THE SCOTTISH OFFICE

01814 NHS
MEL(1993)156

National Health Service in Scotland
Management Executive

St. Andrew's House
Edinburgh EH1 3DG

Dear Colleague

IMPROVING THE EFFECTIVENESS OF SERVICES

The development of purchasing in the NHS has placed renewed emphasis on the outcomes of care and the effectiveness of interventions. It is perhaps therefore worth taking stock of the stream of activity which is underway in this area.

Current work seeks to take into account the different perspectives and responsibilities of purchasers, providers and clinicians; and to address both long and short term aspects. The key elements are:

- a long term programme of work to improve our knowledge about the epidemiology and aetiology of disease, and the effectiveness of various interventions in dealing with different stages of disease. This involves research, audit and needs assessment - at a national level, the Scottish Needs Assessment Programme (SNAP);

- the identification of areas where purchasers, providers and clinicians can have an immediate impact on the effectiveness of care. Such areas include those where there is firm knowledge and agreement by professionals as to what constitutes effective care, and yet there are variations of practice around Scotland which mean that care is not being delivered everywhere as effectively as it could. The work is being driven by clinical audit, CRAG, the Royal Colleges and the Joint Working Group on Purchasing.

This letter focuses on the particular impact which purchasers, providers and clinicians can have in the short term in the following areas:

preventing venous thrombo-embolism

palliative radiotherapy for lung cancer

prevention of blindness due to diabetes

Clinical guidelines on effective interventions in these areas are being prepared by the relevant Royal Colleges and will be available to providers and clinicians in the next few months. In the

10 December 1993

Addressees

For action:
General Managers,
Health Boards

General Manager,
State Hospital

GP Fundholders

For information:
General Manager,
Common Services Agency

Chief Executives,
NHS Trusts

Enquiries to:

Mrs D Evans
Strategic Planning &
Performance
Review Division
NHS Management
Executive
Room 268
St Andrew's House
EDINBURGH EH1 3DE
Tel: 031-244 2402
Fax: 031-244 2051

meantime **to inform the process of negotiating contracts for 1994-95** and in advance of definitive guidelines being available, I enclose guidance for purchasers. The guidance has been approved by CRAG in consultation with the Royal Colleges and is based on firm research. I will expect Health Boards and GP fundholders to take it into account in negotiating contracts for 1994-95 and to include suitable clauses in contracts.

Work is proceeding on producing summaries for purchasers of the first 3 SNAP reports in a similar format to the attached guidance. These will cover congenital dislocation of the hip; hip and knee joint replacements; and cataracts. The first summary is attached and I shall forward the others in due course.

Robert Kendell

R E KENDELL
Chief Medical Officer

GEOFF SCAIFE
Chief Executive, NHS in Scotland

IMPROVING THE EFFECTIVENESS OF SERVICES

JOINT WORKING GROUP ON PURCHASING: GUIDANCE FOR PURCHASERS

PREVENTING VENOUS THROMBO-EMBOLISM

Background

From the findings of the English National Confidential Enquiry into Perioperative Deaths (NCEPOD) it is likely that pulmonary embolism causes perhaps 200 avoidable deaths in Scotland every year (40% of all perioperative deaths following total hip replacement, 20% of perioperative hysterctomy deaths, and 16.5% protatectomy deaths). It occurs when part of a clot of blood in a deep leg vein breaks off and lodges in the lung; large clots are often fatal. In most patients with fatal embolism, preceding non-fatal thrombo-embolism had not been recognised by clinicians.

There is general consensus that the most efficient way to prevent both fatal and non-fatal venous thrombo-embolism is to use routine prophylaxis for moderate to high risk hospital patients. The NCEPOD study urges hospitals to have an agreed policy for prophylaxis against, and treatment of, deep vein thrombosis and pulmonary embolism and suggests that directors and clinicians should monitor the use of prophylaxis.

Proposal

That all appropriate patients considered to have moderate to high risk of thrombo-embolism complicating a hospital stay should receive prophylactic treatment.

Costs

The cost of treating a single case depends on the protocol that the clinician adopts. This in turn depends on the type of operation and associated risk factors. In the routine case of moderate to high risk the cost of administering low doses of herapin until discharge is of the order of about £3-5. 5000 units every 12 hours costs 44p a day. There is evidence that low molecular weight heparin is more effective in high risk patients having operations such as major orthopaedic operations and some clinicians prefer this. The cost is considerably higher - of the order of £35 for a course of treatment. These costs are based on a 7 to 10 day length of stay. The guideline being developed by the Intercollegiate Group will address the issue of the circumstances in which routine heparin and low molecular weight heparin should be used.

Routinely available data is insufficient to quantify what additional cost would be incurred. While we have statistics about the number of cases of thrombo-embolism and the number of operations we have no measure of the number of cases at present receiving prophylaxis nor of the number of patients with additional risk factors. As an indication of the number of selected operations which may require prophylaxis, the table taken from Scottish Health Statistics 1992 for the year 1991 may give some indication of cost.

Moderate Risk

Coronary artery bypass	2661
Cholcystectomy	3260
Prostatectomy	5758
Hysterectomy	6467

High Risk

Total hip replacement	3747

In addition to the procedure, other risk factors relating to the patient indicate the need for prophylaxis. These include age over 40, obesity, previous deep vein thrombosis, varicose veins, immobility, pregnancy, various drugs and specific illnesses.

Another consideration relating to cost is risk management. The NCEPOD report points out that, in any litigation involving damage or death from thrombo-embolism where no prophylaxis is given, judges are likely to find that care has been negligent and to award considerable damages.

Professional support

There is a general professional consensus that prophylaxis is necessary for patients at significant risk. The Intercollegiate Group has agreed to promote this and to produce and promulgate guidelines. A meeting to do this is planned and is part of a wider review of the use of anticoagulant. In the meantime the report from the Thrombo-embolic Risk Factors (THRIFT) Consensus Group has wide acceptance and can be used by purchasers as a basis for negotiation with their providers.

Recommendations for Purchasers

All contracts for medicine, orthopaedics, general surgery, urology and gynaecology should require providers to have written policies for prevention of deep vein thrombosis and thrombo-embolism and to use these for care planning and clinical audit. These policies should be based on the report of the THRIFT Consensus Group now and on the Scottish Intercollegiate guideline when it is available.

IMPROVING THE EFFECTIVENESS OF SERVICES

JOINT WORKING GROUP ON PURCHASING: GUIDANCE FOR PURCHASERS

PALLIATIVE RADIOTHERAPY FOR LUNG CANCER

Background

Most patients who develop lung cancer are incurable on presentation. Radiotherapy to relieve symptoms is the only treatment offered to 50-70% of patients. Only 20% of all patients will be alive one year after diagnosis.

Although there is very strong evidence from a Medical Research Council study that 2 "fractions" (or separate doses) of radiotherapy are as effective as alternative treatments which requires more "fractions", most patients - 70% based on GGHB figures - currently receive 5-7 "fractions".

Proposal

It is proposed that radiotherapy for palliation of non-small cell carcinoma of the lung should conform to the recommendation from the MRC study and that providers should limit treatment to 2 fractions in almost all cases.

Costs

Glasgow figures suggest that between 10,000-14,500 unnecessary treatments are administered each year. There are no additional costs of reducing to a 2 fraction approach. Savings are likely to come from a reduction of time in treatment rooms rather than in money. Time relates to 2 functions (a) planning (b) actual treatment. No planning time is saved, only the time it takes to administer the unnecessary treatments. This is likely to amount to 4-5000 hours across Scotland. Time saved would allow rationalisation of remaining provision, transfer of resources to other treatments and work in areas which may have better potential for health gain. There are financial savings to patients, and the Scottish Ambulance Service from reduced number of patient journeys, around 10,000 return journeys might be saved.

Professional support

This topic has been considered at the Intercollegiate Group on Guidelines. The representative of the Clinical Oncologists has agreed to arrange for suitable guidelines to be developed soon based on the MRC recommendation. He is at present in touch with his English colleagues to ensure that the guidelines in the 2 countries are congruent. There does not appear to be any professional disagreement.

Public Support

There is no likelihood of taking public opinion on this but generally shorter periods of treatment have benefits in terms of patient satisfaction.

Recommendations for Purchasers

Purchasers should require providers in contracts to:

- develop, and use, policies for radiotherapy covering the number of fractions which should be administered for palliative lung cancer derived from the national guidelines from the Intercollegiate Group or, if these are not available, from the MRC study.

- report on the proposed use of resources freed by this means.

- establish clinical audit to report patient outcomes.

IMPROVING THE EFFECTIVENESS OF SERVICES

JOINT WORKING GROUP ON PURCHASING: GUIDANCE FOR PURCHASERS

PREVENTION OF BLINDNESS DUE TO DIABETES

Background

Diabetes is a common condition with over one percent of the population affected. At present some complications - eye disease, kidney disease, vascular disease - appear to be inevitable with the passage of time. Early detection and vigorous treatment can often prevent or delay serious consequences and so an effective screening programme for diabetic complications is likely to lead to substantial health gain for many diabetics.

Diabetes is one of the main causes of blindness in the UK. It is the commonest cause of blindness in the 25-64 age range. Diabetic retinopathy (disease of the retina at the back of the eye) can progress to a sight threatening level with few or no warning symptoms. Regular examination of the retina is required to detect disease in time for laser therapy, which is highly effective in preserving sight.

To detect the complication in time, the eyes should be examined by a person with the appropriate skills every year. This is often not achieved because patients are sometimes reluctant to comply, some practices are not organised to support screening and not all doctors dealing with diabetes have the appropriate skills.

A number of options are available to overcome these problems.

a mobile camera which can be taken to health centres or locations in the community and the films are read later by an expert

a trained ophthalmic optician can offer this service in co-operation with GPs

an ophthalmologist can have a special clinic in a diabetic clinic or in an ophthalmological clinic for diabetic eye disease

other doctors with appropriate training can offer a service

Different options are appropriate for different circumstances. For example the mobile camera has been shown to be appropriate and cost effective in rural communities in Tayside. In urban practice ophthalmic opticians might be appropriate. It is likely that more than one option will have to be used in any situation to achieve the level of screening to prevent all avoidable blindness.

Proposals

1. Purchasers should require of providers an improvement in the quality of data about diabetes and its complications. The data required will be identified in the guidelines being developed by the Intercollegiate Group to help meet the St Vincent Declaration targets. (See annex).

2. Purchasers should ensure that all providers develop costed proposals for a comprehensive and ongoing screening programme to detect diabetic retinopathy and an early and potentially curable stage.

Costs

The mobile camera cost about £12 per patient, assuming 2000 screened per annum; plus costs of laser therapy to save sight. Using Tayside figures cost per sight saved is about £1,800.

Costs apart from the Tayside study are very difficult to obtain. There is no routinely available statistic to show the frequency of blindness in late diabetes. The blind register is not accurate since not all patients with serious diabetic eye disease are on the register. Only 60% of all diabetics attend a diabetic clinic and it is difficult to aggregate data across clinics. Statistics for patients in General Practice are also difficult to obtain. An important opportunity for purchasers is to require providers to improve the quality of the data to allow better control and costing.

It is difficult to extrapolate from the experience in Tayside. However, Tayside's population represents 7.7% of the total Scottish population. On that basis, we might expect that the total costs of a national screening programme would be in the region of £200,000 to £250,000. Laser treatment would add a further £200,000 giving a total of £400,000 to £45,000. Again, applying Tayside's figures, the number of patients whose sight would be saved in Scotland as a whole might be around 250. Taking account the additional social and emotional costs of blindness, preventing 250 cases of blindness annually is a substantial health gain at a cost of £1800 per sight saved.

Professional support

The Intercollegiate Group have agreed to co-operate in dealing with this problem. In October a conference was organised to start the process of developing guidelines. Discussion at the conference highlighted the lack of adequate information to monitor and control diabetes and its complications. They plan to make recommendations on the required data set as part of their guideline development programme.

The World Health Organisation "St Vincent" declaration set a target of reducing new blindness due to diabetes by one third or more in 5 years. The UK Government has signed up to this target. The British Diabetic Association strongly supports screening for early eye disease and has provided funding for several mobile screening vans.

Recommendations for purchasers

Purchasers should require all providers of diabetes care to improve the data collection systems to ensure that all diabetics can be identified to allow systematic screening for complications and to allow monitoring of their health status.

Purchasers should require providers to monitor and report annually on incidence of blindness in people with diabetes so that purchasers can monitor progress towards the St Vincent Declaration.

Purchasers should also be asked to work with the clinicians involved in diabetic care in their area (including GPs) to bring forward plans to meet the targets of the St Vincent Declaration including the prevention of blindness. The prevention of blindness project should be included in the 1994-95 negotiations and the others in the year 1995-96.

ANNEX 1

THE ST VINCENT DECLARATION

A meeting of representatives of Government Health Departments and patient organisations, sponsored by WHO, was held by Italy in 1989 to consider the problems of diabetes. They made a series of recommendations to improve diabetic care and these recommendations are known as the St Vincent Declaration. They also set 5 targets to encourage the implementation of effective measures to prevent costly complications.

Reduce new blindness due to diabetes by one third or more

Reduce the number of people entering end-stage diabetic renal failure by at least one third

Reduce by one half the rate of limb amputation for diabetic gangrene

Cut morbidity and mortality from coronary heart disease in the diabetic by vigourous programmes of risk factor reduction

Achieve pregnancy outcome in the diabetic woman that approximates that of the non-diabetic women

The data required to monitor these targets is not currently available and much is common to all targets. Establishing an information system for all targets would be more efficient and effective than setting up systems for individual complications. Purchasers should therefore negotiate with providers to have established a system which would allow monitoring of diabetic patients rather than for blindness alone.

The Intercollegiate Group are already engaged in a series of meetings related to each of the 5 areas identified and will recommend as part of the guideline on good clinical practice a basic core data set required to report on the outcomes of diabetic care.

IMPROVING THE EFFECTIVENESS OF SERVICES-JWG ON PURCHASING GUIDANCE FOR PURCHASERS

CONGENITAL DISLOCATION OF THE HIP

Background

* Congenital dislocation of the hip (CDH) is a potentially crippling disorder associated with a high degree of handicap and orthopaedic problems in childhood and adulthood if not recognised early.

* Scottish data suggest that CDH affects 2.7 babies out of every 1000.

* Effective means of screening for CDH early exist. These include clinical physical examination of the hips at birth and ultrasound scan.

* In Scotland around 36% of children are diagnosed late. This compares with lower rates in other countries - most notably Austria where ALL children are diagnosed early.

Proposal

* The proportion of CDH diagnosed late varies between health boards, purchasers should aim to ensure that effective screening is in place to ensure as many as possible CDHs are diagnosed early.

Costs

* The Scottish Needs Assessment Programme (SNAP) report "Congenital Dislocation of the Hip" published by the Scottish Forum for Public Health Medicine July 1993) gives a detailed economic assessment of the costs and benefits of clinical and ultrasound screening; and of no screening. It concludes that clinical screening is cost effective in all cases and that ultrasound screening is cost effective in high risk cases.

* Clinical screening is estimated to costs £2 per child and ultrasound between £10 and £20. It is however important to note that the costs found in this study cannot necessarily be taken as applying elsewhere. Purchasers will need to check that item costs in their area broadly match those assumed in Section 6.3 of the report.

Professional Support

* There is widespread professional support for effective screening for CDH. The failure to diagnose almost a third of cases early is attributed in the SNAP report largely to inadequate training.

Recommendations for Purchasers

* Purchasers should:

  - monitor the proportion of cases diagnosed late by each provider;

  - commission ultrasound screening for high risk babies;

  - ensure all babies are examined clinically at birth by staff or GPs who are well trained.