

New classification of diseases and problems

RCGP RESEARCH DIVISION EXECUTIVE

A new classification of diseases and problems has been adopted by Council of the Royal College of General Practitioners. This paper sets out the reasons for its development and the steps that have been taken to maintain relationships with the other classifications.

National morbidity surveys

During the planning of the third United Kingdom National Morbidity Survey, which began in 1981, it was realized that the second *International Classification of Health Problems in Primary Care (ICHPPC-2)* had many fewer rubrics than the classification used in the second, 1971, survey. As one of the objectives of the 1981 survey was to make comparisons with the second survey, it was important that the classification used would facilitate this objective, and in addition it was decided that more rather than less rubrics were required.

The solution adopted for the survey was to asterisk certain categories in the 1971 classification where greater specificity of diagnosis was required. Care was taken to ensure complete compatibility with ICHPPC-2. When doctors encountered a diagnosis that fell to be coded in one of these asterisked categories, they were instructed to refer to the full ninth edition of the *International Classification of Diseases (ICD-9)* and to enter the four-digit ICD code on the survey records.

This appeared to be satisfactory, though the extra work involved was not trivial and there is anecdotal evidence that some doctors used an alternative diagnosis in order to avoid the necessity for using the *ICD*. For the broad grouping of disease categories used in the analysis of previous surveys, this almost certainly does not matter.

Experience with the 1981 survey confirmed that a more extensive classification than the ICHPPC code was indeed desirable. In 1982 the Research Division Executive invited Dr Donald Crombie to convene a small working party whose remit was to substitute an appropriate number of additional rubrics and codes for the asterisked categories.

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Computerization

At this time a sophisticated multiuser general practice computer system was being developed in Manchester, and the modified classification devised by the working party was entered on to this computer to facilitate manipulation and editing. Automatic coding of all diagnosis and problems entered has now been achieved, and only the first three letters of a diagnosis or problem need be entered to arrive at a code with, usually, no more than one additional key depression.

A computerized classification system should allow clinicians to enter diagnostic or problem descriptions without restrictions, so the computer must hold an extensive dictionary of rubrics. As this dictionary was developed, it became apparent that an increasing range of more specific codes was desirable, and synonymous descriptions of particular rubrics have also been accommodated.

The system is 'self-learning'. If a diagnostic term is not already in the dictionary it can be added by the user, who must, of course, apply the appropriate code number to it. To permit extra flexibility it is possible also to create extra codes, but users must be certain that these additional codes assigned to the rubrics are in the same order as that followed in *ICD-9*. Since this operation requires familiarity with the *ICD* it might be better if additional codes were allocated only after consultation with the RCGP. This would have the additional advantage of maintaining common standards.

Compatibility with ICD-9

As progress was made on the computer system, it became apparent that the College's expanded classification frequently differed from *ICD-9* in the ordering of the rubrics. There was no apparent justification for this difference. As the avowed objective of all short-list classifications is to maintain maximum compatibility with the parent *ICD*, the order was changed where required, and direct comparability has now been achieved. This is probably much more important in the UK than elsewhere, as the NHS uses *ICD-9* exclusively, and easy and valid conversion from the College short-list to the *ICD-9* must be a high priority for British general practice. General practitioners in Britain will be

able to provide a unique range of comprehensive morbidity data relating to the population, which will greatly enhance the planning of patient care throughout the National Health Service.

Had the differences in the ordering of rubrics between the College classification and the *ICD* been allowed to persist, problems could have arisen when groups of *ICD* codes needed to be translated into groups of codes in the College classification. If the same diseases were not included in both groups, some diseases might be erroneously excluded or included in the analysis. This difficulty is not insurmountable with the use of appropriate computer software, but there seems no point in perpetuating problems when they can be easily avoided.

Use for manual coding

The new classification has now been developed in a way that makes it entirely suitable for automatic coding in a computerized system. It is desirable for such a classification to have more codes and disease or problem descriptions than might be thought ideal for a purely manual system but the list of diagnostic and problem terms is not so long that it cannot be readily accommodated in manual systems. Indeed, because the computer can easily generate a comprehensive list of terms in alphabetical order, it is possible to identify a code almost as easily by reference to this printed index as it is on the computer.

Because the majority of terms likely to be used by general practitioners in the UK are printed in the index, or stored in the computer, no judgement is required to assign the correct code. The task can therefore be readily delegated to nonmedical staff. Only when a new diagnostic term has to be added to the index is it necessary to have a doctor's advice.

Use of codes in the computer

When using the computer to record diagnoses, the correct diagnosis or problem is automatically added to the relevant patient's record, together with the date of the episode. The numerical code is also added to the record, but it is not displayed on the screen.

The codes are required only when searching patients' records in order to identify those with particular diagnoses. It is much easier to specify these diagnoses by code number than to enter all the possible synonyms by which the particular disease may have been described in the clinical record. It is also much simpler and more precise to specify codes when analyses of morbidity are to be undertaken.

Standardized morbidity statistics

The College will shortly be considering making recommendations for standardized methods of analysis of morbidity data coded using the College disease

classification. Individual practices will also be encouraged to tabulate their morbidity data in a way that will permit the valid aggregation of data from groups of practices. The use of postal codes for each registered patient will allow morbidity data to be related to appropriate geographical areas, such as those of the District and Regional Health Authorities. These, in turn, can be aggregated to produce national data that promise to be of immense value in the planning of services.

Additional facilities of the classification

The new College classification has been extended to include surgical procedures and also important life events. The latter include occurrences which, although they may not be causing a problem to the patient when first encountered, are worth recording because they may well influence health and welfare at a later date. Examples are the death of a spouse and a woman's final menstruation.

By also extending the classification, as it were, horizontally, a facility has been provided to indicate whether or not any diagnosis or problem is creating a handicap. This simple dichotomy can be readily expanded, if desired, to indicate the degree of handicap experienced.

Conclusions

The need to rationalize the modification made to the College's old disease classification for the 1981 National Morbidity Survey has coincided with the need to develop a disease and problem classification that will permit easy automatic coding on a practice computer. If there is to be minimal restriction on the use of diagnostic terms by the clinician, computer coding demands a much larger dictionary of rubrics than has been accommodated in previous short-lists of the *ICD* intended for use in primary care. However, the list is not so long that it precludes use in manual systems. In some places the *ICHPPC-2* classification has retained the order of diseases incorporated in *ICHPPC-1* and previous College classifications, and has not followed some of the changes in order made in *ICD-9*. A classification intended for use in British general practice must give priority to maximum compatibility with *ICD-9*, which is used throughout the National Health Service. However, computer programs that will translate entries made on the College classification to the codes used in the *ICHPPC-2* classification can be readily developed, so that international comparisons of morbidity data from general and family practice are not endangered. Even so, it is worth putting this facility into perspective: apart from general or family practice, all the rest of the health services throughout the world use *ICD-9*.

The new College classification of diseases and problems is the first of a comprehensive set of recommendations that will ultimately permit general practitioners

with computers to generate morbidity statistics in a standardized form, so that they can be validly compared between practices and aggregated to allow enhanced planning throughout the National Health Service.

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Address for correspondence

Dr Clifford R. Kay, RCGP Manchester Research Unit, 8 Barlow Moor Road, Manchester M20 0TR.

Note

The new classification bears the copyright of the Royal College of General Practitioners. It will be available to practitioners and computer systems suppliers in either electronic or printed form. Enquiries should be addressed to the General Administrator, RCGP, 14 Princes Gate, London SW7 1PU.

Self-extinguishing cigarettes

Over 2,000 people are killed every year in the United States in fires started by cigarettes. The cigarette is one of the biggest single causes of home accidents. Left on a flat surface, the average American cigarette will burn for about 25 minutes. Smouldering fires are hard to detect in the early stages: the first warning may be when the victim awakes, choking, in the early hours—or never wakes up at all.

Now fire service and medical representatives in the US are calling for laws to ensure that all cigarettes are designed to self-extinguish within five minutes, and so prevent fires. The self-extinguishing cigarette has been around since 1854 and over 50 patents have been taken out, but today only two US brands (Shermans and Mores) are self-extinguishing. This proves that such cigarettes are commercially acceptable. It is unlikely, however, that the tobacco industry will act voluntarily on this recommendation and so lives will continue to be lost in fires that should be preventable.

Source: *Newsletter of the Association for Nonsmokers' Rights* 1983; Nov/Dec: 10.

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