Section 1

Introduction

At a meeting of HOPE's Sub-Committee on Co-ordinating which was held in Ireland in June 1997, it was decided that a joint project would be established involving Finland, Spain and Ireland. The purpose of the project was to examine measures taken in recent years to reduce hospital surgical waiting lists in each of the participating countries. Measures taken to manage waiting lists were also to be addressed. The participating countries each nominated two persons from a regional health authority within their country to the project to form a Working Group. The members of the working group were:

Matti Hannuksela (Finland)
Mary Hynes (Ireland)
Carmen Martínez de Pancorbo (Spain)
Juha Metso (Finland)
Leticia Moral (Spain)
Mary O'Connell (Ireland)

This report describes national or regional initiatives taken to reduce waiting lists in the following:

INSALUD, Spain: where 80 hospitals were involved in 1996 and 1997 in a region with a population of 15 million.

South Karelia, Finland: the initiative here involved one hospital in a region whose population is 131,000. The waiting list initiative began in South Karelia in October 1995.

Ireland: the national initiative took place in a country of 3.5 million population and 50 acute hospitals. Waiting list initiatives began in June 1993 and have continued since on a rolling basis each year.

Although there are differences in size, populations and health care systems between Finland, Spain and Ireland, each country had experienced similar difficulties in the growth and management of its hospital waiting lists. The following table shows the similarities which existed in specialties which presented the greatest difficulties with regard to waiting lists, with ophthalmology, orthopaedics and urology presenting challenges in each country:

Specialties experiencing waiting lists			
	Finland	**Spain**	**Ireland**
Ophthalmology	·	·	·
Orthopaedics	·	·	·
Urology	·	·	·
Ear, nose and throat surgery		·	·
Gynaecology		·	·
Cardiac Surgery	·		·
Vascular Surgery		#	·
Plastic Surgery			·
General Surgery		·	·

Each country responded differently in designing initiatives to address these difficulties. Responses to the problem took place at national, regional, secondary and primary care levels. Because of the differing structures of healthcare systems in the participating countries, each level is not pertinent to the initiatives addressed in each country. At the same time however, in attempting to understand waiting lists and waiting times and the initiatives taken to address them, it is important that the ways in which each level impacts upon the other are taken into account.

The report begins with a short account of the socio-economic and demographic features of each country and of its healthcare system and concludes with a literature review of the topic.

Section 2

Healthcare Systems, Contractual Arrangements and Private Practice

INSALUD, Spain:

There are 17 regions in Spain, 7 have decentralised health services, INSALUD represents central government. Universal coverage is extended to the population through seven regional health authorities. Individuals select a general practitioner who is linked to an identified group of medical specialists for specialty referral. Almost all doctors practice in Social Security facilities highly centralised (national system of hospitals and clinics).

Contracting and accountability: Hospital consultants have autonomy according to their contract. Within hospitals there is a clinical director who can influence clinical decisions. Co-operation with initiatives is reliant on the goodwill of those involved.

The extent of private healthcare: In addition to the Social Security system, a private sector insurance system has emerged to which individuals may contribute in addition to Social Security payments. The extent of private hospital provision is variable across the regions; many of these facilities are contracted by government for use by public sector patients. Primary care physicians are paid by a combination of salary/capitation while hospital physicians are paid by salary. For this latter group, salary levels vary according to the consultant's time commitment to the hospital, years of service etc.

South Karelia:

The Finnish healthcare system is primarily based on public funding**.** It consists of three levels of care: primary (243); central hospital (17) and university hospital (5). The system is funded through state and local taxation. Users pay on average approximately 21.5% of service costs although this varies according to the service involved. Of total public healthcare expenditure, 43.2% is spent on primary care while 56.8% is spent on specialised healthcare. All money spent on secondary care is directed through local authorities and through primary care.

Contracting and accountability: The hospital in South Karelia is owned by the ten communities of the county. All doctors and other employees are directly employed by the hospital. Within the hospital, the heads of each specialty have their own budget which can be used according to their assessment of need; it can be decided by the head of specialty if work can either take place within the hospital or if it should be contracted out to private or other public hospitals. In every specialty there is one chief doctor who is responsible for patients and finance.

The extent of private healthcare: Private healthcare is delivered by part-time specialists working in private practice on an out-patient basis. There are no private hospitals in South Karelia; doctors are allowed to have private patients in the hospital as part of their salary. The number of private patients accounts for only 0.5% of the total. Approximately 5% of doctors work solely in the private sector. In primary care, two different salary systems co-exist. The first is a monthly salary and fee-for-service which operates well and does not contribute to waiting list problems. Waiting lists exist in the second payment method which is based on monthly salary only.

Ireland

The health services in Ireland are a mixed system and include both services provided by the State and those funded through private health insurance. The great bulk of public non-capital funding (88.1%) for the Irish health services comes from the exchequer by way of general taxation. A further 9.3% comes from an earmarked tax, known as the health contribution and other miscellaneous sources. The remainder of public funding comes from receipts under EU regulations. Generally in the health services, 70% of costs are pay and 30% are non-pay. In the three acute hospitals directly managed by the Eastern Health Board, pay accounts for 71.6% of the budget. (National figure not obtainable.) Just over 50% of *public* health expenditure is spent on the acute hospital sector.

Those who are covered by the General Medical Services scheme (GMS) are entitled to a full range of publicly funded health services without charge. Eligibility is determined according to income, but discretionary powers remain with the regional health authority according to the individual's circumstances. The main entitlements are

- General practitioner services
- In-patient hospital services in public wards
- Specialist services in out-patient clinics
- Prescribed drugs, medicines and medical and surgical appliances
- Dental, ophthalmic and aural services
- Maternity care and infant welfare services

Those not covered by the GMS scheme may avail of in-patient hospital service in public wards and specialist service in out-patient clinics, subject to a small charge.

Contracting and accountability: The clinical independence of consultants working within the acute hospital system is protected by the contract under which they are employed. Within the contract, a consultant is defined as *'a registered medical practitioner in hospital practice who...undertakes full clinical responsibility for patients in his care, or that aspect of care on which he has been consulted, without supervision in professional matters by any other person'*. The contract recognises and expressly protects the right of the patient to the independent judgement of his personal consultant.

The extent of private healthcare: Details of private expenditure on healthcare are patchy. Of claims paid by the Voluntary Health Insurance Board (VHI) over 70% are to hospitals and over a quarter are in respect of consultant fees. Approximately one third of the population are covered by private health insurance. A range of schemes are provided, with an emphasis on covering the costs of in-patient hospital care. Health insurance premiums qualify for tax relief at the standard rate of tax, provided the insurance is with a company based in Ireland. Private insured health care has been financed almost exclusively through the Voluntary Health Insurance Board, a not-for-profit statutory organisation. In the past year, the VHI has been joined by BUPA (U.K) in the private health insurance market.

	% GNP/ GDP	Acute	Primary care

	on healthcare	hospital beds*	physicians*
Spain	7.6% GDP	3.6	0.83
Finland	8% GNP	2.9	0.5
Ireland	7.3% GDP	3.3	0.48

***per 1,000 population**

Section 3

The Initiatives

The impetus to reduce the waiting lists and waiting times had different origins in each country.

INSALUD: Central government in Spain began the waiting list initiative and the regional authority in Madrid, INSALUD was responsible for the initiative described in this report. INSALUD provides healthcare for 40% of Spain's population.

South Karelia: The Finnish Medical Association took the initiative regarding implementation of a pilot Finnish treatment guarantee programme. A seminar was arranged by the Association after which a pilot initiative was decided. Healthcare organisations in both primary and secondary care were involved in the decision, as were political decision-makers. Some scepticism was experienced from both politicians and doctors about the project. This report details the initiatives taken by South Karelia region with particular reference to its implementation in one hospital from 1995-1998. The waiting list group in South Karelia took the initiative regarding validation of the waiting list and this was designed by them.

Ireland: In Ireland, it was central government administration - the Department of Health the majority of hospitals in the country which initiated the project. This initiative is also described in the pages which follow along with its implementation in a major acute hospital in the Eastern Health Board region.

Base-line data

At the beginning of the initiatives, all regions recognised the need for improvement in base-line data collection and analysis in order to examine the extent of the waiting list problem and to plan for its resolution**.**

INSALUD: In Spain, a highly developed computerised system was already in place with each hospital sending information by electronic transfer to the central authority. The primary focus for the waiting list initiative was the standardisation of entry to the list and improvement in the data which was collected. Diverging methods of entry to the waiting lists and procedures for documenting deferrals were discovered. Because of this, the actual number of patients waiting for surgery was difficult to estimate; it was recognised that either underestimation or overestimation could exist. The reliability of information regarding those already on the lists was also in question. In response to this, waiting list registration in the region was centralised. An obligatory minimum data set for all hospital waiting list registrations was established and the delivery of information to the Central Authority was regulated.

South Karelia: In Finland also, it was recognised nationally that detailed information was required in order to establish the extent and nature of the waiting list problem and that there was a lack of reliable data. Variations between specialties or districts in the length of waiting lists could not be explained: it was noted there that there was no correlation between hospital expenditure and length of waiting lists.

Ireland: Base-line waiting list data by specialty was gathered nationally in Ireland by the Department of Health.

Validation and Prioritisation of Waiting Lists

Validation and prioritisation of the waiting lists received attention as part of each initiative. As can be seen below however, validation of the lists can have unforeseen consequences:

INSALUD: Hospitals were required to improve the quality of their data. Waiting lists were reviewed by the hospitals' Admissions Department to ensure they were up to date. As a result of the validation process, 21.7% of patients were removed from the lists. However, as an unforeseen consequence of the validation process, the overall number of those waiting for surgery grew when all patients were taken into account. In order to prioritise those waiting for surgery, indications for operations were devised in collaboration with groups of medical experts from national specialty associations which regulated how priority setting between different groups of patients should be organised.

South Karelia: Validation of the waiting list was undertaken by the local waiting list group in South Karelia.

Ireland: In one large acute hospital whose initiative was studied for this report, a three-step priority rating was used in order to prioritise those waiting for surgery; however, criteria for deciding the priority rating was not standardised across the hospital.

Consultation and Goal-setting

INSALUD: Criteria for surgical intervention were established by INSALUD working in collaboration with groups of medical experts from national specialty associations. Goals were set for the relevant hospitals by the Central Authorities, the first of which stated that: *"At the last day of the year, no patient will have had a waiting time in excess of one year and waiting time will be reduced from seven months to four months"*. These goals were part of a rolling process of goal-setting which still continues and evolves. In 1997 a pilot project was undertaken in two regions in seven certain designated procedures which stated a maximum guarantee where maximum guarantee times were stated as between six and eight months. These were set by national specialty associations. If the hospital cannot offer the treatment within the time limit, then the local authority must offer treatment at another hospital within the network or at a private facility. At hospital level, consultants and administrators met to review the goals and to decide how best they could be achieved locally. Hospitals were expected to re-allocate funds internally in order to reach waiting list targets.

South Karelia: The hospital consultant who spearheaded the initiative in the South Karelia Hospital presented the findings of his analysis of waiting times to the other consultants in the hospitals. Upon examining the data, the consultants concluded that a reduction in waiting lists was necessary and could be addressed. It was agreed than 75% of patients listed for surgery should receive treatment within three months.

Ireland: At national level in Ireland, consultation took place between the Department of Health and hospital managers during which targets were set for waiting list reduction. The goal was to eliminate waiting times in excess of one year for adults and six months for children. The

specialties which were targeted by the initiative were: ophthalmology; orthopaedics; urology; ear, nose and throat surgery; gynaecology; vascular surgery; plastic surgery and general surgery. A separate initiative took place in respect of cardiac surgery. Furthermore, targets were set for the numbers of additional procedures by specialty which were to take place. As part of the initiative in the major acute hospital studied for this report, the hospital's senior management consulted widely with hospital consultants. In this particular hospital, it was agreed that two specialties, ophthalmology and urology would be targeted.

Regulations, incentives and penalties

In addition to other mechanisms, solutions to the problem of waiting lists included regulation, provision of incentives or imposition of penalties. In the INSALUD region (the only region employing penalties), a combination of all three were used:

INSALUD: In the region, regulatory mechanisms designed by the regional health authority were employed to enforce compliance with the initiatives. Return of monthly waiting list information to Central Authorities became obligatory. Furthermore, additional finance totalling 19m. ECU in 1996 and 46m. ECU in 1997 was provided for certain designated surgical procedures. Hospitals with primary responsibility for patients who exceed the specified waiting time are obliged to pay for their treatment at private clinics.

South Karelia: The hospital consultant with responsibility for the initiative presented comprehensive data analysis to his colleagues and this proved sufficient to ensure compliance with the initiative. Therefore, minimal additional expenditure was required and amounted to the cost of providing an extra team in theatre for six months. Because of the enthusiasm of those involved in the South Karelia initiative, no penalties were required; in fact two specialties surrendered beds during the consultation process giving an annual saving of approx. 2m. ECU.

Ireland: The government's Department of Health provided financial incentives which amounted to 83.75m. ECU in the period 1993-1997.

At hospital level, incentives were offered to those complying with each initiative as follows**:**

- Purchase of endoscopic and ultrasound equipment
- Incentive payment to hospitals by re-imbursement of day-case costs
- Renovation and refurbishment of wards and departments
- Minor increases in part-time and full-time staffing levels: surgical, nursing and administration

Changes in clinical practice

Guidelines and protocols for clinical practice were established by INSALUD. Other attempts to influence clinical practice in waiting list management in INSALUD, South Karelia and Ireland included:

- Increase in day-case surgery (e.g. increased by 50% in INSALUD through incentive payment)
- Minor operations performed at primary care level
- Second opinion referral
- Triage by consultant physician prior to surgery
- Introduction/expansion of endoscopic procedures
- Training in endoscopic procedures

Operational changes

Changes which occurred at operational level within and between hospitals, although simple, were recognised as effective:

- Designation of 5-day and 7-day beds/units
- Analysis and rationalisation of theatre use
- Allocation of additional theatre time
- Altered division of labour within department

Average theatre usage in INSALUD was estimated at 65% of total available surgical time in June 1996. Rationalisation of theatre usage was a fundamental part of the waiting list initiative. Targets are now set to increase morning usage to 75% of all available time. Afternoon theatre usage is to be dedicated only to those whose waiting time is in excess of one year and funding for evening use of theatre is only provided after efficient use of morning theatre time has been achieved.

Contracting-out to other public or private hospitals was part of the initiative in INSALUD and also in Finland; in the latter country, cardiac surgery was so contracted.

Section 4

Outcomes

INSALUD: The most successful aspects of the initiative are seen to be the standardisation of the waiting list information system and the obligatory minimum data set which was refined and implemented. The following aspects of the initiative are also seen as most successful:

- Waiting list definition
- Standardised registration systems
- Standardised criteria for placement of patients on waiting lists
- Prioritisation of list and selection of patients from list
- Waiting list review
- Provision of incentive payments for day cases

Outcomes of the initiative in INSALUD region can be seen in the following table:

	No. on list	**Waiting time**	**Average wait (days)**
1.6.96	168265	>1 yr.: 21525	217
31.12.97	148224	> 9 months: 826	98

In addition to a reduction in waiting lists and waiting times, activity also increased as is shown in the following table:

Surgery	**1994**	**1995**	**1996**	**1997**
Inpatient	31,9640	286,705	336,981	339,134
Day	33,332	36,676	51,996	72,834
Minor	210,990	189,541	200,202	196,057
Total	**563,962**	**512,922**	**589,179**	**608,025**

South Karelia: The initiative increased surgical activity in the hospital. Orthopaedic and urological waiting list/time have changed greatly. Reduction in waiting times is shown as an Appendix to this document and in the following Table:

Surgery	**1995 waiting time days**	**1997 waiting time days**
Ear Nose Throat	126	90
Abdominal surgery	186	155
Urology	242	50
Orthopaedics	298	174
Gynaecology (sterilisation)	106	325

No waiting list difficulties have been experienced in other specialties e.g.: minor orthopaedics; cancers; coronary bypass etc.

Ireland: The funding which was provided for the waiting list initiative provided hospital managers for the first time with a negotiating tool with which to meet hospital consultants. Given the system of reporting relationships which pertain, hospital managers felt that it would have been difficult, if not impossible to ensure the compliance of consultants without such funding.

Date	**Number on Waiting List**
June 1993	40,130
Dec 1993	25,373
Dec 1994	23,835
Dec 1995	28,004
Dec 1996	25,959
Sept 1997	30,453

Cost

INSALUD: Costs of hospital activity and contracting-out is shown as follows:

1996: 19.5m ECU for financing 13,461 procedures
1997: 46m ECU for financing 27,392 procedures

South Karelia: Little extra cost was incurred by undertaking the initiative in South Karelia; the exceptions to this were the purchase of ultrasound equipment and employment of an extra temporary orthopaedic surgery team for six months.

Ireland: The cost of the additional procedures which took place as a result of the initiative is as follows:
1993: 25m. ECU for financing 18,768 additional procedures
1994: 12.5m. ECU for financing 16,669 additional procedures
1995: 10m. ECU for financing 12,861 additional in-patient procedures and 12,078 additional out-patient procedures.
1996: 15m. ECU for financing 13,170 additional procedures.

During 1995, the targets set for additional inpatient and outpatient procedures were exceeded by 2,467 and 6,768 respectively. During 1997, 10m. ECU was made available for the waiting list initiative of which 1.25m. ECU was dedicated to the cardiac surgery waiting list. In 1998, 11.5 ECU will be made available and hospital managers and Chief Executive Officers of health boards will be held accountable to ensure that targets are met. Outcome data is not yet available for 1997. The Department of Health is commissioning an independent study of the waiting list initiative to date.

Quality and Customer satisfaction

INSALUD is currently evaluating the impact of the initiative on technical and clinical quality. Changes in some quality indicators since the initiative are being studied (re-admission rates, morbidity and mortality rates). Furthermore, the impact on indicators for surgery and clinical practice in the most common procedures is also being studied. This will include: evaluation of awareness and knowledge of the guidelines, changes in rates of indicators for surgery and variation in demand. In South Karelia, no changes in technical or clinical quality were noticed during the initiative.

Waiting lists and waiting times had been a major source of complaint to Spain's *Defensor del Pueblo* (Ombudsman). During 1997, a significant decrease has been noted in the Ombudsman's annual report. In South Karelia, customer feedback is obtained annually by questionnaires and no change was noticed during the waiting list initiative.

Section 5

Ongoing Management of Waiting Lists

INSALUD: In the region, data is returned to the Central Authority each month showing the number of patients waiting for each procedure along with their waiting times. Improved monitoring of waiting lists and waiting times and evaluation of waiting list management have been implemented, the objective of which is to devolve responsibility and awareness from health authorities to hospital managers who are expected in turn to transmit this to surgeons. The specific objectives are to:

- Improve selection of patients from the waiting list
- Increase the proportion of planned interventions
- Improve efficiency of surgical resources
- Undertake validation of waiting lists

In order to increase standardisation, hospitals are now required to submit two different data bases by electronic transfer:

- Data set of all hospital waiting list registrations
- Patients operated and those removed from the waiting list during the period (including the reasons for their removal as this is seen as a key indicator in waiting list management)

This information is checked for consistency and validation queries are raised with the hospitals concerned where large, unexplained changes occur. Special computer programmes have been developed to enable such data examination.

A monitoring system has been devised for each hospital which has the following components:

- Hospital goals are agreed between central and regional authorities (Annual Hospital Contract)
- Establishment of monthly weighted objectives, based on waiting list structure, historical surgical activity trends, supply-demand indicators and hospital waiting list management
- Feedback systems which allow for discussion of goal attainment, resource usage, waiting list management and additional resources which may be required.

In spite of improvements in the past two years, official statistics still contain anomalies and inconsistencies. Substantial variations in methods of waiting list registration and management of waiting lists still exist. To address this, a multidisciplinary group is designing a guide for the management, monitoring and validation of waiting lists. A definition of a waiting list will be devised since variations in waiting lists are principally caused by lack of precision in this area. Scrutiny of waiting lists and stricter indications for placing patients on the list will also be addressed.

South Karelia

It is recognised in Finland that waiting list management involves priority setting, management and leadership skills. Data systems are to be seen as the basic tool with which to develop quality systems.. Comparative data which highlights variation is an important part of the system. Following the initiative, no further prioritisation between specialties or procedures are considered necessary. Urgent cases are treated without delay; other patients are expected to see a specialist in three weeks in the outpatient department and the maximum waiting time for elective procedures is three months.

Ireland

As part of the initiative, activity levels were monitored by the Department of Health to ensure that targets were being achieved. Data was returned to the Department on a quarterly basis by specialty which showed baseline and additional activity.

Section 6

Outpatient Waiting List Management

INSALUD

It is seen as important that improvements in in-patient waiting times do not occur at the expense of those waiting for out-patient appointments. To address this, an action plan has been devised, the goals of which are as follows:

- Decrease of average waiting time by 25%
- Decrease maximum waiting time - upper limit four months for first outpatient appointment

Return of monthly information regarding outpatients is obligatory. This includes the number waiting on the last day of each month; the length of their waiting time to date (maximum and minimum length of wait) in each specialty. These numbers are then aggregated, analysed and monitored centrally. As with surgical waiting lists, anomalies and inconsistencies were discovered in definitions, methods of registration and in waiting list management systems. Variations exist between hospitals regarding list size. Further standardisation of information is being developed. Primary care physicians are also seen as part of the process and initiatives in primary care are detailed elsewhere in this report.

South Karelia

As part of the initiative's consultative process, agreed waiting times for outpatient specialist appointments were negotiated with the hospital's consultants. It was agreed that the patient should be seen by consultant within three weeks in 75% of cases. However, it is considered that waiting time for specialist consultation is still too long (between 3-8 weeks) in some specialties, especially orthopaedics and pulmonary disease.

Ireland

Outpatient waiting lists and times were included as part of the second phase of the national initiative in Ireland which took place from 1995 onwards. Additional funding was provided and targets were set for the number of additional outpatient appointments to be met and these targets were exceeded. This initiative was designed to focus upon the specialties targeted by the inpatient initiative as well as a number of other priority areas which were identified during discussion between the Department of Health and health authorities and hospitals..

As detailed elsewhere in this report, consultation with general practitioners regarding that initiative which was undertaken by one hospital showed dissatisfaction with outpatient waiting times for certain physician specialties which was addressed by the hospital.

Section 7

Primary Care

INSALUD

Co-ordination between primary and secondary care is recognised as vital and therefore both are involved in a Health Care Commission which has been created in each area. The following are being developed by the Commission:

- Referral systems between general practitioners and specialists
- Information dissemination between primary and secondary care in order to make waiting list data more accessible
- Analysis of general practitioners' referring behaviour

In order to control referral rates proposed guidelines for referral between general practitioners and specialists are being devised by national medical specialty associations and scientific societies. Evaluation of the implementation of the guidelines is planned. A maximum referral rate from primary care to secondary care has been established in 1998 after consultation between managers of primary care physicians and hospital managers.

South Karelia

As part of the overall initiative, a working group of representatives from primary and secondary care established goals for reduction in waiting times for primary care appointments. For primary care physicians working within a capitation system, it was agreed that a patient should see the general practitioner within three working days and that more urgent cases should be seen on the same day. At local level in South Karelia the working group agreed that these targets were desirable for all primary care physicians. These targets were reached. With regard to the hospital waiting list initiative, primary care professionals were motivated to co-operate since it is through them that hospitals are funded. An example of increased co-operation was the development of a new strategy for urology patients in primary care.

Ireland

A number of hospitals held meetings with their local general practitioners. It was noted that the areas of concerns of general practitioners were sometimes different to those targeted by the waiting list initiative. In the voluntary hospital cited in this report, general practitioners identified long waiting times for rheumatology and dermatology outpatient appointments as areas which impinged greatly on the quality of life of patients and their families. In order to address this, an "early consult" rheumatology clinic was established and a similar initiative is planned for dermatology. Fast-track referral criteria have been agreed and standard referral forms have been developed for use by general practitioners. Up to 80% of patients have been referred back to their general practitioner after one visit. Steps have also been taken to inform local general practitioners of waiting times, both by specialty and by consultant. Feedback is provided to the hospital by general practitioners at Hospital Liaison Committee meetings.

Section 8

Discussion

There are differences in size, populations and health care systems between the three countries involved in this project, Ireland, Finland and Spain. However, all three have experienced difficulties in relation to waiting lists, with large numbers of patients awaiting treatment. There are also similarities in the specialties experiencing large waiting lists, with ophthalmology, orthopaedics, urology, ENT and gynaecology posing particular difficulties. Even though the approach to solving the problem was different in the three countries, a number of common themes emerge.

Waiting list management is not an end in itself, neither is it the solution to the health needs of the population. Rather, it should be seen as just one element of an overall strategy to achieve health gain for the population. Waiting lists need not necessarily be seen as an indicator of inadequate resources or of inadequate effort. They can be seen rather as indicators of a need for goals definition, management or communication between parties. Given available resources - which are outside the control of healthcare providers, the response of those providers must be to manage waiting lists.

Goal setting

In both Spain and Finland there was great emphasis placed on reducing waiting times. In Finland explicit targets were set for waiting times for inpatient, outpatient and General practitioner care. In the initial years in Ireland the emphasis was on reducing the numbers on the waiting lists and on providing additional procedures, over and above the baseline activity of hospitals. In latter years the emphasis has shifted to eliminating delays over one year for adults and six months for children. The Patients Charter in the UK has adopted a similar approach with a guaranteed maximum waiting time.

Waiting list theory suggests the numbers seeking treatment and the average duration of wait are highest in a regime which treats complainants strictly in the order in which they join the 'queue'[2]. A more efficient approach is to offer higher priority to those whose need for treatment is more acute and we recommend that this approach be adopted by countries experiencing waiting list difficulties. To implement such an approach requires an explicit system of deciding priority, both within and between specialties.

Whatever approach is ultimately used, it is essential that clear goals are set which are understood by all parties involved.

Priority setting

A discussion of priority setting in the context of waiting lists is a recognition that waiting lists are a form of rationing of finite health care resources. This has not been made explicit in any of the three countries included in this report. Where rationing is implicit and maximum waiting times targets are set, a situation arises where patients of low acuity may be treated before patients with greater medical need simply because they have been waiting longer.

Initiatives in Salisbury in the UK and in New Zealand have attempted to address this issue, albeit in a limited way[18,19]. In INSALUD, guidelines and protocols for clinical practice have been established. In Ireland surgical protocols are also being developed and implemented, particularly in the area of cancer treatment. However it must be recognised that priority setting within specialties does not help in resource allocation between specialties. We recommend that a public debate is initiated encompassing health care professionals and consumers to educate the population about waiting lists and clinical practice. Such a debate would help to raise awareness of the finite nature of health care resources, the need for rationing and help set national priorities for the allocation of available resources.

In the Finnish example quoted in this report no further prioritisation is considered necessary as targets are being achieved. This may not apply in the rest of Finland as the initiative under study is the most successful of the three Finnish initiatives.

Clinicians often make substantially different management decisions for similar clinical situations. This variation in practice often occurs in geographically close communities and is not consistently explained by differences in patient characteristics or preferences. Variation in management often includes practices that are inconsistent with good evidence about optimal care[21]. Evidence-based medicine is the conscientious and judicious use of current best evidence from clinical care research in the management of individual patients[22]. It is an emerging clinical discipline that brings the best evidence from clinical and health care research to the bedside, surgery or clinic and to the community. The performance of systematic reviews of health care has become the focus of an international group of clinicians, methodologists and consumers called the Cochrane Collaboration. These reviews provide evidence on the efficacy of preventive, therapeutic and rehabilitative regimes.

Three steps are crucial to the timely introduction of evidence into clinical decisions: getting the evidence straight, developing clinical policy from evidence and applying the policy at the right place and time. We recommend that attention to these steps be incorporated into the management of waiting lists. This includes:

- Training and continuing medical education in critical appraisal of research literature
- Disseminating and providing access (paper and electronic) to systematic summaries of evidence about health care interventions
- Clinical policy development involving 'front-line' local practitioners with responsive local systems; the policy must achieve a balance between the evidence from research and the circumstances in which the evidence must be applied
- Recognising and overcoming barriers to applying evidence in practice.

I n summary then, we believe we should move towards a position where practice insofar as possible is evidence-based. in the short term in the absence of evidence being available, we should aim for universally agreed best practice and to prioritise within that framework.

Data issues

There are difficulties in interpreting trends in waiting list statistics. Definition difficulties, absence of a generally agreed urgency rating system and lack of a systematic method of collecting information about outpatient waiting time all have been identified as contributing factors[12,15]. The lack of standardisation makes it almost impossible to evaluate the impact of waiting list initiatives as changes in the numbers on the list may be due to changes in data collection rather than an outcome of the intervention. In Spain considerable effort was put into standardising entry to the list and improving the data collected; as in other countries, many anomalies were discovered. In both Spain and Ireland it is accepted that a significant proportion of those on the waiting list at the beginning of the waiting list initiative no longer wished to avail of surgery. In addition in Spain, patients were identified who should have been on the waiting list but who were not.

We recommend that the way in which waiting list data are collected and the definitions used are standardised both within and between countries. It is only when this is done that valid comparisons between consultants, hospitals, regions and countries can be made.

Criticism has been voiced in the literature of the use of average waiting times, which do not accurately reflect the variability of waiting times and may conceal very long waits by some patients[6,15]. Some studies have recommended the use of centiles rather than average measures. Data presented in centiles are easy to interpret and progress toward achieving targets is readily tracked. We recommend that this approach be adopted. Furthermore, it is important to measure waiting time in a comparable way and moves should be made to standardise this. The preferred method is retrospective.

Management issues

It is clear that in the three countries included in this report consultation between clinicians and hospital management was an essential component of the waiting list initiative. The situation in Finland was unique in that the hospital manager was also a senior clinician. Presentation of national comparative waiting list data resulted in co-operation from clinical colleagues, emphasising once more the importance of good data. Where problems persisted in one clinic, the clinician/manager did some clinic sessions himself, demonstrating that the waiting list could be reduced. The importance of motivating opinion leaders in bringing about change in professional groups is highlighted.

In Ireland, where clinical independence is safeguarded in the consultant contract, hospital managers are constrained in their dealings with clinicians. In this case, the additional resources provided by the initiative facilitated dialogue between managers and clinicians and helped gain clinician co-operation. INSALUD also recognised the importance of collaboration of all parties involved in maintaining control over waiting lists. Indications for operation were devised in collaboration with groups of medical experts from national specialty associations. At hospital level, consultants and administrators worked together to review goals. In addition to including incentives, the two pilot projects in INSALUD included sanctions.

We recommend that the central role of clinicians be formalised in the management structure of waiting list initiatives and that, if possible, consultant contracts take due cognisance of their role in managing resources. Comparative waiting list data should be made available to clinicians and managers.

Linkages

Concern has been expressed internationally that efforts to reduce in-patient waiting lists will exacerbate outpatient problems[15]. In all three initiatives described in this report, the importance of ensuring that improvements in the in-patient waiting times were not at the expense of outpatient lists was made explicit. Target times were set in Finland from the beginning of the initiative and additional resources made available in Ireland from 1995, the third year of the initiative. INSALUD also recognised that surveys of outpatient appointments were required and began an outpatient waiting time reduction programme in 1997. We recommend that outpatient waiting times are monitored routinely as part of waiting list initiatives. Key points from the patient's perspective are the length of time from referral until seen in an outpatient clinic and length of time from referral until definitive treatment. These should be included in the waiting list initiative minimum data set.

Once the focus shifts from inpatient to outpatient care, the importance of the primary care system becomes more apparent. In Ireland, the Health Strategy stresses that care should be given at the lowest most appropriate level. In Finland explicit targets were set for waiting times to see a general practitioner. Finland is unique in that the hospital is funded from the primary care budget of the district in which it is situated. In all three countries, to varying extents, efforts have been made to involve general practitioners, to devolve care to general practitioners where appropriate, and to develop shared management protocols for common conditions. In Finland, general practitioners work in the Accident and Emergency department at weekends and in the evenings; patients are directed to the most appropriate doctor within the Accident and Emergency department. Deployment of general practitioners in an Accident and Emergency department in Ireland resulted in cost savings[23]; this pilot project is now being extended to other Accident and Emergency departments.

We recommend that general practitioners be involved at national level in the process of national priority-setting referred to earlier. We further recommend that general practitioners at local level be involved in hospital waiting list initiatives.

A senior manager in the Irish health services drew our attention to the interdependence of waiting list initiatives and Accident & Emergency services. This was in the context of the pressure experienced in Irish hospitals during winter months when a rise in the number of emergency admission leads to cancellation of elective admissions which may impact on waiting lists. If, on the other hand, efforts to reduce waiting lists are vigorously pursued, emergency patients may have to wait a number of hours within the Accident and Emergency department for admission. The importance of having adequate rehabilitation and extended care facilities to facilitate discharge of patients who no longer need acute hospital care was stressed. These observations highlight the complexity of health care provision in developed countries and the potential for unintended consequences when initiatives take place in one part of the system. We recommend that changes in all parts of the healthcare system are monitored when waiting list initiatives are introduced.

Monitoring

Reference has already been made to the need to strengthen and standardise waiting list information systems. The importance of monitoring all components of the health care system and not just in-patient data has also been stressed. When goals are expressed in terms of numbers or

time on the waiting list, these are obvious indicators to use in monitoring progress. We feel it is important to monitor more widely than this.

Increased use of day surgery was a feature in Spain, Ireland and Finland. Five-day wards are also utilised in tackling waiting lists. However more complex procedures cannot be undertaken on a day-case or five-day basis. It is essential that patients requiring such procedures are not perversely left to wait indefinitely; waiting times for complex procedures must be routinely monitored. Similarly, waiting list initiatives may result in less priority being given to conditions not amenable to surgery or not requiring invasive procedural investigations. We recommend that data in relation to all specialties be monitored.

It is important that success in terms of reducing waiting times or numbers on waiting lists is not at the expense of quality of care. Potential quality indicators include:

- Readmission rates
- Unplanned overnight admission of day case
- Unplanned admission to intensive care unit
- Wound infection rates
- Pulmonary embolism rates
- Mortality rates

We recommend that such indicators be included in the monitoring of waiting lists. In addition, when indicators are being analysed, other variables such as demographics and case-mix should also be taken into account.

Finally, the trend toward consumerism in health care provision must be acknowledged and we recommend that monitoring of consumer satisfaction be done routinely.

Section 9

Conclusions And Recommendations

Waiting list management should be seen as one component of achieving health gain for the population.

Within healthcare, choices must be made and prioritisation must take place within and between specialties.

Notwithstanding this, it is recognised that medicine must take place within an ethical framework and that we should specially take care of those who cannot provide for their own care.

Neither can healthcare take place in an economic vacuum and it is recognised that at some stage, choices must be made.

Careful account should be taken of value for money in every aspect of healthcare system.

Where possible, all intervention must be evidence based and where this is not possible, it should take place according to explicitly agreed best practice.

Waiting list management should be seen as part of a continuum of care which reaches from primary care through outpatient departments to hospital intervention and finally back again to primary care.

A minimum data set should be established which is standardised within and between countries.

There should be commonly agreed criteria for entry to waiting lists at national level.

Urgency criteria for intervention should be established.

Clear targets for waiting times should be set at national and regional level.

Information about waiting lists and waiting times should be made available and widely disseminated.

Terminology used should be defined and standardised both within and between countries.

There should be a clear responsibility designated for the management of waiting list. It is recognised that individuals with leadership qualities are those who will have the most success in management of hospitals and management of waiting lists.

Responsibility for management of waiting lists should be clearly designated and assigned to a level high enough to ensure compliance and objectivity.

Systems should be structured and managed in such a way as to ensure accountability at each level.

Systems should be examined to highlight the rewards and penalties which exist within them and in particular those which may be hidden or which may operate in a perverse way.

Further work should take place to develop these recommendations and to make them specific at European level.

Section 10

Literature Review

Waiting lists - an international phenomenon

At any time in the past 25 years, there have been large numbers of patients awaiting in-patient admission to NHS hospitals[1]. Morgan points out that the large and increasing numbers of people on waiting lists has occurred despite an increase in the total numbers of patients treated. Waiting list cases are heavily concentrated among five specialties, namely general surgery , orthopaedics, ear, nose and throat, gynaecology and ophthalmology which account for 75%. Another 18% are from oral surgery, plastic surgery and urology, while all other specialties, including cardiothoracic surgery, cardiology and neurology, radiotherapy and mental illness, comprise the other 6%. Within each specialty there is further concentration of waiting list cases among a small number of conditions. The numbers awaiting advanced or life-saving procedures is relatively small.

The data indicate that considerable numbers of people wait for hospital treatment under the NHS for unacceptably long periods of time, while there are important local variations in the length of lists and waiting times. Morgan notes that the numbers of people genuinely waiting for hospital care is likely to be considerably less than the official statistics indicate as these figures often include people who no longer require an operation or are not sufficiently fit for treatment.

There has been relatively little public pressure to reduce waiting times for fairly straightforward investigative procedures or non-urgent treatments which are seldom life-threatening. Public pressure in response to long waiting times has also been reduced by the use of the private sector which forms a growing component of health service provision.

Morgan concludes that a major factor contributing to waiting lists is the ever increasing demand for health care. This growth in demand partly reflects the increasing proportion of elderly people in the population who are the heaviest users of the health services. The changes in medicine itself, with the availability of new diagnostic and operative procedures and methods of treatment creating new needs and demands are also important.

Goddard and Tavakoli agree that waiting lists have been a pervasive feature of the British health care system since the creation of the National Health Service (NHS) in 1948[2]. Despite a progressive increase in the proportion of United Kingdom (UK) Gross National Product spent on the NHS and despite numerous initiatives aimed at tackling the waiting list problem, both the number of patients on waiting lists and the average duration of wait for certain categories of non-urgent treatment have also tended to increase during the post-war period. The creation of an internal market and the separation of the functions of health care purchasers and providers as a result of the NHS reforms of April 1991 has drawn renewed attention towards the waiting list phenomenon, and created expectations that as a by-product of market-led gains in NHS efficiency, waiting times might be expected to fall.

Hemingway and Jacobson quote waiting list statistics for England[3]. There were 628,800 people on an inpatient waiting list and 4,423,000 people on a day case waiting list in England on 30 September 1994. Of these, 7% and 4% respectively had waited more than one year.

New Zealand implemented major reforms of its healthcare system in 1992, including a complete split between funding, purchasing and provision of services. Long waiting lists for elective surgery had been a nagging issue that long predated the reforms[4].

The Dutch health ministry has also announced radical plans to tackle chronic problems of long hospital waiting times especially for eye, heart and orthopaedic surgery[5]. The move was prompted by research showing that in the first half of 1996 up to 100 patients benefited from schemes offering faster treatment for non-medical reasons. Of the 450,000 Dutch patients awaiting specialist hospital treatment each year, 90% thought they had to wait too long.

A study was carried out between 1992 and 1995 into the total waiting time by public patients for selected surgical procedures in the greater Dublin area[6]. Procedures studied were cataract removal, prostatectomy, transurethral resection, knee and hip replacement, herniorraphy, cholecystectomy and varicose vein operation. In paediatrics, grommet insertion and tonsillectomy/adenoidectomy were also examined.
Among the key findings were

· Within any specialty, there was major variation between hospitals and between clinics within hospitals in waiting time to obtain and Outpatient Department (OPD) appointment, in the length of time one could spend within the OPD system and time on a waiting list for a surgical procedure
· Length of waiting lists varied enormously between procedures: a median of 30.9 weeks on the waiting list for varicose vein operation compared to 4.6 weeks for a grommet insertion
· Overall 71% of patients were satisfied with the length of time they were on a waiting list for a procedure
· Those definitely dissatisfied with their time on the waiting list had waited on average over four times longer than those who were satisfied
· Just over half of the patients considered their condition had disimproved while they were on the waiting list. This varied from 90% of those awaiting knee operations considering they had disimproved to 29% of those who were waiting herniorraphy
· Satisfaction levels were much lower in those who considered their condition had disimproved.

That patients may be justified in their dissatisfaction with long waiting times is supported by a report of the potential dangers of long waiting times for a routine outpatient appointment at a urology clinic[7]. Over a three year period, 55 patients with symptoms of bladder outflow obstruction were recruited for two clinical trials. These patients were recruited from the waiting lists of new patients and had been classified as having routine conditions by the consultant on the basis of the information in the referral letter. During the investigation of these patients, seven new cases of cancer of the prostate were diagnosed. A superficial cancer of the bladder was detected in one patient and a caecal cancer in another. The study highlighted the prevalence of associated disease in patients who were classed as having routine bladder outflow obstruction. At the time of the study, the average wait for a routine appointment at that outpatient clinic was eight months with a further wait of two years for a prostatectomy. The authors argue that since most of the prostatic cancers detected in the study had not metastasised to bone and were well or moderately well differentiated, these patients might have suffered if detection had been delayed.

They conclude that a long wait for a patient with bladder outflow obstruction for a specialist opinion is both undesirable and unacceptable.

Waiting lists as rationing devices

Traditionally, the NHS at district level has used a number of approaches to restrict access to non-emergency services. Virtually all have been implicit rather than explicit[8]. One of these is waiting lists, where access to services might be restricted through delay. A waiting list may be so long as to exclude access to specific services.

Waiting lists represent an imbalance between demands for hospital care and the supply of services, according to Morgan[1]. The size of this imbalance in the UK reflects both the absence of financial barriers to health care as well as the limitations of supply arising the relatively low level of funding of the NHS.

Starting from a theoretical interpretation of the NHS waiting list as a rationing device which restricts access to treatment for certain non-urgent conditions, Goddard and Tavakoli used a queuing model to investigate the efficiency and equity implications of three theoretical regimes of waiting list management[2]:

- firstly, treating complainants strictly in the order that they join the queue;
- secondly, affording higher priority to the more ill and lower priority to the less ill in an attempt to achieve equality between the total level of 'suffering' experienced by all treated complainants; and
- thirdly, offering rapid treatment to as many seriously ill complainants as the system can cope with comfortably without significant queues starting to build and offering the remaining (less seriously ill) complainants a prospect of treatment which is so distant or uncertain that they are dissuaded from even joining the queue.

The authors show that in the theoretical model, the numbers seeking treatment and the average duration of wait are highest under the first of these regimes and lowest under the third. While there are strong efficiency arguments in favour of the third approach, it would give cause for concern on grounds of equity. It discriminates against complainants who are insufficiently ill to receive rapid attention but who are sufficiently ill that they would seek and obtain treatment under either of the other two regimes.

They argue against the imposition of a guaranteed maximum wait, since this would be expected to increase the demand for treatment and therefore raise the level of queuing congestion experienced by all complainants. On the other hand, the model tends to favour explicit rather than implicit rationing of entry to the queue due to the potential for efficiency gains through shorter waits for complainants whose need for treatment is most acute. The authors acknowledge that the inherent flexibility and unpredictability of the NHS makes quantification of the effects of any policy change more uncertain than what they attempted to show in the paper.

Mechanic points out that governments in all nations seek means to limit public expenditure and mandates for health services[9]. Explicit approaches include fixed global budgets and limits on the benefit package and eligible providers. Rationing also occurs implicitly through cost sharing, waiting lists, and requiring professionals to work within a constrained budget. Increasingly

implicit rationing has been under attack as uninformed, arbitrary and inequitable. Instead, it is argued that explicit strategies such as contracting and purchasing arrangements, rating systems that establish people's preferences and the value they place on varying medical outcomes, determinations based on quality adjusted life years, outcomes research and practice guidelines should dictate allocation decisions. Mechanic maintains, in contrast, that though some explicit controls are needed over financing and the diffusion of expensive new technologies, explicit rationing at the micro level will increase tensions, conflict and instability.
Klein, Day and Redmayne illustrate the complex and multi-dimensional nature of the resource allocation process in service delivery[10]. They stress the importance of non-medical decisions about priorities in the allocation of resources that may greatly affect the quality of care offered to patients and rarely feature in debates about rationing. They discuss factors influencing GP decisions to refer patients to hospital. They conclude that the rationing of access to specialist services by GPs tends to be an idiosyncratic process, affected but not determined by the availability of resources.

Idiosyncratic variation between consultants is also the norm, not only in the way they practice but in the way they manage access to services. Criteria used by consultants in managing the queuing system, in deciding priorities between patients on waiting lists, remain obscure. Where scales of urgency exist, it is unclear how these criteria are applied in practice: to what extent is there agreement between consultants in the way they define 'urgency', whether the concept is stable over time or changes with the availability of resources. In their interviews with purchasers, examples emerged of providers selecting out people they did not want to deal with e.g. speech therapists preferring middle-class children as clients to more difficult cases. In other words, resources were allocated according to the responsiveness or acceptability of the client.

Managing waiting lists

The long history and unchanging nature of the waiting list problem is illustrated by a detailed study of a waiting list for orthopaedic outpatient appointments in South Glamorgan Area Health Authority[11]. The study was undertaken to identify factors that might lead to better management and reduction of the long waiting list. One third of patients on the list failed to attend when appointments were offered. A postal questionnaire to all those listed as waiting confirmed that many no longer sought specialist orthopaedic consultation. Another third of the patients reported that they had been treated previously for the same orthopaedic problem. Thus the study confirmed the widely held view that long outpatient waiting lists include both patients with conditions that have already cleared up and patients with long histories of chronic conditions. It is likely that many of these latter patients have problems which are not curable and where only palliative solutions are available.

The authors recommended periodic waiting list review with deletion from the list of those who no longer seek appointments. The proportion of non-attenders would then be smaller and more constant, allowing for better use of resources within the outpatient clinic. They also recommended that patients for routine review of refitting of appliances or supports should not be added to waiting lists as 'new' patients, but should be booked straight into clinics, even if at five-yearly intervals. Finally, they recommended that patients who have been through the system previously whose symptoms are not particularly amenable to treatment and who have been re-referred should be given a low priority by their referring doctors so that earlier appointments may be offered to truly 'new' patients with treatable or potentially serious conditions.

More recently, Pope, Roberts and Black examined a list of 1,283 patients waiting for general and orthopaedic surgery in an outer London borough[12]. While the mean time spent waiting was 10 months, the distribution of waiting times was skewed, with most patients waiting a few months and a long tail representing those who wait for considerable periods, some over five years. In general surgery, varicose vein surgery and hernia repair accounted for nearly 60% of those waiting for more than a year. Of those waiting more than three years, varicose vein surgery and hernia repair accounted for 80% of the list. Amongst patients waiting for over a year for orthopaedic surgery a quarter were waiting for knee replacements and about 15% were waiting for hip replacements.

There were inconsistencies in the relationship between urgency rating and time on the waiting list. There was evidence that for some patients an inverse relationship existed in which more urgent cases were more likely to wait longer than less urgent cases. There were some marked differences in the size of the waiting list and the mean waiting time between consultants. Analysis of the flows onto the list and work done in one month showed that it would take a considerable time to clear some lists at present rates of activity.

Morgan attributed long waiting lists for admission and unacceptable waiting times for hospital appointments to methods of waiting list management, the level of funding of NHS hospitals and the efficiency of resource use, in the face of ever-increasing demand for hospital services[1]. Movement onto and off an in-patient waiting list involves decisions made by general practitioners, hospital doctors and admissions officers. There have been few incentives to ensure that waiting lists are regularly reviewed or to 'clear' a waiting list. Attempts to improve the management of waiting lists have mainly focused on increasing administrative efficiency rather than influencing referral decisions and clinical practices more directly.

Morgan describes the additional funding which, from 1987, was provided in the NHS in successive years to address waiting list problems. A proportion of funds was earmarked for districts with the greatest waiting list problems. These financial initiatives were important locally in reducing waiting lists, although having relatively little impact on national figures. The approach of providing extra cash for districts with long waiting lists often gives little incentive to achieve a more efficient management and validation of lists and to avoid a backlog of patients requiring hospital admissions.
The other main approach has been through measures designed to increase efficiency. Many measures have been introduced by districts on a fairly ad hoc basis. Examples cited by Morgan include

- walk in clinics for medical and psychiatric patients as an alternative to presentation at an accident and emergency department.
- open access diagnostic services (X-ray, gastroscopy) to reduce waiting time
- increased responsibility of senior nurses to enable more patients to be treated
- employing locums and supernumerary registrars to enable spare beds and theatre capacity to be used
- changes in allocation of theatre time and hospital beds between specialties
- use of five day wards
- expansion of day surgery.

The National Health Service and Community Care Act 1990 introduced an internal market into the NHS. The new system of financing hospital services through contracts should provide a greater incentive for hospitals to reduce their waiting lists and achieve agreed standards, including the specified waiting times, in order to attract new contracts. However, with the exception of fund-holding GPs there is no incentive for GPs to limit their referrals to consultants, or limits on consultants' decisions to admit patients for in-patient care. Morgan concludes that in the absence of a mechanism for reconciling supply and demand, it is likely that considerable waiting times for non-emergency procedures will continue.

Under the Patients' Charter, a maximum waiting time of eighteen months has been introduced for all services[8]. The House of Commons Health Committee raised a number of questions in the case of waiting lists.

- How effective are the waiting time targets set out in the Patient's Charter?
- Should these targets be reduced further?
- What implications do these targets have for setting priorities amongst patients?
- How should waiting times be measured?
- How long should people wait on these lists?
- Should there be shorter targets for some conditions, longer for others?
- Do clinicians have effective arrangements for deciding priorities within the lists?

The Health Committee examined the impact of waiting time targets in the context of low priority services. They found that access to 'non-essential' or 'low priority' services may be regulated in a number of ways.

1. A service may be excluded completely. The service may not be judged appropriate for NHS provision
2. Authorities may restrict availability by limiting the amount of money made available in their contracts: or, less likely, by specifying the maximum number of people to receive that service per year.

Evidence from district purchasers suggested that most had attempted to avoid imposing blanket exclusions on services. However, evidence from a majority of districts surveyed suggested that access to at least some 'low priority' services had been restricted. Exclusion or restriction policies differed markedly across the country both in terms of the services covered and the nature of the restrictions applied. The services most frequently subject to restriction included plastic surgery procedures undertaken for cosmetic purposes, tattoo removal, reversal of sterilisation and certain fertility treatments. While these involve asymptomatic non-threatening condition they can nevertheless raise very difficult questions for purchasers.

The Health Committee concluded that in terms of the impact on overall NHS resources, the absolute exclusion of services to date had been of marginal significance. The evidence suggested that purchasers tended to restrict access to services by limiting the availability of resources rather than exclude services completely. Many of the services excluded or restricted were those that previously had very low priority and hence very long waiting times. However, if purchasers continue to offer these 'low priority' services, all patients must be seen within the national target time of 18 months. It is partly in response to this pressure that some purchasers have taken an explicit decision to exclude local access to specific services. The Committee recommended the

Department refine the operation of waiting time targets. They believed that some flexibility was necessary to avoid the potentially perverse distortion created by the need to treat all patients within the eighteen month time limit. This could be achieved by extending the practice of setting specific targets for treating specific conditions. They further recommended that the Department set out clearly the framework within which purchasers will be expected to define the local package of service, and set out the criteria by which their decision may be scrutinised, debated and if necessary challenged by individuals.

Hemingway and Jacobson questioned the assumptions that being on a waiting list is a measure of need and that the longer the wait the greater the need[3]. These assumptions result in initiatives to reduce waiting lists tending to act as if it is the long wait itself that warrants treatment. They point out that increasingly, systematic reviews and techniques for identifying consensus have been used to set criteria of appropriateness for clinical procedures but that there has been little interest in using this work to tackle waiting lists. They suggested that where there is a waiting list, the intended procedure, the precise indication for that procedure and any co-morbidity must be assessed. These factors could be used to generate an appropriateness rating. They also suggested that commissioners agree with general practitioners and providers the criteria for appropriateness for entry to and clearance from a waiting list, that such an approach should be widely debated in local community settings and that the criteria for appropriateness should be linked with a commitment to audit. This would allow the standards given in the patient's charter to be achieved on the basis of need rather than political whim.

Newton, Henderson and Goldacre referred to policy initiatives in the NHS to reduce waiting times including the patient's charter, earmarked funds of about £30 million a year nationally from 1987 to 1993, and the funding of 100 new consultant posts in 1990 specifically to reduce waiting times[13]. They examined national waiting list statistics from 1987-94 to determine how list size and waiting times changed in relation to changes in the number of admissions from the list. They also considered changes in the number of patients added to the list. They used local data to assess the impact of earmarked waiting list funds on admission rates, list size and waiting times at an individual district specialty level.

The national study showed that increasing admissions tended to improve waiting time but not list size. The local study showed that it was unusual for admissions to increase after an allocation of waiting list funds. Rather, allocations seemed to reduce list sizes without increasing admissions - possibly as a result of identifying patients on the list who did not require surgery for various reasons. The authors concluded that the objective of validation of the list alone could not justify the expense of these initiatives.

In contrast, Gray points to the reduction of waiting lists as one of the great success stories involving the reform of the National Health Service (NHS) in the United Kingdom[14]. The author summarised the successes of the NHS in reducing the length of waiting lists. No one served by the publicly financed NHS has to wait two years for a procedure. Fewer than 4000 wait longer than a year and more than half the patients needing treatment are seen within 6 weeks of their first appointment with a specialist; 75% are seen within 6 months.

The shift of power from specialists to patients and their general practitioners through reforms such as the introduction of fund-holder groups, the introduction of a Charter of Rights endowing patients with the sense they had a right to quality service and the establishment of national and

local standards of service were all seen as contributing to the success. The author cited Alan Langlands, chief executive of the NHS, as indicating that the key to reducing the size of waiting lists is money. In the run up to the 1992 general election, the Conservative government knew that smaller waiting lists would be a crucial element in any election victory. Money was directed to hospitals and specialists so they could reduce waiting lists to reasonable lengths. After a 32% increase in elective-surgery workload and a 10% increase in the emergency and acute-care workload, the backlog was slashed. The stress on NHS personnel was intense however as they were obliged to work nights and weekends for several months. Another impact on health care was that once people realised that they could get good service within the NHS, demand for private care dropped. The author also referred to the widespread and profound unease about what is happening to health care and the growing perception that the goal is a privatised system. These are seen as an unexpected perceptual cost of the reforms.

"Lies, damn lies and statistics"

Shorter waiting times for hospital treatment are among the indicators quoted to support claims that the introduction of the internal market and other changes to the NHS are a success. A number of papers highlight difficulties in interpreting trends in waiting list statistics. Pope, Roberts and Black pointed to the lack of a standard nomenclature and coding system for patients awaiting surgery and the absence of a generally agreed urgency rating system[12]. Without these, comparisons between consultants and hospitals are difficult to interpret.

Pope expressed concern that the limit on inpatient waiting times, introduced as part of the NHS reforms, would merely shift delays rather than tackling the issue and that patients would end up waiting longer for outpatient consultations[15]. She drew attention to the long waits experienced by some British patients to be seen by a hospital doctor and the lack of a systematic method of collecting information about outpatient waiting. The most commonly used statistic is average waiting time per specialty, but that figure varies with local definitions and is so skewed by inter-consultant variation that it is virtually meaningless. She stated that reliable up to date information about outpatient waiting times is essential and that meaningful alternatives to measuring performance by averages are needed. Looking at centiles may give a better view of the situation.

This view is supported by the authors of the Dublin study referred to earlier[6]. They commented that comparison of the figures in their report with official data on waiting times (time on the waiting list) may be misleading. In general delay times, time in out-patients and waiting times, were positively skewed and median rather than mean values were presented. Because of the nature of this data, the median values tend to be less that the arithmetic mean usually quoted in official statistics. In an attempt to present the variability in waiting times (between clinics irrespective of hospitals, between clinics within hospitals and between hospitals) either the range or the quartiles were used. In addition, the report determined waiting time from placement on the waiting list to the actual procedure; the official statistics are based on how long patients, who were on the waiting list at a particular point in time, had waited up to that time.

Smith also drew attention to definition difficulties[16]. There are three types of waiting list in Scotland

- True waiting list - number on the inpatient waiting list. In Scotland, patients on this list may be allocated a guarantee-exception code if their condition is of low medical priority e.g. tattoo removal, or patient referred to named consultants rather than to colleagues with lower workloads.
- Deferred waiting list - for patients who are under social or medical constraints which affect their ability to accept an admission date when offered and for those who fail to attend after being offered an admission date.
- Planned repeat waiting list - where care is planned over a series of admissions e.g. for chemotherapy.

As part of the monitoring process NHS trust and health authority league tables based on a snapshot of the number of patients on the inpatient waiting list are published at the end of each quarter. They show the number waiting in each specialty for specified time intervals and thus the number who have exceeded the guaranteed maximum waiting time for that specialty. The author aimed to determine whether the time spent on the inpatient waiting list gives a valid indication of how long NHS patients have to wait for treatment, and with reference to Scotland, how many patients are placed instead on the deferred waiting list or are exempted form the normal guarantees. The second aim was to determine the feasibility of measuring the total time that patients have to wait between the initial general practitioner referral for an outpatient appointment and admission for treatment, the post-referral time. The third aim was to assess the advantages of the post-referral waiting time over the currently used inpatient waiting time as a monitoring and decision making tool for general practitioner and health authority purchasers.

The study found that in the specialties investigated, approximately half of the average post-referral wait of 110 days was spent on the true inpatient waiting list, one third being spent on the outpatient waiting list and one sixth waiting between lists. The averages concealed wide variations in waiting times and overall there was little positive or negative correlation between the time spent on the outpatient and inpatient waiting lists. No patient on the true waiting lists had guarantee exceptions during the study period. Of 6417 patients on inpatient waiting lists in the three hospitals studied, 14.9% were on the deferred list.

The author argued that monitoring and subsequent publication of post-referral waiting times would give a considerably more accurate picture for purchasers on the total length of time that patients have to wait for treatment. The inadequacy of the inpatient waiting lists as a measure of waiting times was particularly evident in conditions like cataracts and osteoarthritis, which need to reach a certain stage before surgery. The point at which these patients are added to the waiting list varies widely among consultants. Those who add their patients to the list at the first outpatient attendance will seem unfairly to have a longer waiting time than those who delay placing patients on the list until they are ready for operation. The total post-referral wait however may be the same in both situations. Careful monitoring is required to ensure that deferred patients are treated as soon as possible after the reason for deferral no longer exists. Stringent monitoring is essential to ensure that future reductions in the time waiting on true inpatient waiting lists are not gained at the expense of longer periods waiting to be placed on the lists and that no increase occurs in the number of patients placed instead on deferred waiting lists or exempted from the normal maximum waiting time guarantees.

A similar note of caution was sounded by the Radical Statistics Health Group who also illustrated that statistics in relation to the numbers of people on waiting lists may be open to

misinterpretation[17]. They highlighted that delays in making a decision to admit a patient can make recorded waiting times shorter. In addition patients who are offered a date but are unable to attend have their waiting times calculated from the most recent date offered. The numbers of these self-deferred case are no longer published in the Department of Health's six-monthly statistical bulletin on waiting times. Data requested by the House of Commons Health Committee show that self deferrals rose from 48,343 during the period March to June 1988 to 66,901 during September to December 1993. More recent data showed that the upward trend in self-deferrals continued in 1994. Information on the numbers of people removed from waiting lists for reasons other than treatment was also excluded from statistical bulletins when their format was revised. Their numbers rose from 90,931 during March to June 1988 to 219,564 during September to December 1993. The median value of waiting times decreased very little between 1988 and 1993 in contrast with the dramatic reduction in numbers of people waiting over 18 months.

The authors recommended an extension to the collection of data about patients waiting for NHS treatment. The time of arrival of a referral letter to an outpatient department, the time of the initial appointment and the time between appointment and admission should all be recorded. This would reveal any delays in the system and would monitor the number of people waiting to join a waiting list.

Innovative approaches

A waiting list prioritisation points scheme was initiated at Salisbury District Hospital with the goal of making more explicit the criteria that consultants use to manage and schedule their inpatient waiting lists, and to facilitate factors other than time waited to determine a patient's place on a waiting list[18]. Each patient on an inpatient waiting list is given 0-4 points in each of the following categories

- progress of disease
- pain
- disability or dependence on others
- loss of usual occupation (job, house, work, school)
- time waiting. Points are then squared to emphasise differences and summed to give a score out of a possible 80 points. The criteria chosen were arrived at through discussion between local consultants and GPs in the Wessex area.

Such a points scheme represents explicit rationing in an attempt to reconcile a limited supply of health care with demand. It can be seen as an attempt to make informal, covert rationing, which has occurred since the inception of the NHS, more formal, explicit and publicly accountable. The need to set priorities and in some way restrict access through eligibility criteria is increasingly widely accepted. Tudor Edwards argues that it is the nature of eligibility criteria, their philosophical basis and more pragmatically who is to set them that will lead to a diverse spectrum of opinion.

Before the NHS reforms, NHS waiting lists were the property of hospital based consultants who would decide who to treat and in what order. The creation of the internal market and separation of purchaser and provider raised questions as to the 'ownership' of waiting lists. Purchasers hold responsibility to meet the health care needs of their population, some of whom are on NHS

waiting lists, while hospital based consultants face a responsibility to meet contracts on behalf of their provider unit, while trying to exercise their clinical freedom in managing their waiting lists. There is an issue as to whether consultants within a clinical specialty can reach agreement on the progression or spread of disease or condition, let alone on the pain suffered by a patient or his or her social circumstances. Inter-specialty consensus on the relative priority of patients treated in different clinical specialties is likely to be more difficult to achieve. A further criticism is that the points system does not explicitly link a patient's priority position on a waiting list to his or her expected health gains from treatment. There is no linkage between health gain and resources used.

The author goes on to describe how an efficient waiting list points scheme might work. An efficient waiting list policy, aiming to maximise health gain from available resources, might complement a general health care policy of giving priority to treatments and health care services that offer the greatest health care benefit per unit of resource, whether this be expressed in terms of £s spent or in terms of more physical units such as bed days. At an inter-specialty level, this would doubtless lead to the redistribution of resources e.g. bed capacity between clinical specialties. Patients would be drawn from the waiting list in order of their expected Quality Adjusted Life Year (QALY) gain per bed day from treatment. If this waiting list policy were carried out at the clinical specialty level, resources could be distributed between clinical departments so as to equate the total health gain per bed day of the marginal patient treated per time period in each clinical specialty. This would mean that patients would have the same opportunity of being treated, given their expected total health gain per bed day from treatment, regardless of the nature of their condition and clinical specialty from whom treatment was received. Such a policy is likely to leave some patients with minor conditions never being treated. A health gain per unit of resource maximisation based waiting list points scheme would fail to take into account factors such as time already waited, family and employment circumstances, and would only indirectly take account of factors related to quality of life, i.e. those incorporated into the health state descriptors used in QALY calculation.

The author applauds the architects of the Salisbury scheme for their recognition of the need to move the waiting list debate beyond waiting time targets. She proposes a research project to collect QALY data alongside the existing points scheme in order to identify how efficient the scheme is in terms of getting high QALY gain per unit of resource patients to the front of the queue. If the points scheme in its present form is leaving some high QALY gain per unit of resource patients languishing at the back of the queue, there is something to be learned about what might be an acceptable trade-off between health gain per unit of resource, and factors judged to determine deservingness of priority on a queue, such as dependence on other, loss of usual activity or time already waited.

As part of a sweeping overhaul of its economy and social structure, New Zealand implemented major reforms of its healthcare system in 1992, including a complete split between funding, purchasing and provision of services[4]. The national health committee resisted pressure to develop a simple list of services depicting what was in or out of the 'core' of services that would be publicly funded. Instead it defined eligibility for services in terms of clinical practice guidelines or explicit assessment criteria which depict circumstances under which patients are likely to derive substantial health benefit from those services, bearing in mind competing claims on resources.

The national health committee recommended that surgical services should move away from a system of waiting lists and toward a system of specific booking times, so that patients would know when they would receive their operation. A national project was initiated to put in place the tools needed to assess the extent of patients' overall priority or urgency for surgery. Priority would generally be given to patients with the greatest likely benefit. Five sets of standardised assessment criteria were developed for elective surgical procedures under the auspices of the project. Numerical scores were assigned to each of the multiple levels of severity on each criterion; relevant scores on each criterion were added together to form a total score. The procedures covered were:

- Cataract extraction
- Coronary artery bypass graft surgery
- Hip and knee replacement
- Cholecystectomy
- Tympanostomy tubes for otitis media with effusion

As well as clinical criteria several social factors were incorporated within the priority criteria to some extent. Age was incorporated into the criteria for coronary artery bypass graft surgery, on the basis that this type of surgery has direct implication for life expectancy as well as quality of life, whereas the other surgical procedures directly affect only quality of life. Threat to independence, care of dependants and ability to work were incorporated but given relatively little weight compared to clinical factors. Time spent on the waiting list was excluded mainly because the principal tenet of the criteria is that they reflect the degree of clinical (and social) likely benefit associated with the clinical condition, not time spent waiting.

On 8 May 1996 the minister for health in New Zealand announced the creation of an NZ$ 130m fund to be used for clearing surgical waiting lists and replacing them with booking systems. Access to the fund was contingent on the use of explicit priority criteria such as, but not limited to, those developed during the project. The professional and public response was favourable in general.

Priority criteria for coronary artery bypass grafting were developed by a professional advisory group consisting of seven cardiologists, four cardiac surgeons, one physician and two general practitioners[19]. The priority criteria were degree of coronary artery obstruction, class of angina, results of exercise stress test and ability to work, care for dependants or live independently. A clinical audit was conducted of all patients on New Zealand's waiting lists for coronary artery bypass grafting using the criteria. Based on the observed distribution of priority scores, the cost of providing surgery to all patients down to various levels of priority was estimated. Cardiologists and cardiac surgeons agreed that a threshold of 25 points was a reasonable clinical goal but to work with a threshold of 35, which could be sustained with the level of funding available. It was agreed that the gap between the clinically preferred and currently afforded threshold was a subject for wider societal dialogue and decision. The ability to measure the size of the gap between clinical desirability and financial sustainability provided a new transparency to the problem of healthcare resource allocation.

Dixon and New compare and contrast the approaches in Britain and in New Zealand[20]. The British on the one hand has decided not to define a list of core services available on the NHS and has left it up to purchasers to decide, providing them with information on the effectiveness of a

range of treatments. On the other hand, it has developed several policies with direct bearing on rationing, such as curtailing free eye testing on the NHS, allowing adult dentistry to drift out of the NHS and requiring purchasers to meet specific waiting time and productivity targets for inpatient care regardless of the urgency or likely effectiveness of treatment in individual cases. The result, they conclude, has been haphazard access to care depending on where the patient lives and policies aimed at maximising effectiveness coupled with those likely to undermine it.

They contrast the situation to that in New Zealand, where there is also a split between purchasers and providers, where priority criteria were developed to encourage treatment of the most needy patients first. The authors consider that encouraging local providers to develop priority criteria for specific services as has been pioneered in Salisbury could be a next step in the NHS but urge a note of caution. There are important questions about which clinical and social factors to include and how best to weight them. Local criteria may conflict with national priorities. In addition, the New Zealand initiative helps to set priorities for demand within specified services but does not offer help about the appropriate mix of services, including whether some should be off the NHS menu. The approach may not be useful in deciding the level of funding for health care: in New Zealand the level of funding dictates the number of points at which a patient can expect treatment rather than the reverse. If the basic aim is to maximise health benefit from available funds, then the cost effectiveness of treatments, rather than just the effectiveness should be considered. Finally, the implication is that patients not achieving the required number of points are returned to their general practitioners for management. This may increase already high demands on general practice and ultimately result in higher costs of treatment. Despite these caveats, the authors conclude that adopting an approach such as the New Zealand model might encourage a shift of emphasis away from a counterproductive cycle of increasing hospital activity and the inflexible use of waiting times to rank demand towards increasing efficiency instead.

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APPENDIX

Demographics

Using the latest available figures, comparative data is given below for Spain, Finland and Ireland regarding each country's area, population, life expectancy, elderly and youth populations and those unemployed.

Spain

The population of Spain is 39.7m people in an area of 504,750 sq. km. Of those, 16.4% are 65 years or more. The birth rate is 9.8 per 1,000. Life expectancy is 77 for men and 78.5 for women. Spain has a crude mortality rate of 8.8 per 1,000 and the principal causes of death are accidents, cancer and vascular diseases. Using the European Union Community Household Panel Survey to assess poverty, 19% of households were found to be below the 50% poverty line.

Finland

In 1995, the population of Finland was 5.1 million, living in an area of 338,145 sq. km. The birth rate is 11.8 per 1,000. 14.5% of the population is aged 65 years and over. There is a crude mortality rate of 9.6 per 1,000 in Finland and the principal causes of death are: 20.3% of the deaths are due to cancer; 17.2% to ischaemic heart disease and 17.6% to other diseases of the circulatory system**.** Life expectancy is 72.8 years for men and 80.2 for women. Finland has been struggling with high unemployment which is decreasing and now stands at 15%. The Finnish variation between lowest and highest income groups is narrowest among the OECD countries and poverty figures are among the lowest. Using the European Union Community Household Panel Survey to assess poverty, 8.7% of households were found to be below the 50% poverty line.

Ireland

Just over 3.6m people live in the Republic of Ireland which has an area of 70,285 sq km. The birth rate is just under 14 per 1,000, a rate which reflects a fall which began only in recent years. The percentage of the population represented by those aged under 18 years is 32.5% as a result of very high birth rates in previous years. Of the total population, only 11.5% is aged 65 years or more although this figure is predicted to rise sharply within the next five years with a very significant rise in the upper age cohorts (75 years and over). In 1996, Ireland had a crude mortality rate of 7.3 per 1,000. Half of all deaths are due to diseases of the circulatory system, with a further quarter due to cancer. Eligibility for free medical care (or Medical Card) has been found to be the most reliable indicator of need and 40% of the population is eligible for this cover. Using the European Union Community Household Panel Survey to assess poverty in 1993, the proportion of persons below the 50% poverty line had increased when compared to 1987 figures. Of all households, 21% were found to be below the 50% poverty line in 1994. Households with an unemployed head were the most substantial group among the poor.