INTRODUCTION

The amendment regulations to the general practitioners' terms and conditions of service came into force on the 1st April 1990. These amendments are substantial and many of the issues are controversial.

This article aims to take a broad overview of screening of the elderly population and, with the aid of practice audit and literature review, the following areas are covered:

(a) The new regulations for geriatric screening.
(b) The problems of the ageing population structure.
(c) The advantages and disadvantages of screening the elderly.
(d) THE AUDIT: A retrospective opportunistic review into screening the elderly, aged 75 and over, in general practice.
(e) The identification of potential problem areas in the screening programme.
(f) A critical evaluation of the government's regulations.
(g) Proposals to improve the efficiency and effectiveness of the screening programme.

THE GOVERNMENT PROPOSALS FOR SCREENING THE ELDERLY

These are that patients aged 75 and over should:
(1) be invited to participate in a consultation and
(2) be offered a domiciliary visit, every 12 months.

The doctor will, when making an assessment following a consultation, record in the patients medical records the observations made of any matter which appears to him to be affecting the patients general health, including where appropriate the patient's:

(a) sensory functions,
(b) mobility,
(c) mental condition,
(d) physical condition (including continence),
(e) social environment,
(f) use of medicine.

The development of the ageing population structure is demonstrated in figures 1 and 2. In 1901, it was pyramidal in shape but by 1981 it roughly resembled a square. The ageing population structure has developed for the following reasons:

(1) Improvement of hygiene and nutrition in society.
(2) The conquest of infectious diseases.
(3) The increased use of birth control.
The elderly make much heavier demands on health and social services than the young. Figure 4 demonstrates the increased incidence of longstanding illness in the elderly. 56% of all non-psychiatric NHS beds are already occupied by the over 65's. The majority are in the department of Geriatric Medicine, but they also account for:
- 36% of Trauma and Orthopaedic beds.
- 42% of General Surgical beds.
- 49% of Ophthalmology beds.
- 50% of General Medical beds.

Already the demands for medical and nursing services seem stretched. The increasing elderly population will have a profound effect on the health and welfare services. By the year 2001, on current trends, elderly males could occupy 75% , and elderly females 90% of all acute general hospital beds (excluding maternity)!

Concern has been expressed that the hospital services will not be able to cope in the future. The answer to this dilemma could be in prevention and in identifying disability before it becomes severe. This may also improve the quality of life.

DISCUSSION

In 1964, Williamson et al published an article on the unreported needs of the elderly at home(1). Since this pioneering work, there have been many changes in attitudes towards the elderly in the general practice setting. The concept that there is an iceberg of hidden illness among the old people has been challenged and there has been many a lively debate over the relative merits of surveillance, screening and case finding.

IS SCREENING FEASIBLE?

Screening studies of the elderly have been shown to reveal a high prevalence of unreported problems:-

In one practice(2), all 855 patients over 65 years old were reviewed. Of these, 138 had been screened on a previous occasion (2 years earlier). Patients were invited who were previously screened, 43% had definite problems (deafness, anaemia, visual defects etc.,) two patients were found to have diabetes, one had temporal arteritis, two had renal disease, and one had myxoedema. At the second examination of these patients (2 years later), 28% had been cured, 48% had been relieved and 23% remained unchanged. The screening clinic was found to be acceptable by the patients. 30% of the retested patients did, however, develop new definite problems by the second test, emphasising the need for a regular screening programme.

ADVANTAGES OF SCREENING

Proponents of geriatric surveillance argue:

(1) That some spin-offs (morale, self esteem and satisfaction) are immeasurable and come forth when it is shown that someone cares.

(2) That selective screening of high risk patients (e.g. the very old, the recently bereaved, the socially isolated, the immobile, the recently discharged) is a more realistic proposition with a higher yield in prospect.

(3) An opportunistic approach is also feasible, since 90% of the over 75's see the primary health care team over a 1 year period.

(4) That to-day's trivial problem (e.g. loose doormat) is tomorrow's major one (e.g. fractured neck of femur).

THE DISADVANTAGES OF SCREENING

Doubts have been cast on the feasibility and effectiveness of screening e.g:-

Williams(3) - Identified patients over 75 years old who had no contact with primary health care team over a one year period. They were then visited at home and assessed by the practice health visitor, who found the general health of these patients to be good.

Wallis and Barber(4) - Estimated that to screen all patients over 75 years in their Glasgow practice needed 18 hours of health visitor time per week for the first year, and 11 hours per week in subsequent years.

Tulloch and Moore(5) - Found that screening produced an increased use of health care and social facilities, but not a great change in health. It is argued by some that most newly diagnosed problems in the elderly are trivial or irreversible, so health spin-offs are small.

HOW EFFICIENTLY ARE WE PRESENTLY SCREENING?

Since we are now obliged to undertake geriatric screening, it is worth considering how efficiently this is presently being performed, and how much extra work and organisation is required under the new contract.
THE AUDIT

Opportunistic screening by a general practitioner of the over 75's over the past 12 months, and review of unscreened patients

The object of this audit was to assess how a general practitioner was presently assessing his geriatric population over the age of 75 years and to identify any illness present within patients not seen in the last 12 months.

The practice consisted of seven full time partners with a list size of 14,447 patients, operating on a personal list basis.

THE OBJECTIVES

(a) To determine the number of patients over the age of 75 years.
(b) To determine how many had been seen within the past twelve months.
(c) To assess the frequency and accuracy of medical observations within the notes with respect to the proposed regulations.
(d) To assess how efficiently the population is presently being screened.
(e) To decide what improvements are required in order to fulfil the proposed requirements, and to decide the most efficient way of doing this.
(f) To identify and follow up patients not seen within the last 12 months.

THE SEARCH

1. To obtain with the aid of an age/sex register, the names of all these patients over the age of 75 years.
2. From the notes, see how many times they have been seen over the past 12 months, and whether this was a surgery consultation or a home visit.
3. To determine whether the objective criteria of the new contract have been fully assessed, in particular:– Weight.
   Blood pressure
   Mobility.
   Mental stage.
   Mood.
   Continence.
   Social environment.
   Use of medicines.
   Vision.
   Hearing.
   Tests and investigations.
   Thus, this was an audit of opportunistic screening of patients over 75 years in the past 12 months.
4. To pay home-visits to the unseen patients, and identify any medical, social or psychological problems.

RESULTS

THE PRACTICE PROFILE

<table>
<thead>
<tr>
<th>PARTNER</th>
<th>LIST SIZE (all ages)</th>
<th>NUMBER (&gt;75 yrs)</th>
<th>% (&gt;75 yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2219</td>
<td>285</td>
<td>12.8%</td>
</tr>
<tr>
<td>2</td>
<td>2303</td>
<td>150</td>
<td>6.5%</td>
</tr>
<tr>
<td>3</td>
<td>2170</td>
<td>92</td>
<td>4.2%</td>
</tr>
<tr>
<td>4</td>
<td>2026</td>
<td>60</td>
<td>3.0%</td>
</tr>
<tr>
<td>5</td>
<td>2196</td>
<td>143</td>
<td>6.5%</td>
</tr>
<tr>
<td>6</td>
<td>1911</td>
<td>38</td>
<td>2%</td>
</tr>
<tr>
<td>7</td>
<td>1816</td>
<td>212</td>
<td>11.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14447</td>
<td>980</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

National average list profile

List size: 2,000 patients
Number aged 75 years and over: 130
Percentage aged 75 years or over: 6.5%

A retrospective assessment of the efficiency of screening by partner number 3

Total number of patients = 2170
Total aged 75 years = 92
(65 female+27 males)
% aged 75 years = 4.2%

No. patients seen in last 12 months = 82
% patients seen in last 12 months = 89%
No. of patients seen at home = 61 =66%
Average number of consultations per 12 months = 6

% with weight recorded =45%
% with B.P. recorded =55%
% with mobility recorded =22%
% with mental state recorded =14%
% with mood recorded =13%
% with continence recorded = 8%
% with social environment recorded =18%
% with blood tests recorded =17%
% with visual acuity recorded = 4%
% with hearing recorded = 5%
% with urine test recorded = 5%
Number of patients under regular 2 monthly review =31
=34%

The ten patients who had not been seen in the past 12 months were then followed up:–
1 Had emigrated.
2 Were ghost patients.
1 Had been admitted to a long stay ward.
The remaining six were last seen
1964: Alive and well.
1978: Alive and well.
1978: Glycosuria found on routine urine test.
1987: Social recluse (refused medical intervention, but husband seen regularly).
1986: Carcinoma of breast under hospital review.
The corrected figure would therefore be – 88 patients aged 75. Therefore 93% of the elderly population had been seen in the previous 12 months.

WHAT DOES THIS INFORMATION TELL US?

1. This can only assess the proportion of patients seen, the frequency of the consultations, and whether they were seen at the surgery or at home.
2. It is dependent upon an accurate age/sex register and/or Family Practitioner Committee patient list.
3. The notes were written in a concise manner, meaning only positive findings were recorded. The G.P. had a detailed personal knowledge of a large proportion of his patients.
4. Although 93% of the patients had been seen in the past 12 months, only a small proportion had the specific areas as outlined in the new contract fully assessed (see later).
5. A small proportion of patients lived full and active lives, independent of medical intervention. How aggressively therefore should we attempt to screen these patients?
6. Is there likely to be an increased yield from screening infrequently screened patients? From our experience, one patient previously not seen since 1978, had glycosuria on routine testing. However, the number of patients involved was far too small to state whether this was of any significance.

7. The proportion of elderly patients aged 75 or over was only 92 (4.2%), which is considerably below the national average.

**HOW TO SCREEN THE ELDERLY**

It is important to discuss the mechanics of a surveillance programme. An accurate list of patients over 75 years of age in the practice is obviously needed, provided from the practice age/sex register and checked against the list provided from the Family Practitioner Committee.

The practice had 980 patients aged over 75 years requiring an annual visit. Allowing for 6 weeks annual leave for the visiting G.P. this equates to 3 patients per week on each general practitioner’s list. This amounts to 21 visits for the practice per week, or 4.3 per weekday. Surveys have shown that allowing for travelling time, each assessment will take approximately 45-60 minutes.

At present, however, we are seeing 90% of the target population over twelve months. Therefore, it would surely be more efficient to screen patients opportunistically. At present 34% of patients are seen at home on a regular 2 monthly visit, mainly for purpose of review and repeat prescriptions. This would provide an ideal opportunity to perform assessment. In this way, as long as each G.P. performs 3 home assessments per week, the target would readily be achieved. However, G.P.s with a large proportion of elderly patients may have to rely on training a nurse for the visiting programme, or working in conjunction with the health visitor. A practice nurse or health visitor could readily retrieve the relevant information within about 40 minutes. However, a close liaison with the general practitioner must be ensured, by such means as regular meetings.

**THE MAIN AREAS OF ASSESSMENT LISTED IN THE NEW CONTRACT**

The new contract lists seven major areas of assessment which are briefly outlined below.

1. **SOCIAL AND HOME ASSESSMENT**

   This entails assessing the patient’s social support, carers, relatives, need for home helps, meals-on-wheels etc. A general assessment of home conditions, (e.g. hearing, availability of a telephone) completes the picture.

2. **MOBILITY ASSESSMENT**

   The mobility assessment entails determining the stability (frequent falls) and mobility (Parkinson’s Disease? arthritis? previous stroke? etc.,) of patient. The need for special walking aids, home adaptations etc., should be considered.

3. **MENTAL ASSESSMENT**

   The mental assessment includes true psychiatric disorders (depression is common in the elderly), as well as an assessment of any confusion present. The standard questions (name, age, date of birth, address etc.,) may be appropriate in specific situations but many of the fit elderly will, not unnaturally, find any routine questioning along these lines insulting. The general practitioner must clearly use his or her discretion.

4. **ASSESSMENT OF THE SENSES**

   Simple hearing and vision tests may yield a significant number of patients who will be in need of some sort of intervention. The problem here will be one of referral. The Ophthalmology and E.N.T. Departments of our hospitals are already overloaded, and it is an irony that, at the same time that the government is proposing these screening programmes, it is exhorting us to reduce our referral rate (with a very real threat of cost limiting in the background).

5. **ASSESSMENT OF CONTINENCE**

   The following principles are useful in any assessment of continence:-
   
   (a) The commonest cause of faecal incontinence is faecal impaction with overflow.
   
   (b) With urinary incontinence, the urine should be tested for glucose and infection as these are common causes - a rectal examination for prostatic hypertrophy or faecal impaction may be helpful and in women, a pelvic examination may occasionally be required to assess a vaginal prolapse.
   
   (c) As with many symptoms in the elderly, the medication should first be reviewed, particularly if the patient is taking strong diuretics.
   
   (d) Incontinence is a common feature in confusion and dementia.

6. **GENERAL FUNCTION ASSESSMENT**

   General functional assessment is an ambiguous term but the following assessments can be included here:-

   (a) Current medical problems.
   
   (b) Pulse and blood pressure.
   
   (c) Urine test – maturity onset diabetes is common enough to give an appreciable yield of new cases. However, with a decreased glomerular filtration rate in the elderly, glycosuria may not be present, and therefore a random blood glucose may be a more effective screening test.
   
   (d) Blood tests: Depending on clinical judgement
      
      FBC?
      
      Glucose?
      
      Profile?
      
      Thyroid Function Tests?

7. **REVIEW OF MEDICATION**

   The principles of prescribing for the elderly patient include:
   
   (a) Keep the medication under regular review.
   
   (b) Ensure that the drug therapy is essential.
   
   (c) Observe for adverse reactions.
   
   (d) Use the minimum number of drugs in the correct dosage.
   
   (e) Check compliance.

   Certain aspects of these assessments are particularly time-consuming. Social, home and mobility assessment may be assisted with the help of a HEALTH ASSESSMENT
QUESTIONNAIRE which could be given to the patient prior to the assessment. At the 1989 meeting of the Geriatric Society Professor Pathy of The University of Wales College of Medicine advocated the use of a self-rating questionnaire. In a controlled study of 711 patients over 65, the questionnaire was used to identify patients who needed medical and social help. In the intervention group, at the end of a 3 year period the immobility rate had significantly reduced to 18.3% (67 patients) in comparison to 24.2% (86 patients) in the control group. Hospital bed-days, day hospital visits, and domiciliary visits were also reduced in the intervention group. G.P. home visits were reduced by 15% in the intervention, but the surgery consultations were increased by 20%.

RECORDING DATA

It is important that all the information from an assessment is neatly accurately and concisely recorded with the patient’s notes. Retrieval can be aided by the use of:—
(a) “Note-tagging”.
(b) A geriatric screening card.
(c) Practice computer.

SUMMARY –THE PRACTICAL POINTS

In performing this practice audit, and reviewing the relevant articles, the following practical points have emerged.

1. The evidence for and against geriatric screening is controversial.
2. There is insufficient evidence to support the value of the government’s proposed screening programme for the elderly.
3. Given that screening of the elderly is to be performed, then a selective approach would be more efficient, identifying high risk groups (possibly with the aid of questionnaires) and then visiting them.
4. Screening the elderly patients would require the average G.P. to see approximately three patients per working week. This would generate a substantial number of referrals, placing further pressure upon available services.
5. Elderly patients who are not known to their general practitioner tend to be in relatively good health.
6. Many of the problems identified will not be amenable to treatment.
7. A nurse or Health Visitor may be an ideal member of the team to undertake the required annual visit.
8. Close liaison is required within the primary health care team.
9. Clear and concise notes are required which are readily retrievable.

REFERENCES

2. Pike LA Screening the elderly in General Practice J.R. Coll Gen Pract 1976; 26:698-703.