

was due to the study design which was hampered by the lack of 'general agreement on the definition of disability'. The definition of disability then given (restriction of activity) is reasonable, but, as the distinction between 'appreciable' and 'significant' was not clearly stated, several important aspects of the study were obscured. For example, was inability to dress oneself considered less of a disability than inability to feed oneself? Without such information, adequate interpretation of the study is difficult.

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Sir,

The letter from Drs Sullivan and Murray commenting on my paper on disability (*August Journal*, pp. 368-370) claims that the distinction between 'appreciable' and 'significant' was not clearly stated, thus obscuring several important aspects of the study. This is simply not the case, although it could be claimed that I did not make a clear distinction between trivial and appreciable disabilities.

I chose to assess the severity of disability by estimating its social consequences, that is, its handicapping effects and taking into account my knowledge of the patients and their aspirations. Thus patients with minor impairments such as loss of the terminal digit of the fifth finger were not even entered in the register (although a professional pianist for example might have been) because of the trivial effect on their day-to-day activities; patients were only registered when the effect was held to be 'appreciable'. Those who were held to be 'significantly' disabled had, as the article states, almost all lost their independence. There were, in fact, two exceptions to this, both severely crippled arthritics living alone who were on the verge of giving up their autonomy.

The question was also raised whether inability to dress oneself was considered less of a disability than inability to feed oneself. There is, of course, no general reply to this question — the answer depends on the special circumstances of each patient. A different example will make this clear — an elderly widow living alone with grossly impaired mobility is much more disabled than a woman of the same age with the identical impairment but whose husband is fit, active and able to do the shopping.

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Accessing remote data bases using microcomputers

Sir,

Dr Saul's article (*August Journal*, pp. 384-386) provides a useful factual review of the use of viewdata systems in the medical context. It should perhaps be pointed out, however, that a microcomputer is not an essential tool in the accessing of remote data bases; a viewdata terminal, consisting of a modem to connect to the telephone line, a keypad and a television screen will access many of the data bases described and may be a more economical proposition unless a suitable microcomputer is already available and not required for an alternative task.

Where the microcomputer comes into its own in the accessing of remote data bases is when the data acquired can be subsequently manipulated by the computer with minimal operator intervention. This may include the downloading of actual computer programmes for running on the receiving microcomputer: for the manipulation of statistics, creation of teaching material or administrative tasks. In general practice one of the most practical useful features may be the acquisition of data regarding patients (laboratory reports, hospital discharge information and so on) for incorporation directly into a computer-held patient record. In the future the general practice microcomputer may be used to transmit data already held within the practice computer data base to a remote computer, for example, the notification of changes of patient registration data to family practitioner committees and health boards and the submission of items of service claims.

At the present time the mere fact that it is possible to obtain certain information from a remote data base via a microcomputer should not be taken as an implication that this is the most appropriate source to consult. Having used several of the remote data bases described in Dr Saul's article over some months I have reached the conclusion that the appropriateness of this medium for the acquisition of information depends mainly on two factors: the frequency with which information on a particular specific subject is sought and the volatility of the information itself. Thus, slowly changing information which is often required, such as general data on drugs and therapeutics, is more appropriately gleaned from a handy printed source such as the *British national formulary*, while information which is less frequently required (for example, the date of the next MRCGP examination) or more rapidly changing, (for example, the state of the practice bank account) may be more appropriately obtained via viewdata.

No article on the use of new technology should be complete without a reference to the security and confidentiality of the information handled by the system and this is particularly important in a medical context. Revelations about the exploits of electronic burglars, 'hackers' who attempt to access remote data bases to prove that security codes can be breached should concern all actual or potential medical users, especially where patient related data may be transmitted over the public telephone network. It is important that systems are developed for medical use which can be shown to be at least as secure as manual methods.

The development of the electronic interchange of information between computers situated many miles apart opens up exciting new prospects for the use of new technology in general practice. However, users and potential users should be aware of the limitations, disadvantages and risks associated with the use of such systems which should be compared realistically with alternative conventional methods of information exchange.

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Place of birth and perinatal mortality

Sir,

Marjorie Tew (*August Journal*, pp.390-394) has claimed that perinatal mortality is significantly higher in hospital than in general practitioner units or at home. Madeley and Symonds have replied that it is impossible to compare these alternative methods merely by standardization, as Tew has attempted to do. However, if the intended place of delivery, rather than the actual place of delivery, is taken as the basis for comparison, standardization is much more likely to produce a valid comparison. Given that randomized trials are, as Tew rightly points out, not feasible, 'analysis by intention to treat' represents the only remaining chance of coping with the inevitable bias caused by the transfer of selected high-risk pregnancies from general practitioner unit or home to hospital. It also removes the need to use the dubious 'labour prediction score'. However, it is still necessary to standardize, preferably simultaneously, for risk factors known at booking, since patients booked for hospital are typically at higher risk than those booked elsewhere.

Tew correctly states that the objective of 'analysis by intention to treat' is to compare the total risk of booking for hospital with the total risk of booking for