**Title:**

**Do We Require Initiatives to Reduce Ophthalmic Outpatient Waiting**

**Lists?**

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**Summary:**

A five week outpatient initiative aimed at cutting the waiting list for Ophthalmic new patients is described. The cohort of 317 patients were examined qualitatively to help determine how future Ophthalmic resources might be directed. Cataract was the most frequent diagnosis. 1 in 5 new referrals were listed for surgery and only 12% of patients needed follow-up appointments. 10% of referrals suffered from conditions that could potentially lead to irreversible visual loss. A third of referral letters had inaccurate diagnoses suggesting that grading waiting times on the basis of referrals letters is unsatisfactory. 18.6% failed to attend their appointments. These patients were contacted and subsequently seen to ascertain the cause of their non-attendance and their diagnosis. No significant difference was found between the non-attenders and the attenders in relation to their diagnoses or subsequent management. The mean waiting time for a routine outpatient appointment for a new referral in England was 21 weeks (Range 0 - 179). The mean Inpatient waiting time for England was 28 weeks giving a mean total waiting experience of 53 weeks (Range 3 - 82). This outpatient initiative effectively reduced the waiting time from 38 weeks to 2 weeks and by removing the backlog of patients the outpatient waiting time was maintained at 8 weeks over the following year and total waiting experience to 20 weeks.

## Introduction:

Ophthalmology is a speciality with a heavy outpatient commitment: currently in many departments both outpatient and inpatient waiting lists are increasing. The Department of Health collects information on national inpatient waiting times, through the Kohner reports, but to date there is no uniform method of reporting outpatient waiting lists. In 1984 the BMA published a survey demonstrating an average increase in outpatient waiting times for all the major specialities in England and Wales (1983-1984) with a 39% annual increase in Ophthalmology[1]. These results were reviewed by the Health Services Management Centre in Birmingham[2]. They assessed both maximum and minimum waiting lists and found an overall national increase of over 20% per annum in Ophthalmology, with a wide variation between districts. Nationally the average wait for an outpatient appointment was around 12 weeks in the early 1980's[1], and this has increased as expected to the present 21 weeks. Methods of reducing this increase need to be investigated.

St George's Hospital has an Ophthalmic unit similar to that of a District General Hospital and in 1989 the average wait for a new referral to the outpatients was 28 weeks. The visual morbidity caused by such a wait is unknown. An outpatient initiative was undertaken to try to reduce this waiting time. From this cohort of patients the patterns of referral, diagnosis and management were recorded. The results provide useful information for planning future Ophthalmic services at St George's and possibly other District General Hospitals.

## Method:

St George's Hospital provides Ophthalmic care for the Wandsworth population of 188,200. In addition it absorbs patients from the surrounding areas making an effective catchment

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population of 334,600. At the start of the drive there were 317 new patients on the outpatient waiting list (GMT's firm) making a waiting time of 28 weeks for a clinic appointment. Emergencies and children were seen in specialised clinics and are not included in these figures. For five consecutive weeks one general clinic session was delegated to seeing only new patients. One extra clinical assistant, three part-time nurses and six extra hours of secretarial time were funded by the hospital. The total cost of this was £801.75 comprising of £391.65 for Nursing staff, £176.70 for Secretarial time and £233.40 for Clinical assistants. To prevent a build up of further clinic visits, cases were investigated as fully as possible at the first visit and any patient not requiring active treatment was discharged. 10 patients were allocated to each doctor per session. Data was collected on a short questionnaire by the Ophthalmologists. Those that did not attend (DNA) were contacted by telephone to ascertain the reason for the non-attendance and to make arrangements to see the patient again. Where a patient went to another hospital, the details of the diagnosis was obtained. It is known that some Regional Health Authorities (RHA) collect data on outpatient waiting times and they were asked to supply details of the waiting time for a non-urgent appointment for each clinic of the hospitals in their region.

## Results:

317 new patients were given appointments but only 258 attended making a DNA rate of 18.6%. The time interval from the date on the referral letter to when the patient was seen in clinic ranged from 10 days to 37 weeks, average 13 weeks. By the end of the drive the wait for an appointment was reduced from 28 to 2 weeks. Referrals from an Optician are authenticated by a GP before being forwarded to the hospital. There was an average delay of 25 days between the date on the Opticians letter and that of the GP's, the maximum being 300 days - this patient presumably did not think his referral urgent and so delayed forwarding his letter.

## Pattern of Referral:

The age distribution of the referrals shows a higher proportion of the elderly as compared to the general population in the Wandsworth Health Authority, Figure 1. The female to male ratio was 5:3. Referrals were from three sources; 55% (141) direct from a GP, 27% (69) from an Optician via a GP and 19% (48) from within the hospital; the three main referring specialities were Diabetic Endocrinology, General Medicine and Neurology.

The diagnosis as stated on the referral letter was compared with that made in the clinic. GP's were correct in 57% of cases, Opticians in 60% and hospital referrals in 33%. Only 6 out of 15 cases of glaucoma were diagnosed correctly in the referral letter, all of which had been made by an Optometrist, and a retinal detachment was misdiagnosed.

## Pattern of Management:

Of the 258 patients seen, 327 diagnoses were made, some patients having more than one ophthalmic condition (Figure 2). Cataract was the most frequent diagnosis and of these 49% (43) were listed for surgery. 13% (34) patients required orthoptic assessment, including visual field testing, and this was performed during their initial clinic visit. Figure 3 shows the management plans made for this cohort of patients. Only 12% (32) of patients required outpatient review; the rest were discharged (61%), listed for surgery/laser therapy (29%), or referred for further medical opinion (5%). As a result of this drive the inpatient waiting list was doubled from 10 to 20 weeks but this was reduced to 12 weeks over the following year.

## Non-attenders:

A constant problem amongst all clinics at St. George's is a high non-attendance rate. Appointments were given no more than six weeks in advance and over half the patients were asked to confirm their intent to attend. The 59 patients who failed their appointments were

contacted by one of the authors and the reasons for non-attendance are shown in Figure 4. 50 of these patients were then subsequently seen, 5 had died and 4 were uncontactable. The spectrum of diagnoses is shown in Figure 3 and were not significantly different from those keeping their appointments (p=0.3). There was however a higher proportion of Diabetic patients among the DNA's (16% verses 3% for attenders). A similar proportion of patients could be discharged and the management decisions were not significantly different between the two groups (p=0.2).

**Discussion:**

Our overall impression was that this initiative was both a cheap and practical way to reduce an outpatient waiting list. The clinics were run efficiently with the extra nursing staff and the overall high morale. Doctors spent less time doing administrative work than usual, eg. form filling, and so were able to investigate their patients more thoroughly. Duncan et al[4] demonstrated this effect in a urology clinic; 45% of the consultant's time was spent doing avoidable administrative work and if this was reduced to 20%, they predicted 25% more patients could be seen in a given time. From our cohort of patients it can be seen there is a disproportionate representation of the elderly; nearly half the patients were over 65 years compared to a sixth of the local population. This is in agreement with Donaldson et al's 1989 census of Ophthalmic outpatients in the Northern Regional Health Authority[5]. This age group of the population is expected to grow by 2.4% as a whole by the year 2001[6] and it is predicted there will be a parallel increase in the outpatient workload. This is of relevance in planning future outpatient facilities and anticipating the type of patient referred.

There is a fear that patients may suffer from irreversible loss of vision while waiting for their appointment. In this series 10% of patients were judged as having conditions (including Glaucoma, Diabetic Retinopathy, Vein Occlusions or Retinal Detachment) that could, given time, lead to an irreversible deterioration of vision. To combat this problem some units allocate appointments by giving priority to those patients referred with seemingly urgent

complaints. We found that the accuracy of diagnosis as stated in the referring letter was ambiguous or incorrect in at least a third of cases suggesting this is an unsound method for predicting those patients in need of early attention. This practice could also lead to medicolegal problems[7] and a preferred method must be to cut the total outpatient wait and see all patients promptly.

1 in 5 of the new patients seen was listed for major surgery. The College of Ophthalmologists quote a figure of 1 in 20[8]. This latter ratio is calculated from the total number of outpatients, (both new and old), and is therefore lower. Since the number of return visits made varies between units, the ratio quoted for new patients alone is probably more accurate for planning purposes.

It was feared that this initiative would result in an increase number of follow-up appointments, saturating our outpatient resources. This did not happen in practise because by investigating a patient's disease as fully as possible at their first consultation, and discharging all those not requiring active treatment, only 12% of referrals needed return visits which were easily accommodated. Once the backlog of patients on the waiting list had been seen it was possible to maintain the outpatient waiting list time at 8 weeks over the next year (figure 5) while the inpatient waiting time was reduced to 12 weeks. This is with the normal staffing levels despite an 8% annual increase in new patient referrals. This has been achieved by continuing the weekly new patient clinic and improved work patterns.

The DNA rate (18.6%) was higher than the average rate for general Ophthalmic clinics at St. George's (14.2%). The national ambulance dispute and an influenza epidemic had some effect, but a significant number of patients said they had not received their appointment or forgot. The failure rate would probably be reduced if all patients were required to confirm their intent to attend. Bigby et al[9] found that if the DNA rate was more than 5%, a computer generated reminder letter was cost effective and significantly improved attendance. It has

been suggested that patients failing to attend suffer from less serious complaints than those who keep their appointments[10]. This was not the case in this series. A similar proportion of patients required treatment in the two groups ( 59% in the non-attenders versus 57% in the attenders) 85% of the DNA's requested a further appointment and clearly it cannot be assumed that they suffer from trivial complaints.

A patient's wait for hospital treatment depends on both the outpatient and inpatient waiting times. This data is not collected by all regions and as Mordue et al[11] described can be evaluated in various ways. Our study used a retrospective method. This has the disadvantage of excluding those patients still on the waiting list or pre-emptying their appointments by being admitted as emergencies, but has the advantage of providing qualitative information on the spectrum of referrals. In England 10 out of the 14 Regional Heath Authorities now collect data for outpatient waiting times. These figures are currently being collected by the Institute of Health. By combining these outpatient waiting times with the inpatient waiting times[12] the total waiting experience can be calculated for 10 of the 14 Regions (table 1) for 1990. Figure 7 illustrates the wide variation in waiting times between districts which is greatest in the total waiting experience.

**Position of Table 1**

As a result of this Outpatient initiative the total waiting experience was reduced from 38 weeks to 20 weeks which is well below the national average of 53 weeks. An Outpatient initiative is one way in which a waiting list can be reduced quickly. Though the inpatient waiting times will be increased at least those requiring urgent treatment will have been seen and other measures can then by made to reduce the inpatient waiting time and so reduce the overall waiting experience.

To conclude, our results show that 10% of patients on an ophthalmic waiting list are at risk of developing irreversible visual loss and so efforts must be made to reduce outpatient waiting lists. With minimal expenditure an outpatient initiative effectively reduced the waiting list time. Though initially it did result in a longer inpatient waiting list, 1 in 5 patients being listed for surgery, these patients have an accurate diagnosis and should not be at risk of irreversible visual loss. We feel that the practise of giving some patients priority on the basis of their referral diagnosis is unsound and not supported by our results. The high failure rate of attendance may be reduced by requiring patients to confirm their wish to attend the clinic and by sending computer generated reminder letters.

## Acknowledgements:

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**Figure 1:** Histogram of the ages of the study group of 317 patients. The superimposed line graph represents the age structure of 188,200 residents of Wandsworth Health Authority in mid-1988[3].

**Figure 2:** Pattern of diagnoses made in the clinic. 327 diagnoses were made on those who attended while 64 diagnoses were subsequently made on those who failed to attend. (Chi-squared P=0.2)

**Figure 3:** Pattern of management decisions made in the clinic for the 258 attenders and 59 non-attenders. Major operations required full inpatient assessment whereas minor operations were carried out in the outpatient operating theatre (Chi-Squared p=0.3).

**Figure 4:** Reasons obtained by a telephone enquiry for patients non-attendance.

**Figure 5:** The waiting time for an outpatient appointment for a routine new patient refral to GMT's firm before and after the outpatient drive.

**Figure 6:** Summary of the waiting times for a routine new out-patient appointment in Ophthalmology from a survey on 312 clinics in England. Data compiled from 10 or the 14 Regional Health Authorities.

**Figure 7:** Histogram illustrating the wide variation in waiting times between districts in 10 of the 14 Regions. The total waiting time represents the length of time a patient with a cataract would have to wait, once referred by the General Practioner, until the operation is performed. This time is made up of the Outpatient and Inpatient waiting times.

April 1983 — April 1984   201 H District
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ophhd — 107 (72% ↑ wait-list-time. c average inc 60%)

72% showed an inc c average inc
being 60%

surgical spec ↑ 20%.

Health + personal Social
Services statistics for England
1989 ed.

1 + MSO

Table 1.4   1991 projected POP R/t Areas
                              mid 2000
England — 47,899              all
                              49,649

mid 1991
   05+ 7,594
   96 — 7,711
   2000  7,753