Scoring and Interpretation

he AUDIT is easy to score. Each of the questions has a set of responses to choose from, and each response has a score ranging from 0 to 4. In the interview format (Box 4) the interviewer enters the score (the number within parentheses) corresponding to the patient's response into the box beside each question. In the self-report questionnaire format (Appendix B), the number in the column of each response checked by the patient should be entered by the scorer in the extreme right-hand column. All the response scores should then be added and recorded in the box labeled "Total".

Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence. (A cut-off score of 10 will provide greater specificity but at the expense of sensitivity.) Since the effects of alcohol vary with average body weight and differences in metabolism, establishing the cut off point for all women and men over age 65 one point lower at a score of 7 will increase sensitivity for these population groups. Selection of the cut-off point should be influenced by national and cultural standards and by clinician judgment, which also determine recommended maximum consumption allowances. Technically speaking, higher scores simply indicate greater likelihood of hazardous and harmful drinking. However, such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment.

More detailed interpretation of a patient's total score may be obtained by determining on which questions points were scored. In general, a score of 1 or more on Question 2 or Question 3 indicates consumption at a hazardous level. Points scored above 0 on questions 4-6 (especially weekly or daily symptoms) imply the presence or incipience of alcohol dependence. Points scored on questions 7-10 indicate that alcohol-related harm is already being experienced. The total score, consumption level, signs of dependence, and present harm all should play a role in determining how to manage a patient. The final two questions should also be reviewed to determine whether patients give evidence of a past problem (i.e., "yes, but not in the past year"). Even in the absence of current hazardous drinking, positive responses on these items should be used to discuss the need for vigilance by the patient.

In most cases the total AUDIT score will reflect the patient's level of risk related to alcohol. In general health care settings and in community surveys, most patients will score under the cut-offs and may be considered to have low risk of alcoholrelated problems. A smaller, but still significant, portion of the population is likely to score above the cut-offs but record most of their points on the first three questions. A much smaller proportion can be expected to score very high, with points recorded on the dependence-related questions as well as exhibiting alcohol-related problems. As yet there has been insufficient research to establish

precisely a cut-off point to distinguish hazardous and harmful drinkers (who would benefit from a brief intervention) from alcohol dependent drinkers (who should be referred for diagnostic evaluation and more intensive treatment). This is an important question because screening programmes designed to identify cases of alcohol dependence are likely to find a large number of hazardous and harmful drinkers if the cut-off of 8 is used. These patients need to be managed with less intensive interventions. In general, the higher the total score on the AUDIT, the greater the sensitivity in finding persons with alcohol dependence.

Based on experience gained in a study of treatment matching with persons who had a wide range of alcohol problem severity, AUDIT scores were compared with diagnostic data reflecting low, medium and high degrees of alcohol dependence. It was found that AUDIT scores in the range of 8-15 represented a medium level of alcohol problems whereas scores of 16 and above represented a high level of alcohol problems³³. On the basis of experience gained from the use of the AUDIT in this and other research, it is suggested that the following interpretation be given to AUDIT scores:

- Scores between 8 and 15 are most appropriate for simple advice focused on the reduction of hazardous drinking.
- Scores between 16 and 19 suggest brief counseling and continued monitoring.

AUDIT scores of 20 or above clearly warrant further diagnostic evaluation for alcohol dependence.

In the absence of better research these guidelines should be considered tentative, subject to clinical judgment that takes into account the patient's medical condition, family history of alcohol problems and perceived honesty in responding to the AUDIT questions.

While use of the 10-question AUDIT questionnaire will be sufficient for the vast majority of patients, special circumstances may require a clinical screening procedure. For example, a patient may be resistant, uncooperative, or unable to respond to the AUDIT questions. If further confirmation of possible dependence is warranted, a physical examination procedure and laboratory tests may be used, as described in Appendix D.