IMPROVING OUTPATIENT CLINIC WAITING TIMES METHODOLOGICAL AND SUBSTANTIVE 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 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)

	_		found wait unreasonable
Less than 10 mins	3 11%	11%	2%
10 mins - < 20 mins	18%	29%	2%
20 mins - < 30 mins	s 16%	45% 	2%
30 mins - < 45 mins	s 14%	59%	10%
45 mins - < 60 mins	13%	72%	34%
50 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 half 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.

' The Patient's Charter' was published As as 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 establish methodological base for further to а sound 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 Fr	requency	Percent	Cum. Percent			
Before time 0 - 10 mins 11 - 20 mins 21 - 30 mins	18	12.3 8.2 12.3 15.0	20.5			
	13	13.2 5.9 21.4	78.6			
TOTAL	220	100.0				
WAIT_ Waiting Time -	10 minute	blocks				
Before time 0 - 10 mins 11 - 20 mins 21 - 30 mins 31 - 40 mins 41 - 50 mins 51 - 60 mins 60 + minutes	15 27 33 26 26 29 31					
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 10 clinics [March 1993] Cum.				
Value Label	Frequency	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		
1 - 40 mins	29	10.0	92.8		
11 - 50 mins	13	4.5	97.3		
1 - 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

Before time 44 0 - 10 mins 80 11 - 20 mins 61 21 - 30 mins 56 31 - 40 mins 29 41 - 50 mins 13 51 - 60 mins 3 61 - 70 mins 1 71 - 80 mins 1 80 + mins 3

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 < PAS generated
DATE < Recorded manually
Patient Label < PAS generated
ID
Last Name
ARRIVAL TIME < Recorded, for later analysis if needed
AMBULANCE YES NO < Arrive by AMBULANCE (Circle YES or NO) or not ?
APPOINTMENT < Appointment time
CONSULTATION START < Time when FIRST seen by consultant
CONSULTATION END < End of FIRST session (1)
CONSULTATION START < Time when seen AGAIN by consultant
CONSULTATION END < End of SECOND session (2)
OTHER DEPT. ATTENDED YES NO < Needed to visit (Circle YES or NO) other department ?
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 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 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 The data files were then used to consultants. statistical reports on a monthly basis. Use was made of 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 ambulance service, 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 The time when first seen by a consultant is START/END (1) 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 DEPT.

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

study by Pearson (1992) revealed the complexity of arrangements that often had to be made in order for people to attend outpatients clinics. A journey of some $1\frac{1}{2}$ -2 hours was not uncommon, involving perhaps two bus journeys and a waiting period in between. Under these circumstances, may seem unduly insensitive to it remind people of the necessity to adhere to appointment times but the possibility letter could yield that diplomatically worded remains a 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

easily understood information (numbers and the forms of in 10 minute blocks). As well as the global percentages 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 'pure' (non ambulance, non-late, non-other regarded as 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 represented the global figures less those who were 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 is an 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 was 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.

A checklist for clinic organisation

Although no two clinics are exactly alike, lessons may be learnt both by studying the data from one's own clinic and

learning from the experience of others. The following checklist helps to ensure that relevant factors are not forgotten:

Consultants

- Are there sufficient consultants/ junior doctors for the clinic ?
- Are they all able to start on time ?

 (Otherwise reorganise the clinic start times)
- Are the patient records both available and prioritised (those requiring attention by the consultant, preconsultation tests) ?

Arrivals

- Is there any 'bunching' apparent
 (are patients arriving 'early' to beat the system ?
 or late because of appointment time ?)
- Are DNA's / 'Extras'/ Lates recorded and investigated ?
- Is there a monitoring of transport arrangements provided by

the hospital, ambulance service, public transport, private transport that impacts upon clinic arrival times ?

Surveys

- Evidence from your own surveys of number, length and timing of pre-consultation visits (X-rays, blood tests) ?
- Length of consultation for both new and for continuing patients ?
- Are the lengths of the 'queue' monitored for bottlenecks ?
- Are clinic start and end times monitored ?

Tests (pre-consultation)

- Have pre-consultation 'slots' been organised with the appropriate department (e.g. for X-rays) anticipating that outpatients will (probably) require them or do outpatients have to compete with all other patients for resources ?

- Have patients been told that they may require further tests

The mnenomic C.A.S.T may be a useful reminder of some of the issues to be borne in mind. Many of these considerations are discussed in the Department of Health's 'Queue Action' (1992) where many practical suggestions are made for the evaluation and reorganisation of outpatient clinics. Not least, a sample 'Patient Tracking Form' and a 'Clinic Organisation Form' are included and if adhered to nationally would bring a degree of standardisation across the country.

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 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, provision of children's play areas and wall murals, the provision of new signposting and toilets and the access for the disabled was improved. 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 a result of these environmental changes, As patients appreciated the significant improvements, in tune with rising outpatient expectations with the service. 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 set standards of performance that are reflected in quantitative already terms. The research quoted shows that dissatisfaction with waiting times clinics in was the greatest single cause of concern. It comes as no surprise that the standard of performance in outpatient clinics should 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'

quote illustrates a point which, hitherto, has This received little attention. Does the subtle 'pressure' upon in the consultants to reduce average waiting times towards slightly incline them 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.

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. the strong So 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
                                                       -20
           2 05/08/92 485362
                                 10.20
                                            10.00
           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
20 12/08/92 15070 9.45
21 12/08/92 113684 9.55
22 12/08/92 341965 10.15
                                            10.00
                                                        0
                                           10.00
                                                      15
                                            9.30
                                                       -25
                                           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
32 12/08/92 169804 9.35
                                                      55
                                           10.45
                                           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]
                                        : 11.8 mins
     Mean waiting time (ALL)
     Median waiting time (ALL)
                                       : 15.0 mins
                                         : 70
     Maximum
              [id 467548]
     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	CONSUL_X.AU1			
Value label	Frequency	Percent	Cum. Percent	
Before time 0 - 10 mins 11 - 20 mins 21 - 30 mins	10 4 8 2	12.1 24.2	30.3 42.4 66.7 72.7	
31 - 40 mins 41 - 50 mins 51 - 60 mins 61 - 70 mins	5 2 1 1	6.1	87.9 93.9 97.0 100.0	
TOTAL	33	100.0		
Before tim 0 - 10 min 11 - 20 min 21 - 30 min 31 - 40 min 41 - 50 min 51 - 60 min 61 - 70 min	ns 4 ns 8 ns 2 ns 5 ns 1			
Valid cases	33			

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

WAITING TI	MES	NON-	-DELAYED pati	ents	only	CONSUL_X.AU
Value	e la	abel	Frequency	7	Percent	Cum. Percent
Befo	ore	time			30.0	30.0
0 -	10	mins	4			43.3
11 -	20		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
TOTAI	L		30		100.0	
		В	efore time	9		
		0	- 10 mins			
		11	- 20 mins			
		21	- 30 mins			
		31	- 40 mins	4		
		41	- 50 mins			
			- 60 mins			
		61	- 70 mins	1		
		Va	lid cases	30		

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

CONSULTATION TIM	MES CONTINU	ING patients only	CONSUL_X.AU6	
Value label	Frequency	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	
	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 1	.0		
11 -	15 mins	1		
16 -	20 mins	9		
21 -	25 mins	1		
26 -	30 mins	0		
	35 mins	0		
	40 mins	3		
	45 mins	0		
45 +	mins	1		
Valid	cases 2	28		

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

CONSULTATION TI	MES NEW pa	tients only	CONSUL_X.AU7	
Value label	Frequency	Percent	Cum. 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	d cases	5		