BARNES, T. R. E. (1989) A rating scale for drug induced akathisia. British Journal of Psychiatry, 154, 672–679.

BUCHANAN, A. (1992) A two-year prospective study of treatment compliance in patients with schizophrenia. Psychological Medicine, 22, 787–797.

COCKSON, J. C. (1991) Side effects during long-term treatment with depot anti-psychotic medication. Clinical Neuropharmacology, 14, 524–532.

CUESTA, M. J., Peralta, V. & ZARZUELA, A. (2000) Re appraising insight in psychosis: multiscale longitudinal study. British Journal of Psychiatry, 177, 233–240.

DAVID, A. (1990) Insight and psychosis. British Journal of Psychiatry, 156, 798–808.

DESAI, N. M., HUDZ, Z., MARTIN, S. D., et al (1999) Switching from depot antipsychotics to risperidone: results of a study of chronic schizophrenia. The Schizophrenia Treatment and Assessment Group. Advances in Therapy, 16, 78–88.

FENTON, W. S., BYLER, C. R. & HENSSEN, R. K. (1997) Determinants of medication compliance in schizophrenia: empirical and clinical findings. Schizophrenia Bulletin, 23, 637–651.

GARAVAN, J., BROWNE, S., GEPVIN, M., et al (1998) Compliance with neuroleptic medication in outpatients with schizophrenia: Relationship to subjective response to neuroleptics, attitudes to medication and insight. Comprehensive Psychiatry, 39, 215–219.

GLY, W. & BAN, T. A. (1979) The AMDP System. Springer.

HAVWOOD, T. W., CRAVITZ, H. M., GROSSMAN, L. S., et al (1995) Predicting the ‘revolving door’ phenomenon among patients with schizophrenic, schizoaffective, and affective disorders. American Journal of Psychiatry, 152, 856–861.

LEHMANN, A. F. & STEINWACHS, D. M. (1998) Translating Research Into Practice: The Schizophrenia Patient Outcomes Research Team (PORT) Treatment Recommendations. Schizophrenia Bulletin, 24, 1–10.

MCEVOY, J. P., APPERSON, P. S., et al (1989) Why must some schizophrenic patients be involuntarily committed? The role of insight. Comprehensive Psychiatry, 30, 13–17.

MCEVOY, J. P., APPERSON, L. G., APPERBAUM, P. S., et al (1990) Insight in schizophrenia: Its relation to acute psychopathology. Journal of Nervous and Mental Disease, 177, 43–47.

MCEVOY, J. P., HOGART, G. E. & STENGARD, S. (1991) Optimal dose of neuroleptics in acute schizophrenia. Archives of General Psychiatry, 48, 739–745.

OVERALL, J. E. & GORHAM, D. R. (1962) The Brief Psychiatric Rating Scale. Psychological Report, 10, 799–812.

PATEL, M. X. & DAVID, A. S. (2005) Why aren’t depot antipsychotics prescribed more often and what can be done about it? Advances in Psychiatric Treatment, 11, 203–213.

SANZ, M., CONSTABLE, G., LOPEZ-IBOR, I., et al (1998) A comparative study of insight scales and their relationship to psychopathological and clinical variables. Psychological Medicine, 28, 437–446.

VALENSTEIN, M., COPELAND, L. A., OWEN, R., et al (2001) Adherence assessments and the use of depot antipsychotics in patients with schizophrenia. Journal of Clinical Psychiatry, 62, 545–551.

WILLIAMS, C. C. & COLLINS, A. (2002) Factors associated with insight among outpatients with serious mental illness. Psychiatric Services, 53, 96–98.

WOODS, S. W. (2003) Chlorpromazine equivalent doses for the newer atypical antipsychotics. Journal of Clinical Psychiatry, 64, 663–667.

WORLD HEALTH ORGANIZATION (1973) Report of the International Pilot of Schizophrenia (Vol. I) WHO.

WORLD HEALTH ORGANIZATION (1992) The ICD–10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. WHO.

---

**P. N. Mahadun** Bolton Salford and Trafford Mental Health NHS Trust, Crisis resolution Home Treatment Team, Chapel Road, Sale, Manchester M33 7EG; email: prem.mahadun@trftftrhs.nhs.uk, M. Marshall School of Psychiatry and Behavioural Sciences, University of Manchester, Preston

---

**SIAN RIPLEY, SARAH JONES AND ALASTAIR MACDONALD**

**Capacity assessments on medical in-patients referred to social workers for care home placement**

**AIMS AND METHODS**

To investigate the feasibility of a clinical algorithm to assess capacity and examine the relationship between its results and the assessments of capacity by others involved in the decision of a patient to permanently enter a care home from a medical ward.

**RESULTS**

A total of 23 patients out of 38 (60.5%, 95% CI 44 – 77) had some mention of capacity in any type of record (medical, social work or nursing). At formal assessment 47% of older patients lacked capacity.

**CLINICAL IMPLICATIONS**

The absence of any recorded assessment in at least a third of patients is worrying, given the importance of the decision to the patients’ lives and their financial status. It is to be hoped that the implementation of the Mental Capacity Act (2005) will rectify this situation.

Doctors are often asked or take upon themselves to evaluate the ability of older adults to continue living alone in the community; their capacity to make this decision can be more difficult to assess than that for other medical dilemmas. A large number of requests for capacity assessments of medical in-patients are seen in liaison psychiatric services for older people (Mujic et al, 2004): the role of the psychiatrist should be to assess the degree of impairment that may affect capacity. The assessment of the capacity of older people to consent to permanently enter a care home is a major issue. Pressure on beds may preclude both older people and their carers from exercising a genuinely informed choice (Lundh et al, 2000). It is usually a family member who takes the lead in
both the decision to seek and find a care home, but surrogates may frequently misunderstand patient preferences in relation to living permanently in a nursing home (Mattimore et al, 1997). The person undertaking the intervention should explain it and assess capacity, in this case the social worker involved. Healy (2003) has examined, in a qualitative study, social workers’ ethical tension as they evaluate decisional capacity of older individuals experiencing some degree of cognitive impairment. Ethical tension was particularly strong when participants experienced both pressures from professionals and clinical uncertainty.

Attempts have been made to systematise the assessment of capacity, most prominently the MacArthur Competency Assessment Tool (MacCAT), which can be used in most US jurisdictions (Appelbaum & Grisso, 1995). Measurable subcomponents (understanding, appreciation, reasoning, and ability to express a choice) are assessed. Its use has been reported in decisions about treatment by working-age psychiatric patients in the UK (Cairns et al, 2005); however, it remains unvalidated in these jurisdictions and its use has not been reported in older people in the UK at all, let alone in those with cognitive impairment.

The assessment is longer than would normally be feasible in busy medical wards for older people. We therefore developed a clinical algorithm that has been previously used in older people in nursing homes (Macdonald et al, 2004) for use in this setting. It was based on the principles outlined by the Law Commission (Law Commission, 1996) and conformed with those outlined in the Mental Capacity Act (2005) which received Royal Assent during the study. We wished to investigate the feasibility of its use and the relationship between its results and the assessments of capacity by doctors, nurses and social workers involved in the decision of an older patient to permanently enter a care home from acute medical wards for older people. We hypothesised that a high proportion of patients confronted with this decision would be cognitively impaired, and that less than 10% of older people entering a care home would have a recorded assessment of their capacity to consent to placement in the medical, social work or nursing documentation.

Method
All people over 65 years old on all acute general medicine for older people wards of a district general hospital who had been referred to the social services department for new permanent placement in a care home were eligible. Patients who were already residents in a care home or on a specialist stroke/rehabilitation unit were excluded. Lists were obtained twice-weekly, and the wards were visited and the patients approached. Capacity to consent to the study was assessed and those with capacity who refused were excluded, as were those without capacity whose nearest relative declined assent. In the remainder a formal test of capacity to consent to enter a care home was completed according to an algorithm (Fig. 1). The Mini-Mental State Examination (MMSE) (Folstein, 1975) was administered in most cases after the assessment of capacity. In patients with sensory deficits partial scores were normalised to a maximum of 30. Nursing, social work and medical documentation was examined for evidence of a formal or informal assessment of capacity or decision-making ability. In a random sample of 25% of cases an interview was carried out with the relevant ward doctor, social worker and key nurse to obtain a verbal assessment of the patient’s capacity for the decision. In these cases notes were examined after this interview. Based on our clinical experience it was estimated that around 10% of patients would have a capacity assessment in their records, and that the study should
identify a range of 0–20% with 95% confidence limits. The sample size necessary to achieve this was 35.

Ethical approval was given by the research committee of the hospital involved. Ethical approval for obtaining data from records of patients not consenting to nor being assented for the study was not sought for this study.

Results
Data were gathered from November 2004 to July 2005. As recruitment was slow from the specialist wards for older people the study was extended to include all older people referred from any non-specialist medical ward in the hospital from April 2005.

Referrals for placement of 128 patients were made during this period; 61 of these met exclusion criteria (14 already resident in a care home, 16 not on acute general medical ward, 30 not geriatric consultant (until April 2005), 1 no English language). A further 29 patients could not be assessed (4 were placed before assessment, 5 died, 8 had capacity but refused, 4 lacked capacity to enter study and assess declined, 3 relative could not be contacted, 5 other). A total of 38 participants were interviewed and documentation examined and 10 were interviewed by staff.

The sample interviewed were 58% women, with a mean age of 83 years (s.d.=8.3); 27 (71%) lived alone prior to admission. Participants were assessed at a mean of 53 days (s.d.=27) and median of 46 days after admission. The most frequent physical health problems mentioned in the records were falls (14 participants, 37.8%) and cardiovascular problems (7 participants, 18.4%); 19 participants (50%) had a recorded diagnosis of a dementia, 2 of substance misuse, 1 of a delusional disorder and 1 of affective disorder. Overall, 15 (39.5%) had no recorded mental health problems. In 3 participants the MMSE could not be completed. Of the remainder 26% scored 24 or higher, 29% had scores between 18 and 23, and 46% had scores of 17 or lower. All but 1 participant interviewed eventually entered a care home.

Assessment of capacity at interview
A total of 20 participants (53%, 95% CI 36–69) had capacity to consent to going into a home as assessed by the algorithm applied at interview. There was no significant difference between male and female participants, nor was this proportion related to the age of the individual. Incapacity was strongly associated with a diagnosis of dementia in the records ($\chi^2=15.2$, d.f.=1, $P=0.00$) and with lower MMSE scores ($F=50.7$, d.f.=1, $P=0.00$). The best cut-point on the MMSE to predict incapacity was 16 out of 17; of the 15 participants scoring below 17 only 1 had capacity (7%), whereas of the 23 scoring 17 or above, 19 (83%) had capacity. Using this cut-point in this population the MMSE had a 93% positive predictive value and an 83% negative predictive value against the formal capacity algorithm, with an overall misclassification rate of 13%.

Recorded assessments of capacity
There were 23 participants (60.5%, 95% CI 44–77) who had some mention of capacity or decision-making ability in any type of record (medical, social work or nursing); 12 had an assessment in one type of record, 9 in two types of record, and 3 in all three types of record. In 10 of the 12 participants with capacity assessments in two or more types of records these were social work and medical records. Agreement between these was complete in 8 out of these 10 ($\kappa=0.375$, s.d.=0.36). There was no mention of capacity in the nursing notes of 35 (92%), in the medical notes of 20 (71%) and in the social work notes of 16 (42%) participants. In 2, 5 and 8 participants respectively there was mention of a capacity assessment by another discipline (for example a doctor in social work notes or a psychiatrist in medical notes) – in all cases incapacity was noted.

If there was any record of assessment of capacity in social work notes there was good agreement between this and the formal assessment ($\kappa=22$, $\kappa=0.73$, s.d.=0.15), and this remained true when assessments by doctors recorded in the social work notes were excluded. However, there was poor agreement between the formal assessment and medical notes assessment ($\kappa=11$, $\kappa=-0.29$, s.d.=0.14). In all 3 participants where there was any assessment in the nursing notes, it was of incapacity; in 2 this was in agreement with the formal assessment.

The percentage agreement and $\kappa$ values of agreement between each source of information were: for social work and medical, 80% ($\kappa=0.38$); for social work and nursing, 66%; for social work and formal assessment, 87% (0.73); for medical and nursing, 100%; for medical and formal assessment, 54% ($\kappa=-0.28$); for nursing and formal assessment, 66%. There was a strong correlation between MMSE score and assessments of capacity recorded in the social work notes ($r=35.4$, $P=0.00$) but no relationship was found in the other types of record.

In the 15 participants in whom there was a record of incapacity in any record, 3 were found to have capacity at formal assessment. In the 10 participants where there was a record of capacity in any record, 2 were found to lack capacity at formal assessment. Since there was disagreement between the different types of records themselves it was not possible to establish an overall level of agreement between the formal assessment and the records.

The participant who returned home lived alone, had a MMSE score of 28 and was formally assessed as having capacity but had no capacity assessment in any record.

Agreement between interview assessments and other assessments of capacity
Of the 10 participants about which staff were interviewed, 6 were found to have capacity at formal assessment. One primary nurse was unable to give an opinion about one participant. Agreement with the formal assessment occurred in 8 out of 10 of both social worker
and doctor responses ($\chi=0.58$, s.e. = 0.26), and 6 out of 9 nurse responses ($\chi=0.18$, s.e. = 0.33). Agreement between doctor and social work responses was perfect, but agreement between these and nurse assessments only occurred in 5 out of 9 cases ($\chi=0.05$, s.e. = 0.3).

In cases interviewed where there was any mention of capacity in the records there was agreement between the social worker interview and the social work records in all 7 cases, disagreement between the doctor interview and the medical records in 1 out of 3 cases, and disagreement between the nurse interview and the nursing records in 1 of 2 cases.

There were insufficient cases to assess the relationship between MMSE and these assessments.

Summary of results

At formal assessment 47% of older patients referred for permanent care home placement lacked capacity to consent to placement. In about a third of all patients there was no mention of any assessment of capacity in any social work, medical or nursing record. Assessments recorded in social work notes had the best agreement with the formal assessment, whether or not they were records of doctors’ assessments. There was a very strong association between lack of capacity and MMSE score. There was evidence of disagreement between assessments in different types of record, and between staff assessments at interview and those in the records.

Discussion

This study has a number of limitations: the sample size was modest, but over half of those eligible had their documentation assessed. This study was also limited by the lack of a gold standard for capacity assessments in English law (Cairns et al, 2005), although the algorithm derived from the Law Commission report is probably as close to one as is achievable. Although feasible in research contexts, use of the MacCAT in the UK may not be appropriate because of differences in the nature of capacity as defined in different jurisdictions.

This study found a very high level of agreement between the MMSE and formal capacity assessments, and were the MMSE to be used routinely in individuals referred for care home placement its utility as a substitute for formal assessment of capacity would be a useful topic for further study. However, caution must be used when making important decisions such as care home placement so as no errors can occur.

There are other studies that have examined the relationship between the MMSE and capacity. Buckles et al (2003) found that MMSE scores were correlated with performance ($P<0.0001$) for understanding informed consent information for their non-treatment research study. Kim & Caïne (2002) found that the MMSE significantly adds to identification of incapacity; however, the effect was modest with no cut-off point yielding both high sensitivity and high specificity. Pucci et al (2001) found a MMSE score below 18 had a positive predictive value of 95% and a negative predictive value of 62.3%. These studies looked at hypothetical research scenarios and assessments of capacity were for the decision to be involved in the research.

The main finding was a lack of documentation of capacity to give or withhold consent to admission to a care home, although this was better than we had predicted. Where there were more than one recorded assessment these were not necessarily in agreement, which may have been due to fluctuation in capacity, but this study was not designed to corroborate or refute. However, the absence of any recorded assessment in at least a third of patients is worrying, given the importance of the decision to the patients’ lives and their financial status. It may be tempting to suggest that all individuals in whom incapacity is suspected should be referred for psychiatric assessment, but that would be unreasonable (Ball & Macdonald, 2002). It is to be hoped that the implementation of the Mental Capacity Act (2005) will rectify this situation, and we plan to repeat this study to confirm this.

Declaration of interest

None.

References

APPLEBAUM, P. S. & GRASSO, T. (1995) The MacArthur Treatment Competence Study: I. Mental illness and competence to consent to treatment. Law and Human Behaviour, 19, 105–126.

BALL, C. & MACDONALD, A. (2002) Clinical capacity assessment. Psychiatric Bulletin, 26, 394.

BUCKLES, V. D., POWLISHA, K. K., PALMER, J. L., et al (2003) Understanding of informed consent by demented individuals. Neurology, 61, 1662–1666.

CAIRNS, R., MADDICK, C., BUCHANAN, A., et al (2005) Prevalence and predictors of mental incapacity in psychiatric patients. British Journal of Psychiatry, 187, 379–385.

FOLSTEIN, M. (1975) Mini-mental state: A practical method for grading the cognitive state of patients for the clinician. Journal of Psychiatric Research, 12, 189–198.

HEALY, T. C. (2003) Ethical decision making: pressure and uncertainty as complicating factors. Health and Social Work, 28, 293–301.

KIM, S. Y. H. & CAINE, E. D. (2002) Utility and limits of the Mini Mental State Examination in evaluating consent capacity in Alzheimer’s Disease. Psychiatric Services, 53, 1322–1324.

LAW COMMISSION (1996) Mental Incapacity (LC231). The Law Commission.

LUNDH, U., SANDBERG, J. & NOLAN, M. (2000) ‘I don’t have any other choice’ : spouses’experiences of placing a partner in a care home for older people in Sweden. Journal of Advanced Nursing, 32, 1178–1186.

MACDONALD, A. J., ROBERTS, A. & CARPENTER, L. (2004) De facto imprisonment and covert medication use in general nursing homes for older people in South East England. Aging and Clinical Experience Research, 16, 326–330.

MATTIMORE, T. J., WENGER, N. S., DESBENS, N. A., et al (1997) Surrogate and physician understanding of patients’ preferences for living permanently in a nursing home. Journal of American Geriatric Society, 45, 818–824.

MUIC, F., HANLON, C., SULLIVAN, D., et al (2004) Comparison of liaison psychiatry service models for older patients. Psychiatric Bulletin, 28, 171–173.

PUCIO, E., BELLARDINELLI, N., BORSSETTI, G., et al (2001) Information and competency for consent to pharmacologic clinical trials in Alzheimer Disease: An empirical analysis in patients and family caregivers. Alzheimer Disease and Associated Disorders, 15, 146–154.

STONE, A. A. (1994) Psychiatry’s undiscovered country. American Journal of Psychiatry, 151, 953–955.

*Sian Ripley Specialist Registrar in Psychiatry, Southbrook Road Mental Health Centre, London SE12 8LH, email: Sian.Ripley@slam.nhs.uk, Sarah Jones Consultant Physician, Lewisham Hospital NHS Trust, London SE15 6LH. Alastair Macdonald Professor of Old Age Psychiatry, South London and Maudsley NHS Trust, London SE13 6JZ