



REDUCING WASTE OF OUTPATIENT APPOINTMENTS IN THE EYE UNIT, 2020

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Background: The team had a hunch that there were a large number of appointments being wasted in the department. Outpatient appointments have a high carbon footprint and it is a strategic priority in the NHS to minimise the waste of outpatient services including preventing non-attendance at appointments¹ and making sure that appointments are only offered if they add value² are key practice and policy areas.

Aim: To reduce the number of wasted appointments in eye outpatients and to reduce negative environmental, economic and social impacts whilst maintaining good clinical care.

Approach:

Studying the system: Staff were successfully engaged through having face-to-face communication with all staff prior to the start of the project and the presence of a Green Ward team member in all clinics to aid continued motivation.

Baseline data was collected over two weeks from 14/10/2019 – 25/10/2019 within the paediatric ophthalmology unit. Eligible episodes included

- a child 'was not brought' (WNB)
- adult 'did not attend' (DNA)
- a patient was booked into the incorrect clinic
- a patient cancelled on the day of their appointment.

A total of 306 patients had booked appointments in the Paediatric Ophthalmology Unit over the 2 weeks of data collection and of those 29 patients (9.5%) were identified that met the criteria. For each reason missed appointments were designated as 'avoidable' or 'unavoidable' to help to inform the design of the improvement effort.

A grand total 23 appointments (7.5%) were avoidably wasted and 6 (2%) were unavoidably wasted. Over 1 year, based upon this data a forecast total of 7,956 appointments would be booked, of which 597 would be avoidably wasted. The baseline data was interrogated in more detail to reveal the



reasons for the wasted appointments. Improvements were chosen to address the more frequent, avoidable problems identified that were within the sphere of influence of the team.

Issue	Number of slots affected	Likely reason	Intervention implemented
Patients booked into the wrong eye clinic	2	A high number of different clinics with corresponding abbreviations that clinicians use; these differ from the clinic codes used by administration staff to book clinics on the IT system.	Revised front sheet for clinicians to indicate which clinic the patient should be seen in; this will use clinic codes rather than abbreviations making it easier for the administration staff to know which clinic to book and reduce errors.
Duplicate bookings	2	Current booking protocol (in place to prevent duplicate bookings) not being followed by all administration staff.	Liaise with administration team lead to help insure that all admin staff check for existing appointments as part of the booking process.
Patients cancelling on day	6	Send effective reminders with request to let hospital know if they cannot attend.	Change to clinic letters to reiterate importance of cancelling clinic with advance notice if possible and reminder of pressure on clinics. Planning to implement text reminder service to all clinics (currently only letter or telephone reminders).
Patients tried to cancel but unable do so.	2	Test of booking lines could be carried out (e.g. to check if patients can get through easily).	Awaiting action.
Patient moved away or discharged	2	Is there a particularly mobile population?	Consider mechanism for keeping up to date with patient details and follow up plans. Awaiting action.



The actions above would address 15 of the 23 avoidably wasted appointments. 2 interventions were implemented during the project addressing the cause of 4 of the 23 avoidably wasted appointments.

The greatest problem was patients cancelling on the day. A text message reminder service introduced at Barts Health¹ that used messaging around the financial cost of missed appointments on the health service reduced missed appointments by 23%. If this effect was replicated in Bournemouth Hospital then 137 fewer appointments would be wasted with the potential to reduce the waiting lists.

Results:

Data on the impact of these interventions is not yet available. However, if the interventions were 50% effective, we could prevent wastage of 2 appointments per week, or 104 appointments per year. We can therefore **forecast annual savings of 2,396kgCO₂e and £6,812**. As the numbers are very small it is difficult to forecast with accuracy; more data is needed.

Financial benefit

The hospital has a block contract for eye outpatients so wasted appointments result in loss of productivity and capacity, increasing waiting times rather than resulting in direct financial loss. However, a financial value is assigned to appointments.

It was calculated that avoidably wasted appointments cost £1,409 in the 2week period. Over a year this would amount to £36,634. If 50% of wasted appointments could be saved this could amount to a forecast £18,317 in savings.

Financial cost to patients in parking charges on avoidably wasted journeys was £3.55 over 2 weeks; forecast as £92.30 over 1 year

Social sustainability: Impact on relationships and networks for patients, staff and the wider community

Staff: fitting extra patients in to already busy clinics may increase pressure on clinicians, 2-3 minutes of clinician staff time calling WNBs (4 in the 2 weeks of data collection) and perhaps 5 minutes of admin staff time rebooking WNBs/cancellations for each patient. Wasted appointments may have a positive impact of giving clinicians time to carry out other tasks. As a consequence of fewer missed appointments, clinicians might need time scheduled elsewhere for management/clerical tasks that they fit in when patients do not arrive.

Patients: often need to miss school or work to attend appointments so if they are booked in unnecessarily that can be highly disruptive for them. 1 patient who had a wasted journey was driven to the hospital by her partner, wasting their time, though with no impact on employment

Clinical outcomes: Whilst no specific poor clinical outcomes were identified it is possible that delayed appointments can lead to delays in treatment for what can be vision threatening conditions in children. Other ocular conditions can cause symptoms such as eye pain, irritation and double



vision. All of these can be corrected with appropriately timed investigation and treatment so anything that delays this can be clinically significant and effect a patient's quality of life.

Qualitative data from staff gathered using a structured survey revealed themes of:

- **Learning:** ○ about their service through carrying out the project; including that the problem they had with wasted appointments was not as bad as the team thought before they gathered the data!
 - Carbon footprinting skills applied to healthcare to allow environmental impacts to be measured.
 - Understanding of what sustainable healthcare looks like in their department. • **Change:**
 - Taking small steps towards changing the service was easier than anticipated.
- **Job satisfaction:**
 - Enjoyment of the process of the competition and working on an improvement project.
 - Glad to be able to make their service even better.
 - Enthusiasm for carrying out more improvement projects in the future.
- **Team building:**
 - The clinical teams approached the administration team to work together on this project and collaborated effectively, discovering common goals. Prior to the project the clinical and administration teams did not work together. The clinician team overcame their initial concern that raising the issue of wasted appointments could be seen as a criticism of the administration team, but they handled the conversations well and relationships were improved.

Quotes from staff about the experience of being involved in the Green Ward Competition

'I was very enthusiastic about this project from the beginning but was not prepared for what I would learn about our system here. I was pleasantly surprised that we found some potentially easy solutions or at least relatively simple things to implement. I have learnt how to calculate a carbon emission. I feel more enthusiastic about doing further projects in future.' **Kate Bush, Consultant Ophthalmologist.**

'I was positive about taking part in the project from the start and was pleased that the proposed problem regarding wasted appointments was not as bad we had initially thought. It was also great that...we... managed to put some solutions together to make it even better. I enjoyed the process, learning more about sustainability, its impact and how we [can apply sustainable healthcare principles to the] ophthalmology services.' **Henrietta Holmes-Smith, Deputy Head Orthoptist**

'I really enjoyed taking part in this project and found the results very interesting. I was surprised by the amount of different ways sustainability can be improved within our ophthalmology service. Initially, I didn't consider the greater impact of incorrectly booked and missed appointments.' **Charlotte Smith, Orthoptist**