



Comptroller and Auditor General
Report of Value for Money Examination

Department of Health and Children

Prescribing Practices and the Development of
General Practitioner Services

Report for presentation to Dáil Éireann
pursuant to Section 17 of the
Comptroller and Auditor General
(Constitution) Act 1986 (No. 8 of 1986)

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Comptroller and Auditor General
Report on Value for Money Examination

Department of Health and Children

Prescribing Practices and the Development of
General Practitioner Services

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Arna fhoilsiú ag Oifig an tSoláthair

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Report of the Comptroller and Auditor General

Prescribing Practices and the Development of General Practitioner Services

I have, in accordance with the provisions of Section 9 of the Comptroller and Auditor General (Amendment) Act, 1993, carried out a value for money examination on prescribing practices and the development of general practitioner services in the General Medical Services scheme, administered by the Department of Health and Children, the Health Boards and the General Medical Services (Payments) Board.

I hereby submit my report of the above examination for presentation to Dáil Éireann pursuant to Section 11 of the said Act.

A handwritten signature in black ink, appearing to read 'John Purcell', with a large, stylized flourish above the name.

John Purcell

Comptroller and Auditor General

26 September 1997

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Summary of Findings

Entitlement to State funded health care is divided into two categories. Category One provides entitlement to a means tested medical card under the General Medical Services (GMS) scheme with eligibility to a comprehensive range of health services free of charge, including general practitioner services and prescribed drugs and medicines. Category Two provides entitlement to public hospital services subject to statutory charges.

At 31 December 1996, the GMS scheme provided for the health care needs of 1.25 million people, representing 34.6% of the population, at a total cost of £264.1 million. The cost of drugs and medicines prescribed under the GMS scheme has increased by over 100% in the ten year period to 1996, rising from £63.9 million to £130.3 million.

During a review of the scheme in 1990/91 the Department of Health and Children (the Department) and the Irish Medical Organisation (IMO) agreed that the level of prescribing could be reduced without having an adverse effect on the quality of patient care. Following this review the Department and the IMO agreed to introduce an incentive scheme known as the Indicative Drug Target Scheme (IDTS), with effect from 1 January 1993, to encourage more rational and economic prescribing. The Department also agreed to establish a General Practice Development Fund which would also provide for investments in general practice.

In 1994 the Department published a Strategy document, which identified organisational and service problems in the health services. The steps to be taken to develop the service were set out in an action plan covering the period 1994 to 1997.

The examination focused on

- the steps being taken to promote more cost effective prescribing within the GMS scheme and to determine whether there is potential for further savings
- the extent to which the required improvements identified in the 1994 Strategy document have been implemented.

The Indicative Drug Target Scheme

The IDTS provides for the calculation of monetary prescribing targets for each General Practitioner (GP) taking into consideration the make-up of his/her patient panel. Savings from achieving the targets are apportioned between the doctors concerned and the health boards to be spent on specific improvements to practices and for the overall development of the service.

- In the absence of good scientific evidence as to their effectiveness, the continued use of mucolytics, which cost some £700,000 annually should be reviewed.
- A switch to less powerful forms of antibiotics would have long term benefits in medical care and reduce costs. For example, a 10% change in prescribing amoxycillin could save over £100,000 a year.
- The prescribing of medical foods, which cost over £3.8 million in 1996, should be subject to regular review to prevent over prescribing.

Improvements in General Practitioner Services

Up to 31 December 1996, £49 million and £15 million, respectively, had been paid from the General Practice Development Fund and the IDTS towards the development of GP services. The efficiency and effectiveness of the developments have not been evaluated by the health boards. However, since March 1996 new projects are required to have inbuilt evaluation mechanisms, but it is too early to assess their effectiveness. Each health board should also carry out an overall assessment of its programme of investments and a review at national level should be considered by the Department.

In order to improve practice management and the sharing of information, the Strategy document set a target of 80% for the computerisation of GP practices by 1997 but only some 58% of practices had been computerised by February 1997.

The examination established that none of the health boards were receiving data on the incidence of illnesses from GPs because of a lack of resources in their public health departments. Moreover, a patient registration system has not been introduced, apart from a pilot project in the North Eastern Health Board. The absence of data from these sources works against better planning and effective delivery of the health services.

Therapeutic committees have been set up in all health boards with the primary purpose of bringing together GPs and hospital doctors/consultants to define and implement agreed therapeutic regimes for specific ailments. However, there have been difficulties in their operation, particularly in the area of communications between hospitals and general practice.

Health boards should ensure that arrangements are in place for the refund of the unexpired value of any publicly funded grant in the event that the grant-aided premises cease to be used for the grant aided purpose. Only two health boards have done so.

Prescribing Practices and the Development of General Practitioner Services

1 Introduction

Entitlement to Health Care Services

- 1.1 Every person in the State is entitled to a certain level of State funded health care. The financial status of the patient determines the extent to which the State meets the cost of the service. The entitlement is divided into two categories.
- 1.2 People in Category One are eligible for a means tested medical card under the General Medical Services (GMS) scheme which entitles them to a comprehensive range of health services free of charge. These include general practitioner (GP) services, prescribed drugs and medicines and inpatient/outpatient hospital services. At 31 December 1996, the GMS scheme provided for the health care needs of 1.25 million people, representing 34.6% of the population.
- 1.3 People in Category Two are entitled to public hospital services, subject to statutory charges. They are not entitled to free GP services or to free prescribed drugs and medicines. However, they can obtain financial assistance towards high drugs costs under the Drugs Cost Subsidisation Scheme, the Long Term Illness Scheme and the Drugs Refund Scheme.
- 1.4 This value for money examination was concerned with aspects of services provided to people in Category One.

Reviews and Initiatives

- 1.5 Several studies have been carried out over the last ten years on the overall health service and on the individual services including GP services. The proposals in these studies were drawn together in a document published by the Department of Health and Children (the Department) in 1994¹. This document included a cohesive long-term strategy and a four-year action plan covering the period 1994 to 1997 (see Appendix A).
- 1.6 The document identified several organisational and service problems relating to the provision of GP services and proposed a number of steps to be taken over the four-year period to develop the service. These included
 - the promotion of better quality and more cost effective prescribing
 - the design of incentives for improved organisation
 - arrangements for the exchange of information
 - the introduction of a system of patient registration.

¹ *Shaping a Healthier Future, A Strategy for Effective Health Care in the 1990s, Department of Health, 1994.*

2 Proposals for Developments

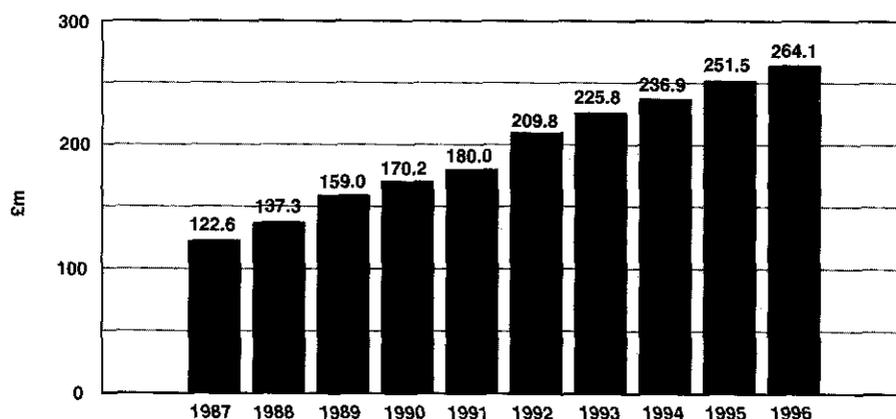
General Medical Services Scheme

- 2.1 The provision of free GP services under the GMS scheme is governed by a contract between the GP and the health board under which the GP agrees to provide a service to medical card holders. There were 1,647 contracts in place at the end of 1996.
- 2.2 For the majority of patients, the GP will be the first point of contact with the health services. The range of medical services available from GPs include the traditional services which have come to be expected from family doctors and other services which until recently were only available in a hospital setting. The increased range of services now available from many GPs include physiotherapy, dietary advice, family planning, minor surgery, counselling, blood pressure monitoring and palliative care for the terminally ill.

Cost of the General Medical Services Scheme

- 2.3 Expenditure on the GMS scheme amounted to £264.1 million in 1996. Figure 2.1 shows the costs of the scheme during the period 1987 to 1996.

Figure 2.1
GMS expenditure 1987 - 1996



Source: GMS (Payments) Board, Annual Reports 1987 to 1996.

- 2.4 Expenditure under the GMS scheme covers fees and allowances to doctors, prescribing fees to pharmacists as well as the cost of drugs, medicines and appliances provided by the pharmacists. Figure 2.2 shows the breakdown of the 1996 payments.

General Practice Development Fund

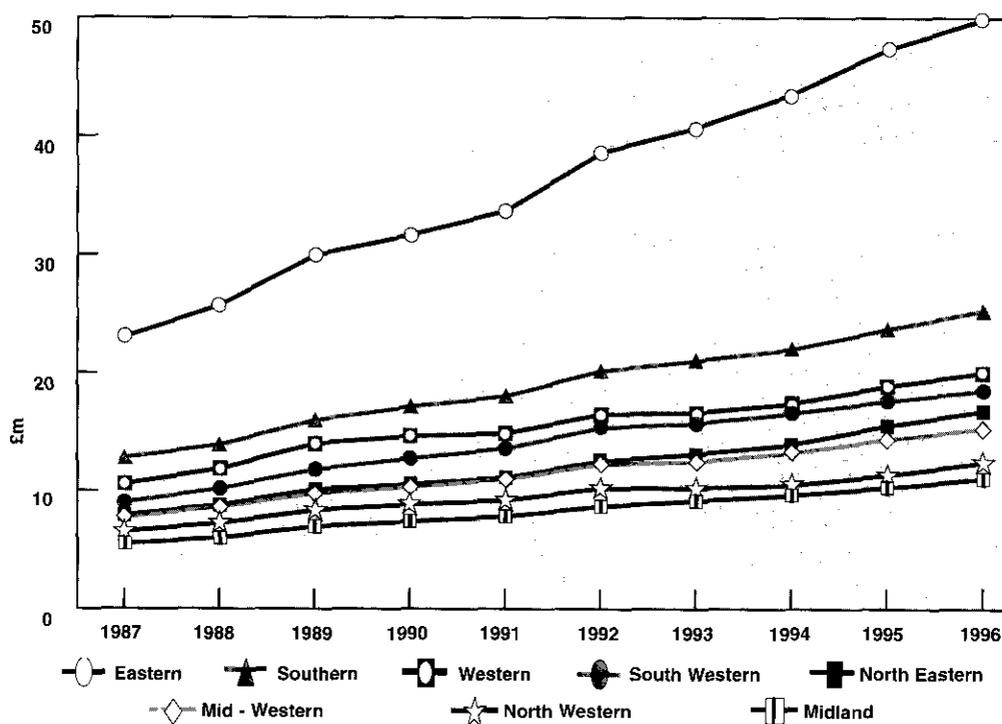
- 2.8 Following the 1990/91 review, agreement was reached between the Department and the IMO in November 1992, on the implementation of an arbitration award. An integral feature of the agreement was full commitment by all parties to the future development of general practice as outlined in the Blueprint and a commitment to the achievement of responsible and cost effective prescribing.
- 2.9 The agreement also provided for the establishment of an investment programme in general practice. A General Practice Development Fund was established by the Department to carry through the investment under the agreement which was to take place over two years, with £12.5 million being invested in general practice in 1993. A core element of £7 million would recur in 1994.
- 2.10 It was subsequently agreed, between the Department and the IMO, in December 1994, that the General Practice Development Fund would continue and that from 1 January 1995 it would attract the appropriate percentage increases applied in any given year in determining annual Departmental Estimates for non-pay items. The outcome of the operation of the General Practice Development Fund is considered in Part 5.
- 2.11 Arising from the 1990/91 review it was also agreed to establish a scheme, the Indicative Drugs Target Scheme (IDTS) with effect from 1 January 1993, under which indicative prescribing targets would be determined for all doctors in the GMS scheme and a proportion of the savings generated from the achievement of these targets would be invested in the development of the individual practices concerned. The outcome of the operation of the IDTS is considered in Part 3 of this report (see paragraphs 3.20 to 3.32).

General Practice Units

- 2.12 In 1993, a General Practice Unit (GP Unit) was set up within each of the eight health boards as an integral part of the board's management structure to support the provision of general practice. The role of the GP Units is outlined in Appendix B.
- 2.13 Each month the GMS (Payments) Board provides, to each GP Unit, statistics on the prescribing of participating GPs. The GP Units evaluate the data and advise individual doctors on their prescribing patterns.
- 2.14 The GP Units are important agents for change and development. The Department is aware that their potential can best be fulfilled where there is both communication between the Units (facilitating, for example, shared ideas and models of good practice) and evaluation of their activities and development.

3.4 Figure 3.2 shows the increase in the total cost of prescriptions for each of the health boards for the period from 1987 to 1996.

Figure 3.2
Increase in the cost of prescriptions by health board 1987 - 1996



Source: GMS (Payments) Board Annual Reports 1987 - 1996.

3.5 The lowest increase was in the North Western Health Board where the cost of drugs went from £6.5 million in 1987 to £12.3 million in 1996, an increase of 89%. The highest increase was in the Eastern Health Board, representing 30% of the total cost in 1996, where costs went from £23.0 million to £49.9 million, an increase of 117%.

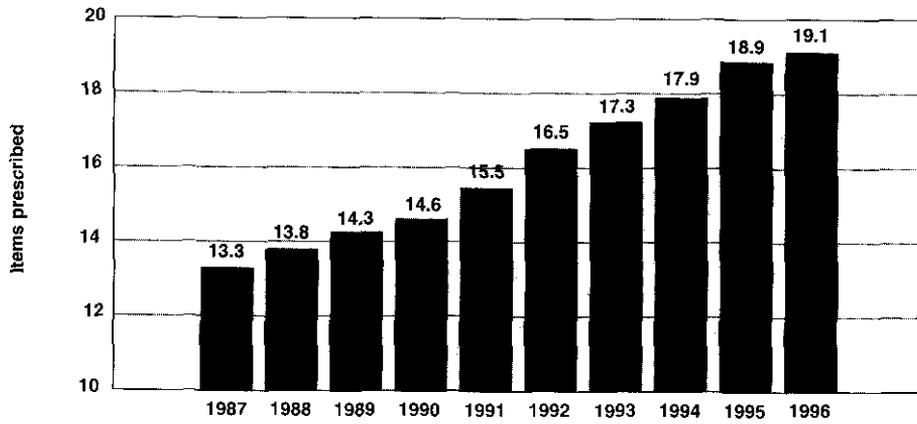
Factors which affect the Cost of Drugs and Medicines

3.6 The basic factors which affect the overall cost of drugs and medicines are

- the number of persons who are eligible under the scheme
- the volume of the drugs and medicines prescribed
- the price of the drugs and medicines.

The level of prescribing of generic and high cost drugs can also have a major influence on the overall cost of drugs.

Figure 3.4
Items prescribed 1987 - 1996

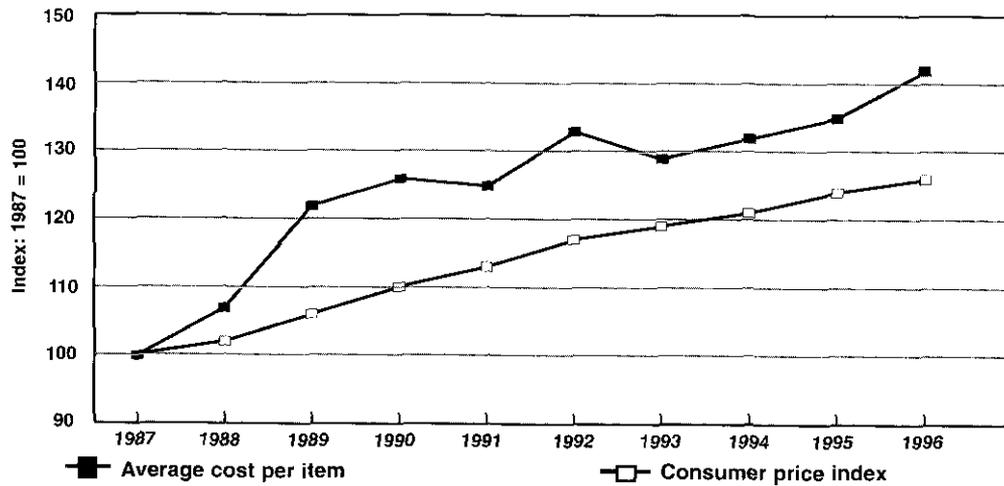


Source: GMS (Payments) Board, Annual Reports 1987 - 1996.

Price of Drugs and Medicines

3.11 Figure 3.5 compares the increases in the average cost per item prescribed to the increases in the consumer price index over the ten year period 1987 to 1996.

Figure 3.5
Increase in cost per item and consumer price index 1987 - 1996



Source: GMS (Payments) Board Annual Reports 1987 - 1996,
Central Statistics Office.

Generic Drugs

- 3.15 Proprietary or branded drugs are protected by patent legislation for a period of twenty years. When the patent expires there is no legal bar against the manufacture and sale of generically equivalent drugs, subject to the normal authorisation process. The marketing of generic drugs under brand names has created a category of drugs referred to as 'branded generic'. The cost difference between the proprietary and the less expensive generic equivalents can be significant.
- 3.16 The quality, safety and efficacy of all drugs and medicines on the Irish market is assured as each product is assessed and licensed by the Irish Medicines Board⁵. The National Therapeutics Advisory Committee, an advisory body to the Minister, has stated that it "is wholly satisfied that all authorised generic products for human consumption on the Irish market are of equal standard with their proprietary counterparts⁶."
- 3.17 The Department, through the GP Units encourages GPs, where clinically appropriate, to prescribe rationally and cost effectively.

High Tech Drugs

- 3.18 Developments in biotechnology and therapeutics have given rise to the introduction of medicines for the treatment of conditions, many of which had previously either no effective treatment or required extended in-patient hospital care. A contributory factor for the upward trend in the overall cost of prescribing within the GMS scheme in recent years has been the introduction of new and relatively more expensive medications. Use of these drugs permits people to be treated in their own homes rather than in hospital which can benefit the patient and often reduce the overall cost of health services.
- 3.19 As a result, the cost of treating these illnesses has shifted from the hospital budget to the community care budget. No studies have been carried out to measure the extent to which a shift of costs has taken place or on the impact on the overall cost to the health services.

⁵ *The Irish Medicines Board was established in 1995 and replaced the National Drugs Advisory Board from 1 January 1996. It took over the drugs licensing function of the Department of Health from 14 February 1996.*

⁶ *Second Report of the National Therapeutics Advisory Committee to the Minister for Health, April 1993.*

Savings 1993 - 1996

- 3.26 Data relating to the operation of the IDTS, for the four year period 1993 to 1996, was obtained from the GMS (Payments) Board and analysed to establish the extent to which savings were achieved.
- 3.27 In each of the four years 1993 to 1996 expenditure on prescribed drugs and medicines exceeded target, as shown in Table 3.1.

Table 3.1
Indicative Drug Target Scheme - outturn 1993 - 1996

	1993	1994	1995	1996
	£'000	£'000	£'000	£'000
Target ^a	129,225	137,131	146,610	155,532
Outturn ^a	135,114	140,005	154,617	163,421
Net Over-run	5,889	2,874	8,007	7,889
Under Target	5,376	8,105	1,723	3,145
Number of GPs	644	785	443	592
Over target	11,265	10,979	9,730	11,034
Number of GPs	919	881	1,207	1,055

Note: ^a The cost of drugs and medicines for high cost patients were treated as being budget neutral in 1994, 1995 and 1996 and are excluded from the target and outturn figures.

Comparison of GP Performance

- 3.28 Of the GPs who contracted to supply services under the GMS scheme from 1993 to 1996, a total of 1,395 had contracts in each of the four years.
- 3.29 Tables 3.2 and 3.3 set out the extent to which these 1,395 GPs achieved their targets over the four year period 1993 to 1996. Table 3.2 shows that 5% of GPs achieved savings in each of the four years while 27% did not achieve savings in any year.

4 Economy in Prescribing Practices

Analysis of Prescription Data

- 4.1 Good prescribing practice must take account of a number of factors including the need for efficacy, safety, appropriateness and cost effectiveness. The choice of drug prescribed for each patient is the prerogative of the individual GP and will depend on the individual circumstances of each patient. However, in exercising this prerogative it is important for the GP to have regard to any economies which can be made which do not have a detrimental effect on patient care.
- 4.2 For the purposes of the examination prescription data for five months, (January 1995, May 1995, September 1995, January 1996, May 1996), was acquired from the GMS (Payments) Board. The data was analysed to establish the trend in economic prescribing, the maximum potential savings achievable and whether there is scope for further savings.
- 4.3 The data was also analysed to establish the financial impact of
- the substitution of generic drugs for more expensive branded drugs
 - alternative therapies
 - reducing the use of drugs of limited clinical efficacy
 - reducing the use of over-prescribed drugs such as antibiotics.
- 4.4 The GMS (Payments) Board has identified and categorised drugs of equal strength which are accepted as being medically equivalent regardless of manufacturer and pack size. In its data files each group of equivalent drugs is identified by its own specific code.

Savings from Economic Prescribing

- 4.5 For the five months examined, an average of 1.52 million items were prescribed each month at an average cost of £9.56 million. Substitutable drugs with a range of prices were available for 38.4% of the items prescribed, representing 24.9% of the cost. The average cost per item for drugs for which substitutes were available was £4.07 while the average cost for drugs without substitutes was £7.67.
- 4.6 Table 4.1 shows the notional outcome of substituting the lowest and highest priced drugs in each of the months concerned.

- 4.10 An analysis of the data for May 1996 indicates that the maximum possible savings which could be achieved, if every item prescribed was at the lowest unit cost, would amount to £0.46 million per month or £5.5 million per year. It is recognised that substitution is not feasible in all cases and that other factors would limit potential substitution in practice. Estimates of savings have been calculated on the basis of full substitution and, therefore, must be taken as being at the upper limit of potential saving.
- 4.11 The trend in substitutions over the period January 1995 and May 1996 suggests that some progress has been made with regard to substituting lower cost drugs. However, there is still clearly considerable scope for the achievement of further savings.

Potential Savings from the Substitution of Generic Drugs

- 4.12 Within the area of substituting lower cost drugs for more expensive drugs an analysis was carried out on the major expenditure items within the Anatomical Therapeutic Chemical classification (ATC Class)⁷ where accepted generic substitutes were available for more expensive proprietary items. The substitution was based on replacing the costs of proprietary items with an average of the cost of equivalent branded generic items while maintaining the same level of prescribing.
- 4.13 The annual saving from these substitutions has been calculated at over £1.3 million based on annualising the May 1996 data. The acceptability of extrapolating the prescribing frequency for a single month was tested based on annual reports from the GMS (Payments) Board. The margin of error was considered acceptable in view of the nature of the exercise.
- 4.14 Table 4.3 shows the savings achievable within the ATC Class with full application of the accepted substitutions.

⁷ *Anatomical and Therapeutics Chemical Classification (ATC Class) index codifies drugs according to principles set out by the World Health Organisation (WHO) Collaborating Centre for Drug Statistics Methodology*

are called tricyclics and the newer anti-depressants are called selective serotonin reuptake inhibitors (SSRIs). The differences lie in the cost and in the unwanted side effects of the two groups of drugs.

- 4.18 The side effects of the older tricyclics are typically blurred vision, dry mouth and drowsiness which abate over three to four weeks. They are also more dangerous if taken as an overdose. SSRIs have advantages over tricyclics as they cause less sedation, less anticholinergic effects, less cardiotoxicity and less weight gain. However, they can cause side effects such as nausea, insomnia, tremor and sexual dysfunction.
- 4.19 An analysis of the prescribing data for May 1996 showed that there are considerable differences in the cost of prescribing tricyclics and SSRIs. The ingredient cost of the 14,703 SSRI prescriptions issued in May 1996 was £352,444, an average of £23.97 per prescription. In the same month the ingredient cost of 30,588 tricyclic prescriptions was £142,235, an average of £4.65 per prescription.
- 4.20 There is no general agreement about whether a tricyclic or an SSRI should be a first line treatment as all anti-depressants appear equally effective. For many patients the older tricyclics will be a suitable first choice treatment but if unwanted side effects are unacceptable an SSRI should be used. There are possible benefits from using the higher cost SSRIs because of greater acceptance, less expenditure in the treatment of overdose cases, and possibly fewer accidents or suicides.
- 4.21 The potential annualised savings, based on an analysis of the May 1996 data, in substituting lofepramine, a tricyclic, for sertraline, an SSRI, would be some £640,000. However, further epidemiological⁸ research and experience is required to assess the full potential for better prescribing in this area.

Ulcer Drugs

- 4.22 Omeprazole is an acid reducing drug which is effective in the treatment of stomach ulcers and gastro-oesophageal reflux which produces symptoms similar to heartburn. It is increasingly being prescribed with other expensive medications in the treatment of an organism called *Helicobacter Pylori* which is the main causative organism in the development of ulcers. It is the highest cost drug in the GMS scheme costing over £6.1 million in 1996.

⁸ *Epidemiology is the study of the incidence of illness, disease and other medical conditions in a defined population or area.*

cost per prescription of £3.22. Amoxicillin is available with an enzyme inhibitor making it a more powerful and expensive antibiotic. Over 257,000 prescriptions, for the more powerful antibiotic, were issued in 1996 at a cost of £1.9 million giving an average cost per prescription of £7.32.

- 4.30 The October 1996 issue of the Drug and Therapeutics Bulletin, published by the Consumers' Association (UK), concluded that amoxicillin with an enzyme inhibitor should rarely be seen as a first line drug for the treatment of common bacterial infections in general practice. It should be reserved for use in the treatment of pelvic inflammatory disease, post partum infections, human and animal bites and severe dental infections.
- 4.31 There are increasing concerns within the medical profession about the extensive use of very powerful antibiotics. The evidence from the GMS data indicates that amoxicillin with an enzyme inhibitor is used as a common first line antibiotic by many GPs. The reasons for over prescribing of this antibiotic within the GMS scheme have yet to be fully investigated and addressed. The most likely cause is lack of confidence in the narrower spectrum antibiotics.
- 4.32 More prescribing of less powerful antibiotics would have long term benefits in medical care and as these antibiotics are considerably cheaper than the more powerful antibiotics there could be considerable savings within the GMS scheme. For example, a 10% switch in the case of amoxicillin would produce annual savings of over £100,000.

Medical Foods

- 4.33 In 1996 the provision of medical foods was the third most expensive item in the GMS scheme costing in excess of £3.8 million. There are 87 such products currently on the list accounting for almost 3% of the overall GMS drugs budget. Two thirds of the medical foods budget was taken up by high calorie feeds, soya milk substitutes, breads and products used for congenital metabolic disorders.
- 4.34 There are recognised clinical criteria for prescribing medical foods among which are
- coeliac disease (gluten-free products)
 - inborn errors of metabolism
 - cow's milk intolerance
 - renal disease
 - fat malabsorption (cystic fibrosis etc.)
 - protein - energy malnutrition.

5 Improvements in General Practice

Funding the Improvements

General Practice Development Fund

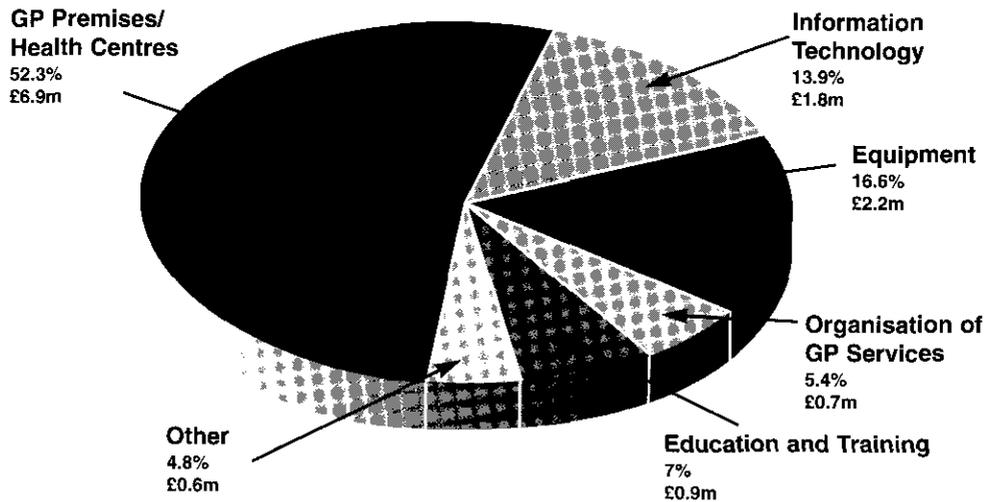
- 5.1 The purpose of the General Practice Development Fund was to provide funding for specific developments in general practice in line with the Blueprint document pending the coming on stream of savings from the operation of the IDTS. Subsequent agreement between the Department and the IMO led to the fund being continued from 1 January 1995.
- 5.2 Table 5.1 shows the payments made to health boards from the fund for approved initiatives during the period 1993 to 1996.

Table 5.1
General Practice Development Fund payments 1993 - 1996

	1993	1994	1995	1996	Total
	£'000	£'000	£'000	£'000	£'000
Rostering/Out of Hours	4,462	4,446	4,600	4,617	18,125
Practice Development	2,975	3,007	3,066	3,077	12,125
Practice Support Grant	911	1,205	1,757	1,364	5,237
General Practice Units	974	1,151	1,151	1,209	4,485
Palliative Care	178	377	377	377	1,309
Immunisation/Screening	252	477	100	100	929
Information Technology	71	146	106	185	508
Other Developments	647	140	229	190	1,206
Health Centres	153	305	100	87	645
Pilot Projects	68	133	501	373	1,075
Vocational Training	252	678	414	391	1,735
Irish College of General Practice	70	17	219	85	391
Royal College of Surgeons in Ireland	55	20	20	20	115
Miscellaneous	19	135	392	607	1,153
Total	£11,087	£12,237	£13,032	£12,682	£49,038

Source: *Department of Health and Children.*

Figure 5.1
Use of Indicative Drug Target Scheme savings, 1994 - 1996



Source: GP Units' returns to the Department.

Unspent Savings

- 5.7 In March 1996, the Department expressed its concern to the health boards regarding the accumulation of unspent savings. While much of these outstanding savings were committed to specific projects GP Units were asked to give urgent priority to investment of the funds during the remainder of the year as a build up of funds could jeopardize the prospects for obtaining further capital funding for the development of general practice.

Examination of Improvements

Need for an Evaluation Process

- 5.8 None of the health boards have carried out evaluations of the various programmes and activities funded from the General Practitioner Development Fund and the IDTS to assess the efficiency and effectiveness of developments in general practice.
- 5.9 The Department has recognised the need for an evaluation process and, in March 1996 issued a circular to health boards which stated that it was imperative that each health board have in place appropriate procedures for evaluating the various initiatives. Arising from the circular new projects implemented by the health boards are required to have, as part of their implementation, a built-in evaluation mechanism. It is too early to establish the effectiveness of the mechanisms which have been introduced.

in areas such as preventative medicine, including vaccination programmes. To date, none of the health boards have introduced such a system. However, the North Eastern Health Board has undertaken a patient registration pilot project on behalf of the Department, involving eight GP practices, including private as well as GMS patients. This project will be evaluated by the Department at the end of 1997.

- 5.15 In return for providing funds towards computerisation the majority of health boards have requested that GPs agree to furnish epidemiological data to the boards' public health departments. However, at the time of the examination none of the health boards were receiving data from GPs because of a lack of resources in their public health departments to evaluate such data.
- 5.16 A comprehensive standard, covering information requirements relating to patient registration and epidemiological data, should be established in order to ensure that the data collected is consistent and compatible at regional and national level. The Department is currently examining the merits of appointing a consultant, on a contract basis, operating under the direction of a project management group which would be representative of the boards and the Department, to specifically co-ordinate the various developments now taking place in the area of GP related computerisation. One of the functions of the consultant would be to examine the epidemiological data issue with a view to improving the present situation.

Therapeutic Initiatives

- 5.17 Therapeutic committees have been set up in all health boards with the primary purpose of bringing together GPs and hospital doctors/consultants to define and implement agreed therapeutic regimes for specific ailments. However, there have been difficulties in their operation particularly in the area of communications between hospitals and general practice.
- 5.18 In the Southern Health Board, the drugs and therapeutics committees are successful, due to strong local leadership. The Southern Health Board success formula could serve as a useful model for other health boards.

Practice Premises and Health Centres

- 5.19 In all of the health boards the GP Units have given emphasis to the improvement of existing GP premises, the building of new premises and to health centre development. Funding for the development of practices has mainly been from the GPs' portion of the IDTS savings. GP Units have invested in pilot developments and have also given grants. The level of grant aided assistance varied from 25% to 100%.

Appendices

- Vocational and postgraduate education for doctors.
- A range of measures would be introduced to improve the linkages between general practice and the other health services particularly acute general hospitals. These would involve GPs in activities currently undertaken by hospitals but more appropriate to the community setting; developing protocols between consultants and GPs of combined care for specific conditions; giving GPs access to appropriate investigative facilities and other services within hospitals; a domiciliary care programme for people who are terminally ill; involve GPs in a screening programme for children; using GP units to make arrangements with GPs for caring for elderly people at home.

Appendix C

Indicative Drug Target Scheme Target Setting Methodologies, 1993 - 1996

Methodology for 1993

The overall budget for expenditure on prescriptions in the GMS scheme in 1993 was set at £132.5 million of which £3.2 million was set aside for distribution to practices with patients on certain high cost drugs.

A provisional amount was calculated for each GP based on the size and composition of each individual panel with reference to national age-related average costs and compared with the GP's projected 1992 costs of drugs and medicines (adjusted for any panel changes which may have occurred).

GPs whose projected costs for 1992 were equal to or less than their calculated provisional amount were given a target for 1993 of their projected 1992 costs, plus 7.5%, plus an adjustment for patients on high cost drugs.

GPs whose projected 1992 costs were in excess of the calculated provisional amount were given a target for 1993 of the provisional amount plus 7.5%, plus adjustment for high cost drug patients.

A residual balance was made available to the health boards for minor adjustments to cover contingencies.

Methodology for 1994

The upper limit for 1994 was set at £144 million of which £4 million was set aside for distribution to practices with patients on certain high cost drugs. In addition, £2.2 million was set aside for distribution to GPs who were already low cost prescribers.

The overall budget for 1993 of £132.5 million, was adjusted for changes in panel size and composition and for cases where individual patient prescriptions exceeded £200. An inflator of 6.9% was used to increase the basic target to take account of growth trends.

Subsequently, budgets were adjusted on a quarterly basis to take account of changes in panel size and composition. An amount of £1.06 million was retained by the GMS (Payments) Board to cater for contingencies.

Any residual amount remaining from the total fund of £144 million was distributed among all GPs in 1994.

Methodology for 1996

The upper limit for 1996 was set at £168 million. £4.5 million was allowed for the cost of specified high cost drugs which were treated as budget neutral. £6.5 million was also set aside to pay grants to Category C doctors and £1.5 million for contingencies.

The categories introduced in 1995 were extended in 1996 to include sub-categories based on whether the doctor's 1995 outturn was under or over target.

Category A1 Doctors whose projected costs for 1995 were in excess of 105% of the national age-related average costs for 1995 and were above target in 1995.

Category A2 Doctors whose projected costs for 1995 were in excess of 105% of the national age-related average costs for 1995 and were under target in 1995.

Category B1 Doctors whose projected 1995 costs were within the range 95% to 105% of the national age-related average costs for 1995 and were above target in 1995.

Category B2 Doctors whose projected 1995 costs were within the range 95% to 105% of the national age-related average costs for 1995 and were under target in 1995.

Category C1 Doctors whose projected 1995 costs were less than 95% of the national age-related average costs for 1995 and were above target by more than 10% in 1995.

Category C2 Doctors whose projected 1995 costs were less than 95% of the national age-related average costs for 1995 and were above target by less than 10% in 1995.

Category C3 Doctors whose projected 1995 costs were less than 95% of the national age-related average costs for 1995 and were under target in 1995.

The 1996 targets for doctors in Group A1 was their 1995 target. The 1996 targets for doctors categorised as A2, B1, B2, C1, C2 and C3 were allocated on the basis of 1995 costs plus a per capita increase of £8 per panel patient.

Appendix D

Other Improvements in General Practice

Provision of Equipment

The majority of the GP Units have purchased equipment for the use of individual GPs or for sharing between neighbouring GPs. Clinical equipment acquired included ambulatory blood pressure monitors, emergency kits, autoclaves, laboratory testing kits, ECG machines, defibrillators and trauma kits, cold boxes and physiotherapy equipment. Office equipment acquired included faxes, telephones and other communications equipment.

Employment of Shared Assistant/Associate GP

A shared assistant/associate GP scheme was introduced to improve working arrangements for single handed GPs, particularly those in remote areas, and to reduce the isolation aspects where adequate rota arrangements were difficult to organise. The scheme also set about redressing the difficulties in getting locum cover for GP leave and regular time off. Shared assistant/associate GP schemes are operating in five of the health board areas.

Employment of Other Professionals

Other health care professionals have been employed either directly or on a sessional basis by the health boards to provide GP based services. The services provided include dermatology clinics, nutritionist services for the elderly, specimen collection services, physiotherapy, dietician, counselling, psychology, psychiatry.

Linkages with Acute Hospitals

Access to Hospitals

The Strategy document envisaged that a range of measures would be introduced to improve the linkages between general practice and the other health services, particularly the acute general hospitals. This entailed giving GPs access to appropriate investigative facilities within hospitals.

Protocols have been developed with local hospitals in the areas of local formularies, asthma treatment, rheumatology, diabetes treatment, referrals, combined care, antibiotic policies and anti-ulcer/*Helicobacter Pylori* strategy.

Rotas

The number of rota arrangements has increased by over 55% from 209 in December 1992 to 323 in December 1996. At 31 December 1996, 1,142 GPs (70% of GMS GPs) were involved in rotas.

Employment of Support Staff

The number of nurses employed in general practice has increased by 137%, from 149 at 31 December 1992 to 353 at 31 December 1996. In the same period the number of secretaries employed has increased by 45% from 734 to 1,066.

Education and Training

Training Practices

There are vocational training practices established in each health board area where new GPs are trained. There is also a three year programme for new GPs in all health boards whereby fully qualified students spend 2 years in a hospital environment and 1 year in practice.

In 1994 and 1995 the Department provided funds from the General Practice Development Fund of £10,000 per year to each training practice, for the purposes of improving practice premises, record keeping and purchasing medical equipment. In 1996 the grant was reduced to £5,000 and remains at that level for 1997. The potential of training practices to set standards and be used as models for change at local level should be considered.

Continual Medical Education

The Strategy document recognised the need for vocational and post-graduate training in order to maintain the highest possible standards among GPs. The continuing professional medical education programme is mainly organised by the Irish College of General Practitioners (ICGP) who hold meetings on a regular basis in a lecture-style forum. Funding of up to 50% of the cost of some courses has been provided by GP Units from the health boards' share of the IDTS savings. Funding has also been provided from the GP Development Fund by the Department.

The Postgraduate Resource Centre, which is run by the ICGP under the auspices of the Postgraduate Medical and Dental Board, has recently been established. The purpose of the Centre is to co-ordinate and develop all facets of postgraduate education for GPs in the State. The Department is providing funding for the Centre from the GP Development Fund.

Specific Improvements

Development of Multi-Doctor Practices

There has been a considerable improvement in the number of multi-practice arrangements since the publication of the Strategy document. The number of single handed practices has decreased from 59% to 42% while the number of practices with three or more doctors has increased from 15% to 29%.

Doctors in Category C received a grant equal to 50% of the difference between their 1995 outturn and the national age related 1995 average cost. This grant was payable in full if GPs in this group came within their 1996 target. Where doctors failed to come within target set but overran by 10% or less they still qualified for a reduced grant.

GPs in all groups qualified for 50% of savings made on target for investment in practice development and the remaining 50% was available to the health boards.

Methodology for 1995

The upper limit for 1995 was set at £155 million of which £5 million was set aside for distribution to practices with patients on certain high cost drugs. £1.5 million was retained by the GMS (Payments) Board for contingencies. The minimum target for every GP participating in the scheme was their 1994 outturn costs (adjusted for high cost drugs).

For the purpose of calculating targets doctors were banded into three categories, based on a comparison of their 1994 outturn and the national age-related average costs for 1994 as applied to their panels. These were as follows

Category A Doctors whose costs in 1994 were in excess of 105% of the national age related average costs received their 1994 outturn figure as a target for 1995 and qualified for 40% of savings made on their target for investment and the remaining 60% was available to the local health board.

Category B Doctors whose costs in 1994 were between 95% and 105% of the national age related average costs received their 1994 outturn figure, increased by a trend inflator of 5%, as a target for 1995 and qualified for 50% of savings and the remaining 50% was available to the local health board.

Category C Doctors whose costs in 1994 were below 95% of the national age related average costs received their 1994 projected outturn figure, increased by a trend inflator of 5% as their target for 1995. Doctors in this group who came within their 1995 target, received a grant for approved practice development equal to 40% of the difference between their 1994 outturn and the national age related 1994 projected average cost. Where doctors failed to come within the target set but overran by 10% or less they still qualified for a reduced grant.

In addition, doctors in this category qualified for 60% of any savings and the remaining 40% was available to the local health board.

Individual budgets were adjusted monthly to take into account changes in panel size and composition. The residual amount remaining from the total target of £155 million was distributed among all doctors in 1995.

Appendix B

General Practice Units

In furthering the aims of the Blueprint and Strategy documents, the GP Units were to be concerned with and relate to all aspects of general practice and with the interfaces between general practice and other health and social services.

Each GP Unit is managed by an administrator who is assisted by clerical staff. Doctors and pharmacists are employed on a part-time contract basis to provide, *inter alia*, assistance and advice to GMS scheme GPs and pharmacists on prescribing related issues. Other professionals have been employed on short-term contracts to provide assistance on specific projects being developed by the GP Units including physiotherapists, community dieticians, public health nurses and systems analysts.

The objectives of the GP Units were given in the Blueprint and Strategy documents as

- the provision of support for all work performed within general practice itself
- the identification of, and the entering into arrangements with, individual practices to provide additional services where this could be done more cost-effectively
- facilitating an improvement in the interface between GPs and hospitals and other health services
- the allocation of resources to fund the development of the service.

A national GP Unit was set up within the Department paralleling the creation of the Units in the health boards. The national unit provides a central liaison point between and with the regional units as well as assisting with the development and organisation of general practice at national level. The national unit employs a medical adviser on a contract basis whose principal function is to provide professional expertise in the development, implementation and review of general practice policy.

The Department has held two major residential seminars since 1994 involving all GP Units to allow for a full exchange of views on operational matters and issues of concern. In addition, in the same period the National GP Unit has visited individual GP Units and issued a number of circulars and letters setting out guidance for the Units on matters such as priorities for developments in general practice and the use of IDTS moneys.

Appendix A

The Strategy Document

Organisational and Service Problems

The following organisational and service problems were identified

- the fragmentation of general practice and the isolation of GPs from the other health services
- the lack of epidemiological data
- the lack of a defined practice population.

Steps Proposed for the Development of General Practice

The following steps were identified for implementation over the four year period to develop general practice and to help it fulfil a wider integrated role.

- Incentives for improved organisation of general practice would be designed so that patients have easier access to a wider range of services. Assistance would be targeted at group practices, amalgamated practices and cooperative type arrangements.
- A number of single centre or multi-centre group practices would be established on a pilot basis which would provide a comprehensive range of primary healthcare services and which would have close links with the hospital services.
- The GP Units which were established in 1993 in each health board would make arrangements with individual practices to provide additional services where this would be more cost effective than existing arrangements.
- New Departments of Public Health Medicine in each health board would liaise closely with GPs on exchanging epidemiological data. The aim was to have 80% of GMS scheme practices computerised within four years so as to improve the sharing of information and help practice management.
- The GP Units would seek to introduce a system of patient registration.
- The development of a detailed information network for GPs, including the establishment of a national drugs information unit so as to promote better quality and more cost effective prescribing.

- 5.20 Two health boards seek a commitment from GPs for the continued use of grant-aided premises in the GMS scheme. The Midland Health Board takes a lien on the premises for a ten year period, while the Western Health Board seeks an eight year continued use commitment from the GP. The Western Health Board seeks a 15% capital contribution towards the development cost from GPs using health centres.
- 5.21 Where public funds are invested in premises development all health boards should ensure that arrangements are in place for the refund of the unexpired value of any grant in the event that the premises cease to be used for the grant aided purpose. The Department has stated that taking a lien on premises, partly funded by health boards, is a matter that is addressed by individual boards on a case by case basis having regard to the level of funding provided by them for the project involved.
- 5.22 Other improvements since 1992 are outlined in Appendix D.

- 5.10 While it is essential to evaluate individual projects each health board should also carry out an overall assessment of the efficiency and effectiveness of its programme of investments in GP developments. In addition, an overall review at national level should be considered by the Department.

Information Technology

- 5.11 The 1994 Strategy document set a target of 80% for the computerisation of GP practices in the GMS scheme in the four year period to 1997 in order to improve the sharing of information and to help practice management. The level of computerisation, as at February 1997 is summarised in Table 5.2.

Table 5.2
Percentage of GP practices computerised at February 1997

Health Board	% of practices
Eastern	65
Midland	69
Mid Western	38
North Eastern	67
North Western	55
South Eastern	37
Southern	48
Western	75
National average	58%

Source: GP Units.

- 5.12 The Strategy document noted the lack of epidemiological data and a defined practice population in the country. This information would provide data on morbidity and mortality and a demographic profile of patients in health boards and at a national level which would assist in better planning and effective delivery of the health services.
- 5.13 Research in Dublin had shown that 11% of families with children reported not having a GP; that a proportion of patients do not closely identify with one GP and change from doctor to doctor; and that in a proportion of families different members attend different doctors.
- 5.14 The Strategy document proposed that GP Units in each health board would seek to introduce a system of patient registration which would help to expand the GP's role
-

Indicative Drug Target Scheme

- 5.3 In December 1993, the Department issued guidelines to GP Units for investing the savings achieved under the IDTS. The guidelines specified that savings were to be used for investment in developments in individual or group practices. This was followed up in 1995 and 1996 by further guidelines and policy documents for general practice developments using IDTS savings.
- 5.4 The approved developments could include recruitment of primary care expertise and support staff, improvements to practice premises and equipment including information technology, improved organisational arrangements including rotas, research and education. The health boards, when making investments in practices, were to give priority to practitioners who, while not achieving savings, did make serious efforts. Applications by GPs for use of their savings are made to the local GP Unit which approves the application and passes it to the GMS (Payments) Board for payment to GPs.
- 5.5 Savings arising from the operation of the IDTS from 1993 to 1995 amounting to £15.2 million were made available in the years 1994 to 1996 to the health boards and GPs for developing GP services. Grants of £4.5 million were also provided to GPs in 1995 under the terms of the scheme making total available funds of £19.7 million. £6.6 million of this amount remained unspent at 31 December 1996.
- 5.6 The GP Units make periodic returns of allocations and payments from IDTS savings to the Department. An analysis of these returns for the years 1994 to 1996 showed that expenditure of approximately £13.1 million was incurred on the development of GP services of which £8.1 million was allocated to GPs and £5 million to health boards. Figure 5.1 indicates the areas into which these savings were invested.

In addition, medical foods are prescribed for patients with various malnutrition states resulting from drug addiction, recent illness and inability to prepare or consume a nutritious diet.

- 4.35 It is the view of the consultants appointed to assist me in this examination that medical foods can be over-prescribed. There are a number of factors which can cause this. Currently GPs are subjected to much nutritional information and advertising. Patients are generally started on products in hospital and the GP merely continues with a GMS scheme prescription. There is an assumption that the patients' nutrition is being supervised from the hospital which may or may not be the case.
- 4.36 Nutrition is a complex area which is poorly understood by many clinicians in hospitals and in the community. It has the potential to be an increasing cost in the GMS scheme and there is a need to make sure that only those patients who benefit from medical foods get them and that their prescription is reviewed on a regular basis.
- 4.37 In July 1988, approval procedures for non-drug items, which include medical foods, were separated from the approval procedures for proprietary drugs which remained with the Department. Approval procedures for non-drug items was assigned to the GMS (Payments) Board.
- 4.38 In November 1992, the GMS (Payments) Board established an expert group to review the list of non-drug items to be available under the GMS scheme and to consider and make recommendations on how non-drug items can best be supplied to end users. The GMS (Payments) Board adopted the recommendations of the expert group's report in September 1994. The recommendations included the adoption of an approved list of foods and access by management to a broad range of expertise in the handling of applications for additions, deletions and alterations to the existing range of reimbursable items.
- 4.39 The GMS (Payments) Board has stated that the non-drug area is subject to review annually by the expert group. In the case of applications for medical foods the group's dieticians review and make final decisions in this area. The group is currently engaged in drafting guidelines for the suppliers of medical foods. The group is also proposing to publish a general information document for GPs on prescribing medical foods.

- 4.23 Omeprazole is capable of blocking secretion of gastric acid completely which cannot be achieved using an older alternative antagonist such as cimetidine. It is also the first choice of drug for patients with erosive oesophagitis, many of whom will require long term treatment. Symptomatic improvement also tends to begin earlier in patients taking omeprazole.
- 4.24 For these reasons there is great pressure on GPs to prescribe omeprazole. For example, because it is very effective in treating gastro-oesophageal reflux it is often demanded on a recurrent basis by patients. Omeprazole and other similar powerful remedies should not be used as a first line therapy for indigestion. Simpler and less expensive strategies such as weight reduction, alcohol reduction and the taking of antacids may be more appropriate albeit more difficult for patients to carry out. It is also very important for GPs to discontinue therapy using omeprazole once ulcers are healed as failure to do so sometimes creates problems.
- 4.25 Because of the relatively high cost of omeprazole a minor shift to less expensive therapies could result in significant savings in the GMS scheme.

Drugs of Limited Clinical Efficacy

Mucolytics

- 4.26 Mucolytics are medical preparations, containing carbocisteines, prescribed to ease the production of sputum. There is no scientific evidence that this happens although some clinicians claim that in their experience, mucolytics help some patients with chronic respiratory difficulties. Many patients have faith in these products despite the lack of scientific proof for their efficacy.
- 4.27 They are usually prescribed with an antibiotic or other respiratory medication and as a result it is often difficult to establish their effect on the overall health of the patient.
- 4.28 In 1996 the cost of carbocisteine containing products to the GMS scheme was some £700,000. In the absence of good scientific evidence, the continued provision of mucolytics containing carbocisteine should be reviewed.

Reducing the Use of Over-Prescribed Drugs and other Medications

Antibiotics

- 4.29 The most commonly prescribed antibiotic in the GMS scheme is amoxicillin. Over 528,000 prescriptions were issued in 1996 at a cost of £1.7 million, giving an average

Table 4.3
Estimate of savings from substitution of generic drugs

ATC Class	Prescribing frequency	Potential Annual		
		Cost	Saving	
		£'000	£'000	%
A02 - Antacids, drugs for treatment of peptic ulcers.	825,456	13,082	186	1.42%
C02 - Antihypertensives (Cardiovascular System)	572,004	7,244	7	0.09%
J01 - Antibacterials for systemic use (General anti-infectives)	1,766,316	8,102	117	1.45%
M01 - Anti-inflammatory and anti-rheumatic products (Musculo-skeletal system)	1,065,996	7,300	233	3.19%
N02 - Analgesics (Nervous system)	1,294,164	3,703	142	3.83%
N05 - Psycholeptics (Nervous system)	1,818,588	5,886	183	3.11%
N06 - Psychoanaleptics (Nervous system)	610,848	6,496	6	0.09%
R03 - Anti-asthmatics (Respiratory system)	1,481,268	13,502	489	3.62%
Total		£65,315	£1,363	2.09%

Alternative Therapies

- 4.15 In addition to assessing the potential for achieving savings from the substitution of lower cost drugs, the examination also assessed areas where there was scope for further savings from alternative therapies which, while being more economic, would not compromise patient care.

Newer Anti-Depressants

- 4.16 It is widely agreed that depression is under diagnosed and under treated and that patients are often prescribed with medication for other symptoms before the depression is diagnosed.
- 4.17 Anti-depressants are a cheap and effective method of treating depression and of improving the quality of life and often the lifespan of patients. There is now a wider choice of effective treatments for the relief of depression. The older anti-depressants

Table 4.1
Cost of substitutable drugs prescribed

	Costs alternatives		Actual £'000
	Lowest £'000	Highest £'000	
January 1995	1,828	2,827	2,383
May 1995	1,866	2,869	2,379
September 1995	1,830	2,810	2,318
January 1996	1,933	2,975	2,437
May 1996	1,847	2,821	2,306

4.7 Analysis of the actual cost relative to the lowest and highest costs, as shown in Table 4.1, indicates that prescribing in May 1996 was marginally more economical than in January 1995.

4.8 The number of items prescribed in each month for which alternatively priced items are available and are substitutable is shown in Table 4.2. The number of the substitutable items prescribed which were at the lowest possible cost and those at the highest possible cost are also given.

Table 4.2
Numbers of substitutable drugs prescribed

	Substitutable items prescribed	Items prescribed at the highest price		Items prescribed at the lowest price	
January 1995	576,791	204,500	35.45%	60,055	10.41%
May 1995	576,372	204,544	35.49%	63,799	11.07%
September 1995	567,568	194,886	34.34%	64,340	11.34%
January 1996	615,498	197,005	32.01%	79,420	12.90%
May 1996	572,155	181,492	31.72%	80,819	14.13%

4.9 Table 4.2 shows that of the 576,791 items prescribed in January 1995 only 10.41% were at the lowest unit cost. By May 1996, of the 572,155 items prescribed 14.13% were the lowest priced alternatives. The volume of drugs prescribed which were priced between the lowest and highest remained static at 54%.

Table 3.2
GPs under and over target 1993 to 1996

	Number of GPs	%
Outturn within target in each of the 4 years	69	5.0
Outturn within target in 3 years	237	17.0
Outturn within target in 2 years	387	27.7
Outturn within target in 1 year	325	23.3
Outturn not within target in any year	377	27.0
Total	1,395	100

- 3.30 Table 3.3 shows that the percentage of GPs coming under target or within 10% of their target has increased from 64.7% to 73.2% over the four-year period 1993 to 1996. The Table also shows that the percentage of GPs whose prescribing costs exceeded their target by 20% or more has decreased from 20.8% to 11.3% in the same period.

Table 3.3
GP prescribing target outcomes

	1993	1994	1995	1996
Under target	40.5%	48.3%	26.0%	34.8%
Over target by				
less than 10%	24.2%	21.2%	46.7%	38.4%
between 10% and 20%	14.5%	13.8%	22.3%	15.5%
between 20% and 30%	9.2%	7.6%	3.9%	7.8%
more than 30%	11.6%	9.1%	1.1%	3.5%

- 3.31 It is difficult to assess with accuracy the extent to which the implementation of the IDTS has contributed to a reduction in prescribing costs since its introduction in 1993 because of the influence of a number of other factors on prescribing costs. However, the figures set out in Tables 3.1, 3.2 and 3.3 would indicate that the scheme has had a positive impact in restraining prescribing costs over the period concerned.
- 3.32 In the four-year period 1989 to 1992 there was an annual increase of 10% in the cost of prescribing in the GMS scheme. In the subsequent four year period, with the introduction of the IDTS, the rate of increase reduced to a little over half of the previous rate.

Indicative Drug Target Scheme

- 3.20 During the 1990/91 review of the GMS scheme it was agreed by the Department and the IMO that
- the level of prescribing in the scheme could be reduced without an adverse effect on the quality of patient care
 - indicative prescribing targets would be determined for all doctors in the scheme and that savings generated would be applied towards the development of practices
 - the indicative prescribing target scheme would be operated on a regional basis by the health boards
 - information on their prescribing would be channelled to GPs through the GP Units.
- 3.21 The IDTS was introduced with effect from 1 January 1993, to implement the agreement. The scheme provides for the calculation of monetary prescribing targets for each GMS scheme GP, taking into consideration the make up of his/her patient panel as regards the age and sex of the patients. In each year certain specialist and high cost drugs are excluded from the target setting process and are treated on a budget neutral basis.
- 3.22 The targets which were calculated in respect of 1993 were applied for the full year while those for 1994 were adjusted quarterly to take account of changes in the size and structure of GPs' panels. From 1995 onwards adjustments to targets have been made on a monthly basis.
- 3.23 The scheme is voluntary and GPs retain the right and obligation to prescribe as they consider necessary. There are no sanctions in place for those who fail to meet their target. Savings are encouraged through the form of incentives.
- 3.24 In the first two years of operation of the IDTS, 50% of any saving on individual targets was made available to the doctors concerned for specific service development and the remaining 50% was available to the health board for overall development of general practice. Since 1995 the amount of savings accruing to the doctor have been weighted on the basis of the total savings made. This later approach has the potential to strengthen the incentive to make further savings.
- 3.25 The target setting methodology for each of the years 1993 to 1996 is described in Appendix C.
-

- 3.12 The wholesale price of drugs and medicines is subject to control through the mechanism of a formal agreement between the Department and the Federation of Irish Chemical Industries (FICI). The first agreement came into operation on 1 April 1972, following the establishment of the GMS scheme.
- 3.13 The FICI agreement covering the four year period from 1 August 1993 to 31 July 1997⁴ includes all medicines prescribable and reimbursable on the GMS scheme and all medicines supplied to hospitals and health boards. The main features of this agreement were
- an immediate price reduction of 3% with effect from 1 August 1993
 - a 5% rebate, from FICI members to the GMS (Payments) Board, for all drugs supplied in the GMS scheme
 - a four year price freeze on drug prices from 1 August 1993
 - a once off ex-gratia payment of £2 million in 1993 by FICI members to the GMS (Payments) Board to compensate for currency fluctuations over the final year of the previous agreement
 - the linkage of the price of new products to the lesser of the currency adjusted UK price and the average price of the same product in a basket of European countries
 - a safety net which allowed for a review of the price freeze if the cumulative currency adjusted average increase or decrease in the indices of wholesale prescription medicines in a basket of European countries exceeded 10%
 - recognition of the right of hospitals or health boards to negotiate better terms with individual manufacturers, importers or agents.

This agreement brought stability to the price of drugs and medicines.

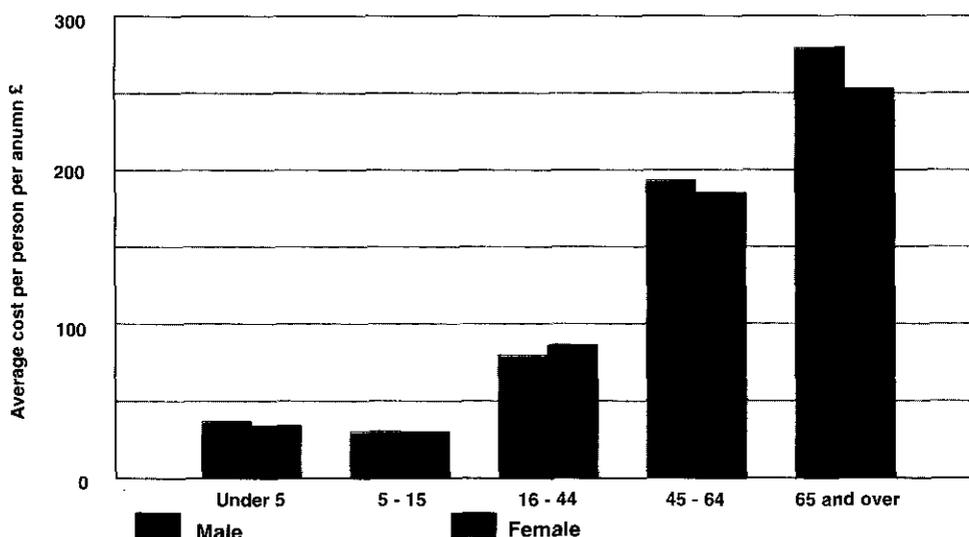
- 3.14 As shown in Figure 3.5 the rate of increase in the average cost per item of drugs prescribed from 1993 to 1995 has been in line with the increase in the consumer price index. However, the increase in the average cost per item in 1996 was 4.9% while the increase in the consumer price index was 1.6%.

⁴ *A new agreement between the Department and the Irish Pharmaceutical Healthcare Association governing all supplies of medicines came into effect from 1 August 1997, covering the four year period to 31 July 2001.*

Number of People Covered by the GMS Scheme

- 3.7 Over the period 1987 to 1996 the number of people eligible under the GMS scheme has varied only slightly, from a peak of 1.34 million in 1987 to a low of 1.22 million in 1990. The number of eligible people covered by the scheme in 1996 was 1.25 million.
- 3.8 The age profile and gender balance of the population covered by the scheme can also impact on prescribing costs. Figure 3.3 shows the variance in the average cost of prescribing medicines for different age groups.

Figure 3.3
Cost of medicines by gender within age groups - 1996



Source: GMS (Payments) Board Report 1996.

- 3.9 The extent to which this has had an impact on the cost of prescribing over the period concerned was not assessed as part of this examination.

Volume of Items Prescribed

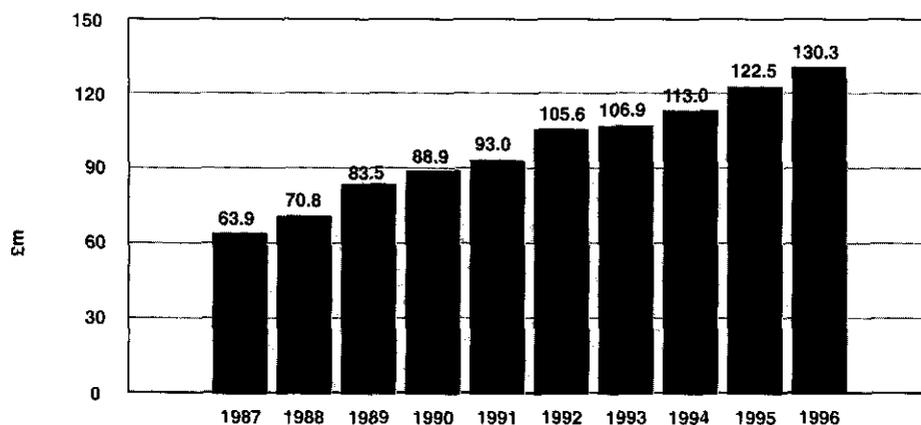
- 3.10 The volume of drugs prescribed, as measured by the number of items prescribed on the forms processed by the GMS (Payments) Board, has increased by 44%, from 13.3 million items per year in 1987 to 19.1 million items in 1996. Over the same period the average number of items prescribed per patient per year has increased by 54%, from 9.92 items to 15.27 items. Figure 3.4 shows the increase in the number of items prescribed in the period 1987 to 1996.

3 Prescribing: Costs and Initiatives

Cost of Prescribing Drugs

- 3.1 Under the terms of the GMS contract the GP is required to
- prescribe such drugs and medicines, from such categories as may be specified by the Minister for Health and Children (the Minister), as the GP considers necessary for any person for whom the GP is obliged to provide services
 - have regard to the need for economy but the primary regard is for the interests of the patients
 - take into consideration recommendations on the prescribing of medicines which may be issued jointly by the Minister and the IMO following agreement between them
 - co-operate in the operation of the National Drugs formulary issued by the Minister with the agreement of the IMO.
- 3.2 The cost of drugs and medicines prescribed under the GMS scheme has increased by over 100% in the ten year period 1987 to 1996 from £63.9 million to £130.3 million. The increase is shown in Figure 3.1.

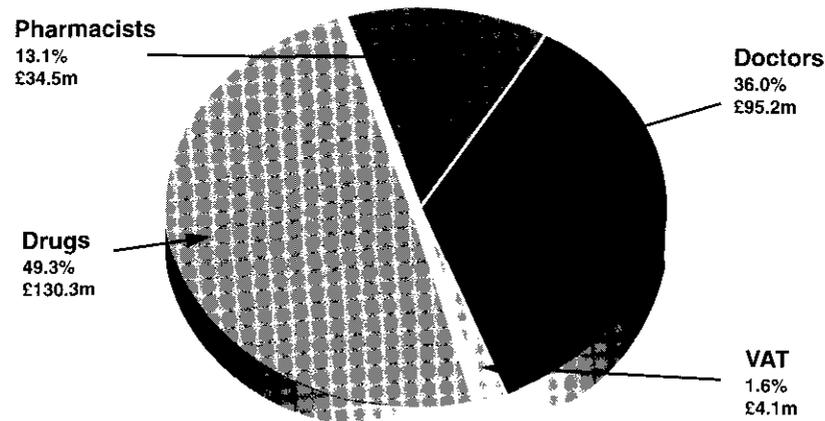
Figure 3.1
Cost of drugs and medicines in the GMS scheme 1987 - 1996



Source: GMS (Payments) Board, Annual Reports 1987 - 1996.

- 3.3 The Department's own figures suggest that Ireland has the second lowest level of consumption of medicines per capita in the EU and the pharmaceutical industry's figures indicate that consumption in Ireland is the lowest per capita in the EU.

Figure 2.2
Payments under the GMS scheme 1996



Source: GMS (Payments) Board, Annual Report 1996.

Review of the General Medical Services Scheme

- 2.5 A review of the GMS scheme was carried out by the Department and the Irish Medical Organisation (IMO) in 1990/91. During the review it was recognised that the cost of prescribing under the scheme had increased at an annual rate of approximately 11% over the previous four years. The rise in the cost was attributed mainly to an increase in the volume of drugs prescribed and the substitution of more expensive drugs rather than an increase in the price of drugs. There was agreement that the level of prescribing could be reduced without having any adverse effect on the quality of patient care.
- 2.6 In 1992, the Department circulated a position paper² (the Blueprint) in which the shortcomings in the structure of general practice were outlined and a number of proposals for the future organisation and management of the service were put forward.
- 2.7 In 1994, the Department published a strategy document³ on the health services. The document identified organisational and service problems within the health sector and the steps to be taken over the four year period 1994 to 1997 to develop the service. The organisational and service problems relating to GP services and the steps proposed for the development of the GP service are outlined in Appendix A.

² *The Future of General Practice in Ireland, Department of Health, 1992.*

³ *Shaping a Healthier Future, A Strategy for Effective Health Care in the 1990s, Department of Health, 1994.*

- 1.7 Further details on the studies which are relevant to the examination are presented in Part 2.

Purpose and Scope of the Examination

- 1.8 The examination focused on the provision of GP services, particularly in the context of the problems identified in the 1994 Strategy document and the proposals for development of the service contained in the four year action plan. The examination was concerned principally with the four year period 1993 to 1996. The resources examined are administered under the aegis of the Department of Health and Children.
- 1.9 In particular, the examination was concerned with
- the steps being taken to promote more cost effective prescribing within the GMS scheme and whether there is potential for further savings (Parts 3 and 4)
 - the extent to which the improvements identified in the 1994 Strategy document have been implemented (Part 5).
- 1.10 The examination was conducted by staff of the Office of the Comptroller and Auditor General with consultancy assistance from the Department of Community Health and General Practice, Trinity College, Dublin. Data from the GMS (Payments) Board was used for analysis purposes.



An analysis of the operation of the scheme showed that GPs who came in under target achieved savings of £18.3 million over the four year period to 1996. GPs who exceeded their targets in the same period overspent by £43 million. The analysis also revealed that only 5% of the 1,395 GPs who were continuously in the scheme over the four years achieved savings in each year while 27% did not achieve savings in any year.

Economy in Prescribing Practices

The choice of drug prescribed for each patient is the prerogative of the individual GP and will depend on the individual circumstances of each patient. However, in exercising this prerogative it is important for the GP to have regard to any economies which can be made which do not have a detrimental effect on patient care.

Data for five individual months (within the period January 1995 - May 1996) was acquired from the GMS (Payments) Board to establish the trend in prescribing costs and the scope for savings through more rational prescribing. Analysis of the data showed that the percentage of all items prescribed which were at their lowest possible cost increased from 10.41% to 14.13% in the period. Prescribing in May 1996 was marginally more economical than in January 1995.

Examination of the May 1996 data indicated that the maximum possible savings achievable, if every item prescribed was at its lowest unit cost, would amount to £0.46 million per month, equivalent to £5.5 million per year. It is recognised that substitution is not feasible in all cases and that other factors would limit substitution in practice. While the trend in substitutions over the period January 1995 to May 1996 suggests that some progress has been made in substituting lower cost equivalent drugs, there is still clearly considerable scope for the achievement of further savings.

The analysis also showed that annual savings from the substitution of generic drugs for more expensive proprietary items could yield savings of over £1.3 million based on replacing proprietary items with equivalent branded generic items while maintaining the same level of prescribing.

The examination also identified the following areas where there was scope for further significant savings from alternative therapies which, while being more economic, would not compromise patient care.

- One example of a switch to a less expensive but equally effective first line treatment for depression showed potential annual savings of £640,000.
- A minor shift in some expensive therapies for the treatment of stomach ailments would provide significant savings.

Abbreviations

ATC Class	Anatomical Therapeutic Chemical Classification
ECG	Electro Cardio Graph
EU	European Union
FICI	Federation of Irish Chemical Industries
GMS	General Medical Services
GP	General Practitioner
GP Unit	General Practice Unit
ICGP	Irish College of General Practitioners
IDTS	Indicative Drug Target Scheme
IMO	Irish Medical Organisation
SSRIs	Selective Serotonin Reuptake Inhibitors
VAT	Value Added Tax



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The report was prepared on the basis of information, documentation and explanations obtained from the bodies referred to in the report.

The draft report was sent to the Department of Health and Children and the General Medical Services (Payments) Board and their comments requested. Where appropriate, these comments were incorporated in the final version of the report.
