Changing methods of recording psychiatric histories by a community mental health team for the elderly was associated with a dramatic improvement in the quality of recording of clinical information and of communication with general practitioners. Comparison is made with published studies of case note audit with feedback. It is suggested that restructuring the way we work may be more effective than simple review of case notes with feedback.

Poor quality recording of clinical information and action plans in case notes has received the attention of many audit projects (Gabbay et al, 1990; Rai, 1990; Ashkenazi et al, 1992; O'Hare, 1995). Published reports differ on the effect of audit in terms of increasing the quality of medical notes with for example, estimates of no effect (Rai, 1990) and significant effect in seven out of 25 headings (Gabbay et al, 1990). O'Hare showed that case note review of adult in-patients led to a 38% increase in frequency of documentation of physical examination four months after the audit. The difficulty with audit is that if it is to be effective in the long term, then it needs to lead to changes in the way things are done to maintain its usefulness. Otherwise audit needs to be perpetually repeated to maintain effect. I report a project whereby the process of assessment was restructured with the aim of producing improved quality without prior use of audit, thus enabling other audit projects to continue. I then returned retrospectively to the project to find out how much practice had been changed and to find out if restructuring the process of data collection might be more effective than traditional medical audit of case notes alone.

The setting

Following the inception of community team working in 1988 a somewhat rudimentary assessment form was introduced for use by all members of the team while making assessments following referral to our service. Simple headings such as Psychiatric, Personal and Family History were written on blank spaces to be filled in. For cognitive testing a range of questions were available with a 'Newcastle scale' (Blessed et al, 1968) attached separately. Many questions seemed odd and difficult and appeared to be of limited use. Four years later it was felt that the old form should be improved. It was therefore decided that a new form would be produced by a group of workers which included the senior registrar, the team social worker and occupational therapist and two community psychiatric nurses.

The new process of data collection was designed to prompt collection of information under all of the major headings which were considered to be part of good practice in psychogeriatric assessment. There were prompts under each heading to guide workers as to the sort of information that could be gathered. The form used was designed to underpin a process of assessment that would be easy to use as well as a flexible but robust way of ensuring that good quality clinical information was obtained at assessment. The cognitive assessment form was designed to incorporate the Mini-Mental State Examination (MMSE; Folstein et al, 1975) with full explanatory notes and to provide space for visual and written work by patients on a single two-sided sheet of A4 paper. It prompted collection of data about hearing, vision and the circumstances of examination to increase the validity of interpretation of the score produced.

Following its introduction the new process was well received. After two years it was decided to audit the performance of the new process in terms of its effect on quality of data collection during use.

Copies of the assessment and cognitive forms are available from the author.
Table 1. Effect of new process on recording of history and clinical examination (values shown under new and old proforma are percentage of casenotes with identifiable record)

|                                | New process (%) | Old process (%) | Improvement factor | P    |
|--------------------------------|-----------------|-----------------|--------------------|------|
| History of presenting problem  | 100             | 100             | 1.00               | NS   |
| Informant history              | 70              | 63              | 1.11               | NS   |
| Personal history               | 90              | 87              | 1.04               | NS   |
| Family history                 | 83              | 87              | 0.96               | NS   |
| Past medical history           | 87              | 80              | 1.08               | NS   |
| Past psychiatric history       | 87              | 70              | 1.24               | NS   |
| Drug history                   | 63              | 63              | 1.47               | 0.005|
| Adverse drug reaction          | 10              | 7               | 1.50               | NS   |
| Alcohol history                | 50              | 10              | 5.00               | 0.001|
| Smoking history                | 47              | 10              | 4.67               | 0.002|
| Activities in daily living     | 83              | 57              | 1.47               | 0.024|
| Financial history              | 80              | 43              | 1.85               | 0.001|
| Statutory support              | 90              | 43              | 2.08               | 0.001|
| Social network                 | 67              | 37              | 1.82               | 0.02 |
| Mental state examination       | 90              | 67              | 1.35               | 0.028|
| Cognitive examination          | 77              | 60              | 1.28               | NS   |
| Score of cognitive test        | 67              | 30              | 2.22               | 0.005|
| Impression                     | 100             | 67              | 1.50               | 0.001|
| Action plan                    | 90              | 63              | 1.42               | 0.015|

P values are calculated using chi-squared statistics.

**Methods**

Sixty case notes were randomly selected from the team's past and present caseload from a three year period spanning the introduction of the new process. Thirty case notes were those which had used the old form and 30 the new form. The presence of identifiable information under several headings (see Table 1) was recorded. The history was rated as being present if there was anything other than a minimal entry (e.g. 'born 1916' was unacceptable for personal history) somewhere in the notes. The frequency of derivation of a cognitive score was noted and a record made of how often the mental state was examined as well as frequency of a written impression and action plan. The clinical and correspondence section of the notes was further examined to see how often such information was subsequently communicated to the general practitioner (GP) by letter or telephone. Chi-squared statistics were used to assess the significance of change after the introduction of the new process. At the end of the study data collection under each heading was added to produce aggregate scores for the quality of information under the history section, clinical examination section and the quality of correspondence with GPs. Statistical analysis was performed using the Statistical Package for Social Sciences, Version 4.0. The local research ethics committee approved the study.

**Results**

The rate of collection of history about presenting complaint, personal and family history had always been high. The new process was associated with an increased rate of recording information under all other headings and these differences were significant in 11 out of the 19 headings assessed (Table 1). The rate of recording was increased by a factor of as much as 5. The absolute improvement in rate of recording was 47% for frequency of recording social service support.

In terms of communication with GPs (Table 2), there was a similar improvement noted (by a factor of up to 5) and the improvement was significant under 9 out of 17 headings. Almost all of the improvement in communication with GPs was associated with increased recording of clinical information in the notes. The letter to GPs was the sole place where information was recorded in only 13% of communications to GPs. Conversely when data were recorded it was communicated to the GP 51% of the time.

**Comment**

Changing the process used in new assessments of patients was associated with a dramatic and substantial improvement in the rate at which information was recorded under each heading.
Table 2. Effect of new process on communication to general practitioners (values shown are percentage of casenotes with record of communication to general practitioner)

|                           | New process (%) | Old process (%) | Improvement factor | P    |
|---------------------------|-----------------|-----------------|--------------------|------|
| Presenting problem        | 87              | 73              | 1.18               | NS   |
| Informant history         | 67              | 37              | 1.82               | 0.02 |
| Personal history          | 57              | 20              | 2.63               | 0.04 |
| Family history            | 43              | 17              | 2.60               | 0.02 |
| Drug history              | 57              | 30              | 1.89               | 0.04 |
| Adverse drug reaction     | 13              | 7               | 2.00               | NS   |
| Alcohol history           | 17              | 7               | 2.50               | NS   |
| Smoking history           | 17              | 3               | 5.00               | NS   |
| Activities in daily living| 47              | 17              | 2.80               | 0.01 |
| Financial history         | 27              | 7               | 4.00               | 0.04 |
| Statutory support         | 47              | 17              | 2.80               | 0.01 |
| Social network            | 40              | 13              | 3.00               | 0.1  |
| Mental state examination  | 87              | 70              | 1.24               | NS   |
| Cognitive examination     | 67              | 50              | 1.33               | NS   |
| Score of cognitive test   | 43              | 17              | 2.60               | 0.02 |
| Impression                | 90              | 77              | 1.17               | NS   |
| Action plan               | 93              | 87              | 1.08               | NS   |

P values are calculated using chi-squared statistics

This was particularly noticeable for items which were less commonly completed to start with. Improvements were larger than those reported from straightforward case note reviews (Gabbay et al., 1990; Rai, 1990; Ashkenazi et al., 1992; O’Hare, 1995). It is pleasing that improvement in collection of clinical information appeared to make communication with GPs better. While it might be argued that it is not necessary to collect history under headings such as activities in daily living, alcohol consumption, adverse reactions to drugs or social network, collection of such information is widely considered to be good practice and constitutes part of the Royal College of Psychiatrists’ consensus care protocol for the assessment of dementia in the elderly, as well as other well known guidelines (Wilcock et al., 1989).

The ability to produce such dramatic improvements without the use of audit or monitoring of case notes suggests that attention to processes used in the delivery of mental health care is as or more important than simple case note audit and feedback. It is of note that many insurance companies adopt standard processes in order to achieve consistent levels of quality and it may be that similar principles should be applied to community psychiatry.

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