conditions (e.g. eating disorders) encountered more frequently in the private sector.

At several points, Wing *et al* talk of the importance of training and supervision. They suggest that the Victorian training consisted of a brief international video link with them. That session was for the benefit of a few key staff in order to resolve a few ambiguities in the College Research Unit's training material. After this, trainers and clinical staff were trained in the recommended fashion.

The training materials issued by the College Research Unit, and the article introducing Version 4 (Wing *et al*, 1998), talk of the importance of training, but supervision is hardly ever mentioned. It may be that as the novelty of the HoNOS wears off, and as clinicians' HoNOS training recedes further into the past, there is progressive loss of fidelity to the rules. Ventura *et al* (1993), in relation to the Brief Psychiatric Rating Scale, wrote of the need to maintain consistency over time, of interviewer style and interrater reliability. In the real world of mental health care, the availability of quality supervision is not evenly distributed between agencies and professions, and any scale needs to survive and perform in that environment. To the extent that supervision additional to initial training is required, the economy of routine use of the instrument is somewhat diminished, but in return one would hope to gain increased confidence in the ratings.

Once a measure is introduced into routine practice (as is about to happen in Victoria), the question of maintaining data quality arises, and it is presumably in this respect that the idea of supervision has been introduced. Continuous local monitoring is one form of supervision; a centralised system of accreditation is another. It is unclear just what kind of supervision Wing *et al* have in mind. Now that the instrument is being used in several countries, a system centralised in Britain seems inappropriate. Ultimately, the best guarantee of data quality is meaningful use, feedback and ongoing monitoring.

The presence of a prompt, relevant and user-friendly feedback arrangement is crucial to clinician acceptance and compliance (Callaly *et al*, 1998*a*). Much of the clinician resistance alleged by Stein (1999) and questioned by Wing *et al* can be traced to the situation whereby clinical staff fill out forms for some obscure management purpose. If staff do not have the necessary tools to use the data they themselves have collected, is it any wonder that they should be less than enthusiastic? Graphical feedback via computer seems a most suitable medium for returning ratings to raters. The College Research Unit has freely distributed a program called HoNOSSoft which does this. Potential users should be aware that this program cannot discriminate between the missing value rating of nine and the real number nine. Thus, service users with one or more missing ratings attract grossly elevated total scores. A program without this fault and a number of extra features has been developed locally (Callaly *et al*, 1998*b*).

Wing *et al* make the good point that an instrument like the HoNOS should not be viewed in isolation, but ideally as part of a wider data set, like a minimum data set. In our article (Trauer *et al*, 1999) we were able to analyse HoNOS results against service utilisation data, and showed that certain useful conclusions could be reached. There are now several articles based on Australian inpatient settings examining the changes associated with acute psychiatric hospitalisation (public and private) and HoNOS has been shown to have a key role to play in psychiatric case mix classification (Buckingham *et al*, 1998). The outcomes information that a scale like the HoNOS can provide lends meaning and relevance to input and process information which are generally routinely collected.

Finally, we may speculate whether the current version (Version 4) of the HoNOS is the final one. Wing *et al* (1998) describe it as the final version, but the commentary suggests that further modifications might be needed. There is acknowledgement of the low reliabilities of certain items, and the possibility of a slightly longer instrument is entertained. In Victoria, where we have substantial experience and data on the scale, some of us are considering some modifications which, while retaining its essential features, will overcome some of the uncertainties in glossary descriptions and anchor points. To take just one example, it would be good to agree whether tobacco use is ratable on Scale 3.

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ASSESSMENT: FROM THEORY TO PRACTICE

Wing *et al* (above) indicate agreement with the main findings from our study. These were that HoNOS may be most suitable for tracking changes over time, but less useful for treatment planning, and should not be used to infer the level of morbidity in a case-load. The Camberwell Assessment of Need Short Appraisal Schedule (CANSAS) (Slade *et al*, 1999*a*), by contrast, indicates when treatment should be commenced or continued, and can be used as a case-load measure, but may be insufficiently sensitive to be used as an outcome measure at the individual level. The concerns expressed in regard to other papers reflect the tension in creating assessments which are both robust and clinically relevant. Developing and implementing outcome measures for use in routine clinical settings will require attention to the construct being assessed, the purpose of the assessment, and the measurement tool used.

Clarity is needed about what constructs are assessed. The National Health Service and Community Care Act 1990 states that services are to be provided on the basis of need, and outcome measured in relation to changes in quality of life. This directive accords with recent research comparing these constructs, which found high need

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to be associated with low quality of life (Slade *et al*, 1999*b*). The constructs of 'need' and 'quality of life' should both be assessed, and HoNOS may contribute to measuring the latter.

The type and robustness of data needed will vary, according to the purpose of assessment. One recent model identifies three levels of potential outcome: individual, local and national (Tansella & Thornicroft, 1998). This 'matrix model' provides a framework for identifying potential uses of HoNOS.

Finally, more attention needs to be paid to developing outcome measures suitable for routine use. Recently proposed feasibility criteria suggest that assessment schedules need to be brief, simple, relevant, acceptable, available and valuable (Slade *et al*, 1999*c*). HoNOS appears to meet the first five criteria. Whether it proves valuable, and to whom, will depend on a number of factors. The development of an information infrastructure to support data entry, analysis and feedback will be needed, as will the introduction of local and national systems for linking effort in collecting such data with visible benefits for patients and staff. Product champions will need to provide strong local leadership, with ongoing training given a high priority. Perverse incentives will need to be avoided, such as performance-related pay based on health gain.

In the longer term, assessments such as HoNOS and CANSAS which are intended for routine clinical use may contribute to a culture-shift, where reflective, evolving and evaluated mental health services become the norm.

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