study to investigate the suspected overlaps between scales for depression and well-being in the elderly in a clinical setting [1]. Among others, they chose the Geriatric Depression Scale (GDS) and the Philadelphia Geriatric Center Morale Scale (PGCMS) and performed factor analysis, correlations and box-and-whisker plots. All three techniques pointed to important similarities between the scales.

We conducted a similar study with 63 patients (mean age: 78.9, SD 7.7 years) admitted to our Geriatric Rehabilitation Unit between May and July 1994 and found analogous results (presented in part as an oral communication at the III European congress of Gerontology, Amsterdam, 1995). The correlation between the GDS and PGCMS was a bit higher than that of Coleman and colleagues (−0.81 at admission and −0.83 at discharge, p < 0.001), perhaps because our patients had lower scores in PGCMS and higher in GDS (median of 7 and 13, respectively).

Both the scores in the GDS and PGCMS were associated with the same variables: number of drugs actually taken and degree of functional loss as measured by the Barthel Index (BI) (defined as the difference between BI previous to the event that caused the incapacity and BI at admission). We found no other variable (clinical, functional, mental or social) associated with GDS or PGCMS. We performed a multivariate analysis using the multiple regression technique, and the only variable independently associated with the score in the PGCMS was that obtained in the GDS (multivariate determination coefficient of −0.63, with a confidence interval between −0.58 and −0.38; regression coefficient of −0.48; both p < 0.001).

We believe that the results of our study support those of Coleman and colleagues and that, as they indicate, it may be necessary to examine other approaches to assess well-being in clinical practice.

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**Collaboration with Orthopaedic Surgeons**

**SIR**—P. D. Gibson disagrees with the statement ‘there is good evidence that collaboration between orthopaedic surgeon and physician in geriatric medicine is of benefit’ [1].

We have examined the effects of regular input by a geriatrician to one acute orthopaedic ward while using the adjacent orthopaedic ward as a control, looking at main outcome measures of length of stay, cost and discharge destination. Patients from both acute wards were transferred to an Orthogeriatric Rehabilitation Ward. In the year prior to the study, patients in both wards had a mean total stay (acute and rehabilitation) of 28 days. On the intervention ward, the mean total stay was reduced to 20.7 days and on the control ward to 27 days. The benefit was seen on both the acute ward (12 vs. 16 days) and the rehabilitation ward (13 vs. 19 days), p = 0.05.

Total cost on the intervention ward was $NZ9400.00 per case, compared with $NZ11500.00 per case on the non-intervention ward (p = 0.05). In contrast, the percentage of patients discharged to a higher level of residential care (home to rest home or rest home to hospital) was 11% from the intervention ward, compared with 23% from the non-intervention ward (p = 0.05).

We conclude that a geriatrician input on a twice weekly basis to all patients over 65 years of age on an acute orthopaedic ward, saves bed days, reduces costs and produces an improved outcome.

The added benefit to patients’ medical care from a specialist physician input early in their hospital stay has impact by preempting medical complications and by co-ordinating rehabilitation and discharge planning from the day of admission. Management of these elderly patients with fractured neck of femur, with often multiple medical problems, is better suited to the skills of the geriatrician than the orthopaedic surgeon or junior house surgeon [2].

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**Diagnostic Criteria for Vascular Dementia**

**SIR**—The accurate diagnosis of vascular dementia (VaD) is fraught with difficulties but is of some importance, not least with regard to the patients’ clinical management. We read with interest the study by Amar and colleagues [1] comparing the ADDTC [2] and NINDS—AIREN [3] diagnostic criteria with their own based on the Hachinski ischaemic scale, imaging and specialist clinical judgement.

The authors acknowledge that the Hachinski ischaemic scale (HIS), although widely used in clinical practice, is flawed. A major criticism of the scale is that it lacks inter-rater reliability and its individual items are open to undue interpretation [4]. Alternative criteria must address this problem without being too inflexible. Both the NINDS—AIREN and the ADDTC rely on objective neurological and radiological criteria rather than clinical features of the dementia, which are likely to be more subjectively evaluated.
It was found that the ADDTC criteria were more sensitive than the NINDS-AIREN criteria in that there was closer agreement between the ADDTC criteria and their own, which, however, are not clearly specified beyond the use of the HIS. The NINDS-AIREN criteria failed to diagnose VaD in cases where there were no focal neurological signs following small strokes, or where the temporal relationship between the stroke and cognitive decline was unclear. It could be argued that a clinical diagnosis of VaD in these cases would not, in fact, be justified.

We agree that the NINDS-AIREN criteria are relatively narrow and that the definition of dementia is arguably too restrictive. This would be anticipated given that they are research criteria, in contrast to the ADDTC criteria which are intended for clinical work. We suggest, however, that the ADDTC criteria are too sensitive. The definition of dementia is vague and open to interpretation, and the ability to diagnose VaD on the strength of non-temporally related strokes only must increase the risk of over-diagnosis. A further drawback of both sets of criteria is the emphasis on what is effectively multi-infarct, cortical, dementia. Validated criteria for the diagnosis of Binswanger’s disease exist [5], yet leukoaraiosis in association with cognitive deficit and neurological signs would only merit a ‘possible’ diagnosis with both NINDS-AIREN and ADDTC criteria.

There is a strong chance that VaD will be inappropriately diagnosed whenever emphasis is placed on a history of strokes without due consideration of their likely clinical or pathological significance [6]. However the diagnosis of VaD assumes that cerebrovascular pathology has a primary causative role in the dementing process, so a ‘definitive’ diagnosis using rigid criteria would lead inevitably to an underestimation of the dementing process, so a ‘definitive’ diagnosis using rigid criteria would lead inevitably to an underestimation of the disease. Validated criteria for the diagnosis of Binswanger’s disease exist [5], yet leukoaraiosis in association with cognitive deficit and neurological signs would only merit a ‘possible’ diagnosis with both NINDS-AIREN and ADDTC criteria.

NEITHER set of criteria appears to be completely satisfactory, particularly without pathological validation or clarification of the exact relationship between evidence of cerebrovascular disease and cognitive decline. The flexible clinical approach described by Amar et al. employing the principles of the HIS, if not the scale itself, seems to strike the right balance between sensitivity and specificity. The NINDS-AIREN and ADDTC criteria have not so far demonstrated an overwhelming advantage over this.

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Sir—We entirely agree with the comments made by Hillam and Graham, i.e. in that neither of the new criteria for diagnosing vascular dementia is totally satisfactory nor represents a major breakthrough in their current format. The NINDS-AIREN criteria are too rigid while the ADDTC are likely to be too sensitive. A recently published study by Wetterling et al. also reported very poor concordance between the ADDTC, NINDS-AIREN, DSM IV and the ICD-10 criteria when all four methods were compared in diagnosing vascular dementia [1]. Among the four different sets of criteria, the DSM IV was the most sensitive while the NINDS-AIREN was most restrictive.

Also, diagnosing vascular dementia by ‘clinical impression’ could be subject to individual interpretations (unless this is clearly defined). This would be similar to the variability in scoring the Hachinski scale that we previously attempted to limit [2]. We therefore feel that refining and modifying the new criteria after clinicopathological studies, which are urgently needed, should be the best way forward.

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