UPDATE: A Computer Program for Converting Diagnoses to the New Nomenclature of the American Psychiatric Association

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A computer program to convert automated hospital and patient records from DSM-I diagnostic categories to those used in DSM-II has been developed; program listings are available on request from the authors. Since some diagnostic categories are not directly convertible, the methods used to surmount particular problems are explained.

On July 1, 1968, the second edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-II), published by the American Psychiatric Association, went into effect, replacing the nomenclature that has been used since the publication of the first edition (DSM-I) in 1952. In order to maintain continuity between the two nomenclatures, Kramer and Nemec have prepared a comparative listing of titles and codes for the two editions (1).

This paper describes a computer program, UPDATE, which uses a modified version of this comparative listing as a table to convert patients' diagnoses, coded according to DSM-I, into the corresponding codes of DSM-II. It should be useful for agencies and research workers who wish to have diagnoses coded according to the second edition on old records where the diagnoses were coded according to the first edition.

Description of the Program

The main program reads an individual patient record (from cards or tape) containing a diagnosis coded according to DSM-I. A subroutine is called and the table is used to find the corresponding diagnosis according to DSM-II. The main program then creates (by punching a card or writing on tape) a new patient record with the diagnosis coded according to DSM-II. Any other information that is on the old record is carried over intact.

There are 17 instances where two or more DSM-II diagnoses correspond to a single DSM-I diagnosis. For example, the DSM-
I diagnosis of acute brain syndrome associated with alcohol intoxication includes all of the following DSM-II diagnoses: delirium tremens, other alcoholic hallucinosis, acute alcohol intoxication, and pathological intoxication. To handle this problem, the computer program provides two options: Either the patient's new record is left without a diagnosis and a printed message identifies the record so that it can be examined and the appropriate choice made; or that DSM-II diagnosis is chosen which the authors believe, in the absence of knowledge of the individual case, is most likely. In the case of the DSM-I diagnosis of acute brain syndrome associated with alcohol intoxication, the DSM-II diagnosis used by the program is delirium tremens.

In DSM-I, the first digit of the brain syndromes divided them into the acute and the chronic forms. The acute brain syndromes were assumed to be of psychotic proportion. The chronic brain syndromes were assumed to be of non-psychotic proportion unless accompanied by a fourth digit qualifying phrase indicating with psychotic reaction. The emphasis is different in DSM-II: The acute versus chronic distinction is relegated to a fifth digit qualifying phrase, and the brain syndromes of psychotic proportion are grouped under the psychoses and the brain syndromes of non-psychotic proportion are grouped in a separate category.

In converting DSM-I brain syndromes into DSM-II categories, the conversion table of the program follows the conventions used in Kramer and Nemec's comparative listing. DSM-I acute brain syndromes are converted into DSM-II psychoses associated with organic brain syndromes (290 to 294) with a fifth digit qualifying phrase of 1, to indicate acute. For example, the DSM-I diagnosis of acute brain syndrome associated with trauma (03.00) is converted to the DSM-II diagnosis of psychosis with brain trauma, acute (293.51). DSM-I diagnoses of chronic brain syndromes where the qualifying phrase with psychotic reaction is not used, are assumed to be of non-psychotic proportion and are converted into one of the DSM-II subclasses of non-psychotic organic brain syndromes (309).

As examples, the DSM-I diagnosis of chronic brain syndrome associated with cerebral arteriosclerosis (15.00) is converted to the DSM-II diagnosis of non-psychotic organic brain syndrome with circulatory disturbance, chronic (309.32). DSM-I diagnoses of chronic brain syndromes with the qualifying phrase with psychotic reaction are converted into one of the DSM-II psychoses associated with organic brain syndrome categories. For example, the DSM-I diagnosis of chronic brain syndrome associated with cerebral arteriosclerosis, with psychotic reaction (15.01), is converted to the DSM-II diagnosis of psychosis with cerebral arteriosclerosis, chronic (293.02).

It is most likely that in any large group of patients diagnosed according to DSM-I, not all of those given a diagnosis of acute brain syndrome would qualify for the definition of psychotic that is given in DSM-II, and many of those given a diagnosis of chronic brain syndrome were psychotic although the qualifying phrase of with psychotic reaction was not used. Because of this, converting the brain syndromes of DSM-I diagnoses to DSM-II categories may lead to a systematic overestimation of psychotic acute brain syndromes and an underestimation of psychotic chronic brain syndromes.

The program is written in Fortran IV for the IBM 360, and with slight changes can be used with the IBM 7094. Program listings are available upon request.

REFERENCE