

# **NHS Waiting Lists:**

# **Towards The Elusive Solution**

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Page 1 — **Erratum**

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# 1 NHS waiting lists: an introduction

Much has been written over the last 40 years bemoaning the state of NHS waiting lists. Contributions to this literature have come from diverse fields; from epidemiologists, surgeons, statisticians, operations researchers, managers and social scientists (Pope, 1990) (Mullen, 1993), (Yates, 1987). This fact, together with the apparent dramatic success of NHS waiting time reduction initiatives over the last decade raises questions as to whether NHS waiting lists still pose the political, clinical and personal problem to patients that they have in the past and whether another treatise on NHS waiting lists is necessary.

In my view, waiting lists are a cause for concern not because of the total number of patients waiting, nor due to whether or not patients wait over an arbitrary maximum guaranteed waiting time; NHS waiting lists are a concern because they represent a microcosm of the NHS as a whole.

Choices over waiting list policy at both national and consultant levels over how individual lists should be managed, reflect inevitable choices over priorities. These choices ultimately govern what services are to be available under the NHS, to whom and on what basis of access; choices which on the scale of the NHS are only recently being debated in the public forum (New, 1996; Culyer 1997).

Development of a battery of methods for the economic evaluation of health care in the emerging discipline of health economics, together with a drive for evidence based medicine are undoubtedly having a profound effect on the finance and organisation of the NHS. In this OHE briefing it has been my task to bring together a diverse literature offered by health economists on the subject of NHS waiting lists. This literature ranges from highly theoretical models of waiting lists as a non-price market equilibrating mechanism, to policy proposals for the reduction in the size of NHS waiting lists and waiting times. What is clear from my trawl through this literature is a shift from such models and policy recommendations towards a recognition, which I support, that the current focus on reducing waiting times and adhering to maximum guaranteed waiting times is misplaced.

Within the wider context of the questions that face the NHS as to priorities for public health care, there is a need to reorientate waiting list policy towards what I would call the 'rationalisation' of waiting times, so that waiting times are more fairly distributed and reflect professional and public concerns over the clinical and social factors that should determine how long individual patients wait for different treatments. The more recent literature by health economists reviewed here, proposes admissions indices, points schemes, and gradients of clinically appropriate waiting times for different urgency categories to facilitate the rationalisation of waiting time.

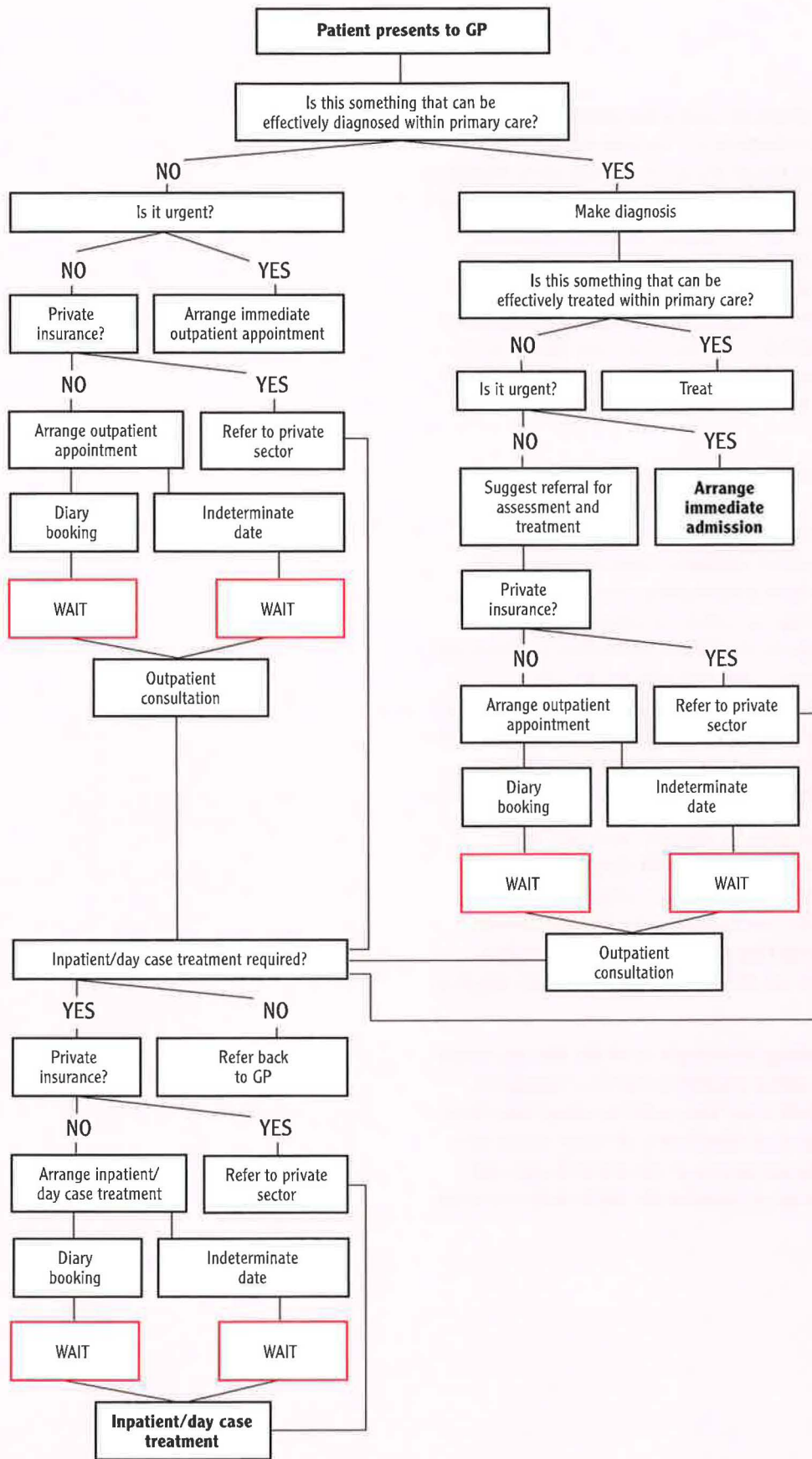
I take this opportunity to offer a few thoughts with respect to future national waiting list policy and the unique and focused research opportunity which exists to examine, within the microcosm of NHS waiting lists, some of the questions of priority setting which face the NHS as a whole in gargantuan proportion.

## 2 The process of waiting for care under the NHS

In the UK, patients gain access to non-urgent health care by seeking a consultation with a General Practitioner (GP). The GP makes a decision as to whether he or she can make a diagnosis and whether the patient's treatment can be managed within the primary sector, or whether referral to hospital is necessary. If a diagnosis is made and considered urgent then arrangements are made for immediate admission to hospital. If diagnosis is made and considered non-urgent then the GP refers the patient, usually by letter, for an outpatient consultation. The hospital will either offer the patient a diary date for consultation or add the patient to an outpatient waiting list. If the patient has private medical insurance then he or she will have the opportunity to avoid such a wait for an NHS outpatient consultation and can seek an almost immediate consultation from the private sector. At the NHS outpatient consultation the consultant or his/her medical staff will assess whether the patient requires immediate urgent admission to hospital or, if treatment is non urgent but necessary and involving inpatient or day case admission, will offer a diary booking or add the patient to his inpatient waiting list. Under the contracting arrangements of the NHS internal market a hospital, will also check whether it has a contract with a health authority or fundholding GP for the provision of the specific treatment required by the patient. Again, if the patient holds private medical insurance then he or she can avoid waiting and receive treatment from the private sector.

Figure 1 shows a decision tree illustration of a patient's path to elective treatment and the stages at which he or she must wait for NHS care or seek private treatment. It shows some of the many decisions of patients, GPs and consultants which are made in the NHS. Together, such decisions determine how patients progress towards treatment, the time waited by patients, diagnostic and therapeutic interventions carried out in the course of their care. Aggregated, these decisions, set within the context of the decisions of purchasers and providers within the NHS internal market, determine patterns of resource use across the NHS, and of particular interest to this treatise, the scale, dynamics and composition of NHS waiting lists.

Figure 1 The waiting process



### 3 The collection of waiting list and waiting time statistics

In England inpatient waiting list statistics are collected from provider hospitals via standard Korner returns and published biannually by the Government Statistical Service Performance Analysis Branch. The publication presents data on ordinary admissions and day case waiting lists for NHS Trusts, District Health Authorities and Special Health Authorities. For each provider unit total numbers waiting for both ordinary admissions and day case admissions are broken down by clinical speciality and shown as numbers waiting; 0 - 5 months, 6 - 11 months, 12 - 17 months and 18 plus months.

These published waiting list figures contain information on patients who are waiting to be admitted for treatment either as a day case or as an ordinary inpatient admission. They do not include patients admitted as emergency cases, outpatients, patients undergoing a planned programme of treatment, expectant mothers booked for confinement, patients already in hospital included on other waiting lists, and patients temporarily suspended from waiting lists for social reasons or because they are known to be not medically ready for treatment (Department of Health, 1996a).

Outpatient waiting list statistics have only been collected since September 1994 (Department of Health, 1996b) and are not the subject of this document. Outpatient waiting list statistics deserve attention beyond the scope of this OHE briefing which focuses on issues pertaining to elective inpatient waiting lists.

Inpatient waiting times begin from the date on which a consultant adds a patient's name to a waiting list. Patients offered a date but unable to attend have their waiting times recalculated from the most recent date offered. These are known as self deferred cases and such patients are included in the total number waiting.



## 4 Why were we waiting? Why are we still waiting?

Waiting lists are the difference between, in any given period, the number deemed needy of treatment, and the number of patients that the NHS has the capacity to treat (Cullis, 1993).

In 1948 at the inception of the NHS there were around 500,000 patients waiting for elective inpatient treatment. This figure rose between 1973 and 1982 to over 750,000. Between 1984 and 1990 there were consistently around 750,000 patients on inpatient waiting lists (Yates, 1987; Frankel & West, 1993). Figure 2 illustrates the trend in total numbers waiting between 1948 and 1996.

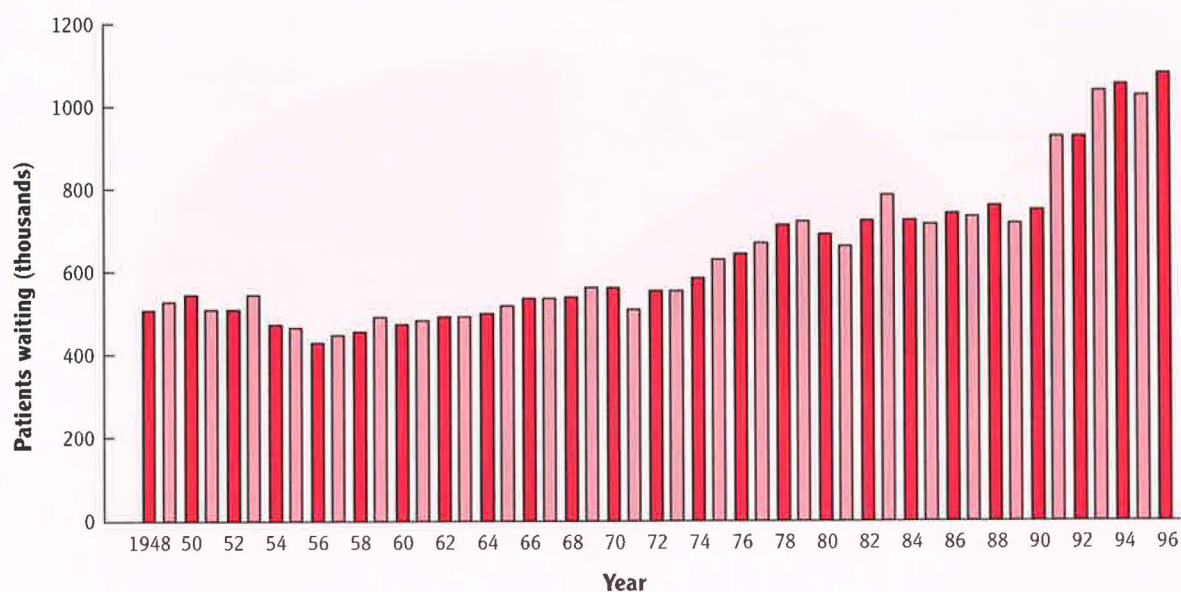
In 1987 Yates published 'Why Are We Waiting' – a personal and highly critical exposé of the state of NHS waiting lists. Spurred by excessively long waiting times and very great variation in waiting times between clinical specialities and between the pre-reform 200 health authorities in England and Wales, he drew on personal, anecdotal and available statistical evidence in order to examine five possible explanations for the persistence of NHS waiting lists. Firstly, the view that waiting list data is so inaccurate that it tells very little about the true extent to which waiting lists represent unmet need. Secondly, the view that waiting lists are

inevitable within a public health care system such as the NHS and that ultimately rationing is necessary. Thirdly, the view that waiting lists are the result of under funding of the NHS. Fourthly, that NHS waiting lists are caused by inefficiency in the use of hospital beds, theatre time and staff. Finally, that waiting lists are caused by consultants working simultaneously within the NHS and private health care sector. His conclusion was, perhaps not surprisingly, that no one single cause fully explains, given the available evidence, the persistence of NHS waiting lists.

Since Yates wrote 'Why Are We Waiting?' in 1987, the total number of patients waiting has risen to, and remained around 1 million. Figure 3 shows, in more detail, the total number of patients waiting between March 1991 and December 1996 (Government Statistical Service, 1996a).

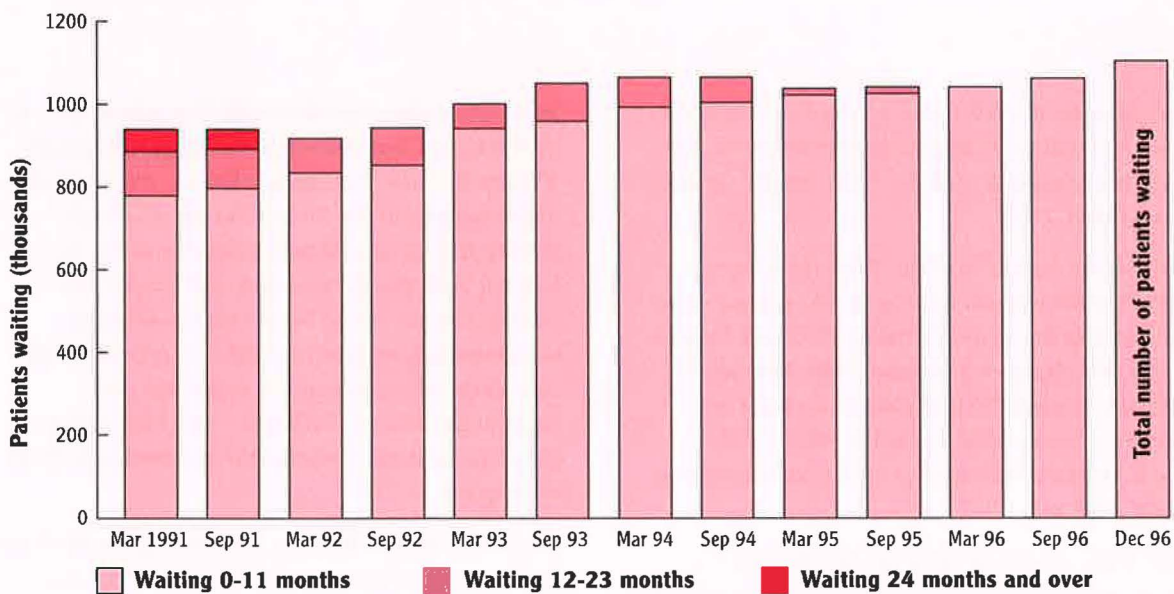
Figure 4 shows most recently available figures for patients waiting by speciality at September 1996. It can be seen that General Surgery, Trauma and Orthopaedics and Ophthalmology account together for 52 percent of all patients on inpatient waiting lists (Government Statistical Service, 1996b).

Figure 2 Trends in elective inpatient waiting lists, 1948-1996



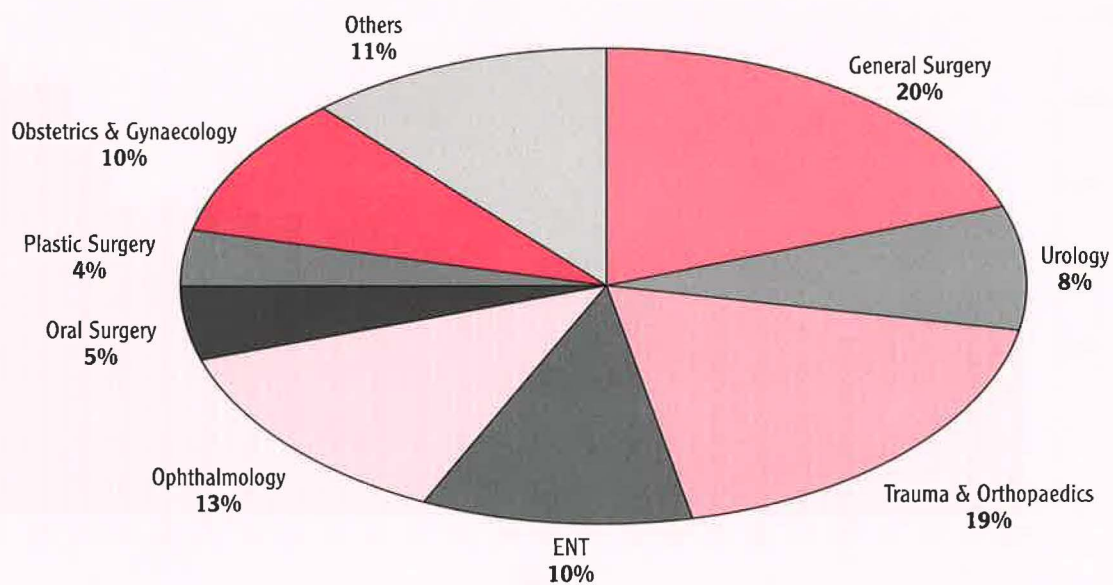
Source: updated from Yates 1987

Figure 3 Distribution of waiting time, March 1991 to December 1996  
 Ordinary admissions and day cases combined: English providers



Source: Government Statistical Office (1996a)

Figure 4 Distribution of patients waiting by speciality, September 1996  
 Ordinary admissions and day cases combined: English providers



Source: Government Statistical Office (1996a)

## 5 The Patient's Charter

The Patient's Charter, launched in April 1991, states that patients have the right to receive health care on the basis of clinical need rather than ability to pay or lifestyle; a choice of GP; immediate access to emergency health care via Accident and Emergency Departments or GPs; the right to access medical records; assurance of confidentiality of medical records; a choice as to whether to take part in medical research and cooperate in the teaching of medical students; information about the provision of local health services e.g. waiting times and rapid investigation of any complaints.

Most relevant to this treatise, in 1995, a guaranteed maximum wait of 18 months which hitherto had covered only hips, knees and cataract surgery was extended to cover all admissions to hospital (Department of Health, 1995).

Also, since April 1995, the Patient's Charter has guaranteed that 9 out of 10 patients can expect to receive an outpatient consultation within 13 weeks of referral by their GP.

Figure 5



Source: The Health Service Journal, 20 February 1997

## 6 The success or failure of NHS waiting time initiatives

As long ago as 1976, commentators have stressed that it is not the total number of patients waiting on NHS waiting lists that should be of concern, but rather the length of time that patients wait for treatment (Culyer & Cullis, 1976).

In 1987 there were over 200,000 patients waiting over 12 months for treatment and 90,000 patients waiting over 24 months. In response to this, central funding for the Waiting Times Initiative ran from 1987/88 to 1993/94 inclusive. During this 7 year period a total of £252 million was distributed, top sliced from the NHS budget, to facilitate additional service provision to eliminate long waits (Department of Health, 1996b). In 1991/92 and 1992/93 Regional Health Authorities (RHAs) were expected to match their central allocation pound for pound. This requirement was waived in 1993/94 but RHAs were asked to contribute from their own resources if this was necessary to meet national waiting list policy objectives. The Waiting Time Fund was allocated to RHAs according to a formula intended to reflect regional waiting lists and needs.

From mid 1994 the Waiting Time Fund was distributed to RHAs as part of their main allocations, built into their recurrent revenue baselines. Waiting times money was not identified separately in their funding, however RHAs were expected to continue to tackle long waits. By now, RHAs no longer existed and these funds were included in the District Health Authorities' revenue baseline allocations. Local health authorities, as purchasers, are required to assess the health needs of their populations and meet these needs through contracts with provider units and ensure that waiting time targets and Patient's Charter guarantees are met. Formally, therefore, the Waiting Times Initiative has come to an end with responsibility for meeting national targets being devolved to purchasers (NHS Performance Branch Waiting Times Unit: Personal Communication, 1997).

Figure 6 shows a breakdown of Waiting Time Fund allocations by RHA between the years 1987/88 and 1993/94.

Figure 6 Waiting Time Fund expenditure by RHA, 1987/88 - 1993/94 end of year position at 31 March

	Expenditure (£000s)							TOTAL
	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	
Northern	1,700	1,925	1,737	1,798	1,665	2,216	3,002	14,043
Yorkshire	1,757	2,097	2,538	2,017	2,178	2,659	3,562	16,808
Trent	2,650	2,895	2,489	2,923	2,779	3,307	3,988	21,031
E Anglian	1,018	1,046	1,327	1,135	2,099	1,846	1,939	10,410
N W Thames	1,590	2,316	2,428	1,690	2,768	3,549	5,230	19,571
N E Thames	2,070	2,767	3,400	3,808	4,769	3,169	4,083	24,066
S E Thames	2,040	2,350	2,653	2,738	3,909	3,562	5,220	22,472
S W Thames	1,330	2,013	1,674	2,138	2,938	2,332	3,172	15,597
Wessex	1,400	1,609	1,518	2,024	2,217	2,317	2,875	13,960
Oxford	1,010	1,163	992	1,638	1,733	2,056	2,604	11,196
S Western	1,650	1,915	1,665	1,546	2,137	2,773	3,537	15,223
W Midlands	3,120	3,354	3,250	4,472	4,440	3,424	4,780	26,840
Mersey	1,350	1,693	1,925	1,515	2,300	2,272	2,579	13,634
N Western	2,295	256	2,407	2,860	2,735	3,344	4,311	18,208
SHAs		140	301	200	420	530	662	2,253
Miscellaneous			266	498	518	249	147	1,678
<b>Total allocations</b>	<b>24,980</b>	<b>27,539</b>	<b>30,570</b>	<b>33,000</b>	<b>39,605</b>	<b>39,605</b>	<b>51,691</b>	<b>246,990</b>
<b>Annual fund</b>	<b>25,000</b>	<b>30,000</b>	<b>31,000</b>	<b>33,000</b>	<b>39,605</b>	<b>39,605</b>	<b>51,741</b>	<b>249,951</b>

Source: Department of Health (1997)

During this period, the success of the Inter-Authority Comparisons and Consultancy Health Services Management Centre (IACC), led by John Yates, merits attention. The IACC was commissioned by the Secretary of State for Health to study inpatient waiting lists in 22 of England's Health Authorities in December 1988. This study took £5.44 million of the Waiting Time Fund to reduce waiting list sizes and times. The 22 Health Authorities were selected due to their disproportional share of England's waiting lists. These districts represented 21 per cent of England's waiting lists and 29 per cent of patients waiting over 12 months for admission at that time. Between December 1988 and March 1990 a reduction of over 26,000 in the number of patients waiting was achieved. The number of patients waiting over 12 months fell during this period from 54,657 to 34,509, a reduction of 37 per cent. This was in contrast to the other 168 health authorities which did not achieve reductions in waiting list size or waiting times over this period. In the 22 health authorities the worst lists were selected and studied in detail. The following steps were undertaken for each list (1) validation of the waiting list; (2) extra admissions made possible using waiting list initiative funds; (3) more efficient use of existing resources through better scheduling. IACC admitted the real possibility that their success, largely achieved through the validation of the waiting lists under their scrutiny, could have been a 'one off' occurrence. They considered the possibility that their reductions would

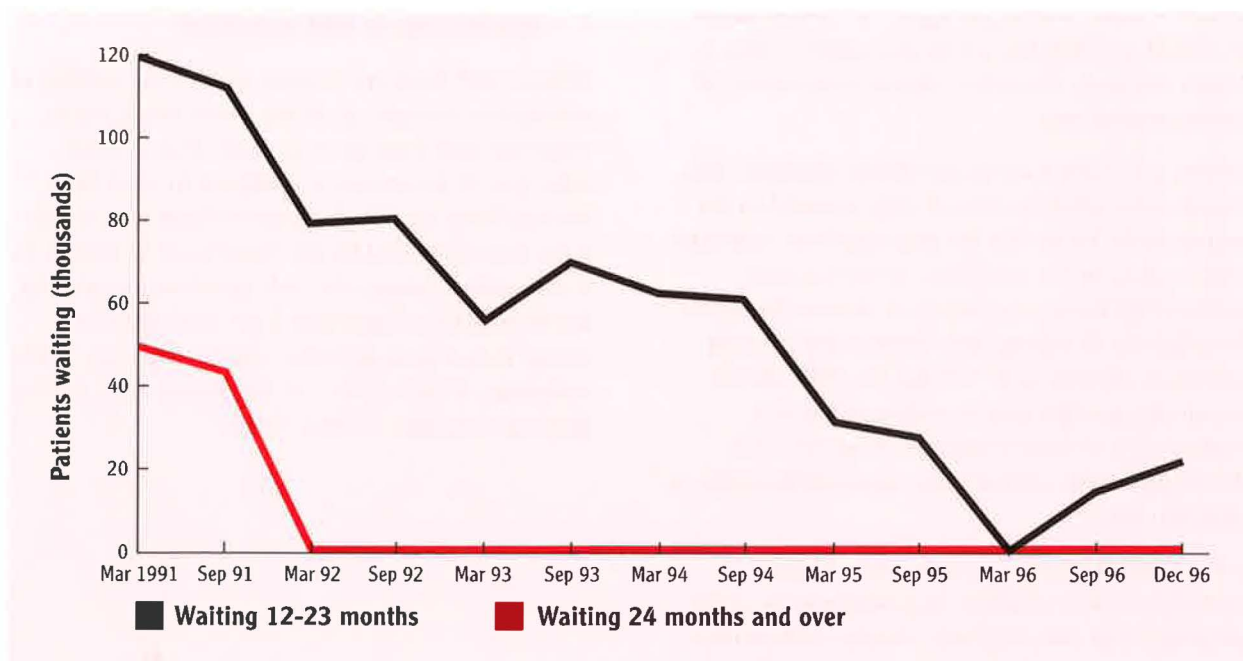
be short term and unsustainable though concluded that the reductions they had achieved were in themselves very worthwhile.

Figure 7 shows that between March 1991 and September 1992 the number of recorded patients waiting over 24 months fell from just under 50,000 to 0. The number of patients waiting over 12 months in March 1991 fell from just under 120,000 to a recorded minimum of just under 5,000 in March 1996. Since March 1996, there has been an upturn in the recorded number of patients waiting over 12 months. Between September 1996 and December 1996, the number of patients waiting over 12 months rose by 6,900 (46 per cent) to 21,900. In addition over this quarter there was an increase in the total number of patients waiting for admission of 34,400 (3.2 per cent) to 1,096,000.

This upturn poses two questions. Firstly, was the reduction in the number of patients waiting over 12 months and 24 months recorded between 1990 and 1996 genuine?

Secondly, is this success likely to be a short term phenomenon, a direct response to the injection of Waiting Time Fund targeted to those waiting lists with the longest waits as is perhaps suggested by the current upturn in the number of patients waiting over 12 months; or, is the current upturn a 'blip' in a longer term real downward trend in NHS waiting times?

**Figure 7 Patients waiting over 12 months, March 1991 to December 1996**  
**Ordinary admissions and day cases combined: English providers**



Source: Government Statistical Office (1996a)

## 6.1 Was the reduction in numbers of patients waiting over 12 months genuine?

The experience of IACC was that substantial reductions in the recorded number of patients waiting and in the number of patients waiting over 12 months could be achieved through waiting list validation, increased activity funded from the Waiting Time Fund, and improved efficiency. Undoubtedly, much of the reduction in waiting times has occurred as in the experience of IACC through genuine improved waiting list audit, increased activity and perhaps greater efficiency. However, there are a number of other reasons as to why the number of recorded patients waiting over 12 months may have fallen.

Within the reformed NHS internal market the decisions of purchasers have also undoubtedly had an effect on waiting times. For example, if, as is happening in some areas, purchasers refuse to fund common, relatively low benefit procedures like the removal of varicose veins, then waiting list figures are bound to have gone down (Coast, 1993). If there is no service provision then there is no waiting list and so the number of patients waiting falls. There is therefore a need to consider trends in waiting list and waiting time figures within the context of trends in NHS activity.

Crucial to such analysis is the casemix composition of NHS waiting lists and subsequent NHS activity. As has been observed, casemix of waiting lists may change over time due to a wide range of factors, such as demographic change, changes in patterns of morbidity, scientific medical advance and changes in private health insurance plan prices (Cullis, 1993). As noted in Section 3 above, waiting list figures are broken down by clinical speciality but not by procedure so little is known nationally about the casemix composition of elective waiting lists.

Patients who cannot accept an offered admission date are said to be self deferred and often returned to the bottom of the list so that the time they have waited no longer counts in the calculation of waiting time statistics. This has an obvious effect of contributing to the reduction of waiting time statistics and raises an interesting question as to whether the NHS should assume that patients' time is costless, which it is evidently not, as demonstrated by Propper (1990). Should patients be offered some degree of flexibility in admission date?

In this sense, NHS waiting time policy seems contradictory in its implicit acknowledgement of the undefined costs associated with waiting in its pursuit of guaranteed maximum waiting times as it offers no

flexibility in date for admission; it could be argued that this inflexibility may exert an even greater cost than a wait for a convenient date for admission known in advance.

One other factor must also be considered to explain why the number of recorded patients waiting over 12 and 24 months for treatment may have fallen. From concerns raised in the media it is becoming increasingly clear that neither the medical profession nor the public hold published waiting list statistics in very much faith. This lack of faith in official NHS waiting list statistics has been expressed by Dr. Sandy Macara, Chairman of the British Medical Association since 1987 who has spoken of the 'cynical manipulation of waiting lists for political cosmetic reasons' as the 'ultimate fraud' (Observer: 14 April, 1996).

One way of concealing a problem is not to collect and publish information about it. It is not clear why the NHS stopped collecting and publishing data on the number of urgent patients waiting over one month for admission in 1987 (Frankel & West, 1993). Certainly, the performance indicators such as the efficiency index and extent to which waiting time targets are met, by which the NHS is currently judged, and financial penalties that hospitals face if they do not meet contracted maximum waiting times, dissuade provider units from reporting long waiting times (Dixon et al, 1996). The incentive structures within the NHS do not encourage a complete collection of waiting list data.

## 6.2 Did the NHS waiting time fund represent a real increase in NHS resources?

Where NHS funds are diverted towards the tackling of waiting lists through top slicing, funds which might otherwise have been spent to good effect in some other part of the service, it is difficult to view the Waiting Time Fund in the generous light with which it has been publicised by the Department of Health. It is necessary to balance the cash injections provided by the Waiting Time Fund with 3 per cent efficiency savings forced upon providers and the reduction in the availability of NHS beds – 31,000 closed since 1994 in England (Guardian: 17 May, 1996).

## 7 Are NHS waiting lists still a cause for concern?

Given that the British NHS has been described as probably the cheapest and most efficient public health care system in the world, it is perhaps surprising that NHS waiting lists have consistently attracted so much domestic political attention. This political and media attention, which at times has reached near hysteria, distorts the true picture. There may have consistently been over 1,000,000 patients on NHS waiting lists, but, as has been noted elsewhere, this represents approximately 2 per cent of the total number of patients treated per year and represents a backlog of only a few weeks or months work (Yates, 1987; Frankel & West, 1993).

Some consultants argue that waiting lists and waiting times can serve a useful clinical purpose (see Figure 8). A period of delay allows some conditions, such as some back pain for example, to improve of their own accord, or patients to adapt to changed circumstances and offers patients a period of grace to decide whether they really want an elective operation given that no procedure is without some risk (Mullen, 1992). Waiting lists also facilitate the scheduling of available resources so that theatre sessions for example can be used to best effect combining some long, complex procedures with quicker, routine procedures. However, Yates has commented that waiting lists of around 100 patients per consultant at any one time would be sufficient to facilitate such scheduling and do not provide a justification for present waiting lists far in excess of this figure (Yates, 1987).

The positive role of waiting lists as a part of the clinical management of patients, and, as some would argue, their existence as a necessary evil within a publicly funded NHS preferable to private market provision of health care, mean that there is little rationale for policies that aim to eliminate NHS waiting lists, were this possible.

With the removal of excessively long waits of over 24 months, concerns about NHS waiting lists are increasingly shifting to consideration of the composition of those lists.

Figure 8 Letter from Dr Siân Griffiths

### **Why the end of waiting lists may not be good news for the NHS**

*When I read Mike Marchment, of the West Midlands Health Authority, saying that 'there is no reason why there should be waiting lists in the NHS by the year 2000' (5 January) my heart does not leap with joy. To assume that reduction in, or abolition of, waiting lists is universally desirable flies in the face of clinical practice and knowledge. Whilst no one would argue that it is unacceptable for some cases to be kept waiting because patients are suffering, an arbitrary time limit is a very crude measure for a very complex health care system. There are many reasons why waiting lists may get smaller, and not reflect increased productivity of the NHS. Factors which influence whether you are placed on a waiting list include whether you go to your GP, whether your GP decides to refer you to a specialist, and what treatment the specialist recommends. All of these are influenced by patient expectations, clinical standards, and availability of services. Reaching a situation of no waiting lists could merely reflect unavailability of services and loss of faith in the NHS. If the currency now being used was one of relative health benefit then I would be less anxious about the focus on time limits for acute hospital-based activity over the demands of community care, the needs of mentally-ill people and the desirability of future investments to promote health amongst our young people. Being driven merely by time limits, without any regard for whether waiting lists are for knee replacements or cosmetic surgery, what treatments are excluded, or how patients have been involved, does not convince me that the balance of health needs of all groups have been considered. Until patients, clinicians, health service managers, public and politicians have had a fuller debate of what health services are needed, I remain unconvinced that to focus on waiting lists is to benefit the health of the population or to ensure the most appropriate direction for the NHS.*

**Dr. Siân Griffiths.**  
Oxford.

Source: The Guardian, 8 January 1996, Page: 12

## **7.1 NHS waiting lists: a mortlake rather than a general delay for all**

NHS waiting lists do not reflect a general delay in the treatment of each and every patient treated by the NHS. Rather, they are accounted for by a few clinical specialities, and within these a relatively small number of conditions.

Frankel has aptly described this sub group of the patient population who are forced to wait excessively as forming an oxbow or mortlake out of the general stream of patients who flow through the hands of the NHS.

The question about waiting lists is then not simply 'why are they waiting' it is, 'why are these people with these particular conditions waiting so long to be treated within these specialities?' (Frankel & West, 1993, p.47).

## **7.2 Concerns that NHS waiting lists are a result of implicit past clinical priorities**

The conditions that make up NHS waiting lists are often of a personal nature: hernias, varicose veins and haemorrhoids, or conditions which affect the elderly, such as joint replacement. It is arguable that in both cases patients are perhaps less likely to complain about having to wait (Frankel & West, 1993). These conditions are non-life threatening, considered routine and of little scientific medical challenge to clinicians. Frankel argues that large waiting lists and unacceptably long waiting times for these few conditions have, in part, resulted from implicit clinical professional priorities.

To illustrate this, Frankel constructed a rough index of professional interest in a range of conditions treated under the NHS. He divided the number of scientific medical articles published on a condition by the level of activity, i.e. number of conditions treated each year by the NHS. Frankel found examples of rare conditions that excite clinical interest, such as slow virus conditions for which two published papers exist per episode treated. He compared this with conditions which are relatively common but attract considerable clinical interest, such as myocardial infarction, for which he found one paper published per 100 episodes treated by the NHS. These examples contrast drastically with an apparent lack of clinical interest in very common conditions which make up NHS waiting lists, such as varicose veins, for which he found one published paper for every 2,000 episodes treated by the NHS. This rough index of professional clinical interest begs the question as to whether all necessary

research has been conducted into the treatment of conditions which make up NHS waiting lists and raises a more fundamental question as to the future role of NHS doctors. Until now the sanctity of clinical freedom has permitted clinicians to balance the delivery of urgent and routine treatments with the pursuit of their own research interests and teaching requirements. Despite resulting in a mortlake of patients waiting for the treatment of common, non-urgent routine conditions, this freedom has undoubtedly provided the stimulus for scientific advance through the day to day delivery of NHS care.

With increasing financial limitations being placed on clinical freedom, and more explicit political and clinical debate over the rationing of public health care, the future role of the NHS doctor is open to question. The advantages for the health of the population of determining the balance of activity of the NHS through contracts set by purchasers and providers, rather than on the implicit priorities of the medical profession, is as yet unclear.

In theory, purchasers should be in a position to contract for a balance of services which, on the basis of clinical effectiveness and cost effectiveness evidence will help to maximise the health gains potentially available from the resources set aside for health care through the NHS. In practice, the extent to which waiting time targets have dominated waiting list management policies in provider units is evidence of the potency of political incentives on priority setting in health care purchasing.



### 7.3 Concerns over consultants' private practice and NHS waiting lists

In a second book entitled 'Private Eye, Heart and Hip', Yates challenges the UK current situation where the NHS and private health care sector exist side by side using the same surgeons (Yates, 1995). Yates points to what he refers to as five coincidences: (1) the poor still have a lower life expectancy and experience greater morbidity than the rich and it is the poor who must rely on the NHS for treatment, (2) the regions that have the most private beds are those that have the worst waiting lists (3) the clinical specialities that have the longest waiting times are those with the highest earnings from private practice, (4) the conditions for which patients have to wait longest on NHS waiting lists appear to account for the majority of the workload in the private health care sector, and (5) the surgeons who work in the private sector are thought to have long NHS waiting lists.

To take the fourth coincidence highlighted, Yates reviewed evidence that in 1987 in the speciality of general surgery, varicose veins and hernia operations constituted over 40 per cent of NHS waiting lists (Davidge et al, 1987) and that those two procedures were the most frequently performed procedures in general surgery in the private sector in 1981, 1986, and 1992/93 (Nicholl et al, 1984; Nicholl et al, 1989; Williams & Nicholl, 1994).

### 7.4 Clinical effectiveness, cost effectiveness and the casemix of NHS waiting lists

As commented upon in Section 3, national waiting list statistics are broken down by clinical speciality but not by procedure, so the casemix of elective waiting lists must be guessed by examination of workload carried out, perhaps in terms of finished consultant episodes, or numbers of operations carried out. Figure 10 lists the 10 most common operations in England in 1992/93.

Yates (1995) presented concerns that, despite the public's faith in the medical profession and scientific basis of modern medicine, many common procedures, such as dilatation and curettage, extraction of teeth, tonsillectomy, which make up much of NHS waiting lists are unproven and perhaps of very little benefit. Yates points to 'huge variations in admission rates, for tonsillectomy and many other conditions, 'whether you examine GP referral rates, operation rates or surgical admission rates'. In all areas it is common to find a three or four fold variation in rates. These variations are made greater by the uncertainty and ignorance of the outcome of many surgical interventions' (Yates, 1995, p.56). In considering the

Figure 9



Source: Punch, 1925 (Reproduced with permission of Punch Ltd.)

conflicting medical evidence underpinning the practice of the removal of tonsils, Yates concludes 'The argument about the tonsillectomy operation is not that it is never appropriate – the argument is about which patients it should be performed on and at what stage' (Yates, 1995, p.55).

For procedures such as heart surgery and joint replacement, Yates draws attention to the absence of consensus or clinical protocol for the criteria for patient selection or stage at which the operation should take place. He points to this and the continued use of prostheses that have been discredited on clinical grounds as possible reasons for the variations in failure rates, for example in total knee replacement.

There is also evidence that many of the conditions which make up NHS waiting lists, particularly joint replacement and removal of cataracts, offer some of the best value for money in terms of health gains from health care expenditure. This issue is discussed more fully in section 9.3.3.

Higgins and Ruddle have expressed the view that there is nothing inherently wrong with waiting lists for

health care. Cullis (1993) has expressed the preferable state of patients on an NHS waiting list to those for example uninsured in the USA who do not get the chance to join a list.

The problem is not how many patients are waiting nor, beyond unacceptably long waiting times, how long they are waiting, the problem is who is waiting for what and how much sacrifice they make as a result of having to wait.

There is a strong argument that waiting list policy should focus on the rationalisation of waiting times rather than i) reducing the size of the waiting list or ii) guaranteeing maximum waiting times.

'In many ways, a system of rationing by queuing is a fairer, more open way of restricting access to scarce resources than some of the alternatives used in other countries. There is no doubt that the management of waiting lists has led to inequity, unfairness and excessive waiting but this is not an argument against waiting lists per se. It is not self-evident that queuing as a way of getting through the entry gate is necessarily wrong, inefficient or undesirable. If we accept that there are inadequate resources to meet all needs promptly, it is clear that some will wait while others have priority. What is essential is fair and open management of the queue, to ensure that those who meet the agreed criteria do actually join it, and then get to the front of the queue quickly' (Higgins & Ruddle, 1991 p.18).

### 7.5 Concerns about NHS waiting lists as a reason for increasing demand for private health insurance

The Institute of Fiscal Studies (IFS) recently published a report, conducted by Besley et al (1996), which, using information from the British Social Attitudes

Survey (BSA), explored the various determinants of individuals' decisions to purchase private health insurance. The report shows that 14 per cent of British households have private health insurance with a roughly equal split between individual and employer provision. As Figure 11 shows, the proportion of the UK population purchasing private health insurance grew steadily through the 1980s, falling off slightly in the early 1990s.

More specifically, the authors focused on the relationship between demand for private health insurance and aspects of NHS performance, such as waiting times and measures of satisfaction. The main findings were:

1. Individuals who express dissatisfaction with the NHS are more likely to purchase private health insurance.
2. The privately insured tend to be better off, better educated, older and more inclined to support the Conservative Party.
3. The privately insured are less likely to favour increased spending on the NHS or to see health spending as a priority.
4. The enhanced flexibility of private health treatment attracts individuals to purchase private health insurance. For example, the ability to bypass NHS waiting lists and choose a convenient date for admission.

Besley et al (1996) found a positive association between the purchase of private health insurance and length of local NHS waiting lists. The existence of a small private health sector alongside the NHS has offered the opportunity for the medical profession to enhance their income while working mainly in the NHS, and has offered choice to the patient. The findings of this report however, indicate that NHS

Figure 10 Ten most common procedures undertaken in the NHS, England, 1992/93

Common name of operation	OPCS code	Number of operations 1992-93
Endoscopy (upper gastrointestinal tract)	G45	299,686
Group including termination of pregnancy <sup>1</sup>	Q11	152,962
Cystoscopy	M45	152,130
Dilatation and curettage (and others)	Q10	126,636
Extraction of teeth (especially wisdom)	F09	93,052
Cataract surgery	C75	92,622
Tonsillectomy	F34	74,751
Correction of glue ear	D15	68,038
Hernia repair	T20	61,721
Hysterectomy	Q07	59,607

Source: Yates, 1995, p.57. <sup>1</sup>Not a waiting list procedure

waiting lists, together with a maturing UK private health care sector, may undermine the sanctity of the NHS in the eyes of the British public.

People who take out private health insurance do not yet have the option to 'opt out' of the NHS and so continue to pay for it through tax contributions. However, as the BSA survey states, such individuals are less likely to want to personally contribute, through increased taxes, to higher spending on the NHS; indeed they are less likely to support the provision of a public health care system as a high political priority.

To this extent, large waiting lists and long waiting times do appear to be the Achilles heel of the NHS. They contribute to the distorted impression being marketed by the growing number of private health insurance providers that 'going private' means receiving a higher quality service.

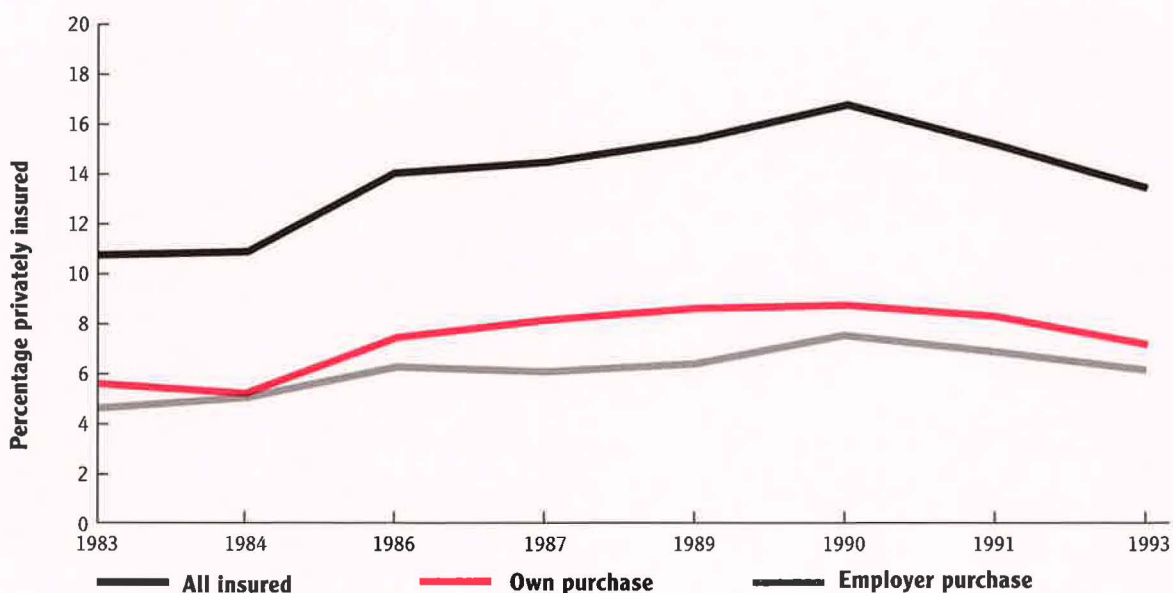
If quality of medical treatment is judged by waiting time and hotel services alone, then this is perhaps true. However, most private health care plans are limited to a range of non-urgent, elective treatments. The NHS provides virtually all emergency medical care to the British public which appears to be overlooked when such limited measures of performance are used.

It has been argued that long waiting times encourage the more affluent to take out private health insurance, so relieving pressure on the NHS leading to shorter waiting times and freed up resources for lower income patients. This may be true if an expansion of the private health care sector does not lead to a contraction in public spending on the NHS.

Evidence from the BSA survey is persuasive that an expansion of the private sector, attracting the articulate, well educated, higher income patients who in the past safeguarded political support for the NHS, could lead to a downward spiral of support for the NHS; leaving it a second best service for those who cannot afford private health insurance.

Buchanan (1965) argued that waiting lists are endemic in a public tax based NHS because individuals are asked to pay for a tax contribution that effectively pays for the care of other people. If individuals attach less weight to others than to themselves, public provision of health care resources, mediated through a voting mechanism will be less than the resources supplied via insurance purchase, in a market context, where purchase offers direct consumption benefit to the purchaser for himself only, assuming no pooling of risks (Cullis, 1993).

Figure 11 Private medical insurance 1983-93



Source: Besley et al., 1996

## **7.6 Concerns that waiting lists reflect evidence of a two tier NHS**

Mullen (1992) noted that with the advent of the NHS reforms and creation of the internal market, 'ownership' of waiting lists passed from individual consultants to purchasers responsible for meeting the health needs of their population. Mullen goes on to describe how in effect waiting lists are still managed by individual consultants, but that consultants now hold a series of waiting lists, one with each of their purchasers, and quotes concerns over GP fundholders' patients and extra contractual referrals gaining priority over other patients. Despite the Department of Health issuing guidelines that no such preferential treatment should be given (Department of Health, 1991), Mullen argued that provider units are acting rationally in giving priority to patients with whose purchaser contracts have not yet been completed for the year, over patients with whose purchaser contracts have been completed and no further funding will be forthcoming for additional work. The new Labour government has, however, recently announced its commitment to avoiding the creation of a two tier NHS.

## 8 Waiting lists: an economist's view

Waiting lists do not exist within the neo-classical economic model of a competitive market because instantaneous price adjustments eliminate any difference in quantities demanded or supplied in a given period.

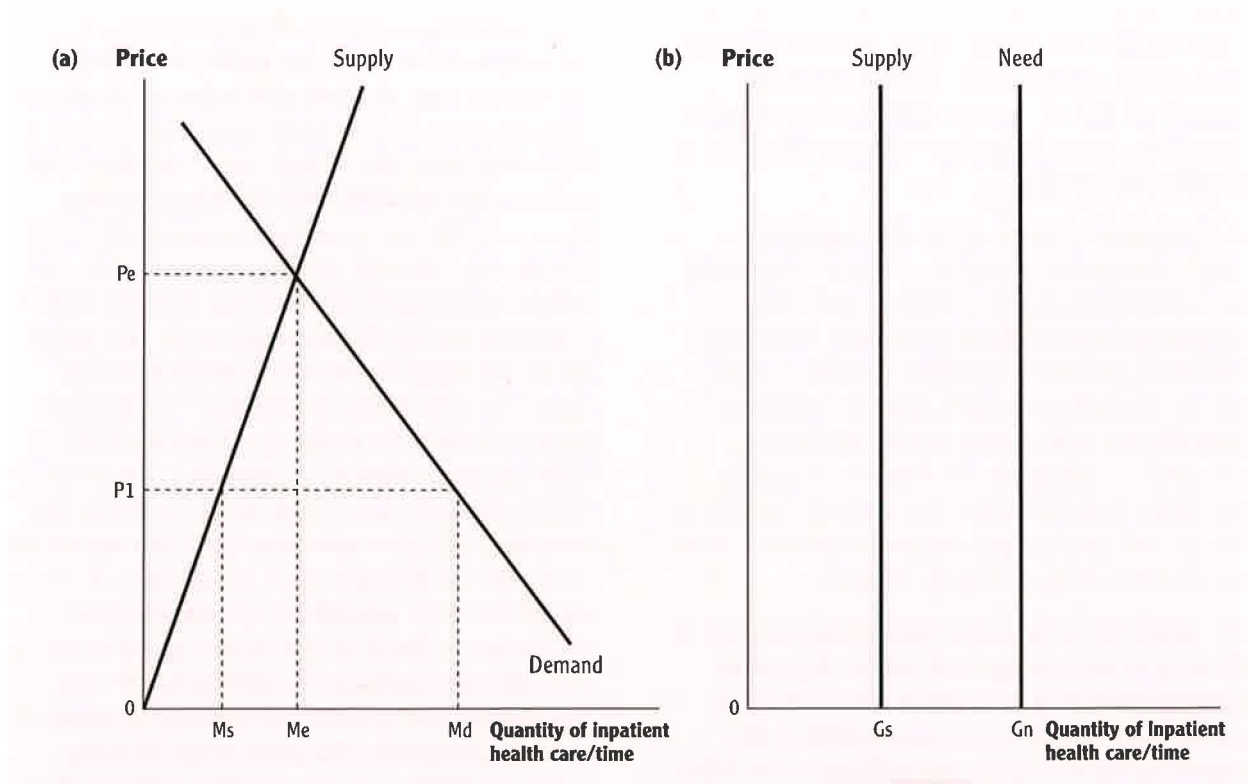
In practice, waiting lists arise in a number of circumstances, for example where prices fail to adjust quickly enough to dispel excess demand, or where supply is stochastic and unpredictable over time (Lindsay & Feigenbaum, 1984).

It is the absence of a market price, together with the nature of health care as a good that leads to the persistence of waiting lists in public health care systems such as the NHS (Culyer, 1971). Consumers face an apparently zero price for health care, this, together with a lack of any real opportunity for most people, to 'opt out' of the NHS has led to the accumulation of waiting patients. Cullis and Jones (1985) have argued that demand for NHS treatment has remained buoyant due to decreasing tolerance of pain and ill health,

encouragement on the supply side by a medical rather than an economic concept of efficiency, medical advance and the consequent rapidly increasing range of medical interventions which can provide some benefit to patients irrespective of cost.

A demand and supply model for health care is shown in part (a) of Figure 12. Quantity of inpatient health care over time is shown on the x-axis and price of health care on the y-axis. The demand curve which slopes downwards from left to right shows the relationship between price and quantity demanded. The conventional relationship is shown in which more is demanded as price falls. In part (a) of Figure 12 the supply curve slopes upwards from left to right showing the relationship that, as prices rise, firms are willing to increase supply. In part (b) of Figure 12, the supply curve is vertical to indicate that supply of publicly funded health care is set at 0Gs by government and that there is hence no relationship between price and the quantity supplied.

Figure 12 Demand and supply model for health care



Source: Cullis, 1993

As Cullis (1993) demonstrates, in part (a) of Figure 12, if the price of health care per unit is  $OP_1$ , then demand is  $OM_d$ , while supply is  $OM_s$ ; rapid upward adjustment of price per unit from  $OP_1$  to  $OP_e$  will remove excess demand because those patients unable or unwilling to pay the increased price will leave the market. The quantity of health care demanded and the quantity supplied will return to equilibrium at  $OM_e$  units per period. There are therefore no surpluses or shortages, but rather self-correcting non-equilibrium prices which adjust to bring the market into equilibrium in which the quantity of, in this case health care, demanded and the quantity supplied are exactly balanced.

The money price of health care in an NHS type system is often zero and the level of provision is determined by government; in part (b) of Figure 12 this has been set at  $OG_s$ . The curve labelled need at  $OG_n$  units is the volume of health care per period demanded by doctors for their patients. There is obviously excess demand here, shown in part (b) as  $G_n - G_s$  but there is no mechanism by which this excess demand will disappear as there is no 'invisible hand' or non-zero price to bring demand and supply into equilibrium.

However, such a demand and supply model, which economists use routinely to illustrate the workings of competitive and not so competitive markets, is only of use so far as the variables that determine supply and demand can be assumed to be independent of each other (Culyer & Cullis, 1976). Health economists have long recognised the 'special' nature of health care as a good, and the complex links between supply and demand, not least in the role of the doctor as supplier of medical services and patient's advocate (McGuire et al, 1988; Culyer, 1971).

In neoclassical economic theory the competitive market as illustrated in part (a) of Figure 12 facilitates the maximisation of social welfare, under a range of stringent assumptions, (perfect consumer knowledge, certainty, many buyers and sellers, freedom to enter and exit the market, a socially optimal distribution of initial resource endowments and the absence of externalities). Consumers are allowed to maximise their utility from the choices they make about what to buy and how much to pay, and profit maximising firms face incentives to be technically efficient.

The superiority of the competitive market, in terms of efficiency in maximising social welfare, depends on numerous theoretical assumptions about the market and the behaviour of consumers and firms. It also depends on the assumption that willingness and ability to pay is judged to be an accurate indicator of the

utility consumers gain from the consumption of goods and services as they vote with their feet or rather with their wallets in the market place.

Most industrialised countries have disregarded the market mechanism for the allocation of health care resources on the grounds that willingness and ability to pay is an inadequate proxy for need or the ability to benefit from health care.

## 8.1 A time price theory approach

A time price theory of how waiting lists act as an alternative to prices as a mechanism for equating supply and demand has been put forward (Nichols et al, 1971). Patients pay a 'time price', in terms of the earnings they forgo or the lost benefit of other worthwhile activities they are unable to pursue while on a waiting list for health care. This theory argues that the rational individual will only join a waiting list rather than pay for immediate, private care if the utility he expects to gain from immediate rather than delayed treatment is greater than the price of immediate care. The utility gained by receiving care immediately is equal to the value of the earnings or other worthwhile activities that could otherwise have to be foregone while on a waiting list for health care.

The relative merit of a time price, 'paid' by patients who have to join a waiting list, as compared with a money price, for health care has been debated (Culyer & Cullis, 1976). Those who promote waiting lists as more egalitarian, as an ethically justifiable basis for rationing access to health care preferable to the price mechanism, argue that time and money are distributed differently between individuals. Time is more costly to those individuals who are high earners and less costly to those who earn little. They argue that rationing access to health care according to a time price favours low income individuals and discriminates against the well off. Culyer and Cullis challenge the moral high ground adopted by the proponents of the time price theory, and argue that the system breaks down for those who hold wealth but who earn little, and that there are grounds for doubting whether the utility or wellbeing gained from £1 is equal for a rich and poor individual, which raises doubts about comparing the value they each place upon time spent on a waiting list for health care. Adding to these objections it can be argued that, if the grounds for rejecting the price mechanism are based on concern that ability to pay does not reflect ability to benefit from health care, then neither does an individual's personal valuation of time adequately reflect his ability to benefit from health care. While it is undoubtedly true that neither

willingness to pay nor willingness to wait necessarily reflect a person's ability to benefit from health care, endowments of time are more equally distributed than endowments of other resources, so that rationing by waiting does have equity advantages over rationing by price.

Propper (1990) has provided empirical evidence that individuals with different incomes and in different occupations and stages of life do indeed place a different monetary value on having to wait for health care under the NHS. Propper argued that since no market for waiting time for health care exists, in which patients could be observed revealing their preferences at the margin, the best that could be deduced from patients' decisions was that the total time price cost of waiting for NHS treatment was less than the cost of private health care for the patient who remained on an NHS waiting list. She therefore used a stated preference technique in which respondents were asked to make choices between different health care options with different attributes such as length of NHS waiting time, uncertainty of date of treatment and cost of private treatment. Propper acknowledged that respondents' choices between public and private care could have been made on criteria such as perceived quality rather than reflecting a direct trade off between time and money.

Propper obtained estimates of the value of time spent on NHS waiting lists which appeared to be less for low income groups than for higher income groups, and less for housewives than for the retired and the employed. Propper found that the value of time for full time employed, part time employed and the retired did not differ significantly. The average value of waiting time per month across all segments was £37.69 (which admittedly seems rather low). These estimates were obtained using the assumption that the condition for which patients were waiting did not deteriorate over time; Propper acknowledged that the figures obtained would underestimate the money value of time for conditions which do deteriorate over time.

## 8.2 NHS waiting lists: a challenge to the time price theory

Lindsay and Feigenbaum, who described NHS waiting lists as 'one of the largest queues in the western world' (Lindsay & Feigenbaum, 1984, p.405) challenged the time price theory arguing that patients waiting for health care wait 'in absentia', so suffer no inconvenience of actually physically standing in a queue. They argue that since there is no cost of waiting, one might expect NHS waiting lists to increase without limit; however, it

is observed that this has not been the case and that waiting lists have remained fairly stable in size, around the 1,000,000 mark since 1990, as indicated in Figure 3. They argue that waiting lists act as a market equilibrating mechanism due to the fact that having to wait for a good or service decreases the utility a consumer eventually gains from its consumption. They offer the example that this morning's newspaper is of greater value now than it will be this evening or next week. In the case of waiting lists for health care, they argue that waiting for treatment leads to a decay in the utility patients eventually receive from treatment.

It is therefore the reduction in utility of gaining a good or service through joining a waiting list, rather than any financial cost of waiting, that serves to equilibrate demand and supply through waiting lists in a market. Lindsay and Feigenbaum were interested in relating the rate at which demanders join waiting lists to expected delay and the decay rate of demand for those services. Using data on waiting time and hospital discharges for conditions by ICD code for the then 14 Regional Health Authorities in England, they tested empirical propositions that the rate of joining should be inversely related to the expected delay, the decay rate and the cost of joining.

With the help of a doctor they sorted all diseases and conditions into 3 categories: (1) high demand decay rates, i.e. a long wait rapidly decreases the utility a patient will get from the treatment of a non-urgent condition that can be treated with drug therapy as an alternative to hospital admission; (2) non-emergency cases such as hernia or cataracts that may not grow worse with delay in treatment but for which there is no alternative to hospital treatment; (3) conditions which rapidly become more serious over time, might be said to have negative demand decay rates as demand increases with the passage of time. Category (3) patients were dropped from the analysis as they are dealt with under the NHS as urgent admissions.

The results of Lindsay and Feigenbaum's empirical analysis provide some support for their predictions of a negative relationship between expected delay and the rate of joining and a negative co-efficient on the interaction of decay rate and the effect of delay.

Lindsay and Feigenbaum conclude that rationing by waiting list is socially inefficient as rationing occurs not only by preference, as in a competitive market, but also by decay rate i.e. by the rate at which the utility gained from eventual consumption of a good or service deteriorates over time. Hence, that some patients who receive treatment value it less than some others for whose condition there is a higher decay rate of utility from treatment, but who value it higher.

Lindsay and Feigenbaum's model formed the basis for much of the empirical work on waiting lists since carried out. Cullis and Jones (1986) extended Lindsay and Feigenbaum's model to incorporate the possibility of the purchase of private health care.

Most recently a complete theoretical supply and demand model, based on that of Lindsay and Feigenbaum, has been developed in which waiting times and the price of private health care adjust instantaneously so as to equate demand in the public and private health sector with available supply (Goddard et al, 1995). This model combines a queuing model of hospital treatment in the public sector with a price adjustment model of the private health care market. On the demand side patients are assumed to face a choice between immediate private treatment, a wait for NHS treatment, or no treatment. The authors show patients' choices to be dependent on a range of medical and economic factors. Examples of medical factors are severity of illness and expected rate of deterioration or improvement of the condition. Examples of economic factors are income, consumer prices, interest rates and the cost of private treatment. The model reaches equilibrium when, simultaneously, waiting times in the public sector and prices in the private sector cause the private sector market to clear and equate the referral rate and discharge rate in the public sector. The main contribution to the economic literature on waiting lists made by this paper is the linking of the behaviour of the public and private health care sectors to macro-economic variables. The authors state that although their analysis is theoretical, given necessary cross sectional or time series data, their hypotheses could be tested. This could provide valuable empirical evidence for the future development of waiting list policy.

In theory, allocating health care between individuals by waiting list, rather than by price in a market is inefficient (Mullen, 1993a; Barzel, 1974) leading to losses in utility, either expressed in monetary terms as in the time price theory or in terms of a decay in the utility people gain from eventual receipt of health care as proposed by Lindsay and Feigenbaum. In either case, there is a loss to society associated with waiting from which no-one else gains. Any movement away from a health care market using price to equilibrate demand and supply results in a loss of social welfare under the assumption that willingness and ability to pay reflect utility from consumption.

Public health care systems such as the NHS arose out of the dissatisfaction with willingness and ability to pay as a basis for access to health care, and out of widely held philosophical concerns for the need for publicly

provided health care, out of what has been called a 'caring externality' (Culyer, 1971).

If this is the case, then if the total social welfare gained from having a public health care system, even with its waiting lists, exceeds the sum of individuals' disutilities from having to wait, then society benefits from having an NHS despite the existence of waiting lists.



## 9 Health economists' contribution to the waiting list debate: some policy proposals

This section first examines policies that have been put forward by health economists with the goal of reducing the overall size of NHS waiting lists, and then presents a range of policies with the goal of reducing waiting times. For each, where available, evidence of effectiveness is reviewed. Finally, attention is given to policies that have been proposed by health economists for the rationalisation or prioritisation of waiting lists.

### 9.1 Policies to reduce the size of NHS waiting lists

#### 9.1.1 Increasing NHS capacity

A battery of arguments as to why the increase of NHS capacity will fail in the long run to reduce waiting lists for elective care has dominated the health economics literature on waiting list policy. Culyer and Cullis (1976) set out microeconomic arguments for why increasing NHS resources will not work as a policy instrument to reduce the size of waiting lists. The key argument is that where rational consumers face a zero price for a good or service, they will expand consumption until the utility they gain from the consumption of the marginal unit falls to zero. There is therefore no incentive to stop seeking health care where its price at the point of consumption is zero so that increase of NHS capacity will do nothing but bring forward previously latent demand.

It has been argued that increasing public sector capacity causes doctors to re-assess thresholds for treatment; extending the offer of treatment to less urgent cases in response to an increase in capacity (Cullis & Jones, 1983; Street & Duckett, 1996).

Authors such as Lindsay and Feigenbaum point to the persistent growth in the size of NHS waiting lists despite waiting list initiatives.

'Expansion of services typically does not eliminate waiting lists or even substantially reduce them' (Lindsay & Feigenbaum, 1984, p.405).

Theoretical assertions as to the futility of increasing NHS capacity as a means of reducing the size of waiting lists have been supported by empirical evidence.

Frost (1980) tested the hypothesis that a 1 per cent increase in consultant numbers will lead to a 1 per

cent increase in the number of patients on surgical waiting lists, using NHS time series data for surgery. Frost distinguished between short and long term effects and suggested that 78 per cent of the final increase in waiting lists would have occurred within 2 years of the increase in the number of consultants.

Frankel and West (1993) reiterate the apparent inevitability of waiting list growback after waiting list reduction initiatives. It is their view that recent waiting time policy has had no impact on the total number of patients waiting (although this was admittedly not its prime purpose); instead what has happened has been a redistribution of waiting time across all patients and the elimination of excessively long waits over 2 years, which may be judged as successful as long as it is sustained. This has been borne out by the recent upturn in patients waiting over 12 months shown previously in Figure 7 and the steadily growing number of patients on waiting lists, in Figure 3.

#### 9.1.2 Subsidies for patients to seek private treatment

A subsidy scheme has been proposed to achieve a policy goal of reducing the total number of patients on NHS waiting lists (Cullis & Jones, 1985). Cullis and Jones propose that the government might offer an in-kind subsidy to encourage some patients on NHS waiting lists to seek care in the private health care sector.

Cullis and Jones conclude that such a subsidy would be a more effective means of reducing the size of NHS waiting lists than by directly increasing NHS provision because it would avoid the second round increased referral effects, resulting from latent demand and supplier induced demand, that it has been argued occur in response to an expansion of services. They argue that, in addition to an increase in GP referrals, there would be a 'crowding out' effect of increasing NHS provision, by which they mean that some patients who previously sought treatment in the private sector might switch back into the public sector and so contribute to waiting lists in future periods. Cullis and Jones argue that it is only where there is no private health care sector that an expansion of NHS provision will have a proportional effect on the size of NHS waiting lists. Although this has been recently challenged by Martin and Smith and is discussed in the next section.

Cullis and Jones argue that a direct expansion of NHS provision would have the advantage of being a policy with a known financial commitment for government, while a subsidy scheme would have to constitute an unknown financial commitment for government as take up rates would not be known in advance. They propose the piloting of the scheme to determine the size of the subsidy necessary to encourage sufficient patients to seek treatment in the private health care sector. They argue that a decision would also be necessary as to the range of conditions/treatments for which the subsidy would be available.

Cullis and Jones (1985) argue that the NHS could save money by paying the difference between the full cost of private treatment and individual's contribution, as long as this subsidy amounted to less than the cost of NHS treatment.

As Street and Duckett (1996) correctly observe, the conclusions depend on factors such as: (1) the relative efficiency of the private and public sectors, (2) spare capacity, (3) whether costing and pricing are done on the basis of marginal or average costs, (4) whether the private sector raises prices in response to increased demand, and (5) whether patients who would have previously gone private now join NHS queues to receive the subsidy.

Cullis and Jones set out what they see as obvious criticisms of a subsidy policy. A principal criticism is that it involves a version of the willingness to pay principle. This may therefore sacrifice equity as it is likely that the relatively well off will find subsidies for private health care more attractive than lower income individuals who may not be able to find the remaining cost of private care.

Increasing NHS spending to facilitate an expansion of services will mean that, as Cullis and Jones argue, patients will to some extent, be treated from waiting lists in order of clinical urgency regardless of willingness and ability to pay.

Cullis and Jones draw on evidence (Le Grand, 1982) that the top socioeconomic classes receive 40 per cent more NHS resources per person reporting illness than do individuals in the lowest socioeconomic classes. Cullis and Jones reflect that if the higher socioeconomic groups are successful at 'arguing their way up the queue', exercising 'voice', then a subsidy scheme could mean that these individuals are encouraged to exit the waiting list.

In defence of the subsidy policy, Cullis and Jones argue that concerns over the possible regressive distributional effects of such a policy are really a function of more fundamental issues of income distribution in general.

Cullis and Jones conclude that a subsidy policy hides rather than solves a problem of large waiting lists, and that although potentially less costly and more effective at reducing the size of NHS waiting lists than direct expansion of the NHS service provision, such a policy has an indeterminate effect on social welfare.

## 9.2 Policies to reduce waiting times

More recently Martin and Smith (1995) conducted an extensive cross sectional multivariate analysis of NHS waiting lists using small area data. Martin and Smith modelled waiting times as prices in a supply and demand model based on the work of Lindsay and Feigenbaum. The purpose of their study was to model waiting times and hospital utilisation as a function of various supply factors such as efficiency and provision of inpatient beds, and various demand factors such as socioeconomic conditions. To do this Martin and Smith use Hospital Episode Statistics (HES) data for 1991/92 to model waiting times and operation rates in 4,500 small areas covering the whole of England.

They argue that previous univariate analysis of NHS waiting lists failed to model the system as a whole. They found that long waiting times act only as a very modest deterrent to demand for surgery except in areas currently experiencing relatively long waits. This implies that waiting times may not be an important component in medical referral patterns except where waiting times are very long. On the supply side, they found a very strong positive relationship between the local waiting time and number of operations, suggesting that long waiting times act as an important stimulus to more intensive use of NHS resources, perhaps as part of the NHS Waiting Times Initiative.

Martin and Smith found the most important indication of utilisation in an area to be need, as measured by the York Acute Sector Needs Index, and that factors such as bed provision have a relatively small effect in comparison, suggesting a far weaker link between the supply and demand for health care than has been proposed in the literature up to this point.

From their results, Martin and Smith infer that an increase in NHS capacity could reduce waiting times, if permanent, given current medical technology and public expectations. From estimates of the elasticity of public demand for inpatient elective treatment with respect to waiting time they propose that any demand inducement effect of increasing NHS capacity would be much smaller than forecast by previous authors.

They found the level of day case surgery to have a strong negative impact on waiting times. The authors

also found that the provision of private hospital beds had a negative impact on demand for inpatient services. They found that GP provision has a relatively weak negative impact on utilisation suggesting GPs may act as a modest substitute for inpatient surgery.

Martin and Smith recognised the necessity of testing what effect waiting times themselves have on facts such as the level of day case provision, average length of stay or proportion of all admissions that are elective. They found that waiting times appear to have little detectable influence on day case proportion or length of stay. However, they found that waiting times played an important part in influencing the proportion of all surgical admissions that are elective.

Martin and Smith (1995) conclude that:

‘In general, a short run boost to surgical provision to clear waiting times will not secure long run improvements in waiting times. This [they argue] accords with the results of elementary queuing theory, which suggest that the long run average waiting time for service is simply a function of the arrival rate and the service capacity. Only a permanent increase in capacity will reduce the long run waiting time, given a constant level of demand’ (p.23).

### 9.3 Policies to rationalise NHS waiting lists

#### 9.3.1 Admissions indices for the management of waiting lists

As far back as 1976, Culyer and Cullis proposed the need for an admissions index for the management of waiting lists which could incorporate clinical and social criteria to reflect the relative priority of each patient. They argued that clinicians alone should not be left to determine the priority of patients receiving public health care and that indeed inherent in their proposal for an admissions index was the need for national norms and reduction in the clinical freedom of each individual doctor. Social science, they argued could help provide a framework for the construction of such an index but that the selected criteria and relative weights assigned were normative political issues.

Culyer and Cullis argued that any such needs index must cut across interdependence between supply and demand for health care. For example, such a statement of need about an individual patient must be independent of current levels of health care provision.

Culyer and Cullis proposed the following as candidates for inclusion in an admissions index:

1. Time already spent on a waiting list.
2. Urgency based on expected rate of deterioration of patient’s condition (clinical prognosis about time for intervention).
3. Urgency based on patient’s health status (ability to function while waiting).
4. Urgency based on social productivity of patient and number of economic dependents (which should not be a narrow concept of contribution to GNP).
5. Urgency based on other social factors.

They proposed the calculation of each patient’s individual points score per period with time already waited used as an exponent.

They noted that of these criteria only time already waited was easily measured in units and that all the other criteria would require scoring using some kind of points scheme. Culyer and Cullis proposed the use of a simple three point scoring system to maximise the likelihood that different scorers’ assessments would converge.

Culyer and Cullis argued that some of the ranking exercise could be delegated. The potential for this has been demonstrated in the safe delegation of priority scoring in a Swedish pain clinic (Brattberg, 1988). Culyer and Cullis argued that so long as a clinical specialty’s beds were used to full capacity, then introduction of a needs index could lead to greater efficiency in terms of needs met from the waiting list.

They argued that it would be possible to reduce to a minimum the unmet need of patients on a waiting list by each day admitting patients with the greatest points score per day of expected length of hospital stay.

Culyer and Cullis went on to reflect that the introduction of such an admissions index across clinical specialities might lead to the redistribution of beds and other resources between specialities. They argued that maximum efficiency could only be achieved when marginal need (i.e. the score of each marginal patient treated per period) in each department, hospital and region is the same.

They concluded that the optimum level of inpatient hospital provision would be reached when the additional costs of providing more inpatient resources (or costs saved by reducing them) equal the social value of reduction (or increase) in the need for inpatient care; so relating the question of health care provision back to the economic concept of allocative efficiency.

Points schemes for the management of elective waiting lists are beginning to attract greater attention as a

means for rationalising or prioritising waiting lists. They afford the opportunity to pursue goals such as meeting the greatest needs of patients on a waiting list as opposed to managing the list so as to meet guaranteed waiting times or reduce the total number of patients on the list.

In the UK, Salisbury Health Care NHS Trust Hospital is currently piloting a cross speciality waiting list points scheme based, in part, on the criteria proposed by Culyer and Cullis, developed by Dr Alastair Lack, Consultant Anaesthetist. Under this scheme patients placed on a waiting list after their outpatient consultation are assigned a score of 0-4 points for each of the following criteria: progress of disease, pain, disability or dependence on others, loss of usual occupation (job, house work, school) and time waited. Points are then squared to emphasise differences and summed to give a score out of a possible 80 points. As the issue of what relative weights should be attached to each criterion is extremely subjective, a range of weighting schemes is currently being explored. Patients are also assigned to iso-resource groups in order to forecast the intensity of their resource use requirements. Patients' points scores are updated regularly to reflect the time they have waited. The intention is that patients could be drawn for treatment according to their points score. However, under current arrangements, the hospital must meet contractual requirements to comply with the Patient's Charter maximum waiting time guarantees (Edwards, 1994).

New Zealand has a similar health care system to that of Britain, mainly publicly funded since 1992 and

having moved to an internal market with a split between purchasers and providers. Facing similar dilemmas about the future rationing of health care, the New Zealand Government set up a National Health Committee to examine possible options. One of its tasks was to generate criteria for the prioritisation of elective waiting lists. These criteria, in part clinical and in part social were generated by clinicians and by members of the public. Interestingly the length of time waited was not deemed to be a criterion for priority, contrasting with the current focus of UK waiting times policy (Dixon & New, 1997). Figure 13 shows the criteria used to rank patients on waiting lists for cataract surgery developed in New Zealand.

### 9.3.2 Enforceable contracts for the clinical prioritisation of elective waiting lists

Street and Duckett (1996) argue that, to redress perverse incentives which have in the past encouraged consultants to maintain long waiting lists as a sign of prestige and as a source of bargaining power for additional funding (Yates, 1985), there is a need for binding agreements between governments and providers and for funding to be closely linked to activity.

Street and Duckett (1996) draw on the experience of Victoria's public hospitals in Australia. They describe how, in 1991, faced with large waiting lists and long waiting times, Victoria's Department of Health and Community Services managed to achieve long run reductions in waiting times by asking consultants to categorise patients according to speciality specific

Figure 13 Priority criteria for cataract surgery in New Zealand

<b>Social criteria:</b>		
Limitations to activities	(0-20	points)
Driving	(0-10	points)
Working for wages/ care giver for dependents	(0-20	points)
Person has other disability	(10	points)
Time on waiting list	(10-40	points)
<b>Clinical criteria:</b>		
Visual acuity:	(0- 95	points)
Glare	(0- 10	points)
Severe visual field defect in other eye	(15	points)

Source: NACCHDSS, 1995

urgency criteria, then linking funding to activity through enforceable contracts with Victoria's public hospitals.

Patients were categorised as urgent if deemed to require immediate treatment without which emergency admission might well be necessary. Patients were categorised as semi-urgent if, although experiencing pain and disfunction, their condition was not expected to rapidly deteriorate while waiting. Patients were categorised as non-urgent if the pain and disfunction they experienced were minimal and not expected to deteriorate.

In 1993 Victoria moved from a system of global funding for its hospitals to a system of casemix funding such that reimbursement was closely linked to activity. Waiting list initiatives were established such that hospitals could not claim revenue for additional output if they had not treated all category 1 (urgent) patients from their waiting lists. Targets were set for the less urgent categories of patients to be treated by certain dates, effectively setting a gradient of clinically appropriate waiting times across the three urgency categories.

The new incentive structure for waiting list management had an immediate effect. There were dramatic reductions in the number of patients in urgency category (1) (most urgent) waiting over 30 days for treatment, and reductions in the number waiting over clinically appropriate waiting times in the other two categories.

Street and Duckett describe how it might have been expected that, in response to the new incentive structure, hospitals might have encouraged their consultants to manipulate the categorisation of patients or the method in which patients were added to the waiting lists. No external audit of the response to the initiative was conducted, however, Street and Duckett comment on the relative stability of the number of category (3) (non-urgent) patients. If consultants were simply re-categorising patients into this third, untargeted group then it might have been expected to grow.

Street and Duckett argue that Victoria's experience has important lessons for waiting list policy in the UK. They argue that this experience demonstrates that it is possible to design waiting list policies to encourage hospitals to prioritise their waiting lists according to agreed criteria. It is interesting to contrast the high absolute priority given to maximum guaranteed waiting times in contracts between purchasers and providers in the UK, with the overriding priority of clinical urgency and subsequent waiting times in contracts set between Victoria's government and its public hospitals.

### 9.3.3 A QALY maximisation approach to the management of NHS waiting lists

The quality adjusted life year (QALY) is the best known of a range of health related outcome measures that adjust years of life following treatment to reflect the quality of life in which they are spent and not only any increase in their number (Buxton, 1992).

Williams, (1990) argues that 'good fairy' waiting list initiatives targeted at those waiting lists with the longest times will never achieve the elimination of NHS waiting lists, due to a clinical 'grey zone' as to thresholds for need that respond to changes in health service capacity. He further argues that waiting lists should not be viewed in simple terms of numbers of patients waiting, but rather as a stock of, as yet unmet, need:

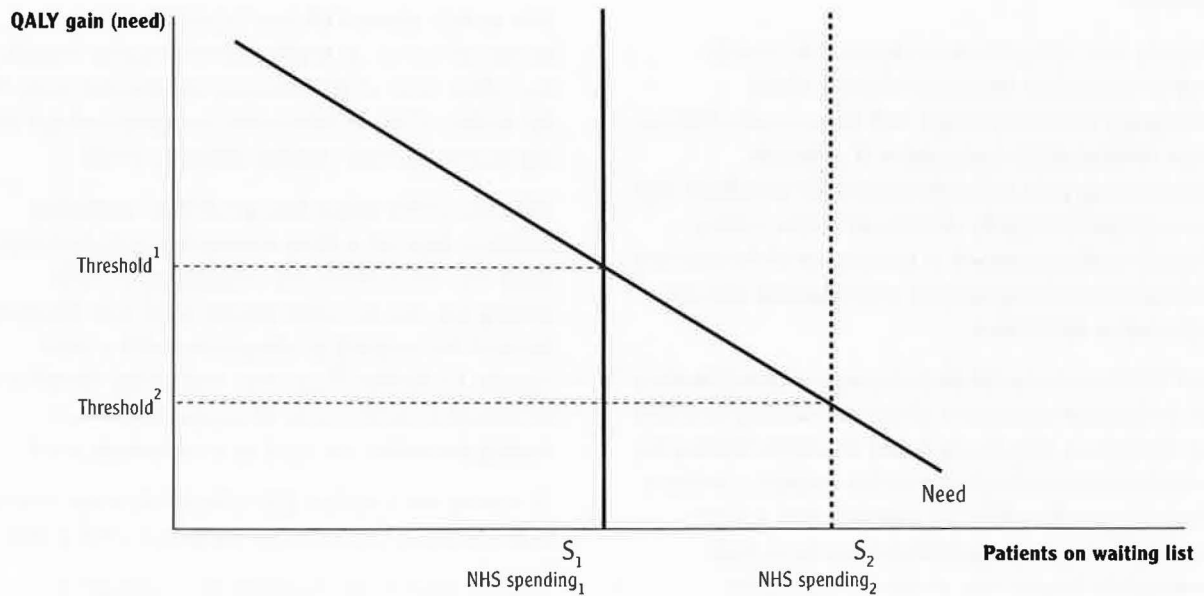
'A waiting list is really a pile of health benefits waiting to be delivered to customers' (Williams, 1990 p.242).

Williams argues that if patients on a waiting list were placed in order of the size of the health benefits (measured in terms of QALYs) they would be expected to gain and priority was given to patients sacrificing the greatest health benefit as a result of having to wait, then health gains could be maximised from treating patients from that queue. Williams recognises that such a waiting list policy approach, if introduced across clinical specialities, could lead to a flow of resources between specialities. Williams argues for the need to collect information on the relative health gains that can be expected to be enjoyed by each patient and the problems of incentives facing consultants.

Figure 14 shows QALY gain on the y-axis and patients on a waiting list on the x-axis and illustrates how in any one period it might be possible to rank patients in order of anticipated QALY gain. Patients would be treated up to the point S1, denoting NHS capacity for that period. Patients to the right of S1 would have to wait until the following period for treatment, perhaps if their QALY gain were very small, never reaching the front of the queue. The effect of increased resources is illustrated in Figure 14 with a move to NHS spending S2 which could allow treatment to be extended to patients on the waiting list with a smaller expected QALY gain.

Empirical evidence of the relative health gains from treating different conditions on elective waiting lists has been calculated along with the relative benefit from reducing waiting times for these conditions (Gudex et al, 1990; Edwards & Barlow, 1991; James et al, 1996). For example, Gudex et al calculated, for 22 of the most common conditions on Guy's Hospital's general surgical waiting list, the QALY gain from

Figure 14 Prioritising waiting lists



treatment versus no treatment and the QALY gain from treatment now versus treatment one year later, these are shown in Figures 15 and 16 respectively.

If the decision to be made is whether to admit a patient to a waiting list at all, then, using the QALY information in Figure 15, the criterion could be to admit those conditions with the lowest cost per QALY up to the point where the available budget for elective surgery has been exhausted. This approach would attempt to maximise the QALYs gained from a given budget. If, however, all the conditions are to be treated eventually but there exists a short-term budget constraint which means that some will have to wait until next year, then the information in Figure 16 could be used to identify the conditions at the bottom of the list for which one year's delay would cause the smallest loss of QALYs.

The philosophical and technical objections raised against QALYs, and consequently the use of cost per QALY league tables, have been well rehearsed (Harris, 1985; Buxton, 1992). It has recently been argued that, with respect to the prioritisation of NHS waiting lists, the quality of QALY calculations currently in existence is not sufficiently robust or generalisable to offer confidence in their use as a basis for the prioritisation of NHS waiting lists (Coast, 1996). This criticism is made on the grounds that most of these figures have been based on the prognoses of samples of consultants rather than on the results of clinical trials and the self-reported health states of patients before

and after treatment. There is much work to be done improving the robustness of QALY calculations; however, interestingly, some evidence has emerged that the estimates of consultants' prognoses of patients on orthopaedic waiting lists do not differ significantly from the self-reported health states of those same patients (James et al 1996). In theory, QALYs or other health gain indices do offer a way forward enabling a move from process measures of the performance of the NHS towards performance measures that begin to measure health gains produced by the NHS.

It is interesting to note similarities between admissions indices and health gain maximisation solutions. Culyer and Cullis propose the introduction of an admissions index which could lead to a redistribution of resources between clinical specialities and hence to an increase in some abstract concept of social welfare in terms of reduced absolute need on waiting lists. Williams proposes the ranking of patients according to anticipated QALY gain from treatment, based on a definition of need as the ability to benefit from treatment. Due to the way QALYs have in the past been calculated, this solution is focused on maximising the production of units of 'health' rather than on social welfare based on a wider concept of need embracing both clinical and social factors which acknowledges the importance of fairness in the process by which patients gain access to health care under the NHS (Edwards, 1996).

Figure 15 Benefits from treatment versus no treatment (present value\* of the future stream of QALYs)

Condition	QALY gain (mean + SD)
Bilateral IH - male	1.84 + 1.69
Recurrent IH - male	1.59 + 1.80
Unilateral IH - male	1.34 + 0.70
Circumcision	1.21 + 1.24
Unilateral IH - female	1.12 + 1.03
Piles	0.77 + 0.40
Anal fissure	0.70 + 0.22
Epigastric hernia	0.69 + 0.58
Hyperhidrosis	0.69 + 0.59
Anal fistula	0.67 + 0.41
In-growing toe nail	0.56 + 0.25
Bilateral VV - female	0.41 + 0.24
Ganglion	0.39 + 0.25
Unilateral VV - female	0.29 + 0.20
Subcutaneous lumps	0.28 + 0.13
Incisional hernia	0.27 + 0.10
Bilateral VV - male	0.26 + 0.16
Skin lesions	0.26 + 0.22
Excision of mole	0.25 + 0.23
Gynaecomastia	0.22 + 0.10
Unilateral VV - male	0.22 + 0.06
Anal tags	0.20 + 0.08

\*discounted at 5 per cent per annum over the expected lifetime of the patient  
 VV = varicose veins    IH = inguinal hernia

Source: Gudex et al, 1990

### 9.3.4 Examination of the implications of selecting patients from a waiting list according to different criteria

Health economists have begun to examine, using theoretical queuing models and empirical data, the implications of selecting patients from waiting lists according to different criteria. Using queue theory, Goddard and Tavakoli demonstrate diagrammatically how different queue disciplines lead to different outcomes in terms of treatment outcomes and waiting times and consider some equity and efficiency implications of each (Goddard & Tavakoli, 1994). They model three queue management regimes: a first-come-first-served regime, a second regime that links waiting time inversely to need, so as to try to equate across patients the sacrifice associated with waiting, and thirdly, a regime that prioritises those patients in

Figure 16 Benefits from immediate treatment versus treatment one year later (present value\* of the future stream of QALYs).

Condition	QALY gain (mean + SD)
Hyperhidrosis	0.462 + 0.038
Bilateral IH - male	0.068 + 0.117
Anal fissure	0.050 + 0.037
Recurrent IH - male	0.039 + 0.044
In-growing toe nail	0.033 + 0.012
Piles	0.030 + 0.030
Epigastric hernia	0.026 + 0.022
Anal tags	0.021 + 0.014
Unilateral IH - female	0.021 + 0.014
Anal fistula	0.020 + 0.015
Ganglion	0.019 + 0.014
Circumcision	0.018 + 0.007
Gynaecomastia	0.014 + 0.010
Incisional hernia	0.014 + 0.008
Unilateral IH - male	0.013 + 0.006
Bilateral VV - female	0.010 + 0.002
Skin lesions	0.010 + 0.003
Subcutaneous lumps	0.010 + 0.003
Unilateral VV - male	0.010 + 0.003
Unilateral VV - female	0.008 + 0.003
Bilateral VV - male	0.007 + 0.004
Excision of mole	0.007 + 0.004

\*discounted at 5 per cent per annum over the expected lifetime of the patient  
 VV = varicose veins    IH = inguinal hernia

Source: Gudex et al, 1990

greatest need so as to practically exclude patients waiting for the treatment of minor conditions from ever reaching the front of the queue.

Goddard and Tavakoli found that in their theoretical model the number seeking treatment and the average duration of wait are highest under regime (1) and lowest under regime (3). Welfare analysis provides a strong efficiency argument in favour of the third regime. The model shows how the benefits to the seriously ill patients who would receive more rapid treatment would outweigh the cost to the small minority of less ill complainants who would be excluded from treatment.

Goddard and Tavakoli explore the implications of the introduction of a Patient's Charter to guarantee maximum waiting times. They demonstrate that the

Figure 17 Health gains per bed day under alternative patient selection criteria

Criteria	Health gain achieved per bed day (quality adjusted life weeks)
First come first served	9.37
Health gain per bed day maximisation	15.2
Throughput maximisation (patients selected in inverse order of their bed day requirements)	9.6
Random selection	11.2
Suffering (patients selected according to the difference between pre and post operative health state score multiplied by weeks waited)	7.39

Source: Edwards, 1996

imposition of a maximum waiting time performs poorly on efficiency criteria because those who would gain the greatest benefit from treatment are not necessarily those who have waited longest. They also found that the average wait increases in response to the imposition of a maximum waiting time guarantee because if the guarantee encourages more people to seek treatment, then there is more queuing congestion in total. This implies that the more seriously ill cases must wait longer but also that the average wait for the entire group increases. On the other hand, if the additional people joining the waiting list gain some benefit from their ultimate treatment, rather than being put off by the prospect of a long wait and so never gaining that benefit, then this positive outcome should be taken into account. Goddard and Tavakoli argue that, if average waiting time is of political concern, (rather than numbers waiting over 12 months as at present) then the consequences of Patient's Charter guarantees should have been given more consideration.

Goddard and Tavakoli examine the case of the imposition of a quantitative limit to the number admitted to queue per period, for example through the imposition of an admission threshold based on defined criteria. They conclude that such a policy can lead to improvements in social welfare if waiting times for the seriously ill are greatly reduced, even if other less seriously ill patients are forced to now wait almost indefinitely. They conclude that their model is in principle supportive of explicit rationing of access to treatment.

Edwards (1996) used the data published in Gudex et al. (1990) in a queuing model which simulated the outcome of selecting patients according to a range of criteria. Figure 17 shows five patient selection rules and the corresponding health gains per bed day, measured in terms of quality adjusted life weeks achieved for a 26 week simulation period using data

from the Guy's Hospital surgical waiting list as published in Gudex et al. This shows that achieved health gain per bed day would be greater by taking people off waiting lists purely at random than by giving priority to patients for whom the difference between the pre- and post-operative health states would be greatest. This is because the latter rule takes no account of the inputs of bed days required to achieve the improvement in health state and gives priority to cases with a higher total health gain but possibly with a lower health gain per bed day. Health gain is maximised if priority is given to patients with the highest potential health gain per bed day. Edwards also went on to show the total number of patients treated, waiting time and casemix of patients treated under each patient selection rule and corresponding figures for patients still waiting (Edwards & Barlow, 1994).



## 10 Some concluding thoughts

Having considered recent trends in waiting lists and waiting times in light of the Waiting Times Initiative and Patient's Charter, and reviewed a considerable proportion of the theoretical and policy oriented contributions that health economists have made to the debate over waiting list policy, I have come to the following conclusions.

Firstly, that long term sustainable reduction in waiting time is only possible through a permanent increase in NHS capacity and that the reductions in waiting times achieved under waiting times initiatives are likely to be short lived as is being seen with the recent upturn in the number of patients waiting 12 months for elective treatment.

Secondly, that current waiting list policy which focuses solely on guaranteeing maximum waiting times, reflects the general measurement of the performance of the NHS in terms of the process by which the NHS delivers health care, rather than in terms of the outcome of health care through improvement of the health of society. It is relatively easy to count the number of patients treated per year and time they have waited, less easy to begin to measure changes in health and sacrifices associated with waiting for the treatment of different conditions, but this is an area to which the health economist has some contribution to offer.

Thirdly, that current waiting list policy, although undoubtedly well intentioned, is fatally flawed in its sole focus on waiting times rather than on the composition of NHS waiting lists. Current policy has served to redistribute waiting time within the context of performance measures that penalise a provider for not treating a patient within 12 months for a minor condition, even at the expense of prioritising such patients above more urgent patients who have waited only a few months.

Fourthly, therefore, there is a need to collect and publish waiting list and waiting time information not only by clinical speciality but by condition/treatment if an accurate picture is to be generated as to the composition of NHS waiting lists and the health sacrifices that patients make by having to wait.

Fifthly, that debate over the management of waiting lists must be conducted within the wider context of an NHS facing up to the need to explicitly prioritise health care. This will ultimately require decisions

nationally or locally by purchasers within the NHS internal market, about what services the NHS is to offer and what it will no longer offer, to whom and on what basis of access.

Sixth, if national maximum waiting times continue to be pursued, we should move from a single maximum waiting time for all patients to a gradient of clinically appropriate waiting times. As has been demonstrated in Australia, this can be achieved through enforceable contracts between purchasers and providers. In the same way that contracts stipulate quality assurance for infection control, hotel services and hospital security, they could in future have to stipulate adherence to an agreed national or, more likely, local system of waiting list prioritisation for each clinical speciality.

Given the move towards evidence based medicine and the increasing body of evidence of the cost effectiveness of different medical interventions, this could be led and achieved through the Royal Colleges, through the establishment of a protocol for waiting list prioritisation and grading of medical interventions into urgency categories. To be accepted, this will have to be led by the consultants who have historically managed waiting lists and continue to do so on a day to day basis, in conjunction with purchasers responsible for meeting local health needs. Such a protocol could help standardise GP referral patterns and guide the appropriate management of certain conditions in the primary sector without referral into the secondary sector.

Seventh, the expectations of patients will need to be more realistic. Within a cash limited public health service, patients cannot expect the right to receive all treatments within a maximum guaranteed waiting time; rather, patients can expect to receive treatments which have been proved clinically effective and relatively cost effective, within a clinically appropriate time for their condition. Patients will have to accept that those requiring less urgent treatments may have to wait longer than those requiring more urgent treatment. We must escape the Charter mentality of unrealistic promises.

Finally, there is no doubt that consultants do already prioritise their waiting lists to a varying degree, largely between urgent and non-urgent cases but that social as well as clinical factors influence decisions about

relative priority. There exists a unique research opportunity with a clear and practical outcome, to find out and document the clinical and social factors that currently, implicitly or explicitly, determine the priority given to patients by consultants and to explore the consequences of alternative possible prioritisation schemes. Given the role in practice of purchasers in determining priorities for health care provision, there is a need to find out how they believe NHS waiting lists should be prioritised. Given the growing interest in citizens' juries and recognition that the public has a role in decisions about the future use of health care resources and in the debate about future rationing of health care under the NHS, there is a need to find out what clinical and social factors members of society believe should determine how long they wait for treatment under the NHS, if some waiting is inevitable.

Finding out what the relevant interested parties: patients, members of the general public, GPs, consultants, purchasers and politicians, think about how NHS waiting lists should be prioritised, could ease us within a focused context, into the gargantuan questions about what services the NHS should provide, to whom and on what basis of access, and about deciding the relative weight to be given to the views of each party.

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