# IMPROVING MEDICINES MANAGEMENT IN THE OVER-75S IN GRAMPIAN

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*Advanced age, frailty and increased use of drugs are all factors that contribute to the risk of experiencing medication-related problems. In Grampian, all people aged 75 years or over are assessed annually, but there is considerable variation in the degree of assessment of medicines management. By building on an existing screening service, there is the opportunity to increase the level of prevention, detection and resolution of medication-related problems in this vulnerable age group, with minimal resource implications. This article describes the multidisciplinary development in Grampian of standard assessment sheets, with prompts for appropriate action, advice or referral and an associated information package facilitating comprehensive assessment of medicines management and audit. The involvement of community and practice-based pharmacists is encouraged in this process*

Does it matter if we review older people's medication? The incidence of chronic illness increases with age and older people are more likely to have conditions that require drug treatment. Medication-related problems experienced include adverse drug reactions, drug interactions and treatment failures and are thought to account for 10 to 30 per cent of elderly hospital admissions.[1,2]

Many such problems are attributed to lack of monitoring and follow-up of medication effects, over-prescribing of medicines, patients' lack of basic knowledge about their medicines and poor compliance.[3–5] There is growing awareness that many medication-related problems can be avoided with increased vigilance and intervention by the health care team.[6–9]

Regular assessment of medicines management in the home can provide valuable information on a patient's use of medicines. The assessment can identify problems experienced in taking medicines and at the same time, gather information on how current medicines, including over-the-counter preparations, are being taken. In many cases, simple problems can be efficiently resolved by the assessor or appropriately referred.

Medicines management is likely to be improved by increasing patients' and their carers' awareness of why, how and when to take their medicines, informing them of common side effects and what to do about them, ensuring they reorder repeat medicines efficiently and can open their medicine containers and read the labels.

## THE OVER-75 ASSESSMENT

The potential value of the annual assessment of those aged over 75 years as an ideal opportunity for the early identification and prevention of medication-related problems in the elderly was identified in Grampian in 1994. The over-75 assessment was introduced three years earlier as part of the new contract for general practitioners.[10] This placed particular responsibility on GPs and members of their teams to screen patients aged 75 years or over. It was recommended that such health assessments should be based on functional, rather than medical assessment and include:

- A home visit at least once a year
- Assessment of social circumstances
- Mobility
- Mental state
- Senses
- Incontinence and general function
- Review of medication

Few guidelines were given on how these health assessments should be performed and in 1993 the Royal College of General Practitioners published a clear and practical approach which included detailed recommendations for initial medication assessment and further medication review if problems were identified.

In practice, the form of the initial screening assessment varies widely. Assessments are carried out by health visitors and assistants, community and practice nurses and GPs, either in the patients home or in the surgery. Assessment sheets and training in their use varies widely between practices. Given the different background and experience of assessors and the variable training provided, considerable variation in the extent of medication assessment and the identification of medication problems is to be expected. Few assessment sheets provide adequate prompts for comprehensive medication assessment or guidance for identification, resolution or referral of problems, and practices vary widely in the extent to which doctors review the annual assessment sheets.

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## PILOT PROJECT

Following collaboration between a GP, a pharmacist and two health visitor assistant assessors in a practice in Grampian, a medicines management assessment tool was incorporated for the first time into the existing over-75 assessment in the practice, and guidelines for the assessors were developed. The new assessment was found to be a useful tool to aid the identification of patients with medicines management problems in the community, with minimal resource implications.

In 1996, Primary Care Development Funding was awarded to progress this initiative and extend it within Grampian. The primary objectives were:

- To agree a standard medication assessment tool which is adaptable to the needs of individual practices and allows comparison between practices
- To develop guidelines for all assessors to encourage comparable levels of identification, resolution or referral of medication-related problems

## SURVEY OF PRACTICES

An initial survey on the extent of medication assessment within the annual over-75 assessment in Grampian showed considerable variation between practices. Practices were found to be using different grades of staff to carry out the assessment, and the content of the assessments showed considerable variation (Tables 1 and 2). From the 89 practices in Grampian, 50 responses were received.

The survey showed that many practices had delegated responsibility for the assessment to community nurses, practice nurses, health visitors and health assistants.

The extent of doctor input varied from no input other than dealing with referrals from assessors, through to an annual surgery or home interview with the doctor for each patient aged over 75 years. The proportion of patients assessed in clinic or at home varied from practice to practice, perhaps reflecting the way in which individual prac-

**TABLE 1: VARIATION BETWEEN PRACTICES IN GRADE OF STAFF USED TO CARRY OUT THE ASSESSMENT (N=50)**

| Assessor | Number of practices |
|---|---|
| General practitioner | 14 (28%) |
| Community nurse | 32 (64%) |
| Practice nurse | 10 (20%) |
| Health visitor | 25 (50%) |
| Health assistant | 19 (38%) |

**TABLE 2: VARIATION BETWEEN PRACTICES IN THE CONTENT OF THE ASSESSMENT (N=50)**

| Medication area assessed | Number of practices |
|---|---|
| Knowledge of medication | 29 (58%) |
| Correct administration | 29 (58%) |
| Ability to open containers and read labels | 24 (48%) |
| System for ordering and collecting prescriptions | 25 (50%) |
| Storage of medicines | 14 (28%) |
| Ability to use any prescribed devices | 18 (36%) |
| Quantity of medicines held | 22 (44%) |
| Use of over-the-counter medicines | 17 (34%) |

tices offered the visit. The potential for assessing medicine storage conditions, quantities stored and use of over-the-counter medicines is limited with clinic based assessment.

Assessment sheets used varied from those which had a small section headed "Medication" with no prompts for questions to be asked, through to sheets which had prompts for detailed questions assessing many aspects of medicines management and use.

This non standardised approach to medication assessment between practices risks variable quality of assessment and may hinder the collation of information to aid the development of future services.

### DEVELOPMENT OF A STANDARD ASSESSMENT TOOL AND INFORMATION PACKAGE

Ten areas of medicines management in the home were identified by the pharmacist in conjunction with the community nurse assessor and acceptable standards in each of them were agreed. Based on this, an assessment tool was devised with prompts for specific actions to be taken in the event of a negative response. This was piloted in one practice. The medication assessment areas were:

- Accuracy of the repeat prescribing record
- Medicines being taken or given as prescribed
- Ability to access medicine container, ie, open container/blister strip
- Ability to read label
- Perception of problem taking medicine
- Use of inhalers, eye-drops, compliance aids
- Medicine storage conditions
- Quantity of medicine held and repeat medication requests
- Safe disposal of all discontinued medicines
- Use of over-the-counter medicines

An information package for assessors was compiled by the pharmacist to complement the assessment sheet. This contained guidelines on using the assessment sheet and actions to be taken when a problem was identified. Information was provided on particular areas, such as use of compliance aids and safe disposal of unwanted medicines. In addition, suggested GP and community pharmacy "over-75" referral sheets and a medicines information sheet, which could be used for selected patients, were included. Examples of how these could be adapted to suit the needs of different practices were given. This package was compiled as a hard copy and was also available on disc.

The timescale of the project allowed for presentation of the assessment tool and information package to 44 practices. Each practice was encouraged to select and adapt the material to suit its particular requirements. A total of 29 practices chose to pilot the new assessment sheet, with modifications in some cases. Four practices considered their existing assessment was adequate and 11 were unwilling to participate at that time. Their main reservations involved concerns about the extra time involved and the difficulty in some practices in obtaining a current list of repeat medication. Where possible, training in the use of the assessment tool and information package was provided by the pharmacist. However, due to the number of assessors in some practices and shift working, some assessors were trained by colleagues. Training by specialist colleagues was encouraged, eg, inhaler technique by asthma nurses. Community pharmacists identified by the practice were informed of the initiative and liaison with assessors was encouraged.

***Feedback to practices*** Quantitative data from completed assessment forms for each practice piloting the sheets were analysed using Excel and individual reports were returned to each practice. In addition, data from all participating practices were collated, allowing comparison between practices. The data collected and analysed were of limited value in many cases, because some of the sheets returned were incomplete. Problems had been identified and resolved by the assessor and they had not felt it necessary to record the problem, action taken and outcome. As a result, the sheets were adapted to offer more detailed categorisation of possible actions to take. The actual number of problems identified and actions taken is therefore likely to be higher than recorded. The collated response is shown in Table 3. For some assessment areas there was no response, therefore the yes/no responses do not add up to 100 per cent.

Most referrals to the GP (191 patients), involved medicines not being taken as prescribed and inconsistency in repeat medication records. The GP referral sheets, in some cases with an attached feedback section, were found helpful in improving communication. Referrals to community pharmacists were low (29 patients), perhaps reflecting poor lines of communication and a lack of perception of the pharmacists potential input.

**TABLE 3: COLLATED RESPONSES TO MEDICATION ASSESSMENT QUESTIONS (N=1226)**

| Assessment area | Yes | No |
|---|---|---|
| Is repeat record up to date | 75% | 18% |
| Medicine taken as prescribed | 85% | 10% |
| Can patient read labels | 86% | 9% |
| Can patient open pack | 84% | 10% |
| Device used correctly (if used) | 20% | 2% |
| Suitable storage condition | 92% | 1% |
| Safe disposal of discontinued medicines | 72% | 15% |
| Good re-ordering system/ quantity held | 91% | 2% |
| Over the counter drug use: | | |
| Paracetamol/analgesics | 10% | |
| Laxatives | 1% | |
| Low dose aspirin | 2% | |
| Other | 6% | |

Advice regarding storage, stock control and disposal of medicines was offered by assessors as required. The main OTC medicine problems picked up by assessors involved inappropriate use of aspirin and excessive use of analgesic and laxative preparations.

In some cases, assessors provided more detailed information on the problems they identified and the actions taken. This qualitative information, giving insight into the clinical relevance of the problems identified by assessors, was also fed back to practices.

Information returned with completed assessment sheets varied between practices. Some only provided the assessment sheet for each patient with no details of the medication. Others provided names of medicines, but no doses, and others provided full details of the medication. The information available from assessment sheets was therefore limited in most cases. It was however, possible in 27 cases (2.2 per cent) for medicines issues to be identified by the pharmacist which were not recorded as being picked up at assessment.

In most practices, assessment sheets were not seen by the doctor and only those problems identified and perceived relevant by the assessor were referred to the doctor. Having highlighted areas which would be outside the training and remit of the nurse assessors, there may be a need within practices for systems to ensure all medication assessment sheets are reviewed by the doctor or practice-based pharmacist, preferably as part of a formal medication review.

Practice-based pharmacists were encouraged to become involved in agreeing the assessment sheet, training assessors, reviewing patients' medication as part of the assessment, dealing with problems identified by assessors and reviewing completed medication assessment sheets.

***Feedback from assessors*** Assessors were invited to complete an anonymous questionnaire and to provide verbal feedback. Of the 11 practices responding to the questionnaire (38 per cent response), all found medication assessment helpful in detecting and preventing medication-related problems and seven (64 per cent) had chosen to continue to use the new assessment sheet. Reasons for reverting to the previous assessment format included:

- The existing assessment sheet was adequate
- The extra time taken, both in assessment and in follow up was a problem
- Difficulty was found in obtaining current repeat medication profiles for patients before visiting

Positive aspects of using the new assessment tool were identified as:

- Standard system
- Clear, comprehensive checklist
- Easier assessment
- Helps detect and prevent problems
- Improves communication
- Useful for updating records and notes
- Increases awareness of likely problems
- Identifies hoarders
- Includes over-the-counter medicines
- Highlights discrepancies
- Can reduce number of drugs taken and drug costs

## CONCLUSION

The medicines management assessment package described may form a useful starting point for practices to review their systems for assessing medicines management and regularly reviewing medication in those aged 75 years or over. The value of the formal medication assessment sheet with prompts to ensure adequate assessment of all aspects of medication use, has been recognised by assessors and the prompts have also been found helpful for training new staff and students. The main disadvantages identified are the extra time involved and the increased complexity of the assessment.

The need for systems to ensure all completed medication assessment sheets are reviewed by the doctor (or practice pharmacist) has been identified. Improved communication between assessors and community pharmacists should be encouraged to resolve individual patient problems and the involvement of practice pharmacists in reviewing the system of over-75 medication assessment is recommended. Encouragement is given to adapting the package to the requirements of each practice, while maintaining the basic standardised documentation. This facilitates the process of standardising the approach to medicines management with its consequent advantages in terms of staff training and also in comparing and pooling data from different practices.

This primary care development project has increased awareness of the importance of medication assessment as a component of the assessment of over-75s. The setting up of local health care co-operatives (LHCCs) in Scotland affords the opportunity to agree standard assessments within each LHCC and to provide appropriate training and support to introduce management guidelines on medication assessment in a phased and controlled manner.

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## THE ROYAL PHARMACEUTICAL SOCIETY S SPECIAL INTEREST GROUPS

The Royal Pharmaceutical Society has established special interest groups for community pharmacists, for veterinary pharmacists, for industrial, regulatory and technical pharmacists, for hospital pharmacists, and for pharmacy academic staff. The groups hold meetings to consider topics of interest within their own fields of practice and they provide a source of advice to the Society's Council on specialist matters. Each group is administered by a committee, most of whose members are elected by the group, the remainder being members of the Council. Details of the groups can be obtained from the Royal Pharmaceutical Society, 1 Lambeth High Street, London SE1 7JN. The name and direct telephone number of the appropriate contact person is given after each entry below.

***Community Pharmacists Group*** The Community Pharmacists Group, formed at the beginning of 1994, is open to all pharmacists engaged in the practice of community pharmacy. The group committee has the discretion to grant membership to pharmacists who are not engaged in community pharmacy practice but who have a direct involvement or demonstrable interest in that aspect of pharmacy. Contact: Emma Richards, practice division (tel 020 7572 2411).

***Veterinary Pharmacists Group*** The Veterinary Pharmacists Group is open to all pharmacists who are engaged in, or actively considering engaging in, the preparation or supply of agricultural chemicals, veterinary medicines and allied products. Other pharmacists may be granted membership at the discretion of the group committee. Contact: Liz Griffiths, practice division (tel 020 7572 2408).

***Industrial Pharmacists Group*** The Industrial Pharmacists Group is for pharmacists who are engaged in industrial practice, those who act as consultants to industry, those whose work is concerned substantially with questions of industrial pharmaceutical practice and those whose work concerns, or who have an interest in, industrial, regulatory or technical matters affecting pharmacy. Contact: Emma Richards, practice division (tel 020 7572 2411).

***Hospital Pharmacists Group*** The Hospital Pharmacists Group is for pharmacists who work in National Health Service, private or armed forces hospitals and those employed by, or acting as consultants to, NHS health authorities, health boards and trusts. Also eligible are pharmacists working in the prison service, community pharmacists seconded to provide a service within a private hospital and other pharmacists whose work is significantly concerned with matters relating to the practice of hospital pharmacy. Contact: Liz Griffiths, practice division (tel 020 7572 2408).

***Academic Pharmacy Group*** The Academic Pharmacy Group is open to pharmacists and other academic staff who make a significant contribution to pharmacy teaching and research in a United Kingdom school of pharmacy or a recognised pharmacy academic practice unit. Contact: Rachel Ollerearnshaw, education division (tel 020 7572 2375).