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# Waiting Lists and Waiting Times in Health Care

# **Managing Demand and Supply**

**Sub-Committee on Coordination** 

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# Introduction

Paul van Rooij

In March 1998 a working group, in order of the HOPE sub-committee on co-ordination published their report 'Measures to reduce surgical waiting lists'. The purpose of this project, involving Finland, Spain and Ireland, 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.

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The results of this project led HOPE to the decision to start a new project in 1999, again involving Finland, Spain and Ireland and also Sweden and the Netherlands. The participating countries each nominated persons within their country to the project to form a working group. The members of the working group was:

Marianne Hanning, Sweden Carmen Martinez de Pancorbo, Spain, Juha Metso, Finland Leticia Moral, Spain Mary O'Connell, Ireland Paul van Rooij, The Netherlands

This report summarises the discussions of the working group. In the last report much effort was given to describing the waiting list situation and policy initiatives in the different countries. In this report we have chose to look at a number of topics under the central theme: "*waiting lists as a measure to manage demand and supply*".

In general, an excess of demand over supply causes waiting times and waiting lists. Elimination of waiting lists and waiting times in the public medicine system is impossible. As long as the use of health care services in principle is free, waiting lists will be a part of the health care system. Waiting lists becomes an instrument for rationing demand and prioritising supply. Since we see that countries with more or less similar funding systems still have different problems, there must be reasons explaining the length of waiting lists and waiting times. These reasons could be:

- A lack of resources or / and capital;
- A lack of personal;
- Bad management of waiting lists or / and inefficiency.

At last, but not at least, a reason for differences, both in and between countries, is a different way of registration of waiting lists.

Given this, the importance of quality, effectiveness and efficiency of the following must be emphasized:

- Waiting times must be reasonable and acceptable.
- High quality information systems and datasets are crucial to enable the management and monitoring of waiting lists and waiting times. If you can't measure, you can't improve.
- There must be effective decision-making and prioritisation systems of high quality. Funding and financing systems have a major influence on waiting lists and waiting times.
- Effective systems of financial incentives for the reduction of waiting lists and waiting times.
- Effective logistical-operations systems within hospital units.

The report begins with a description of minimum data requirements for effective management and monitoring of waiting lists and waiting times (chapter 1). In Chapter 2 the experience of the INSALUD Waiting list policy during 1996-2000 is referred. Then, in Chapter 3 the question is 'Appropriate waiting times: who shall decide?' Chapter 4 look at the management of waiting list by referring different decision making systems and at systems for prioritisation. In Chapter 5 two examples of Internet based patient information systems are presented. The last chapter looks at funding systems and their incentives in the relation to waiting lists.

In February 2001 the working group presented the report at a session in a conference held by HOPE and European Health Managers Forum in Tenerife, Spain. The conference program is presented in appendix A.

# Improving Waiting List Information Systems

Carmen Martínez de Pancorbo Leticia Moral

Improved management of waiting lists requires an understanding of the relationship between the demand for a service and the rate of supply. This understanding requires the development of information systems, which not only can record the numbers of patients waiting for admission but also enable demand and supply for particular services to be monitored.

# 1.1. What is a waiting list?

# Definition of waiting Lists

The waiting list is a formal record of patients identified as needing non-emergency appointment to a hospital for assessment or treatment. It is used to progress the appropriate procedures of review, selection and admission to ensure that none of those patients become lost or inadvertently overlooked.

Waiting lists are a statement of known demand that quantifies, at any point in time, the number of patients waiting for assessment or treatment. This can be analysed to provide vital information on the use of, and need for, hospital resources.

Waiting lists contain patients of different categories and at different stages in the care process.

To facilitate both the clinical and administrative management of the waiting lists they could be sub-divided into a limited number of smaller lists (see below). They also can help the regular review and assessment of patients awaiting admission, and they simplify the extraction of management information and statistical data for hospital and clinical managers.

# Active and suspended patients

The active waiting list should include patients awaiting elective admission for treatment which are currently available to be called for admission.

The active waiting list should exclude patients who are not currently available for admission (suspended patients).

Suspended Waiting: A list of patients awaiting elective admission who, due to some underlying medical condition or a social reason, are not currently available to be called for admission.

# Suspended admissions criteria

- Patients who have another medical condition which needs prior treatment.
- Patients who have difficult personal circumstances of uncertain duration.
- Patients who decline an offer of admission with no intention of coming in during the immediate future.

It can be helpful to keep these patients separate (computer listing) for the maintenance of the list:

- Patients are not accidentally called for admission
- Patients are excluded from the list from which clinicians select patients
- These patients are more easily monitored
- Management information is more accurate
- Patients who persistently turn down offers of admission for social reasons could be removed from the waiting list altogether and referred back to the GP for follow up action.

Computer systems must have the facilities for temporarily suspending and reinstating patients. Waiting list *totals* should include both groups of patients (active and suspended patients).

# Patients with and whitout an admission date

Ideally a patient's admission date should be agreed and booked, as the same time as a decision is made that hospital treatment is required. This removes a considerable amount of uncertainty for the patient and can assist in planning the use of resources as well as be a help in reducing the rate of patient non-attendance.

Waiting list totals should include both groups of patients (with and without admission date).

# Planned admissions vs. active waiting list

Planned admissions are patients who are waiting to be recalled to hospital for a further stage in their course of diagnosis/treatment.

Keeping the records as a separate sub-division ensure that they are not overlooked for admission after the appropriate interval and simplifies the compilation of information about these patients both for those with and without admission dates.

# 1.2 Standardised methods for registration of waiting times

Clinical priority should form the basis for the selection of patients for admission (see chapter 3 and 4). Where there are patients of equal priority, preference should be given to patients with the longest waiting times, including any time waited as an outpatient.

There is very limited information on the validity of time spent on a waiting list to be used for proposes of assessment and comparison. This is due primarily to the range of methods used to estimate waiting times, e.g., cross-sectional, retrospective, prospective, which may result in different measures of waiting time. In addition, different kinds of 'time' are often involved (but not labelled), such as the interval between when a referral is made and assessment by a specialist, or between the first consultation and the decision that a procedure is required.

Standardised methods for measuring and reporting waiting times should be developed. This requires, development and consistent application of criteria for determining whether a patient should be placed on a waiting list (see chapter 4), consistent approaches to defining 'time on' (that is, when a patient should be placed on a waiting list), and continuous monitoring to ensure that patients are appropriately prioritised and that those who no longer need to be on lists are removed.

The whole waiting time from initial referral to the specialized care through to treatment (whole "care process") should be kept under review. The following "steps" should also be possible to identify and measure:

- Total waiting time from the moment the hospital receives the referral until the examination starts.
- The time from the moment examination starts until examination finishes (the consultation may take several appointments and investigations).
- Total waiting time between end of examination and start of treatment.

As treatment methods change and the boundaries between ambulatory and inpatient care become more fluid then the two periods of waiting will need to be considered more closely. The scope of waiting times should cover both the management of access to outpatient consultations for assessment as well as inpatient admission for treatment. In addition, waiting times for investigations need to be monitored.

# 1.3 Recommended model of waiting list data set

Objective:

Registers can be a useful tool for many types of users and can serve as basis for medical-, administrative-, statistical and public information purposes.

The development of a standardised minimum data set for the registration of all patients referred for diagnosis or treatment that is consistent across all providers and specialities would allow reliable comparisons between countries, regions and hospitals.

- The waiting list must contain sufficient data about each patient to aid their subsequent selection for admission and treatment (clinical and administrative decisions on individual patients).
- On the other hand it must be possible to aggregate data in order to give the responsible health authorities as well as the hospitals comprehensive information on activity, waiting lists and waiting times, in association with data about movements to and from the list (local management and statistics for waiting list policies and procedures).

Waiting lists can be looked at in different ways:

• Cross-sectional data: show how many patients are waiting on a given date, for example the last day of every month, for assessment/ treatment and how long they are expected to wait.

*Current stock* = *previous stock* + *flow in* - *flow out* 

- Prospective data: show prospective waiting time (prognosis) for the next patient that will be put on the waiting list.
- Retrospective data: show how many patients were seen in a given time period and how long they waited.

The number waiting on waiting lists can be monitored using cross-sectional data and actual waiting times can be monitored using retrospective data.

Arrangements for the monitoring of waiting list and waiting time information should focus on the *time* waited by patients, more than total number of patients waiting.

The distributions of waiting times for a given procedure tend to be skewed, often with a few people waiting very long times, and large clusters waiting a few weeks to a few months depending on the procedure. Therefore the whole waiting time frequency should be a better measure of patients waiting than the average waiting time.

#### 1.4. Minimum data set

#### Minimum data set 1.4.

I.	<ul> <li>Patient identification. (Unique identifier if it is possible)</li> <li>Patient's name and address (including postcode)</li> <li>Patient's telephone number (home, work or other contact telephone number)</li> <li>Date of birth</li> <li>Sex</li> </ul>	
	- General practitioner (if applicable)	
II.	Date put on Waiting ListDate when the request of care is received by the unit responsible of care:- Demand for care(Outpatient Waiting list)- Decision to treat(Inpatient / Day case Waiting list)	
III.	Referral Unit- Primary Care (General practitioner, if applicable)- Speciality (Consultant, if applicable)	
IV.	"Receiving" Unit - Specialty - Consultant (if applicable)	
V.	Cause of referral(Outpatient Waiting list)- Intended procedure(Inpatient, Day Case Waiting list)	
VI.	Priority	
VII.	Date of removal of the Waiting list Date of the first visit or Treatment/Surgery - First visit (Outpatient Waiting list) - Treatment starts (Inpatient / Day case Waiting list)	
VIII.	<ul> <li>Reasons for leaving the Waiting list</li> <li>Patients who received examination/treatment for the condition in the hospital <ul> <li>Date of examination/treatment = date of leaving the waiting list</li> <li>Examination diagnosis</li> <li>Procedure for treatment</li> </ul> </li> <li>Patients who have received treatment for the condition in another hospital</li> <li>Patients who, on the basis of clinical judgement, no longer need treatment</li> <li>Patients who indicate that they no longer wish to be treated</li> <li>Patients who have moved away from the area</li> <li>Patients who have died</li> </ul>	

Double counting or other administrative errorsPatients who did not attend for their admission on the day of operation

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# 1.5. Recommended data for assessment and management of waiting lists

- Outcome of admission date offer The outcomes of offers of admission should be recorded, in accordance with the hospital policy of consequences of not responding (removal of WL, reset of waiting time...)
- Monitoring of passive waiting periods
   Waiting due to circumstances specific to the individual patient: underlying medical condition or
   personal circumstances.
   Such patients should remain on the waiting list, but should be excluded for measurement of waiting
   times for the period that are medically or socially unfit.
- Hospital cancellation

Whenever a hospital cancels an admission it should give the patient a rearranged date at that time. The patient should be admitted again within an interval of the cancellation. This should be noted on the waiting list record to ensure that this patient is not cancelled again.

- Transfer offer to alternative providers
  - Date of offer
  - Patient agrees/does not agree
  - Alternative provider
- Review date of Waiting List data

Date of administrative review (or validation) of waiting lists: routine that checks that patients on the waiting lists still need their treatment and that their details are correct. For shorter lists, this procedure becomes unnecessary.

# Surgical Waiting List Reduction Programme -The Spanish Experience

# Leticia Moral Carmen Martínez de Pancorbo

# 2.1. Introduction

As in other countries, in Spain surgical waiting lists in the last decade have grown. The majority of people are waiting for uncomplicated surgical operations in six specialties: orthopaedics, general surgery, ophtalmology, ENT surgery, urology and gynaecology. Since 1996, INSALUD, responsible of providing health services to over 14 million Spaniards, formally developed an institutional policy for the reduction of waiting times for elective surgery in order to ensure equal and adequate access to surgery over its territory. The management initiatives undertaken from 1996 to 2000 to meet policy objetives, the financing scheme and their impact on waiting list and waiting time is described in this chapter. Apart from increasing supply in several ways, the lines of action were based on reinforcing the information system, and periodic review of waiting list with close monitoring according to established standard management criteria.

# 2. 2. First stage

# 1996 Initiative

The first Programme was developed during the second six-month period of 1996. The short term specific objective was: "no patient would be waiting for over one year on the last day of 1996".

Significant measures were carried out to lower maximum waiting time. The first decision was to validate the reliability of the information about surgical waiting lists (WL). Hospitals were asked to improve the quality of their data and WL were reviewed by the hospitals' admission department to ensure they were up-to-date. After list reviews, 20.5% of the patients were removed from the lists. However, as an unintended consequence, the declared number of those waiting for surgery grew and the review of the WL shed a pool of 24 000 patients not previously counted.

According to the Central Waiting List Information System data, in June 1996 there were 168 265 patients awaiting a surgical procedure with a mean waiting time of 210 days. At that moment 21 525 had been on a list for over one year. The following immediate term actions were defined:

- Institutional preliminary criteria on waiting list management were adopted: The priority related to individual cases was based on clinical judgement and the length of time already waited by patients.
- Introduction of the concept of "target population" as a strategy for achieving the waiting list objectives. The target population defined for 1996 were the patients which had entered the waiting list before the January 1<sup>st</sup>, 1996 (53 722 patients).
- Estimation of the hospital capacity to operate the target population with elective work.
   In June 1996, the average theatre usage of INSALUD hospitals was estimated as 65% of the total available surgical time so targets were set to increase morning usage to at least 75%.
- Estimation of the remainder target population that could not be operated with the hospital's existing facilities. These patients were planned to be operated by:
- Referral of patients to neighbouring INSALUD hospitals that did not have problems with their own waiting list.
- Referral to private contracted hospitals with an agreed financial arrangement.
- Allocation of additional theatre time with a separate remuneration to be dedicated only to operate the target population. Financial support for the additional hospital capacity needed to lower the waiting list was allocated only when the hospital demonstrated that the existing facilities were already efficiently utilised (operating theatres usage over 75%).

Supplementary funding was paid by the central authority for additional hospital production. This extra budget was calculated from the number and type of procedures to be treated under the Waiting List Initiative, with a specific fixed calculated cost for each type of procedure.

This supplementary budget was sent to hospitals at the commencement of the programme with the communication of number and type of patients to be treated with the additional funding.

## Results of 1996 Programme

By December 1996, the patients over 12 months on the list were reduced from 21 525 to 2 624. Patients of the target population had been operated in 75% of cases (40 082 / 53 722), 58% during normal theatre usage hours (23 286 / 40 082), 15% during additional theatre-time and 8% by referral to neighbouring INSALUD hospitals. Only 18% of the operated patients were referred to private contracted hospitals. In 1996, the planned surgical interventions increased 7.1%,

compared to 1995 adjusted values. The number of patients on the list were 165 735 by December 1996 and the mean waiting time decreased to 135 days.

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The total cost of the 1996 Programme was 18 612 137 euros (13 461 surgical procedures), 10 751 147 euros were designated to contract arrangements with private hospitals (7 273 procedures) and 7 860 990 euros were designated as funding for overtime hospital activity (6 188 procedures).

From a clinical, social and political point of view the results of the Programme were considered excellent. Nevertheless, the allocation process for WL funds used in the programme was not considered an efficient system. The supplementary budget sent to hospitals at the commencement of the programme was based on a removal rate of 10%. At the end of the Programme more than 20% of the patients were removed from the lists, interpret as hospitals received more extra money than necessary.

# 2.3. Second stage

## 1997 Inititative

The 1997 WL Reduction Programme established the following objectives: a mean waiting time for non-urgent interventions of 100 days and maximum waiting time of 9 months. Thus, the target population defined for 1997 were the patients which had entered the WL before the first of April 1997. On December 31<sup>st</sup>, 1996 patients waiting over 9 months were 19 052.

In 1996, efforts were focused primarily in surgical supply improvement. In 1997 initiatives to control demand were implemented.

The following actions were defined:

• The development and effective implementation of a comprehensive information system.

To ensure correct monitoring, the waiting list registration from all hospital departments was centralised in the hospital's admitting department and a compulsory minimum database was established. The delivery of information to the central authority was regulated in such a way that data should be sent monthly in electronic format to INSALUD's central offices. This included an active waiting list database, with individual information on each patient waiting for an intervention in an operating theatre and a database with exits from WL, which comprised information on removals from the WL. Through the designed information system it was possible to monitor management indicators such as the entry/exit ratio, mean wait in WL, mean stay of exits from WL and percentage of surgical interventions from the WL of all planned interventions.

Development of guidelines/protocols for clinical practice

In order to control the demand for surgical services, central authorities in collaboration with groups of medical experts, national specialty associations and scientific societies formulated recommendations for surgical indications and clinical prioritisation of cases.

Development of standardised management criteria for WL

A guideline for the management and monitoring of surgical WL was developed by a group of experts (managers and staff in charge of the admitting departments in INSALUD hospitals).

The objective was to establish management standards to organise the access in an efficient manner as well as to develop criteria for quality control in the management of WL.

This guidance included WL inclusion criteria and proceedings for inclusion, patient prioritisation, criteria for exclusion from WL and movements within the list, channels patients follow and requirements for the WL information system.

- Introduction of monthly monitoring of WL indicators: target population evolution, number of patients waiting over 9 months, mean waiting time.
- Estimation of the hospital capacity to operate the target population with elective work.
- Estimation of the remainder target population that could not be operated with hospital existing facilities and evaluation of the alternative possibilities: referral of patients to neighbouring INSALUD hospitals or to private contracted hospitals, additional production of hospitals whith supplementary budget.

As in 1996 the extra budget for additional production of hospitals was calculated based on the number and type of procedures to be treated under the Waiting List Initiative with a specific fixed calculated cost for each type of procedure and communicated to the hospitals at the beginning of the year. But differently from 1996, the allocation of funds was deferred and funds were distributed monthly on the basis of number and type of patients operated from the target population during the previous month.

# Results of 1997 Programme

By December 1997, patients over 9 months on the list were reduced from 19 052 to 876. The mean waiting time decreased from 135 days to 98 days. The number of patients registered on the list decreased from 165 735 in December 1996 to 148 247 by December 1997.

The total cost of the Programme was 30 038 585 euros (35 883 surgical procedures), of which 24 942 002 euros were destined to contract arrangements with private hospitals (22 684 procedures) and 5 096 583 euros were destined to additional funding for hospital extra-activity (13 199 procedures).

From a clinical, social and political point of view the results of the 1997 Surgical WL Reduction Programme were again considered excellent. Nevertheless the financial strategy was newly reconsidered in order to achieve a more simple and efficient process of incentive allocation to hospitals and the incentive system was altered from being based on the mere achievement of supply objectives (system established during 1996 and 1997) to meeting waiting time objectives.

# 2.4. Third stage

# 1998 - 2000 Initiative

This stage was developed during 1998, 1999 and 2000 with the following objectives: maximum waiting time of 6 months and mean waiting time for non-urgent interventions of 80 days (1998), 60 days (1999) and 55 days (2000).

Following actions were defined:

- Effective implantation and evaluation of awareness of surgical indication protocols included as quality objectives for hospitals.
- Implantation of the INSALUD Guidance for Surgical WL Management.
- Estimation of the hospital capacity to operate the target population with elective work and ordinary hospital funding.
- Estimation of the remainder target population that could not be operated with their existing facilities.
   Evaluation of the alternative possibilities: referral of patients to neighbouring INSALUD hospitals or to private contracted hospitals or additional production of hospitals with supplementary budget.
- As years before the extra budget of hospitals was calculated based on the number and type of procedures to be treated, with a specific cost for each type of procedure, but taking into account the total cost of the procedure, not only the personnel cost.

This budget was then divided into ten parts. The WL were allocared on a monthly basis according to achieved monthly targets in waiting list and waiting time (number of patients waiting over 6 months and mean waiting

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time) agreed upon at the beginning of the year. Hospitals which failed to reach the agreed monthly targets were economically penalised with no extra funds proportionally to the deviation from the objectives. For 1998, this proportion of the budget that was retained by central authorities could be finally recovered if target reductions were achieved at the end of the year.

Additionally from 1999, a part of the hospital budget was linked to maximum waiting time (number of patients waiting over 6 months) and another part to the mean waiting time. Hospitals which failed to reach the agreed monthly targets on maximum waiting time could not recover this part of the money at the end of the year. Only the proportion of the budget linked to mean waiting time reduction could finally be recovered if targeted reduction was achieved at the end of the year.

### Results of 1998-2000 Programmes

By 31 December 1998, patients over 6 months were reduced from 24 993 to 530. The mean waiting time decreased from 98 to 66 days. The total number of patients waiting for an operation decreased from 148 247 in December 1997 to 132 221 by December 1998.

The total cost of the Programme 1998 was 48 237 232 euros (41 727 surgical procedures), of which 34 972 894 euros were destined to contract arrangements with private hospitals (23 941 procedures) and 13 264 337 euros as additional funding for hospital extra-activity (17 786 procedures). The apparently increase of the average unit cost in 1998 was due to the payment of the consultations that the treatment of the process generated as well as the operation per se.

By 31 December 1999, patients over 6 months were 513. The mean waiting time was 62 days. The total number of patients waiting for an operation increased from 132 221 in December 1998 to 141 827 by December 1999 due to an increase of entries to WL not coupled with a proportional rise in exits.

The total cost of the Programme 1999 was 45 666 595 euros (41 535 surgical procedures), of which 34 263 700 euros were destined to contract arrangements with private hospitals (23 373 procedures) and 11 402 894 euros as additional funding for hospital extra-activity (18 162 procedures).

By 31 December 2000, patients over 6 months were 2 826. The mean waiting time was 67 days. The total number of patients waiting for an operation increased from 141 827 in December 1999 to 158 228 by December 2000. This is mainly due to an important rise in entries related to increase outpatient activity due to INSALUD programme for reduction of time until seen by a consultant and the development of a crash programme to lower waiting lists and wating times for cardiac surgery increasing numbers of cardiac patients being operated with detriment to patients on the list waiting for an uncomplicated surgery.

The total cost of the Programme 2000 was 60 745 495 euros (48 100 surgical procedures), of which 48 080 968 euros were destined to contract arrangements with private hospitals (32 047 procedures) and 12 664 527 euros as additional funding for hospital extra-activity (16 053 procedures).

# 2.5. Other strategic actions

In addition to the specific actions for WL management explained before, general economical incentives for all professionals were linked to surgical WL reduction objectives.

Linkage of a proportion of hospital managers incentives to agreed WL targets.

Financial incentives for hospital managers varied between 4 357 euros and 7 513 euros depending on the size and complexity of the hospital. In 1997 and 1998 50% of the money was linked to activity and quality objectives (35% linked to WL objectives) and the other 50% to economical targets, in order to counteract an eventual deviation of the budget to achieve the agreed activity objectives.

In 1999 and 2000, the agreed target for reduction of maximum waiting time was defined as a key objective to achieve the proportion of the total incentives linked to activity (50% of total). On the other hand, targets related with personnel expenses were defined as a key objective for the access to the part of incentives linked to economical targets.

 Linkage of a proportion of incentives to hospital doctors and other health care professionals to WL targets. From 1997 the hospital budget introduced a specific amount of money for financial incentives for professionals. This budget is calculated based on the number of workers and their category distribution (each group of professionals has specific financial incentives).

The budget is distributed on the basis of agreed department targets. The hospital managers in conjunction with the workers representatives develop the details of the incentive distribution system.

# 2.6 Conclusions

Waiting lists are not exclusively the result of underfunding, and while targeted funding can help to reduce backlogs and temporarily reduce lists, it does not represent a unique long.term solution to WL. Efforts to adequately lower waiting times require permanent structural measures to confront the source of the problem. Unmasking the magnitude of the problem with a reliable information system, management decentralisation based on the assumption of responsabilities by each hospital and surgical team, quality improvement for evidence-based clinical practice were all crucial aspects for the success of the programmes.

From an economic point, the budgeting and financial incentives for WL were considered crucial elements of the programme, and as experience was gained, the financing procedure has evolved. Two basic changes were carried

out, firstly, in the object of the funding, and secondly, in the allocation process. During 1996 and 1997, funding was linked to activity i.e., number and type of procedures operated. For the following three years this was changed, and funding was linked to waiting times. The advantage of the latter resided in the fact that decentralising responsibilities to doctors is part of the key to success.

For Spain as in other countries, management of waiting list has been done over the years against a background of increasing numbers of patients being treated. In the future hospitals will have to be more effective and efficient to tackle the lists, considering that information is now valid and reliable, so the numbers of patients to be treated are now paired with the number of patients on the list. Furthermore, now that waiting is shorter an increase in demand and in the indications for surgery is suspected. Forthcoming actions are the evaluation of appropriateness of the interventions, coping with the patients' willingness to enter the hospital at the time offered, allocating resources and rational funding.

In Appendix B there are Figures and Tables that summarises the INSALUD waiting list initiative.

# Appropriate Waiting Times: Who Should Decide?

Mary O'Connel

# 3.1 Introduction

Because decision-making in health involves matters of life and death, health is accorded a unique position in comparison with other social issues. Further, health occupies a special place in policy analysis because of the status of the medical profession and its role in shaping and controlling health policy.

For historic, cultural and political reasons, decision making regarding access, prioritisation and rationing within the health sector has been an implicit and indistinct process. The status of the medical profession, the trust in which they have been held by the general public, the lack of reliable data and evidence held by managers and the unwillingness of governments to be explicitly involved in the process, have all led to this lack of clarity. Now, calls for greater transparency, allied to budgetary constraints and escalating costs have led to the need for greater clarity with regard to decision-making.

One of the major difficulties now faced with regard to decision-making about waiting times for services may make rationing a more explicit process. When decision-making was more implicit (if not covert), then laissez faire prevailed: doctors, in particular hospital consultants, appear to have traditionally made such decisions. Now, with greater calls for transparency and with more explicit connections being made between "prioritisation and decision-making" and "rationing", then responsibility for decision-making becomes more contested.

Waiting lists and waiting times are one of the five rationing mechanisms outlined by Hunter (1998):

- Deterrence: *e.g.* user co-payments
- Delay: *e.g.* waiting lists and waiting times, which are a "holding area" to slow down demand
- Deflection: *e.g.* use of the general practitioner as gatekeeper
- Dilution: *e.g.* reducing the amount of service offered
- Denial: *e.g.* exclusion of certain services (p22)

Leneghan (1997) also believes that waiting times and waiting lists are a form of rationing, which has been implicit until now. He remarks that the general public in the U.K. believed that rationing was a "recent and unwelcome phenomenon" (p73) whereas in reality, the National Health Service at district level has always used devices such as waiting lists and waiting times to restrict access to services.

Hunter says (p25) that levels at which rationing take place become important when *who* should make decisions is being considered. Although it is clear that decision-making takes place at local level, there are five candidates for the role of decision maker at national level:

- Medical profession
- Health authorities and managers
- The public
- Governments
- The courts

Here, we will consider the role of the public, the government, politicians and the medical profession in the decision-making process regarding access to services. To these we may add the need for clinical effectiveness and the role of research and the drive towards EBM. Although not a human "actor" in the process, evidence based medicine is increasingly seen as a "neutral" voice in the decision making process.

# 3.2 Public Participation

"....repeated surveys of public opinion show that doctors are accorded highest legitimacy as the group who should make decisions on which treatment should take a higher priority" (Hunter p 27)

Many authors argue that championing public rights to participate in decision making may not be a mechanism to empower people to participate. What may be sought instead is a superficial legitimacy – a veneer for what will essentially remain management decisions about priorities.

Leneghan (p 76) says even though issues are now in the public domain, it has been accompanied by an increasing sense of disempowerment. The public may be more informed and aware of decisions which were once taken behind closed doors, but they feel powerless to actually influence the decisions being taken. Public consultation exercises have been discredited as cynical public relations exercises, and there are too few mechanisms for real public involvement in the whole issue of health care provision.

Leneghan (p78) asks if we need to create more accountability and democracy in the decision making process in which the public can play a part that is meaningful.

Participation, they argue, is inherently inegalitarian and may attract only the views of the articulate middle class at the expense of the less articulate or assertive. For example, a pilot project in Leeds found it was extremely difficult to reach certain groups in the community and only a few 'regulars' turned up to meetings. The project was declared to be expensive and time consuming. We are cautioned that consultation is an expensive process and that this is an important factor to take into account when planning to take account of the public's views.

Furthermore, the effectiveness of consultation depends on many factors such as: what questions are asked, by whom, of whom, by what means and on the basis of what information; on whether any dialogue takes place, and if so, with whom, on how the answers are processed and what conclusions are drawn.

A study by Bowling's is quoted by Leneghan: most people interviewed wanted to be involved in the planning of health services, but three quarters thought that the responsibility for rationing spending on health care should rest with doctors, rather than managers, health authorities or the government:

With:	Number	Percentage
Doctors	1104	56
Health authorities	377	19
Public	336	17
NHS managers	89	5
Central government and	61	3
politicians		

Public's views on where decision making should rest

Source: Bowling (1996)

Surveys of the general public have been found to be ineffective and superficial. It is felt that the general public do not have an understanding of the complexities of issues in health care. Furthermore, judgmental attitudes may be elicited in surveys of the general public in a way which would deny rights of access for certain population groups such as drug misusers (Hunter). The general public's responses were also found to be highly sensitive to the wording of questionnaires. When asked for example if expensive care should be directed towards premature babies, the majority was in agreement. This majority declined sharply when the question was re-phrased to ask if such care should be directed towards babies weighing less than 600g (one and a half pounds) who had very little chance of survival.

One questionnaire survey carried out by City and Hackney Health Authority in London asked the public to rank order certain health interventions. Life-saving technologies were rated highly by the public, community-based services and services for mental illness were prioritized as medium to low. Family planning and health promotion were given a low priority by people surveyed. Ethically, a health authority would be unable to comply with the wishes of the public in this regard. Given this, Hunter wonders if asking the views of the public on certain issues is not therefore a spurious and symbolic exercise, since authorities are not bound to comply with the people's wishes. It appears therefore that 'public sovereignty' in decision making is not possible.

Many authors agree that citizens' panels or juries are the most effective way of ensuring real public participation in the decision-making process. These juries, which are seen as a channel for the voice of the community, are selected by market research techniques as being representative of the public from which they are drawn. Consisting of approximately 12 people, a jury meets for four days and is paid a fee for participation.

Expert witnesses are called by the jury to assist in finding answers to the questions which have been set by the health authority. Although a jury's findings are not binding, their recommendations are usually published. Hunter cautions that this process is expensive since each jury costs between *Euro* 25,000 and 31,000. A less costly variant of this system has been used by Somerset Health Authority: no expert witnesses are called and the queries of the jury are answered by a moderator who has been briefed in advance. Eight such juries in one year costs between *Euro* 54,000-62,000.

# 3.3 Participation by the medical profession

"The consumer's only right is to have access to the health care system: once that has been achieved, it is for the professional providers to determine what is appropriate."

# Klein in Leneghan (p76)

Doctors have traditionally been held in very high esteem by the public. However, Hunter (p 28) says there is a growing feeling that doctors are not best placed to make rationing decisions, especially if the driving forces are financial rather than clinical. He believes that incidents of doctors withholding treatment on moral grounds has eroded the trust relationship between patient and doctor and that as a result, the autonomy with which doctors have been allowed to operate by the public is now beginning to be questioned. Abel Smith et al (p81) agrees that although in E.U. member states the medical profession plays an important part in shaping the process, their importance is declining as part of a more general challenge to professional autonomy.

Doctors themselves feel that they should be the decision makers regarding access. Hunter quotes Heginbotham's survey which showed that 68% of hospital consultants surveyed and 68% of general practitioners surveyed felt that decisions in rationing health care were the prerogative of doctors (p27).

Decision-making responsibility in prioritisation						
Who should prioritise?	Doctors Views	Managers Views %				
	%					
Hospital consultants	68	57				
GPs	68	71				
General public	30	52				

Decision-making responsibility in prioritisation

# Source: Heginbotham (1993)

Only 30 % of doctors surveyed felt that the general public should be involved in prioritisation in contrast with 52% of health service managers. This discrepancy may well reflect health service management rhetoric in recent years on the importance of consultation with the general public and reflect at the same time a time-lag with regard to doctors being of the same view.

Doctors and patients are not always in agreement either: in one small study doctors placed most emphasis on physical distress, while patients ranked disability as the most important indicator for prioritising intervention (Abel Smith p93). So even if there was agreement on *who* should decide, *what* is decided upon may still be contested.

The role which the general practitioner should play in decision making is highlighted by Doherty (1998) who argues that "Those who know the patients best, the referring general practitioners, are not, as a rule, afforded any role in prioritising which patients should be attended to soonest". While he recognises that such consultation with general practitioners has not traditionally taken place, Doherty reminds us that we must have an "emphasis on using the available resources to deal with those patients whose needs are greatest....even if this involves changing custom and practice" (p269).

## 3.4 Paticipation by Governments and Politicians

The British Medical Association was one of the first to call on the national government in the UK to make explicit rationing decisions, rather than to expect doctors to perform the task. Hunter accuses politicians of being willing to centralize credit and diffuse blame, saying that no astute minister or right-thinking politician could conceive of any credit being forthcoming from centralizing responsibility for rationing health care. He believes it only makes sense for government to devolve responsibility for it to the agents of ministers at local area level. He believes ministers cannot be blamed for not wanting to get involved: "They of all people are only too well aware of the dilemmas and pitfalls arising from rationing especially when it becomes explicit. They embrace it at their peril".

Leneghan quotes Gormally (p26) that problems arise because of governments' refusal in many countries to set a framework of principles for priority setting with the result that local managers often find themselves floundering. In taking this stance, politicians may well be in tune with public feelings when we remember Bowling's findings cited above: that the public does not want political involvement. It appears that politicians do not want to be involved in the process and that even if they did, it would not be welcome by the public. This is supported by Heginbotham's survey in which only 6% of the general public agreed that rationing decisions should be made by national politicians. It should be noted that this figure fell to 3% in regard to support for decision making by local politicians.

Hunter agrees about government's role: "coupled with the government's poor record in providing sensible leadership in complex areas, it should alert us not to expect a satisfactory outcome and to warn us that what may result could prove far less satisfactory...." (p65)

The apparent abdication by governments is criticised by Leneghan and leads, he believes, to patchy development of services: government has failed to take a lead and purchasers have therefore had to develop their own approaches. This has led to wide variations in the methodology and quality of the decision making process.....". He goes on to say that "in a recent survey by the Select Committee on Health they were struck by the seemingly enormous variation in approaches to priority setting adopted by the 49 health authorities studied. (p 75)

Abel Smith et al (1997) argue that political involvement is required in decision-making in order to add legitimacy to the process. However, this is not borne out by Heginbotham's survey in which only 6% of the general public believed that responsibility should rest with national politicians, falling to 3% support for local political decision-making.

Who should prioritise?	Public's Views	Doctors' Views %	Managers' Views %
Hospital consultants	61	68	57
GPs	49	68	71
General public	22	30	52
National politicians	6	18	36
Local politicians	3	6	11

Decision-making responsibility in prioritisation

It appears then that while the process may need political legitimacy, the public is not yet ready to trust the endeavour to politicians, either national or local.

# 3. 5 'Rational Rationing'

In the UK, the Rationing Agenda Group, which is led by the British Medical Journal and the King's Fund believes that rationing should be a more explicit and well-understood process since "one will always have to ask what the best uses are for the resources available" and that "rational rationing" is required. Hunter argues against what he believes is a technocratic rational approach to assisting in priority setting or rationing (p70). He believes for example that QUALY has the ability "to conceal ethical and political judgements within a formula which appears scientific and therefore 'objective' and 'true' " (p72). Furthermore, he asserts that the methodology is a "half-understood technical device {which} will only service to mystify and obfuscate these discussions and remove them further from democratic control" (p72).

Abel Smith (p 99) agrees that effectiveness may be a crucial principle in assisting in decision-making. One of the main difficulties, however, is that the level of knowledge available at present is insufficient regarding which services are efficient and which are not. He believes that one priority must therefore be to undertake research to fill those gaps in our knowledge. Such research is perhaps best considered as E.U.-wide initiative, as it would be too expensive for individual member states to undertake.

Leneghan (p80) also agrees that there are too many gaps in our knowledge to be able to rely on existing evidence as a basis for decision-making. Also, while there is much discussion about the need for priority setting according to clinical effectiveness everyone agrees that in principle limitations do exist to the usefulness of the approach. He remarks that certain aspects of care go beyond scientific evaluation and reminds us of the amount of time it will take to move towards evidence based medicine – perhaps ten years in the UK. There is a tension, he believes between EBM and the desire to encourage public involvement in decisions if the two approaches conflict. Evidence based medicine may not be reconcilable with the demands of the public and their emotional preferences (p80).

Hunter believes that "*Little is to be gained by the imposition of a spurious rationality on an inherently irrational process*" (p79). The illusion of technical precision could effectively stifle public debate about what are, at root, value-based decisions.

Finally, Walt asks if decision making is really as rational a process as it appears. "Public policy making has to be understood essentially as a political process, rather than an analytical problem-solving one" (p52).

# 3.6 Subsidiarity vs. Equity

Decision-making takes place at a number of levels (Leneghan). In the UK, the Minister and the Department of Health are responsible for setting national priorities for the NHS. Priorities in health are decided within the context of wider government policies and in the context of agreed national spending limits. Local strategies are then expected to be developed within this framework, taking local considerations into account.

Klein believes that local, district level has been the traditional site of decision-making regarding access when he outlines the various levels at which rationing takes place:

- Decisions at central government level about the allocation of resources to broad sectors or client groups
- Decisions about the allocation of resources to specific interventions and forms of treatment
- Decisions about how to prioritize access to treatment between different patients
- Decisions about how much to invest in individual patients once access has been achieved (Hunter p25)

Abel Smith et al (1997) believe that political involvement is needed in order to give legitimacy at some level to decisions which are made. The model chosen by governments in policy or priority setting reflects the views of national governments about the extent to which various aspects of social policy should be planned and/or implemented by government and whether such functions should be the responsibility of local or central government. Priority setting and implementing priorities are complex matters in pluralistic society and local initiatives have an important role to play. Leneghan quotes the British Medical Association which asks:

"....whether priority setting in a national health service should be taking place at a local level with some scope for variations in the availability of services between localities, or should more explicit discussions be initiated by government at a national level". (p74)

Hunter argues that a local approach is required in rationing and prioritising decisions. In doing this, the principle of subsidiarity is upheld. However, local practices may vary unacceptably in a *national* health service. If national policies are enforced at regional level, it may not be possible at the same time to uphold the principle of subsidiarity. Principles of democracy, accountability and transparency may also be at stake, especially if decision-making and prioritisation takes place at local management level. This dilemma summarises both the strengths and weaknesses of local government decision making according to Hunter.

It is noteworthy that the trust relationship between doctors and patients has been so solid that such principles are not called into question when the medical profession is expected by the public to be the decision maker. Such was the level of trust and esteem in which doctors were and still are held, that the public has not called for their right to transparency, democracy and accountability to be vindicated. It appears that it is only when decision-making moves to management or other level that the absence of legitimacy arises.

# 3.7 Conclusion

All authors appear to acknowledge that reaching agreement on the formal allocation of responsibility to one group is extremely difficult. In fact, it is seen as so difficult by Hunter that he urges not to make the process more explicit. Doherty (1998) believes that when demand outstrips supply that a form of social entrepreneurship must be developed to best serve patients in order to seek new ways of meeting demand. There does appear to be general agreement that the medical profession must take the lead role, supported by a growing body of research. Finally, as Hunter reminds us "at the end of the day, there may be no substitute for clinical judgement and local discretion" (p62).

Doherty (1998)

**References:** 

Hunter D.J. (1998) Desperately seeking soloutions: Rationing in Health Care, Longman ,Essex.

Lenigan J. (1996) Rationing and Rights in Health Care. London: Institute for Public Policy Research.

Abel Smith B, e al (1995) Choises in health policy: an agenda for the European Union. Office for Official Polications if the European Communities. Aldersholt, Brookfield.

# Managing Demand – Waiting List Prioritisation Models

Marianne Hanning

# 4.1 Introduction

The imbalance between rising demand for health services and the capacity available in the sector has forced a debate about rationing and prioritisation in most European countries. National guidelines for prioritisation have been drawn up in many countries. Netherlands, Sweden, Finland, Denmark, Norway, New Zealand and Oregon State in the United States have all made decisions on priority systems or models. Key issues in all these countries have been to discuss which criteria should be used and how they should be ranked in relation to one other.

The principle of *equity and justice* is focused in all systems, and the *need for health care* is in most countries the basic concept for the allocation of resources. However, medical necessity is intimately linked to the result of the care, i.e. the benefit of care (Hurley, et al, 1997), and common to all systems and proposals is that they give importance to the criteria of *cost-effectiveness*. Evidence based medicine and evaluation of medical technology therefore becomes an indispensable aid for ascertaining which types of treatment are effective, and should be given priority. Even if there is great unity in the principle of rejection of the patient's social characteristics as a priority criteria, other criteria as age (Kee, et al., 1997) and working status have been suggested (Bouwer & Hermans, 1999).

# 4.2 Vertical vs. Horizontal Priority Setting

Priority systems at the national level often take the form of priority groups according to severity and kind of health care need, i.e. vertical or horizontal priority. The classification shall be used as guidelines for acting at the clinical level when priorities are given to individual patients. For instance the Swedish, and later the Danish, prioritisation report distinguishes between political-administrative and clinical priorities. The second Norwegian prioritisation report from 1997 uses the term first-order and second-order decisions. The policy discussion on this subject has also moved from more centralised models of prioritisation, towards more decentralised clinical approach and practical, everyday decision making, including priority on waiting lists.

In figure 1, the relation between prioritising between different kinds of health care needs/diagnosis, and the severity/urgency dimension of priority, is illustrated.



Figure 4 1: Vertical vs. horizontal priority setting. Source: Swedish National Board on Health and Welfare

# Patient priority at the hospital level.

Medical care is a process, i.e. a chain of decisions and actions taken over a period of time. The different steps in the treatment process are described in Figure 2.



Figure 4.2: The medical treatment process. Source: Swedish Federation of County Councils, 1997.

During the treatment process priority is given to the individual patient when he/she: is demanding care at the primary level

is referred to the hospital

gets an appointment for the first attendance in outpatient care

shall get a diagnostic test

shall get treated in outpatient or in inpatient care

Need for health care, as perceived by the patient, is the reason for demand of health services in the first place. This first contact with the health care system will then be the basis for a decision to accept or deny further treatment. As a result of the first contact the patients medical need is classified by the kind of care that should be provided (primary or secondary care) and the urgency (acute or elective) that should be given to the patient. This also means that the decision to give care will be influenced by the individual doctors' and based on a medical decision process where priority will be set according to medical knowledge and current practice. However, clinical priorities also will be influenced by "first order priorities", ie, the overall cultural and ethical rules in the health care services.

Many studies have shown that there is limited correlation between medically accepted need for health care services and waiting lists. As much as 20 - 30% of the patients waiting is found to be inappropriately on the list. This lack of accuracy could be the result from bad management, and lacking quality control. It could also be the result of varying thresholds for treatment and admission of patients to the waiting lists (Sanderson, 1982).

Most health conditions facing problems with long waiting lists are of a kind that becomes more and more severe over time. Since the limit (indications) for treatment is not absolute, and people will perceive the disability caused by the disease in different ways, patients will seek care at varying stages. Physicians will also vary in their practice of deciding when it is proper to treat and admit patients to the waiting list. Waiting lists may therefore both over – and underestimate the need for care.

Also waiting times themselves can have an influence on the behaviour of both the patient and the doctor. Long waiting lists may on one hand deter patients from seeking care. On the other hand the doctors can anticipate a long waiting time as a reason to admit a patient to the waiting list well in advance of surgical need ('W' in Figure 1), in order to be able to give the patient care when he/she reaches the threshold for treatment ('A' in Figure 3).





*Figure 4.3:* Thresholds for waiting –list placement and admissions for surgery (Sanderson, 1982).

To be able to understand the importance of the waiting list, it is crucial to know the threshold limits, i.e., on what basis the decision to treat and admit a patient to the waiting list is made up. This is even more important if waiting lists and waiting times shall be compared on national regional or local level.

The extensive differences in regional variations and clinical praxis have – together with the need for rationing care – created a demand for regulation, and a more open account of how priorities are set at the clinical level. This demand have also started a debate about the suitability of explicit priority setting, as well as a development of different models to ration and prioritise between patients at the clinical level.

# 4.3 Scoring Systems for Patient Priority on Waiting Lists

The traditional way of ordering patients on waiting lists has been to let the responsible doctor give priority, such as; urgent, soon or routine. How the doctor prioritises has very much been an implicit process, ie, each doctor has his or her own praxis. Sometimes there are agreements on rules ore guidelines, made up at the clinic or department or in the hospital. In some countries doctors within a speciality have made recommendations on the national level for certain procedures. One example is the regulation of the Swedish maximum waiting-time guarantee in 1992, and another is the scoring system in New Zealand.

The implicit way of setting priorities on the clinical level have been defended by some scientists, who argue that the more theoretical approach in explicit rationing gives a false view of the rationing situation when medicine is practised at the individual level (Mechanic 1997, Hunter, 1998).

Others argue that the solution to a fair rationing of care by waiting lists shall be based on a "system "where each patient should be given a priority score according to criteria that have been agreed and decided at an organisational level, ie explicit rationing (Edwards, 1996). These criteria should be evidence-based measures of clinical urgency, that take account of issues such as potential deterioration in quality of life or clinical condition. They should also take account of the cost effectiveness of different technologies.

As far back as 1976 Culyer and Cullis proposed the need for a structured admission index where both clinical and social criteria where taken into account to reflect the relative priority of each patient on waiting lists. The suggested criteria to be used in such index were:

- time already spent on the waiting list
- urgency based on the expected rate of deterioration of the patient's condition
- urgency based on the patient's health status
- urgency based on the "social productivity" of the patient and the number of the economic dependants
- urgency based upon other social factors

For each patient a score per period - with time already waited used as an exponent – should be calculated.

To exemplify different ways of priority setting at the clinical level with some kind of scoring system we will briefly describe three examples;

- A. Salisbury Hospital (England) Waiting list scoring system
- B. The National Scoring System in New Zealand
- C. Priority setting among patients undergoing elective surgery at Sundsvall Hospital in Sweden.

# A. Salisbury Hospital Waiting List Scoring System

Following the ideas of Culyer and Cullis a scoring system have been developed by Salisbury Health Care NHS Trust hospital. The scoring scheme goes a cross specialities and each patient is assigned a score of 0-4 points when placed on a waiting list for elective surgery after the outpatient consultation.

In the scoring system factors affecting priority for treatment of patients on waiting lists used by surgeons and GPs in Salisbury have been incorporated. The aim is to order patients on the waiting lists according to objective criteria, allowing not only calculation of those with greatest need for surgical intervention, but also a threshold below which patients might not be placed on waiting lists.



The total score can be calculated with a mathematical algorithm, eg. : Sum of squared scores (give "power" to more severe conditions), or

Individually weighted factors (2 x Progress + 1 x Distress & Disability + 0,5 x Occupation + 1x Time)

The scoring model can also be reconciled to the more traditional priority model: Urgent – Soon – Routine, by using score bands, such as >50, 50-25, <25. It is also possible to set up a threshold for admitting patients by deciding lower-limit-score.

# B. The New Zealand Scoring System

Due to an economic crisis, New Zealand made major changes in the health care services in the beginning of the 1990's. A main component in the new system was the creation of a special National health Committee, which had the mission of defining a list of "core health services" that should be performed by the public health care system.

However, the committee took a different approach, leading to defining eligibility in terms of the types of patients for which various interventions were appropriate. Eligibility was thus based on clinical criteria of the patient's ability to benefit from the intervention. Benefit was defined as increased quality of life and to a lesser extent increased length of life. From this work the "National Priority Criteria-project" was set up (Hadhorn & Holmes, 1997).

The stated objectives of the project was:

To develop national criteria for assessing the priority which should be given to patients for medical and surgical procedures. The national priority criteria will serve the following purposes:

- 1. To ensure that the process used to define is fair and consistent across New Zealand.
- 2. To permit the assessment and comparison of need, case mix, and severity.
- 3. To assist the regional health authorities in developing new booking strategies, including target booking times for patients with defined levels of priority.
- 4. To permit comparison of waiting times across regional health authorities.
- 5. To ensure that social values are integrated into the decision making process in an appropriate and transparent manner.
- 6. To provide the framework for the national health committee to define maximum acceptable waiting times for patients with defined levels of priority, as well as core levels of each service.
- 7. To make possible national studies on the health outcomes experienced by patients who do or do not receive the services."

Criteria have been developed by creating clinical consensus in a "bottom-up-approach for

up to date, six surgical procedures; cataract surgery, CABG, hip and knee replacement,

cholecystectomy, and grommets. The methods used were:

Literature review

Professional advisory groups were constituted for each of the procedure, consisting of two or three specialists and surgeons from each of the four regions, and two general practitioners.

A two stage Delphi process preceding each professional advisory group meeting was open to all relevant specialists and surgeons in New Zealand (about 20-30 clinicians participated for each procedure, not counting members of the professional advisory groups).

Criteria were selected and initial weights agreed at meetings of the professional advisory groups. The draft criteria were pilot tested and their weights recalibrated based on the results.

The project is now trying to develop a system of generic criteria that can be applied across all services, elective and acute, and therefore across all patients. This work builds on research on measuring health status using

public preferences, and it is based on Rosser's work on quality of life. The initial set of criteria consists of; grades of suffering, functional status, and clinical cost of delay.

# C. Priority Setting among patients Undergoing Elective Surgery at Sundsvall Hospital

Sundsvall Hospital is the main hospital in the county of Västernorrland with a catchment area of 250 000 inhabitants. At the hospital the surgical specialities (Surgery, Gynaecology/Obstetrics, Orthopaedics, Urology, Ophthalmology and ENT-services) share the operating theatre resources. For several years there had been discussions about the allocation of operating time between the units. There were arguments about low priority patients in some specialities getting care in advance of patients with more urgent needs in others. The previous allocation of operating time was more the result of the units' ability to negotiate and claim resources over the years, rather than conscious and systematic priority setting. The rule was to give each speciality a scheduled certain amount of operating time per day in the week.

In 1998 the board of the hospital decided to try to develop a system for allocation of the resources that would make it possible to compare the need and priority of patients between the different specialities. A special management board of doctors and other personnel at the operating unit was set up. The first step was to decide about the principles for giving a patient priority. The Swedish parliament had in 1997 agreed on national ethical principles for priority setting in the Swedish health care system. There was also a proposal for defining five different priority groups on the national level. This material became - together with priority principles worked out by the neighbouring county council, Gävleborg - the two main sources in the start of the hospital's discussions on priorities and waiting lists. After the initial discussions the board suggested that the following priority principles should be used in giving patients priority to patients for operation.

**Priority 1**: Conditions that have to be operated **immediately** in order to prevent serious health damage or death.

<u>Priority 2:</u> Conditions where the surgical operation has a documented efficiency and where a less favourable prognosis, increase in suffering and pain, and a risk of handicap can be expected if the patient is not taken care of within two weeks.

<u>Priority 3:</u> Conditions where the surgical operation has a documented efficiency and where a less favourable prognosis and future increase in suffering and pain can be expected if the patient is not taken care of within three months.

<u>Priority 4</u>: Conditions where there is a documented effect of surgery in reducing suffering and pain and/or impairment and where there is a need for a renewal of judgement of the indications if the operation is not performed within six months.

<u>**Priority 5:**</u> Conditions of "cosmetic" character or conditions with mild suffering and where an operation is of uncertain prophylactic value.

In the second step the units should categorise all the different kinds of surgery that they are performing into the time limits in the priority groups. A list was created where all kinds of surgery were ordered in accordance to the priority time limit. This was used for booking patients at the central operation unit.

In the third step the procedures have been connected to the need for resources (mean operating time and time for anaesthesia). This information together with data on number of the procedures in a year as well as the number of patients on the waiting list, was the input to a database program for planning and follow up.

The development of this planning instrument has resulted in information on the actual waiting time per unit and priority level. Also, there is information on allocation of resources between units as well as the units' mean time for a surgery and anaesthesia. The database also can calculate each units need for resources in order to take care of the patients on the waiting list in due time. An evaluation of the waiting times of different priority groups showed that they mainly were in agreement with the decided principles. The working conditions have improved and the "fairness" argumentation has ended.

## 4.4 Conclusions

Patients need to be taken care of within different time limits. Some need care directly and others can wait for a longer or shorter time without any risk. Doctors have always made clinical priorities, and presumably in line with what they consider to be best praxis. Priority setting on the clinical level raises two questions. First, who shall be on the list and who shall not? And second, how long is the acceptable waiting time for different patients in different circumstances? Decisions like this has previously mostly been made in an implicit way, but when the gap between resources and demand are widening, there is a need for a more open and systematic way of making priorities. Scoring systems is one way of doing this.

### **References:**

Bouwer, W.B.F. Hermans, H.E.G.M. (1999) Private clinics for emloyees as a Dutch solution for waiting lists: economic and legal arguments, Health Policy, 47;1; 1-18.

Culyer, A.J., Cullins, J.G. (1976) Hospital Waiting Lists and the Supply and Demand of Inpatient Care, Institute of Social and Economic Research, York.

Edwards, RT. (1996) From Implicit to Explicit Rationing by Waiting List. Development for Determining Health Gain Implications of Different Patient Selection Criteria, Doctoral Thesis. York: University of York.

Hadhorn D, Holmes AC. (1997) The New Zeeland priority criteria project. Part 1 Owerview. BMJ 1997;314:131.

Hunter D.J. (1998) Desperately seeking soloutions: Rationeing in Health Care, Longman ,Essex.

Hurley, J., et al. (1997) Medical necessity, benefit and resource allocation in health care. J Health Serv Res Policy, Vol 2, 4, 223-230.

Kee F, et al. (1997) Prioritising the cardiac surgery waiting list: the angina patient's perspektive. Heart: vol 77:330-2.

Mechaninc, D. (1997) Muddling through eleganty: Finding the proper balance in rationing. Health Affairs. Vol 16, 5;83-92.

Sanderson, H. F. (1982) What is a waiting list? British Medical Journal, 69, 1368-69.
# Informing Patients about Waiting Times

Marainne Hanning and Paul van Rooij

#### 5.1 Introduction

In health systems where patients can choose to go to different care givers/providers/hospitals there is a demand for information about the waiting times. Waiting time can be one important factor for the decision of care provider. Also in systems with a strict referral system, the primary doctor have a demand for information about the waiting times when he/she shall refer a patient to secondary care.

Sweden and the Netherlands are among the countries where there have been a strong political support to give patients increased power to chose doctor and hospital. In both countries information about waiting times and waiting lists is now being introduced on the Internet.

### 5.2 The Swedish database for waiting times and waiting lists

The Swedish database covers waiting time to specialist care at a hospital. Both the waiting time to a first visit and the waiting time to treatment is included. All hospitals in Sweden will be reporting to the database via Internet. The database is administrated by the Swedish Federation of County Councils.

The database covers outpatient visits to 25 different types of clinics/specialities, 6 diagnostic procedures and 27 different treatments in elective care. For each of the selected clinic/diagnostic procedure and treatment there is information about:

- 1. The waiting time (in weeks) for a new patient on the waiting list (prospective waiting time), given that the patient is not an urgent or priority patient. This is to inform the patient that he/she does not have to wait longer than this if he/she chose to go directly to/ be referred to an appointment or will be on the waiting list for treatment at that certain hospital unit. The prospective waiting-time is reported from the clinic and it is a prognosis built on the actual knowledge about the situation at the clinic.
- 2. The date when the prospective waiting time was reported. The aim is to have the prospective waiting time as accurate as possible. Therefore the units shall report changes promptly and no prospective waiting time figure should be older than one month.
- 3. Number of patients on the waiting lists. All patients are included, both those who have a booked date and those who does not have a date. Also, all priority groups should be included. The numbers waiting will be reported three times a year; April 31, August 30 and, December 31.

4. Percentage of the patients treated during the last four months that have an actual waiting time less than 3 months. Reporting periods: January-April, May-August, September-December.

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Production the last four months, i.e. number of "new-patients" appointments or number of procedures.
 Reporting periods: January-April, May-August, September-December.

The database started in April 2000, and it is too early to say anything about the effects it will have on patients behaviour and the waiting times. The waiting time differs from patient to patient and it should be the individual need for care that should be the determening factor. Therefore it is difficult to find a single measure to inform the individual patient in a proper way trough a database on Internet. The information about the prospective waiting time can only be used as a rough measure of how long the waiting time will be at different clinics.

#### 5.3 The database for waiting times and waiting lists in the Netherlands

A uniform way for registration of waiting lists (a minimum dataset) has been developed in 1995. Most Dutch hospitals have now introduced this registration, which implicates waiting lists and times can now be compared between hospitals. Three regional experiments preceded the national database.

The database covers outpatient visits to 25 different types of specialties, and almost 50 different specialties and procedures in elective care. For each of the selected specialties and procedures there will be information for public and for policy makers.

The public information is published on the Internet and consists of the following information:

- 1. The waiting time (in weeks) for a new patient on the waiting list (prospective waiting time), given that the patient is not an urgent or priority patient. This is to inform the patient that he/she does not have to wait longer than this if he/she chooses to go directly to/ be referred to an appointment or will be on the waiting list for treatment at that certain hospital unit. The prospective waiting-time is reported from the clinic and it is a prognosis built on the actual knowledge about the situation at the clinic.
- 2. The date when the prospective waiting time was reported. The aim is to have the prospective waiting time as accurate as possible. Therefore the hospitals shall report monthly and no prospective waiting time figure should be older than two months.

The policy information is published on an intranet and consist of the following information:

- 1. Number of patients on the waiting lists. All patients are included, both those who have a booked date and those who does not have a date. Also, all priority groups should be included. The numbers waiting will be reported each month.
- 2. The mean waiting time of the people on the waiting list (in days) and also a distribution of the waiting people in time. These figures will also be reported each month. The aim is to have not only information about the mean waiting time, but also to see the amount of people waiting longer than acceptable.

- 3. The number of people leaving the waiting list. The output is divided in different categories, e.g. elective surgery, acute surgery, death, treated in another hospital etc. To be reported monthly.
- 4. The mean waiting time of the people leaving the waiting list (in days) and also a distribution of the waiting people in time. These figures will also be reported each month. The aim is to have not only information about the real waiting time of people actually being helped, but also to see the amount of people that have actually waited longer than acceptable.

The database started in April 2000, with 95% of the Dutch hospitals joining. It is expected the other hospitals will join in soon. It is still to early to say anything about the effects it will have on patients' behavior and the waiting times.

The evaluation of the three regional experiments shows 60% of the questioned patients wants to be informed on waiting times. 40% Is willing to go to another hospital to be helped earlier. 60% Chooses for their own hospital, even when having to wait much longer.

Most general practitioners judge it important to know about waiting times. Most of them inform patients about waiting times when referring. However they scarcely compare waiting times when referring patients to hospitals.

For 50% of the hospitals and specialists the interest for waiting times, urged them to take extra measures on organization, efficiency and consultation.

During the experiments the number of people on the waiting list dropped by 10 %.

# Effective Funding Systems

Paul van Rooij

## 6.1 Introduction

The funding system in a country has a major influence on waiting lists and waiting times. Governments in all nations seek means to limit public expenditure and mandates for health services. Elimination of waiting lists and waiting times in the public system seems to be impossible. Different funding systems have different incentives, when concerning waiting lists. In this chapter the different health care systems are compared and their effects on waiting lists are described. In the end of the chapter the health care systems of the five participating countries are compared on their structure and some key-notes with two countries not facing the problem of waiting lists.

It is impossible to compare health care systems as a whole. Each subsystem can be organized and financed in different ways. This means that it is clearer to compare individual subsystems with each other. In the first paragraph, the overall finance systems are discussed, followed by the different ways in which the subsystems are financed (reimbursement systems of physicians and hospitals). (Kemenade, 1997).

#### Overall finance systems

The overall finance system of a country indicates something about the funding of the health care system. The system can be based on contributions made by citizens to an insurance company (which can be combined with co-payments), direct to the health care provider (direct-payments), or the health care can be paid out of taxes (national system), where co-payments can also exist. This relation is shown in figure 6.1.



Systems of financing have a major effect upon the way a health care system operates. There are two major ways of funding health care: an insurance system (either social health insurance or private health insurance) or a national system of (general tax financed) health care (e.g. the NHS in the United Kingdom). the way of funding has a major effect on the cost of health care.

#### Finance of subsystems

The bewildering diversity of health care systems at a closer examination shows to be made up of different mixes of a few subsystems of financing and delivery of health care. The differences in overall health care finance systems are not indicative of the financing of the subsystems. In relation to hospital waiting lists, the focus is on the financing of professionals and on the financing of hospitals.

#### 6.2 The Various Professional Payments and their Effects

The professionals can be paid in one of five ways: salary, capitation, case-payment, fee-for-service and overall budget. The professionals may be paid: by the citizen, by the insurance company, by the government (local or national) or by the institution employing him. Figure .1 gives the relations between the reimbursement party and the professional.

#### Salary

A salary is a fixed amount of money for a period of time. A professional is free to work according to other agreements for the remaining time. The advantage is the provider is accountable to the organization. The disadvantage is that it provides little or no incentive for productivity or consumer responsiveness and thus no incentive to avoid waiting lists. A possible solution is to add bonus payments, which can be tied on: productivity, patient satisfactory, quality of care, etc.

#### Capitation (contributions)

Capitation is a fixed amount for each person registered with a provider for a period of time. It may be partial and may vary with patient age, sex or state of health care. The advantage is that it is suited to physicians who work with stable patients. It is not suited to infrequently provided services and provides an incentive to avoid difficult patients. Also there is no incentive for maximum productivity and therefore it is likely waiting lists will occur.

#### Case-payment

Case-payment is a fixed amount for all care provided to a patient. It is usually defined by diagnosis and/or surgical procedures. The advantage is that it is suited to cases in which care can be extended beyond a single

visit or institution. This may have a positive effect on reduction of waiting lists, at least for 'normal, minor complex' cases. However the system is difficult to implement.

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#### Fee-for-service

A fee-for-service can be either a free fee (balance billing) or a fixed fee (prospective and retrospective). The advantage of a free fee is that it stimulates productivity (output) and is preferred by professionals. The disadvantage is that it can encourage provision of unnecessary care. A retrospective fixed fee has the extra advantage that it can contribute towards cost-control. When regarding waiting lists problems a fee-for-service has a strong incentive for maximum productivity and thus will put down waiting lists.

#### Overall budget

And overall budget is established by negotiation between physicians and an administrative entity (e.g. the insurance company). It can be based on projected activities (admissions, day care, outpatient care). Because the contracts are negotiated on an local level, many variations are possible. The reduction of waiting lists can be a part of the contract, but the effect is dependent on the financial possibilities of the administrative entity.

Besides the different ways in which health care can be financed and the different professional payments, the institutions can also be paid in different ways.

#### 6.3 The Various Institutional (Hospital) Payments and their Effects

Institutions can be paid on the basis of an overall budget, capitation, case-payment, day payment and / or fees. These different payment methods can be combined and one method does not exclude another. The institution can receive the money form the insurance company and / or government or direct from the citizen (who can be reimbursed if covered), see figure 1.1.

#### Overall budget

When an overall budget is a block grant, the institution receives an annual budget to cover all their services. This provide direct means of containing hospital spending. They provide little incentive to producers to improve efficiency and therefore also little incentive to decrease waiting lists. The overall budget can also be a prospective (restricting) budget, established in negotiation between the hospital and an administrative entity (e.g. an insurance company). This has the advantage of cost control and can create incentives for efficiency. The disadvantage is, it has no incentive for productivity or consumer responsiveness and it fails to recognize variation in patient mix.

#### Capitation

Capitation is based on the population served by an administrative entity. A fixed amount per person is paid to the hospital for all care to be provided to the population. It has the advantage of facilitating cost control. Its disadvantages are that it is not appropriate for infrequently performed services and it provides an incentive for

avoiding difficult patients. Also there is no incentive for maximum productivity and therefore it is likely waiting lists will occur.

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## Case-payment

Case-payment sets fees prospectively according to diagnostic medical conditions and standardized treatment costs. It has the advantage of creating incentives for efficiency within the scope of the admitted cases. Case-payment has the disadvantage it may encourage unnecessary admissions. This will however have a possible positive effect on waiting lists.

# Day (period of time) payments

Day payment is a fixed amount for all care for a patient for one day. It has the advantage of being easy but the disadvantage that it may encourage unnecessary additional days and admissions. It may have a positive effect on reduction of waiting lists, at least for 'normal, minor complex' cases.

# Fees (charges): specific fees for medical, nursing and other activities

Specific fees have the advantage of providing detailed service activity and co-accounting information but the disadvantages are that it is administratively complex and that it may encourage unnecessary additional days and admissions. When regarding waiting lists problems a fee-for-service has a strong incentive for maximum productivity and thus can put down waiting lists.

# 6.4 Conclusion

The various countries all are pursuing similar goals, although not all attach the same importance to each goal. Barr (OECD, 1992) distinguishes six common objectives.

- 1. Adequacy and equity in access
- 2. protection of patients for high costs
- 3. Macro-economic efficiency
- 4. Micro-economic efficiency
- 5. Freedom of choice for consumers
- 6. Appropriate autonomy for providers

The health care funding system is a complex subject. the existence of waiting lists is a result of the cohesion of the overall funding systems and the financing of the subsystems. The key issues are:

- the total level of expenditures on health care;
- fixed (prospective or retrospective) budgets;
- the payments of subsystems (professionals, inpatient and outpatient hospital care) and their relations and the basic needs for care that are covered by these systems;
- patient freedom of choice;
- patients equity in access, which restricts possible direct payments (either by patients or a third party, e.g. employers of labour).

Although there are different systems, with different expenditures, the way different countries use them is essential. A brief overview of the five participating countries, is given in table 1. Added are two countries not having waiting list problems (Germany, France)

	Expenditures GDP % (1997)	Financing subsystems				
		General practitioner	Specialist Hospital consultant ambulatory Care	Specialist Hospital providing inpatient care (public)	Hospital public / private non-profit (pnp)	
Finland	7.5%	salary (HC) <sup>1</sup> gatekeeper	salary (HC)	salary	global budget, fees (most bed days)	
Ireland	7.0%	capitation (cat.1) fee-for-service $(cat.2)^2$	salary (cat. 1) fee-for-service <sup>2,3</sup> (cat. 2)	salary (cat. 1) fee-for-service <sup>2,3</sup> (cat. 2)	prospective budget	
Netherlands	8.5%	capitation (soc.) + fee-for service <sup>3</sup> (priv.) gatekeeper	overall budget, fee-for-service <sup>3</sup>	overall budget, fee-for-service or salary	prospective budget, day payments + fees	
Spain	7.4%	salary (HC), sometimes a capitation component in salary gatekeeper	capitation (+ salary)	salary	prospective budget, day payments	
Sweden	8.6%	salary (HC) no gatekeeper	salary (HC) fee-for-service	salary	prospective budget	
France	9.9%	fee for service <sup>2,3</sup> salary (HC) no gatekeeper	fee for service <sup>2,3</sup>	salary	prospective budget, monthly allocations (day payments) fee-for-service (pnp)	
Germany	10.4%	fee for service <sup>4</sup> no gatekeeper	fee for service <sup>4</sup>	salary	prospective budget, day payments	

 Table 6.1:
 Comparison of health care systems (based on Kemenade, 1997, Dullings, 1999)

HC = Health care center

<sup>1</sup> in some locations personal doctor system: combination fee-for-service, capitation and salary

<sup>2</sup> prospectively fixed fees

<sup>3</sup> free-fees

<sup>4</sup> retrospectively fixed fees

Some existence of waiting lists can also tribute to efficiency. Waiting lists and waiting times have to be accepted. The emphasis has to be on the quality of management of waiting lists. The funding system should

reward good practices.

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#### References

Kemenade, Y.W. van, *Health care in Europe 1997. The finance and reimbursement systems of 18 European countries.* Elsevier / De tijdstroom, Maarssen 1997.

OECD, The reform of health care. A comparative analysis of seven OECD countries. OECD, Paris 1992.

Dullings, Dr Josef, Hospitals in Europe – Data, facts, trends -. German Hospital Federation, Dusseldorf 1999.

Jakubowski, Dr. med. Elke Msc. HPPF, *Health care systems in the EU, a comparative study*. European Parliament, Luxembourg 1999.

# Program: Waiting Lists in Health Care

Thursday, February 22

9.30	Welcome and introduction of the Hope Working Party for Waiting Lists <b>Mr Juha Metso, Finland</b>
9:40	The actual situation on Waiting Lists in different European Countries Spain <b>– Mrs. Carmen Martinez de Pancorbo</b> Finland <b>– Mr Matti Liukko</b> The Netherlands <b>– Mr Harry Hilderink</b> Sweden <b>– Mrs Marianne Hanning</b> Ireland <b>– Mr Kevin Mc Carthy</b>
10:30	A successful example of fighting long waiting lists <b>Mrs. Carmen Martínez de Pancorbo</b> , Spain
11:00	Booking systems and scoring systems-measures to manage waiting lists. <b>Mrs. Marianne Hanning</b> , Sweden
11:30	Coffee break
12.00	Information systems and waiting lists Mr. Harry Hilderink, The Netherlands
12:30	Round Table - Debate Are waiting lists a healthcare system regulating tool? Should there be a European set for criteria for measuring and evaluating them?
	Moderator and the speakers of there conferences <b>Mr. Juha Metso</b> , Finland
14:00	Lunch

# The INSALUD Waiting List Initative in Tables and Figures



# WAITING LIST REDUCTION PROGRAMMES FINANCIAL EVALUATION (Euros)

		1996	1997	1998	1999	2000
Private Hospitals	Cost	10 751 147	24 942 002	34 972 894	34 263 700	48 080 968
	Number procedures	7 273	22 684	23 941	23 373	32 047
Overtime INSALUD hospitals	Cost	7 860 990	5 096 583	13 264 337	11 402 894	12 664 527
	Number procedures	6 188	13 199	17 786	18 162	16 053
Total W L Programme	Cost	18 612 137	30 038 585	48 237 232	45 666 595	60 745 495
	Number procedures	13 461	35 883	41 727	41 535	48 100



# FINANCIAL INCENTIVES FOR PROFESSIONALS

	<b>1997</b>	<b>1998</b>	<b>1999-2000</b>
	yearly incentive	yearly incentive	yearly incentive
	(% of salary)	(% of salary)	(% of salary)
Doctors	902 euros	1 503 euros	1 803 euros
	(3%)	(5%)	(6%)
Nurses	<b>301 euros</b> (2%)	541 euros (3%)	649 euros (4%)
Nurses aid	<b>120 euros</b>	240 euros	282 euros
	(1%)	(2%)	(3%)
Clerical and scretarial staff, porters	<b>120 euros</b>	228 euros	252 euros
	(1%)	(2%)	(2%)











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