REDUCING OUTPATIENT CLINIC WAITING TIMES - SOME QUALITY ASSURANCE ISSUES

In NHS hospitals, there are approximately 40 million outpatient attendances a year at a cost of some £1.2 billion [1988-89 figures] according to the National Audit Office (1991). About one-fifth of such attendances may be new referrals as a result of referral by a GP. The remainder are due to second or subsequent visits or, more typically, follow-up consultations following a period as an inpatient. The fact remains that, for many people, the experience of treatment in an outpatient department is their main experience of the hospital service.

When questioned, many patients testify to the excellence of treatment that they have received and are understanding of any shortcomings in the service that they may have experienced. Nonetheless the one consistent feature of dissatisfaction which has been expressed with the outpatient service is the length of waiting time in the outpatient clinic.

The term '*waiting time*' is, however, potentially ambiguous as it can be applied to two discrete types of events. On the one hand, the National Audit Office (1991) refers to '*waiting time before first routine appointment*'. This would be a period of time measured in weeks or months. Cartwright and Windsor (1993) use the term 'delay' to refer to this period of time and further refine the types of delay into delays by the patient between the onset of symptoms and consulting a GP, delays between consulting a GP and being referred to a consultant, and finally the delay between being referred to a consultant and the date of the initial outpatient appointment. On the other hand, the National Audit Office also refers to '*waiting time in clinics*' (usually measured in minutes). The potential confusion is beautifully illustrated in the Committee of Public Accounts Report on 'NHS Outpatient Services'[para.15]. The

Chairman put a clear question to NHS Management Executive members on the subject of waiting times in clinics but the reply referred almost exclusively to the waiting time to get access to those clinics! This paper confines its attention to '*waiting times in clinics*' i.e. the second sense of the term.

Concern over long waiting times in clinics appears to have been a consistent source of dissatisfaction. Evans and Wakeford (1964) report that the main criticism of outpatient services was the lengthy waiting time, compounded by an absence of explanation. Nor had the situation improved by the 1980's. Jones,Leneman and MacLean (1987) as a result of their literature search indicate that although satisfaction levels were high, most discontent was expressed over the length of waiting time and the provision of amenities whilst waiting.

In the 133 clinics surveyed in the National Audit Office sample, it was found that the average waiting time was 30 minutes or less in only 47% of clinics. A comparable finding is reported by Cartwright and Windsor (1992) although their data was collected in the Spring of 1989 :

Table 1 : Waiting times in Clinics- National Sample (1989)

Time spent waiting	Cumulative Percent	Proportion who found wait un-reasonable
Less than 10 mins	11%	11%	2%
10 mins - < 20 mins	18%	29%	2%
20 mins - < 30 mins	16%	45%	2%
30 mins - < 45 mins	14%	59%	10%
45 mins - < 60 mins	13%	72%	34%
60 mins - < 90 mins	13%	85%	44%
90 mins - <120 mins	9%	94%	61%
120 mins or more	6%	100%	77%
All outpatients	639		23%

Source : Adapted from Cartwright and Windsor (1992):
Outpatients and their Doctors Table 26, p. 59

It is interesting to observe the tolerance expressed by the vast majority of patients for waits of up to half-an-hour, after which time their tolerance understandably diminishes. The '30 minute threshold' was incorporated into 'The Patient's Charter' as a National Charter standard i.e.

'you will be given a specific appointment time and be seen within 30 minutes of that time'

The definition of 'waiting time' is defined in 'The Patient's Charter' as the time between an appointment time and the start of the consultation or treatment period. The National Audit Office study actually used three different methods to calculate an average waiting time :

- *Time between **appointment time** and the start of the consultation* (43 of 133 clinics)
- *Time between **arrival time** and the start of the consultation* (45 of 133 clinics)
- *Waiting time **estimated periodically** throughout the clinic* (45 of 133 clinics)

and if we were to use only the first of these definitions, then the proportion of clinics with an average waiting time of 30 minutes or less rises to 58% in the NAO study. Note, however, that this figure relates to the number of clinics rather than the patients who attended them.

The Leicester General Hospital case study

Leicester General Hospital is a medium to large size teaching hospital located some four miles from the city centre in a suburban location to the East of Leicester. It is one of the three major acute provider units within the Leicestershire District which collectively serve a population of a million people, including a high concentration of

the population of Asian ethnic origin. The hospital has some 700 beds and provides some 100,000 episodes of outpatient care each year. These figures are projected to rise over the next few years.

As soon as 'The Patient's Charter' was published in the Autumn of 1991, Leicester General felt that a more systematic recording of outpatient waiting times was needed. Accordingly, the Department of Quality Assurance together with the assistance of the author instigated a pilot study the aims of which was to determine a baseline for waiting times and to establish a sound methodological base for further measurement work.

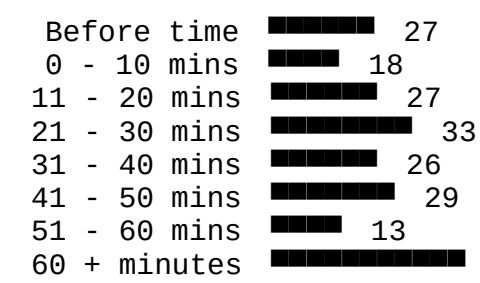
The results of the pilot study *(n=220)* are indicated below and showed waiting times which, at that time, were considered very much in line with national standards but nonetheless capable of improvement :

Table 2 : Waiting times in Clinics- Leicester General (1991)

Waiting Time Pilot Study [December, 1991]

Value Label	Frequency	Percent	Cum. Percent
Before time	27	12.3	12.3
0 - 10 mins	18	8.2	20.5
11 - 20 mins	27	12.3	32.7
21 - 30 mins	33	15.0	47.7
31 - 40 mins	26	11.8	59.5
41 - 50 mins	29	13.2	72.7
51 - 60 mins	13	5.9	78.6
60 + minutes	47	21.4	100.0
TOTAL	220	100.0	100.0

WAIT_ Waiting Time - 10 minute blocks



Valid Cases 220

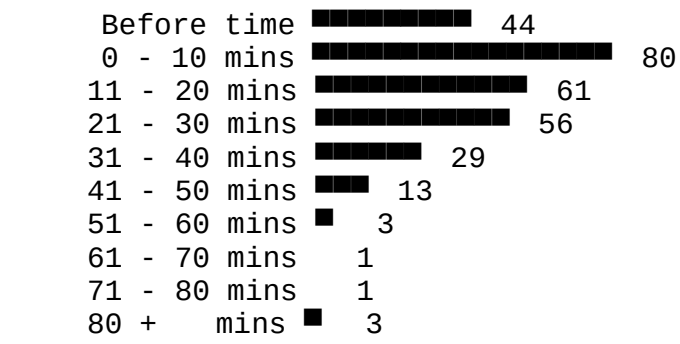
After an intensive program aimed at reaching 'The Patient's Charter' standards, the following sample results were obtained in March, 1993 and this improvement has been maintained, or indeed exceeded, ever since. However, as will be demonstrated later, the global figures given below understate the full extent of the progress made.

Table 3 : Waiting times in Clinics- Leicester General (1993)

Waiting Time - Sample of 31 clinics [March 1993]

Value Label	Frequency	Percent	Cum. Percent
Before time	44	15.1	15.1
0 - 10 mins	80	27.5	42.6
11 - 20 mins	61	21.0	63.6
21 - 30 mins	56	19.2	82.8
31 - 40 mins	29	10.0	92.8
41 - 50 mins	13	4.5	97.3
51 - 60 mins	3	1.0	98.3
61 - 70 mins	1	0.3	98.6
71 - 80 mins	1	0.3	99.0
80 + mins	3	1.0	100.0
TOTAL	291	100.0	

WAIT_ Waiting Time - 10 minute blocks



Valid Cases 291

Measurement and Data Collection

The pilot study indicated that it was crucial to collect succinct yet accurate information from which to derive waiting time statistics. The record card illustrated below was used, after some refinement, as the basic data gathering mechanism:

Table 4 : Sample Patient Record Card

CONSULTANT ..... <-- Patient Administration System (PAS) generated

DATE ..... <-- Recorded manually

Patient Label <-- PAS generated

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   +-------------------------+
   | ID                      |
   +-------------------------+
   | Last Name               |
   | Forenames               |
   | Address 1               |
   | Address 2               |
   | TOWN                    |
   | County                  |
   | Postcode                |
   +-------------------------+
---------------------------------
```

ARRIVAL TIME **<--** Recorded, for later analysis if needed

AMBULANCE YES NO **<--** Arrive by **AMBULANCE** or not ?
(Circle **YES** or **NO**)

APPOINTMENT **<--** Appointment time

CONSULTATION START (1) __.__ **<--** Time when **FIRST** seen by consultant

CONSULTATION END (1) __.__ **<--** End of **FIRST** session

CONSULTATION START (2) __.__ **<--** Time when seen **AGAIN** by consultant

CONSULTATION END (2) __.__ **<--** End of **SECOND** session

OTHER DEPT. ATTENDED YES NO **<--** Needed to visit other department ?
(Circle **YES** or **NO**)

NEW PATIENT YES NO **<--** **NEW** or **CONTINUING** patient ?

LATE YES NO **<--** Patient **LATE** ?
(More than **10 mins**)

Comments

The data was collected by nursing staff for *each* patient in the clinic in the sample. The importance of accuracy and legibility were stressed and validated data files were then prepared using dBASE III+. The data files were validated by being input **twice** by each operator and the two resulting files then compared with each other using a checksum program. (The error rates, before correction,were recorded at 1 per 3,000 keystrokes or approximately 1% of all record cards). It was felt very important to ensure that the data had the maximum degree of credibility to forestall any potential criticism of the data when results were presented back to consultants. The data files were then used to prepare statistical reports on a monthly basis. Use was made of a custom-made dBASE program as well as a suite of low-cost survey analysis programs (**TURBOSTATS**)recently published by the author (Hart,1993).

The complete system of monitoring and statistical analysis was known by the acronym **MOPAL** (Monitoring of Out Patient Activity in Leicester) and the methods employed in its utilisation have been more fully detailed elsewhere (Hart, 1992). The collection of detailed statistical information in order to better plan services is being tried in several outpatient departments. The approach followed at Leicester, although developed independently, bears similarities to that documented by Lal. et. a. (1990). A somewhat more complex computer program, QC Wait, developed at the Royal Hallamshire Hospital, Sheffield, has also been shown to more than half waiting times (Hankinson,1991). A simpler method which concentrates upon synchronising the planned and actual clinic start and finish times is described by Mannion and Pryce- Jones (1991). In this instance, too, providing consultants with charts of the planned v. actual clinic start and end times was the impetus for changes in clinic start times, jointly agreed with clinicians and management.

The pilot study confirmed the importance of measuring various critical factors :

Ambulance

Due to the logistics of the ambulanceservice, it was evident that patients could arrive early or late for clinics for reasons that were not under their direct control. By recording whether or not a patient had arrived by ambulance, it was possible to compile reports which showed whether this created marked variations in arrival times or not.

Consultation- Start/End(1)

The time when first seen by a consultant is recorded even though a patient may have visited another hospital department first (e.g. for a blood-test).Although such a visit can be interpreted as 'receiving attention', it is still necessary to record the start of the consultation proper so that the total amount of consultation time can be correctly calculated.

Consultation- Start/End(2)

For many patients, the consultation will end for that day after one period of time with the consultant. But some patients may receive further investigation and/or treatment before being seen for a further period of time by a consultant and so this, too, is recorded in order to arrive at a total consultation time. For the sake of simplicity, third and subsequent periods of consultation were ignored (but these were extremely uncommon and would not seriously bias the results)

Other Department Attended

If the patient had visited another department, this was recorded so as to remove the result of this complicating factor, if necessary.

New patient

The patients status as *new* or *continuing* was recorded so that the average consultation times of both new and continuing patients could be separately calculated.

Late

If a patient arrived more than 10 minutes late, for whatever reason, this fact was recorded. It is an interesting question whether or not the 'Patient's Charter' should apply to patients who have missed their 'appointment slot'. The measure of' ‘lateness ' as more than 10 minutes after the stated appointment time is essentially an arbitrary measurement.

Output

In any one month, sufficient clinics would be sampled to give a respectable sample size whilst at the same time ensuring that no clinic of any significant size was omitted in a four month period. To avoid the fluctuations associated with small clinics, the data was aggregated for each consultant. In a typical monthly reporting period, two fortnightly clinics would have been held although for some specialities it was more. Reports were then prepared for each consultant whose clinics had been analysed and the results of the exercise discussed with the individual concerned. This approach almost exactly parallels that described by Ross (1989) in which

> 'the key seemed to be to gain the clinicians' understanding and acceptance through presentation of accurate and relevant data'

A sample of some of the routine reports is shown in *Appendix 1.*

Various key features of the output were used to take remedial action to improve waiting times in future clinics.

Late arrivals

The study by Pearson (1992) revealed the complexity of arrangements that often had to be made in order for some people to attend outpatients clinics. A journey of some 1½-2 hours was not uncommon, involving perhaps two bus journeys and a waiting period in between. Under these circumstances, it may seem unduly insensitive to remind people of the necessity to adhere to appointment times but the possibility remains that a diplomatically worded letter could yield benefits in certain instances. The output gives the ID of patients whose address could then be drawn from the Patient Administration System (PAS).

Arrival by ambulance

The (actual) clinic data in Appendix 1 shows the profound impact that ambulance deliveries could have upon the efficient organisation of a clinic. The clinic in question was a 'Care of the Elderly' clinic and over 40% of patients arrived by ambulance at times which varied from 75 minutes early to 40 minutes late

Armed with relevant data, it has been possible to enter into negotiations with the appropriate ambulance service so as to achieve a better match between actual arrival times and appointment times. This has already yielded benefits, principally by substituting the use of ambulance cars for conventional ambulances in the case of the more mobile patients.

Statistical summary

The statistical summary provides interesting management and clinical information. The median waiting time is calculated and this is likely to give a more accurate 'spot' picture of the average waiting time than a mean. For the people who happen to arrive early and are seen before their allotted appointment time, an interesting measurement point arises as to whether their waiting times should be regarded as negative or as zero!) The person with the maximum waiting time is identified so that remedial investigation can be undertaken (and perhaps a letter of apology sent in extreme cases) The statistical summary also provides a 't'-test of differences in waiting time for the 'ambulance' v 'non-ambulance' patients to see if a particular pattern is discernible there. But probably the most useful statistical information of all is the calculation of the average consultation times both for **new** and for **continuing** patients. The sample data revealed that new patients needed a much longer consultation time (as one would expect) of 57 minutes whilst for continuing patients, the average was 17.0 minutes. Armed with this kind of data for each clinic, it should be possible for clinicians and managers to arrive at a schedule of appointments that more fully reflects the pattern of patients in attendance.

Global, specialised and 'non-delayed' waiting time breakdowns

Each consultant was supplied with a whole series of 'statistical breakdowns' in which the waiting times for the monthly aggregate of the relevant clinics was presented in the forms of easily understood information (numbers and percentages in 10 minute blocks). As well as the global returns, further more specialised returns were made available in which each of the 'complicating factors' (such as those who arrived by ambulance, those who arrived late, those who had to visit other departments prior to the consultation) were successively removed. This led finally to a return regarded as 'pure' (non ambulance, non-late, non-other departments) which could be used as a basis of comparison with future returns (for example in three months time) to further measure progress. A return was also

generated which represented the global figures less those who were late (by 10+ minutes) and this particular figure could be regarded as definitive in view of the 'Patient's Charter' standard.

Implementation

Whilst the provision of good quantitative data isan important prerequisite for the management of organisational change, it is important to stress that it can never be a substitute for effective management. Given the backdrop of the monthly monitoring reports, consultants and management worked as a team, to discover ways in which obstacles to better performance could be removed and better modes of clinic organisation achieved. Of course, there are some significant sources of unpredictability (principally consultants and/or junior doctors being called away to attend to emergencies elsewhere) but over an eight month period the improvements in median waiting times were remarkable.

Given the prominence of health in the current political agenda, it is not a source of surprise that a more aggressive managerialist culture is being imported into the NHS. However, the experience at Leicester tends to reinforce the classic view of the social psychologist, Rensis Likert (1967), that a more participative management style generally produces greater involvement of individuals and higher productivity. Put bluntly, an approach which appeared to 'threaten' consultants with an adverse set of reports would not have achieved the desired organisational change. But an approach in which management and consultants worked together to meet the externally imposed standard set by 'The Patient's Charter' effected the improvements needed in a

remarkably short space of time. The case study by Wilson (1993) lends support to the fact that improvements in the service provided by outpatient departments can be effected by good teamwork amongst the whole clinic staff.

Comparative studies

Singleton Hospital, Swansea, has been cited as a recent example of the gains to be had from a systematic quality improvement program (Wilson, 1993). For example, the number of patients seen within 30 minutes has risen at one time to over 80% and 99% of case notes were available on the day of the clinic itself. It is evident that such changes were a result of first ascertaining the views of patients with a comprehensive user satisfaction survey and following this up by a comprehensive integrated teamwork approach in which the changes were as much cultural as they were organisational. The study indicates that at the start of the exercise, the three principal groups (doctors, nurses and clerks) were each asked when a clinic started. For the doctors, the clinic started when *they* arrived, for the nurses it was when the *patients* arrived and for the clerks it began at the *time of the first appointment.* Subsequently, problems were solved on a much more interdisciplinary basis to bring about the co-ordination and internal communication that was previously lacking.

A Northern Irish study (Armstrong, 1992) is interesting in that as well as surveying the views of outpatients to provide data on clinic performance, the hospital took great pains to improve the quality of the environment itself. Improvements ranged from redecoration, the provision of children's play areas and wall murals, the provision of new signposting and toilets and better access for the disabled Health promotion booklets and videos were made available as well as a range of daily papers and magazines. A shop was opened for the use of outpatients, disabled car parking spaces were increased and suggestion boxes were placed in the waiting area. As a result of these environmental changes, 80% of patients appreciated the significant improvements with

the service in tune with rising outpatient expectations. This study is noteworthy in that the local management made progress not only on the narrow front of improving waiting times, as required by 'The Patient's Charter'. Significantly, it has also made strenuous efforts to effect a qualitative change, as well a merely a quantitative change, in the entire outpatient experience.

Similar earlier initiatives to improve the quality of the outpatient environment have also been reported elsewhere - for example, Donn (1988) reports the results from Brighton HA and Miller (1988) describes the initiatives undertaken by Central Nottingham HA at Kings Mill Hospital.

The Quantity v. Quality argument

Policy makers in whatever sphere are inclined to set standards of performance that are reflected in quantitative terms. The research already quoted shows that dissatisfaction with waiting times in clinics was the greatest single cause of concern. It comes as no surprise that the standard of performance in outpatient clinics should be couched in quantitative terms i.e. all patients to be seen within 30 minutes of their appointment.

The evidence from Leicester, Swansea and elsewhere indicates that the 'system norm' has increased from a national average of around 50% (in 1991) to one of about 80% (in 1994). The drive will now be 'on' in outpatient departments throughout the country to achieve the 'non-negotiable' standards set out in 'The Patient's Charter' of 100% patients to be seen within 30 minutes.

Desirable though this may be, there are dangers inherent in a policy which stresses adherence to quantitative indicators at all costs whilst ignoring more qualitative measures. Once an average waiting time of 15 minutes has been achieved, it could be

argued that efforts could be better directed at improving the quality of the environment in the outpatient waiting area. For example, the provision of refreshment facilities and current reading matter may be much more important to patients than,say, reducing the average waiting time by a further two minutes.

Patients will differ in their approach to waiting times depending upon their domestic, work and other commitments. Most patients would like a degree of predictability in the time spent in an outpatient department so that other commitments related to work, childcare arrangements and so on can be coordinated. Cartwright and Windsor (1992) illustrate the point by quoting a 21 year-old woman who attended on one occasion to have a verucca removed:

> 'I had the morning off work to go there and any waiting is unreasonable'

This contrasts with the view of a 69-year old woman, accustomed to waits in an ENT department of three hours who said :

> 'that was a bit of a bugbear, but better that than be rushed and out and not be able to talk properly - I'd sooner wait'

This last quote illustrates a point which, hitherto, has received little attention. Does the subtle 'pressure' upon consultants to reduce average waiting times in the clinic incline them towards slightly shorter or more rushed consultation times than would otherwise be the case ? Consultants will firmly deny that any such considerations affect what is essentially a clinical judgement but the point is under-researched. The Leicester experience did suggest an example of the well-known 'Hawthorne effect' in that when consultants knew that their clinic was being monitored, the waiting times seemed to improve. The monitoring procedure itself could well be having an effect on the very activities which were being observed.

Even if attempts are made to actively improve the environment and 'quality' of outpatient waiting time, then this too would have to be measured in some form of quantitative terms. A monitoring procedure which regularly surveyed outpatient views may seem to be an obvious solution and this may well be the next step along the road once the waiting time issue itself has been reduced to manageable proportions. But given the revolution of rising expectations and a more consumerist culture on the part of outpatients, even the measures here could be suspect.It could be that small but constant improvements are not appreciated and that overall measures of satisfaction, as revealed in an outpatient survey, could theoretically show a decrease rather than an increase in overall satisfaction ratings.

Single measure performance indicators

These are 'headline figures' such as an unemployment statistic or an exchange rate. Politicians and Government ministers will not generally be concerned with the niceties of the problems of the operationalisation of performance indicators but will look for a measure that is easy to understand and to advance in public debate as 'proof' of the success of current policy.

If the 'single measure' does not move in the predicted direction, then Ministers may well be briefed with some of the inadequacies of the indicator.

More complete measures of service

These would include several quantitative indicators and probably some qualitative indicators as well. To measure the improvement in the quality of out-patient clinics more completely, we should need to derive measures of the quality of the interaction between patient and consultant. For example, did the patients fully

understand what was being communicated to them by clinical staff? Were the consultations without undue regard to time pressures or did the consultant(s) feel a subtle pressure to 'rush' consultations in order to comply with clinic appointment timetables?

Here, it is evident that it is quite possible that the quality of outpatient service has actually declined despite the fact that the 'system norm' seems to have shown some dramatic improvement. Without further more specific investigation, it is hard to reach a conclusion. However, there is ample evidence in other policy spheres which indicates a lack of congruence between an indicator and the reality it is designed to illustrate. One could cite, for example, the fact that successive generations of politicians have argued that educational standards are rising in Britain (measured by the numbers and distribution of grades at GCSE 'Ordinary' level and GCE 'Advanced' level). However, there is now a strong argument that in some spheres , particularly in mathematics, that the quality of the output of the British educational system has actually been declining over the years.

Quantitative indicators are nearly always seized upon because they measure that which is measurable rather than that which is significant. Conversely, the type of qualitative indicators that could be employed to give more rounded pictures are typically regarded with a degree of suspicion. Qualitative data may be seen as being 'soft' rather than 'hard' data (in scientific terms) and suffused with either individual values or political partiality.

However, to derive a complete set of measures of a phenomenon a range of both quantitative and qualitative measures is probably necessary. The qualitative measures may have to be provided by independent 'experts' but this runs counter to the received Whitehall philosophy that experts should be 'on tap but not on top'

Perceptions of the service

Should the members of the public be the ultimate arbiters of the quality of the public services delivered to them ? On the one hand, it is possible to point to the increased

emphasis on citizens as the consumers of services rather than the mere recipients. However, as Pollitt observes

> Do 'consumers'(users) understand what is on offer? Are they likely to know what will work best for them, in terms,say,of medical treatments or pedagogic strategies in educational institutions? Are they cognizant of resource constraints,or will they ask for the impossible? What will become of the professional service providers- will they be effectively 'deskilled',deprived of most of their discretion and made slaves of the latest public fad or fashion?

A popular technique to ascertain the public's views of service quality, although much abused, is the 'Consumer Satisfaction Survey'. Although much used in the NHS where they are often perjoratively termed 'Happy Sheets', it is hard to come to a view how we are to arrive at a scientifically respectable survey of consumer satisfaction without recourse to some survey method.

One perennial problem is that badly constructed questionnaires can always elicit the type of responses that managements want to hear. Leaving this problem on one side for the time being, it is still true as indicated in the quote above that consumers may only have the haziest notion of the quality of the service that they are actually receiving. It is not inconceivable that patients could judge the quality of their outpatient experience to be high because they have now more up-to-date magazines through which to browse whilst awaiting their consultation. Conversely, the quality of medical treatment could be increasing but due to the 'revolution of rising expectations' the consumer satisfaction survey could appear to indicate an drop in the overall perceived quality. So the relationship between the consumers' sampled views and the quality of the service that they have experienced may well be a tenuous one.

How may we determine the quality of a service?

The very term 'quality' is now invested with a degree of significance which suggests that the word is more of an 'emblem' than a useful concept with which to guide

public services. Five ways of attempting to achieve 'quality', however defined, will now be delineated in order to advance the debate over the nature and types of performance indicators currently in use. These approaches are not mutually exclusive,however, and are meant to be suggestive rather than definitive.

1. Establish, publish and monitor 'standards of performance'

This is the approach which has been epitomised by the Major administration since 1992. After the Citizen's Charter, there is now a proliferation of other Charters (e.g.Patient's Charter, Parent's Charter) of which probably the more important are those concerned with health and with education. (It is instructive that all the Charters are defined in terms of the individual's rights and obligations rather than the expression of collective rights - hence we have the Patient's Charter but not the Patients' Charter!)

The approach here is to establish (but how?) certain standards and then to publish League Tables by means of which the citizen as consumer can evaluate the performance of locally provided services. It would be an interesting exercise to see whether the provision of such information alters the behaviour or perceptions of members of the public in any discernible way. To many people, the exercise is essentially irrelevant as they little choice but to attend a local hospital or to send their children to a local school. The cynical would no doubt argue that these exercises further empower articulate and vociferous members of the middle classes who probably benefit disproportionately from the public services in the first place. The evidence must remain anecdotal until further research has been conducted.

2. Set up Quality Assurance(QA) units/procedures

One organisational solution to improving the quality of the service provided is to set up intra-institutional and extra- institutional bodies charged with the task of monitoring 'quality'. Again, this approach is most typically to be found in higher education and in the hospital sector where bodies with similar titles ('Quality Assurance Unit') will be found.

Organisations attempt to both produce higher standards of performance and to demonstrate this fact to themselves and to their paymasters by promulgating various standards and cajoling/threatening subunits of the organisation in order to achieve them. However, as the concern over BS5750 indicates, the provision of a mechanism to attempt to secure a quality product is not the same as actually providing the quality, however measured.

The QA industry itself runs the risk of measuring the quantifiable rather than the significant. So-called 'objective' indicators such as waiting times,treatment rates, examination successes, non-completion rates and the like are recorded,scrutinised and sometimes agonised over but the relationship with that they are attempting to measure often 'glossed over'. It is possible to see multiple 'displacement of goals' so well illustrated in Blau(1963) *'Dynamics of Bureaucracy'* in which over-adherence to the measures employed (statistics of numbers in jobs) could subvert the overall mission of the organisation (to provide a suitable match between vacancies on offer and candidates for employment). So 'the operation was a success but the patient died' may unwittingly become true in a host of publicly provided services in which the measure of the organisations success becomes more important than its fundamental objective.

3. Remove evident sources of dissatisfaction

A once-prevalent theory in industrial sociology was that associated with Hertzberg and his 'Motivation-Hygiene' theory. Succinctly, this stated that job satisfaction could be seen as a resultant of 'satisfiers' (factors conducive to job satisfaction) and 'dissatisfiers' (those factors not conducive). The removal of dissatisfiers did not necessarily increase satisfaction as such but evidently removed sources of discontent. Borrowing this concept and applying it to public services, it could be argued that more attention should be paid to removing those aspects of public service delivery that people find particularly irksome. To some extent, this was true of the 'Outpatients' case-study since previous findings had well documented the fact that long waiting times in clinics were a constant theme of dissatisfaction.

When we couple this argument with the observation from quality control circles that 90% of problems can be attributed to 10% of cases, then it is possible to construct a policy to remove those identified sources of dissatisfaction. This argument may sound unduly negative - even in the original Herzberg formulation the removal of 'dissatisfiers' does not necessarily increase the amount of satisfaction with the service. But it does remind policy makers that trying to increase the quality of services may well be thwarted if evident sources of dissatisfaction with the services on offer are allowed to fester.

4. Management by 'sample monitoring'

Tom Peters, the management 'guru' has advocated a policy of *Management by Walking Around* i.e. those charged with responsibilities should attempt to experience the realities of the organisations they manage by 'walking around' them. Although this idea sounds incredibly trite, it does form the basis of some quality control mechanisms within both the public and the private sectors. Hotels and restaurants are aware of the 'one bad meal' effect and are aware of the fact that one of their customers could be the anonymous inspector from a rating agency or a Hotel guide. In the public sector, too, Her Majesty's Inspectors of schools were encouraged to gather sense impressions of the schools that in theory they could visit unannounced. The independent Inspectorate of Prisons can perform a similar service for penal establishments.

One has to counterpose two ways in one one could judge the quality of a public service. On the one hand, there is the 'bureaucratic filter' in which, through a series of monitoring statistics,it is possible to gain an overview of the 'health' of a service. On the other hand, we have the less scientific but in many ways more intuitive approach in which services are monitored as they experienced by typical members of the public. The two approaches parallel a dilemma well known to methodologists. The 'scientific approach' relying upon statistical data may score highly on representativeness but loses out on the reality of the service as experienced by clients ('ecological validity'). But the alternative approach, relying heavily upon sample experiential monitoring, may be criticised for over- generalising from one or two, possibly unrepresentative, instances.

There is no reason why these two approaches should not be combined and when they are, the results may be highly unpredictable. After the publication of 'Hospital League tables' journalists descended upon some of the hospitals officially rated as not meeting the required standards of service but found that members of the public treated by those hospitals seemed as satisfied as patients treated elsewhere.

5. Using customer satisfaction surveys

Reference has already been made to the fact that customer satisfaction surveys are capable of manipulation (either deliberately or through poor design). The sampling methods are often poor and the quality of the data suspect. Nonetheless, there is no reason, in principle, why survey methods cannot be refined by the use of more focussed interviewing, to help to derive some indicators of quality.

There is some evidence that surveys can act as 'window dressing' and as an apparent attempt to consult the users of services without taking the results very seriously. The key to using customer satisfaction surveys could well be to place them in the hands of 'independent' consultants such as local universities rather than in the hands of local management themselves. In this way, there should be better control over the standards of sampling, treatments of non-response, quality of questionnaire construction and so on.

One of the problems of using a survey method to determine satisfaction is that of expense. If a survey is to be conducted according to normal scientific rigour, then recourse has to be had to methods of random sampling rather than quota sampling and the respectability of the results has to be bought at a price. The 'quick and dirty' types of survey do not cost so much to conduct, but neither do they command much respect. The providers of the service could be resentful of the amount of money spent on the monitoring function which could be better diverted to improving the quality of the service they themselves administer.

Evaluation of different approaches to quality maintenance

The thrust of recent British policy has concentrated on the first of these approaches and recent pronouncements have indicated that 'league tables are here to stay' But the 'league tables' will always have such a multiplicity of measurement problems that the comparability that they attempt to demonstrate is constantly jeopardised.

The case of the recently published 'Hospital League Tables' is a case in point. The Audit Commission attempted to achieve comparability in the data by refusing to grade with a star those aspects of service in which the data collection standards failed to achieve certain minimum standards. Immediately after the publication of the results, several anomalies came to light. Some hospitals who were upgrading computing facilities chose not to present data rather than presenting incomplete data and so received 'bad marks'. Another hospital's waiting times were made apparently worse because the Audit Commission insisted that an extra 2 minutes should be added to the average waiting time, this being the time taken from patients walking from the front door of the hospital to the reception desks of their clinics. Given also the management imperative to 'get as many stars as possible' then various data were undoubtedly selectively reported or 'bent' so as to present apparently favourable outcomes.

It could be argued that any of the alternative approaches outlined above might have generated better quality control mechanisms than the 'league table' approach. But from the viewpoint of the political machine, there are no 'headline figures' to report and the results are less easy to communicate in a populist fashion. The 'league table' approach to the monitoring of the quality of public services can be interpreted more as an instrument of crude political control than a genuine desire to report on the quality of services offered to the public. However, so far 'league tables' have been greeted with a certain amount of indifference by the public who prefer to accept the evidence of their own experiences rather than the more dubious public comparisons with which they are being bombarded.

The provision of 'league table data' may also be seen as providing the market with more information with which consumers can 'shop around'. If desirable goods (such as high quality hospitals, schools) are scarce then a rationing or allocation

system is inevitable. The provision of data, crude though it may be, is one way of trying to discern the debates over 'who gets what?' Put crudely, local catchment areas are liable to be the prime beneficiaries of such quality public services but the provision of more information may well enable more powerful social groups to claim access to such services. For example, popular 'high quality' schools should, in theory, be allowed to expand, whilst 'poorer quality' schools should wither on the vine. The full implications of these policies have not been modelled or even worked out in practice. But it is not difficult to conceive of a situation where overall quality declines as 'popular' services have to deal with uncontrolled expansion whilst 'less popular' services attempt to manage with a declining resource base.

The 'league table' approach conflates measurement and control of quality issues with the distributional questions of 'who gets what?'. A lurking suspicion must remain that the distributional questions are of more importance that issues of quality 'per se'. The fundamental issue of the measurement of the quality of public services cannot be addressed without much more sensitive monitoring and measurement than has been witnessed recently.

Further research could well concentrate more specifically upon ascertaining the views of patients concerning current waiting times. If a vast majority of them were to suggest that they were more concerned about getting quality of treatment and were not concerned about reductions in their waiting time if this were to be put at threat, then this may well give policy makers pause for thought. As it is, it seems that one of the greatest causes of concern i.e. the time between referral and the date of the first outpatient appointment is addressed only obliquely in 'The Patient's Charter' via Local Charter standards.So the strong possibility remains that the published standards relate to something which is real, measurable but not particularly significant. The evidence from Cartwright and Windsor (1992) as well as the thrust of questioning in the House of Commons Public Accounts Committee report (1991) indicate that the waiting time before first appointment is regarded as a much more serious issue by patients and by policy makers than the waiting times in the clinics themselves.

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Appendix 1

Table 5 : Statistical summary form (Leicester General)

```
Consultant: CONSUL_X  Month : AUG  [ File: CONSUL_X.AU!]
=======================================================

Labels [ID] of patients arriving 10 + minutes late
--------------------------------------------------

Record#  date       id
     1  05/08/92 466526
    32  12/08/92 169804
    33  12/08/92 487360

    N=   3   [ 9.1% ]

Arrival and appointment times for ambulance patients
----------------------------------------------------

Record#  date       id arrival appoint  mins_early
     1  05/08/92 466526   10.05   10.45        40
     2  05/08/92 485362   10.20   10.00       -20
     3  05/08/92 341846    9.55   11.15        80
     4  05/08/92 110734    9.55   10.00         5
     9  05/08/92 467548   10.00   10.00         0
    20  12/08/92  15070    9.45   10.00        15
    21  12/08/92 113684    9.55    9.30       -25
    22  12/08/92 341965   10.15   11.30        75
    23  12/08/92 484026   10.15   10.30        15
    24  12/08/92 484293   10.36   10.45         9
    29  12/08/92 348848    9.40    9.00       -40
    30  12/08/92  99437   10.14   10.00       -14
    31  12/08/92 486891    9.50   10.45        55
    32  12/08/92 169804    9.35    9.15       -20

Average arrival time BEFORE appointment   + 12.5 mins

    N=  14   [ 42.4% ]

Statistical summary
-------------------

Number of consultations:          33
Number of split consultations:    2  [6.1% of total]
Mean   waiting time (ALL):      11.8   mins
Median waiting time (ALL):      15.0   mins
Maximum      [id 467548]:         70  mins
Minimum:                         -60   mins
Mean waiting time (ambulance):  12.6  mins
Mean waiting time (non ambulance): 11.1 mins

T-Test of differences in waiting times =  0.141
[ NOT significant at 5% level ]

Mean consultation time [ALL]: 23.1 mins
Mean consultation time [New]: 57.4 mins   N=  5 [  15.2% ]
Mean consultation time [Continuing] : 17.0 mins   N= 28
                                        [  84.8% ]
```

Table 6 : Sample Report form (1) - Leicester General

```
WAITING TIMES  Complete data set       CONSUL_X.AU1

                                                Cum.
 Value label     Frequency  Percent      Percent

 Before time         10      30.3         30.3
 0 - 10 mins          4      12.1         42.4
11 - 20 mins          8      24.2         66.7
21 - 30 mins          2       6.1         72.7
-------------------------------------------------
31 - 40 mins          5      15.2         87.9
41 - 50 mins          2       6.1         93.9
51 - 60 mins          1       3.0         97.0
61 - 70 mins          1       3.0        100.0
               -------    -------
       TOTAL         33     100.0


        Before time  ■■■■■■■■■■■■■■■■■■  10
        0 - 10 mins  ■■■■■■■■   4
       11 - 20 mins  ■■■■■■■■■■■■■■■■   8
       21 - 30 mins  ■■■■■   2
       31 - 40 mins  ■■■■■■■■■■   5
       41 - 50 mins  ■■■■■   2
       51 - 60 mins  ■■   1
       61 - 70 mins  ■■   1

       Valid cases    33
```

Table 7 : Sample Report form (2) - Leicester General

```
WAITING TIMES  NON-DELAYED patients    CONSUL_X.AU8
             only

                                          Cum.
Value label     Frequency  Percent        Percent

Before time          9      30.0          30.0
0 - 10 mins          4      13.3          43.3
11 - 20 mins         8      26.7          70.0
21 - 30 mins         2       6.7          76.7
-------------------------------------------------
31 - 40 mins         4      13.3          90.0
41 - 50 mins         1       3.3          93.3
51 - 60 mins         1       3.3          96.7
61 - 70 mins         1       3.3         100.0
               -------    ------       -------
        TOTAL       30     100.0         100.0


        Before time  ■■■■■■■■■■■■■■■■■■   9
        0 - 10 mins  ■■■■■■■■■   4
        11 - 20 mins ■■■■■■■■■■■■■■■■■■   8
        21 - 30 mins ■■■■■■   2
        31 - 40 mins ■■■■■■■■■   4
        41 - 50 mins ■■■   1
        51 - 60 mins ■■■   1
        61 - 70 mins ■■■   1

       Valid cases    30
```

Table 8 : Sample Report form (3) - Leicester General

```
CONSULTATION TIMES   CONTINUING patients only   CONSUL_X.AU6

                                                    Cum.
  Value label      Frequency  Percent            Percent

 1 -  5 mins           3        10.7              10.7
 6 - 10 mins          10        35.7              46.4
11 - 15 mins           1         3.6              50.0
16 - 20 mins           9        32.1              82.1
21 - 25 mins           1         3.6              85.7
26 - 30 mins           0         0.0              85.7
31 - 35 mins           0         0.0              85.7
36 - 40 mins           3        10.7              96.4
41 - 45 mins           0         0.0              96.4
45 +   mins           1         3.6             100.0
                  -------    -------
         TOTAL       28      100.0


         1 -  5 mins  ████████   3
         6 - 10 mins  ████████████████████████  10
        11 - 15 mins  ████   1
        16 - 20 mins  ██████████████████████   9
        21 - 25 mins  ████   1
        26 - 30 mins  ▌   0
        31 - 35 mins  ▌   0
        36 - 40 mins  ████████   3
        41 - 45 mins  ▌   0
        45 +   mins   ████   1

        Valid cases    28
```

Table 9 : Sample Report form (4) - Leicester General

```
CONSULTATION TIMES   NEW patients only    CONSUL_X.AU7

                                          Cum.
 Value label     Frequency  Percent       Percent

 1 -  5 mins           0       0.0           0.0
 6 - 10 mins           0       0.0           0.0
11 - 15 mins           0       0.0           0.0
16 - 20 mins           0       0.0           0.0
21 - 25 mins           0       0.0           0.0
26 - 30 mins           1      20.0          20.0
31 - 35 mins           0       0.0          20.0
36 - 40 mins           1      20.0          40.0
41 - 45 mins           0       0.0          40.0
45 +   mins           3      60.0         100.0
               -------    -------
      TOTAL          5     100.0


        1 -  5 mins   ■   0
        6 - 10 mins   ■   0
       11 - 15 mins   ■   0
       16 - 20 mins   ■   0
       21 - 25 mins   ■   0
       26 - 30 mins   ■■■■■■■■■■   1
       31 - 35 mins   ■   0
       36 - 40 mins   ■■■■■■■■■■   1
       41 - 45 mins   ■   0
       45 +   mins   ■■■■■■■■■■■■■■■■■■■■■■■■   3

       Valid cases     5
```

→