

QEye Project –Leicester medical students’ quality improvement project in ophthalmology outpatients.

Author: Dr Angie Doshani Sponsor: Medical Director

Trust Board paper D

Executive Summary

Context

The ophthalmology outpatient clinic of the Leicester Royal Infirmary (LRI), a university teaching hospital, sees 53,000 patients every year.

17 third year medical students as part of their Special skills module formed the QEye Team to help the ophthalmology department in identifying areas of improvement needed and implementing change where feasible in the short 12 day program.

This is a unique program run with the Leicester Medical School, which gives students the opportunity to learn about QI methodology and implement change in practice.

The team worked with Paula Eddy matron, Sophie Snelson (nurse in charge of out-patients) nurses, nurse assistants (NA), James Dean Head of Service, registrars, reception and administrative staff in the department.

The students divided themselves into 4 groups to address the following areas:

1. Improving Patient Flow in the outpatients
2. Improving the communication patients receive prior to their visit to outpatients
3. Improving the signage to the area
4. Acting on Results.

The following is a brief description of each of the projects

They have been accepted as posters at the International Forum on Quality and Safety (IFI/BMJ) London April 2017.

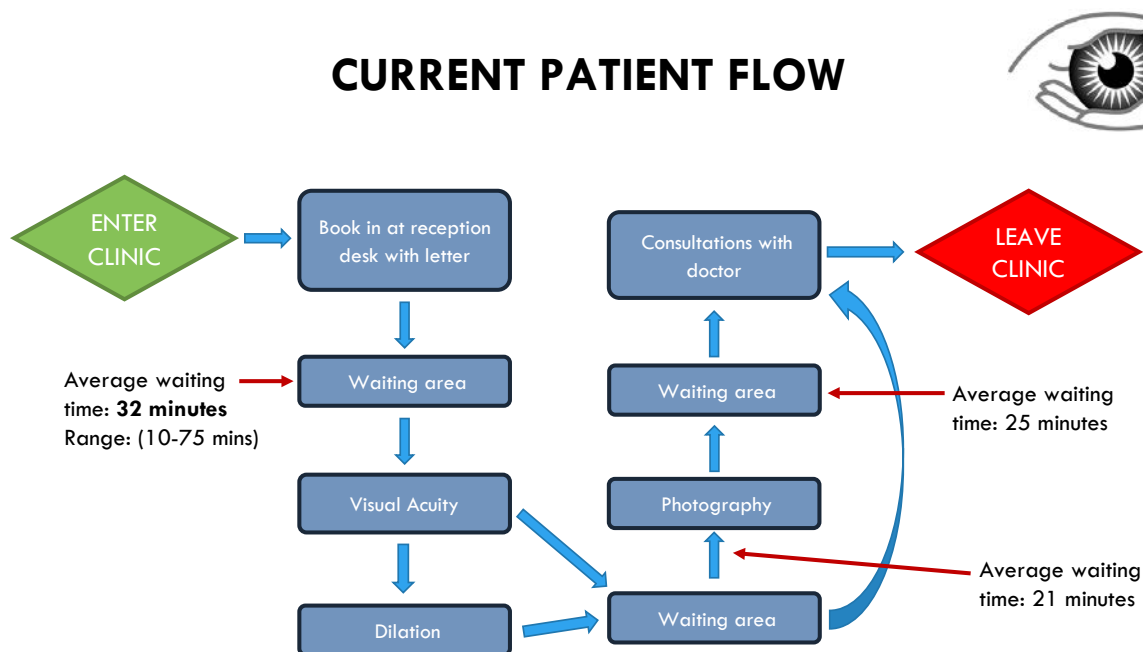
This paper was also presented to the February 2017 UHL Executive Quality Board.

1. Improving Patient Flow in Leicester Royal Infirmary Ophthalmology Outpatients

The ophthalmology outpatient clinic is an extremely busy department, and patient flow is a particular problem. At peak times patients often have to stand, as seating is very limited, and they can expect to spend up to four hours in the clinic. Communication between staff and patients has also been a problem, and has led to prolonged patient waiting times.

To measure the extent of the problem of waiting times, the students followed a number of patient journeys. They measured the time from when they entered the clinic to when they left, also including the times each of the tests or consultations took place. This effectively split the waiting time into sections which were then used to ascertain if there was a bottleneck at any point.

They surveyed a number of patients to assess whether patients were arriving too early for their scheduled appointments, leading to increased waiting times and overcrowding.



Findings

- Visual acuity was identified as a bottle neck area with the longest waiting times
- This test was carried out by HCAs
- These HCAs also had other roles/activities that they were required to perform in addition to the test.
- Patients tended to arrive on an average 22min to an hour prior to their appointment

Interventions/Suggestions

1. Change process of assessing visual acuity, by making it a continuous flow of patients as they arrive. Two NAs dedicated to assessing visual acuity.
2. Triple approach to prevent early arrival:
 - posters outside the clinic
 - receptionists actively turn away early arrivals
 - indication in the appointment letter
3. Assign patients a number card in the clinic, aiming to improve efficiency and flow through the clinic. Patients referred to by number and name.

Eye Casualty and Rapid access eye clinic

The students with the support of the nurses in eye casualty, reviewed patients attending the eye casualty and estimated on the given day 40% of the patients who were seen were not using the appropriate service, and that 10 of the 74 patients seen that day were even turned away from the department. It was also found that patients were overestimating the severity of their symptoms, resulting in incorrect self-referrals.

The ophthalmology department is introducing a new rapid access clinic, which intends to treat patients who have immediate but non-emergency needs. This new facility would be a fantastic opportunity to ensure that the GPs, opticians, other community services and patients are clear on what each service within the department provides.

To inform the wider community of this, the students developed posters to highlight common symptoms and those that require urgent referral.

2. Improving the communication patients receive prior to their visit to outpatients.

The aim of this project was to gauge patient perception about the quality of correspondence they receive from the Department and, if necessary, propose improvements to facilitate smoother patient flow and experience.

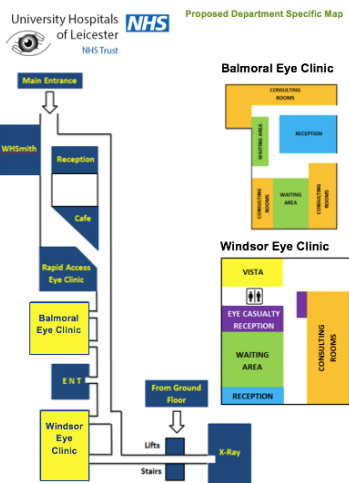
Findings

- 1) Some patients found appointment letters difficult to read and most felt that key information as missing.
- 2) The map of the hospital was too small and confusing.
- 3) The department required an appointment card for new Rapid Access Clinic.

Interventions

1. Under guidance of Vista, the letter was reformatted to improve ease of reading. The font and enlarged and key information was split from block text into bullet points.
2. A 'Frequently Asked Questions' document in response to patient feedback was devised.
3. The hospital map was redesigned to focus on the relevant area of the hospital.

4. A simple appointment card for the Rapid Access Clinic was designed using recommendations from Vista.



3. Improving Signage in the clinic area

To appraise the situation, the students assessed the route to the ophthalmology department from the main reception. They found it difficult to navigate and had to ask the main receptionist for directions who mentioned that many ophthalmology patients had the same problem. This suggested that the signage was both inadequate and sometimes unsuitable. To understand the extent of the problem, they conducted a questionnaire which showed that 12 out of 23 people finding it 'hard' to do the same on their first visit.

Another problem they identified was the inability to differentiate between two reception desks. This meant that patients would end up queuing up in the wrong area to be told to re-queue in another one.

They also reviewed the current Art work in the clinical area and sought opinion of patients and staff attending the clinic. They have developed some design ideas with the De Montfort Art Department, which will feed into the UHL Art Strategy.

Intervention

The students focused on improving the signage to the eye clinic, particularly individuals suffering from visual difficulties. This will help streamline patient flow and improving patient experience. In consultation with Vista it was felt that appropriate signage for visually impaired patients should be on a yellow background with black, bold, Arial font with the standardised UHL eye logo.

This has been implemented in both the eye clinics at UHL.

4. Acting on results

After a routine appointment, patients often have further CT and MRI scans requested. The problems the students encountered were:

1. Patients attending follow-up appointments without tests results available
2. Patients with normal test results attending follow-up appointments
3. Patients with abnormal test results are not followed up appropriately

Intervention

The students proposed the following processes to improve the acting on results.

1. Patient database:
 - To centralise patient demographics, diagnosis and tests into an accessible and easily updatable database
2. Patient card:
 - The card includes the date of the next appointment and tests the patient needs to have before that appointment. Providing patients with a phone number allows them to chase their appointments.
3. Amend the current 'Patient Outcome Form':
 - Made the current form more user-friendly and added a section where clinicians could indicate if patients are suitable for virtual clinics.
4. Implementation of virtual clinics:
 - Virtual clinics allow tracking patient results without them attending the department.



UNIVERSITY OF
LEICESTER

University Hospitals of Leicester
NHS Trust



QI: OPHTHALMOLOGY OUTPATIENTS

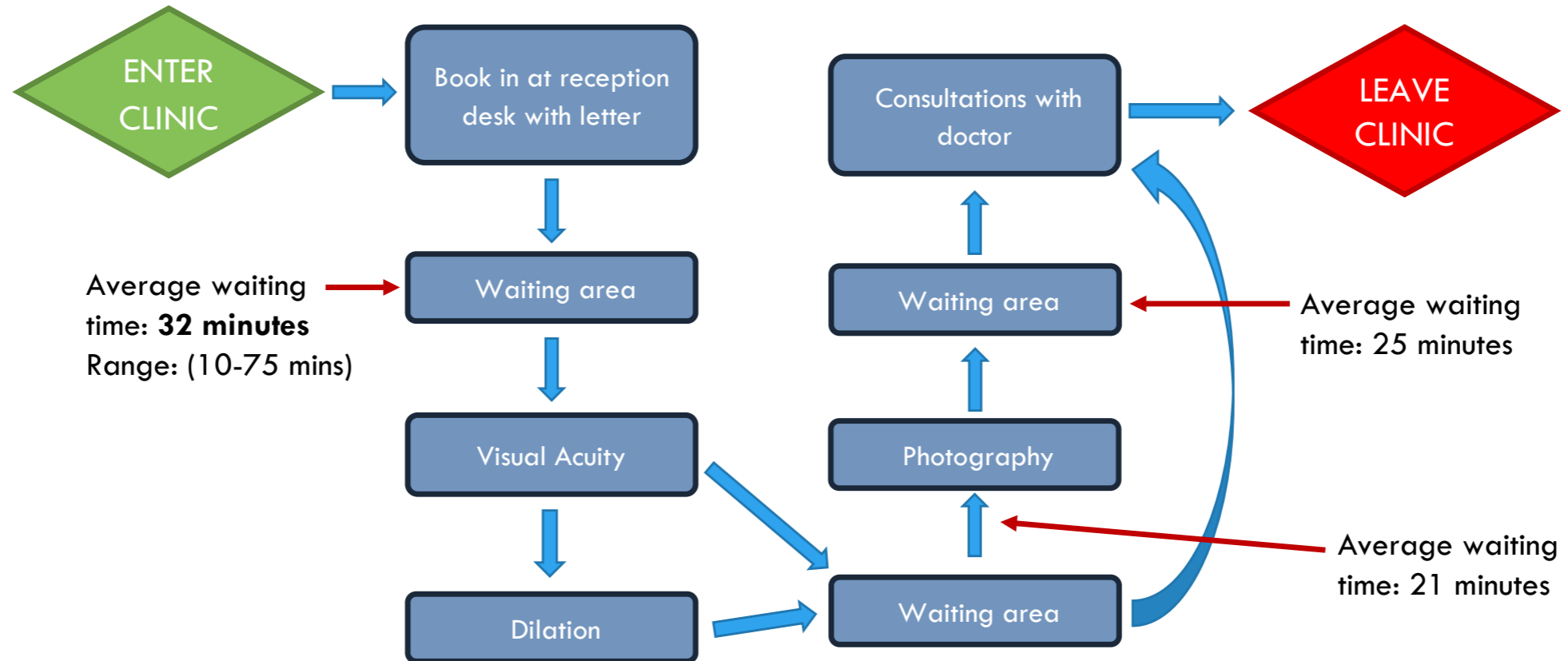
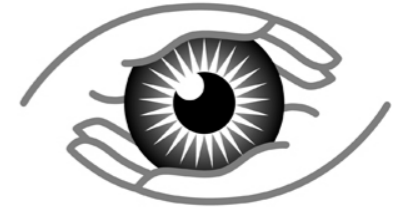


Leicester Medical School

November 2016

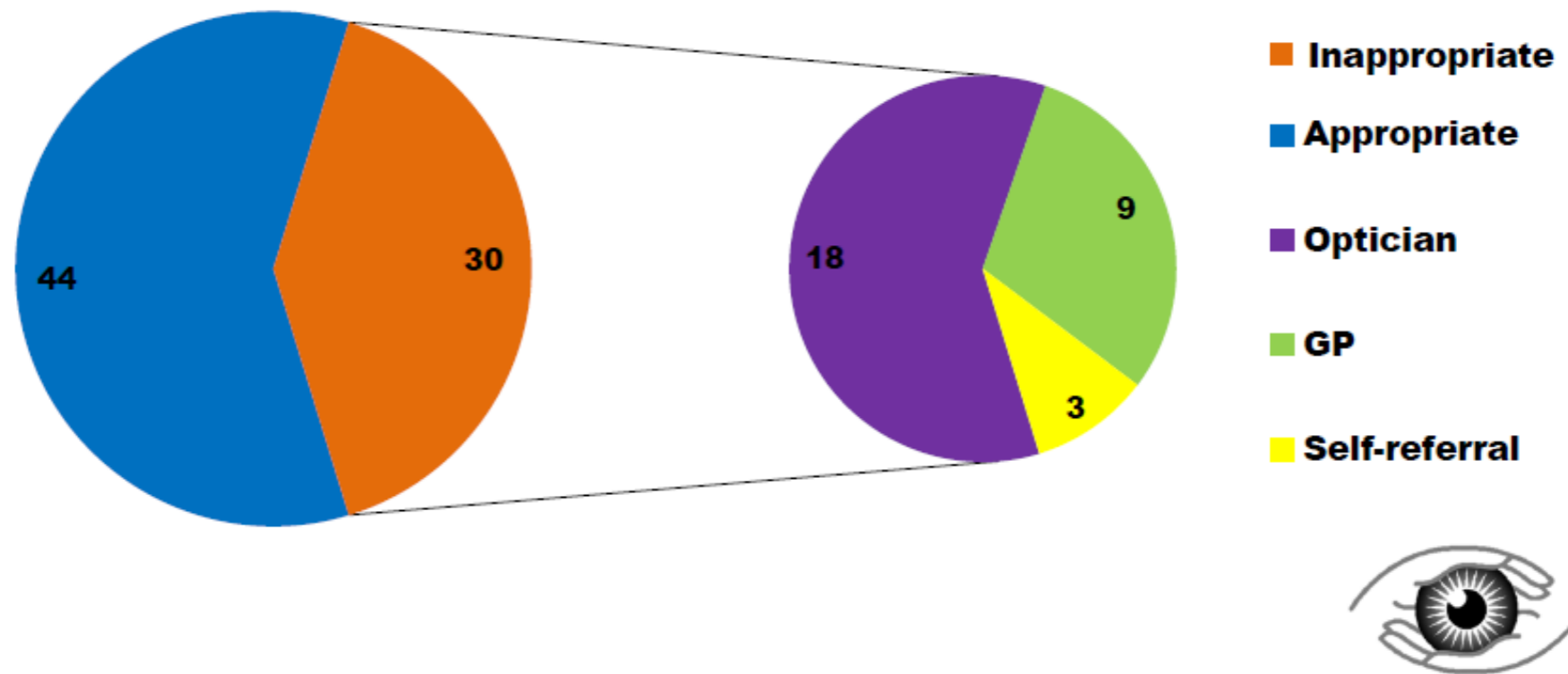
PATIENT FLOW

CURRENT PATIENT FLOW



Eye Casualty

Distribution of patients presenting to eye casualty



Rapid Access Eye Clinic

**Rapid Access Eye
Clinic**



Patient sticker here

Your appointment is:

Date:

Time:

**Located on Level 1 Balmoral building,
Leicester Royal Infirmary
(opposite the café)**

**We would like you to attend the Rapid
Access Eye Clinic, appointment details are
on the back of this card.**

**Please bring items which assist sight in
daily activities (glasses, contact lenses etc.)
and any prescription medication.**

**Please be aware you may not be able to drive
after your appointment**

Contact us or cancel: 0116 258 5928

Communication to Patients

Proposed Improvements to Clinic Letters

Using **vista** recommendations and feedback we identified the following areas:

- Font size
- Layout of text
- Colour contrast
- Bullet pointing



Dear Mx P NAME

We have made a further clinic appointment for you. You will be seen by the consultant or a member of the clinical team. The details are:

Consultant: Mr R TAILOR

On: MONDAY 26th SEPTEMBER 2016 11:15 am

Clinic Name: EYE DEPARTMENT

Location: Eye Clinic, Level 1, Balmoral Building,
Leicester Royal Infirmary

Please bring this letter with you when you come for your appointment and allow yourself time to move around the site as the hospital is large.



If you need an interpreter for your appointment please call 0300 303 1563 as soon as possible.

IF YOU CANNOT ATTEND you must contact us on 0116 258 5928 or if your appointment is no longer needed.

IMPORTANT INFORMATION

- It may be necessary to give eye dilation drops at this appointment which can significantly blur vision. Patients are advised **not to drive for up to 6 hours** after this, as it is unsafe and you are not insured.
- Please bring the following items to the appointment:
 - Glasses
 - Contact Lenses
 - Sunglasses
 - **All medication usually taken on prescription, including eye medication, drops or ointment**
 - Any other items that assist sight in day-to-day activities
 - Bring something to eat if you are diabetic
- Please take **all usual medication** at the **usual times**, unless your GP or ophthalmologist tells you otherwise

Please be prepared to be in the clinic for up to **3 HOURS**, and **do not** arrive more than **15 MINUTES** before your scheduled appointment time

We look forward to seeing you on:

MONDAY 26th SEPTEMBER 2016 11:15 am

Yours sincerely,

The Staff at the Eye Department.

The GP Practice we have recorded for you is: VICTORIA PARK HEALTH CENTRE, 204 VICTORIA PARK ROAD. Please let the receptionist know if this is not correct.



LRI OPHTHALMOLOGY OUTPATIENTS – FREQUENTLY ASKED QUESTIONS

What happens when I arrive at the hospital?

When you arrive at the LRI make your way to the department (NOTE Windsor or Balmoral). Visit the reception to notify them that you are here. Take a seat and wait to be called in by a clinician

What will happen during the consultation?

You will see multiple members of the Ophthalmology team; you may not necessarily see a doctor. During your appointment the following investigations may be performed:

1. Visual acuity test (reading the letter chart). All patients are required to have this.
2. Visual field test.
3. Optometrists give you a sight test.
4. Orthoptists specialise in eye movements.
5. Dilating drops may have to be instilled in order for the doctor to examine your eye; these take 20 minutes to work and last for 4-6 hours; you are advised not to drive until these drops have worn off. You may wish to bring sunglasses as your pupils cannot constrict in bright light as normal.
6. Ophthalmic photographers take a variety of scans, images and photos. You must be dilated for photos.
7. The consultant, or a member of his or her team will see you, on most clinics.
8. Nurses for a pre-operative assessment, if the doctor decides that you require surgery.

Can I drive to my appointment?

If you are given dilating drops as part of your appointment you will not be insured to drive. Information on travelling to the Hospital is available on our website

Should I bring my glasses?

Yes, please bring your most recent pair of reading and/or distance glasses. Please do not wear your contact lenses to the appointment as they may interfere with some of the tests we do. If you are given dilating drops you may wish to bring sunglasses as your pupils cannot constrict in bright light as normal.

Do I need to bring my medication with me to show the Doctor?

It may be useful to bring all the medication you take to show the doctor.

I've just started to get pain/Visual disturbance should I wait until I see the doctor in a few weeks?

If you experience eye pain, please contact your GP to book an appointment. If the situation is an emergency, please visit Eye Casualty in the Windsor Building, Leicester Royal Infirmary.

When visiting the Ophthalmology Outpatients can I bring someone along?

If you have mobility difficulties or limited vision, it may be helpful to bring someone along. However our waiting area can get quite busy so we ask you to bring one person with you.

How long will the appointment be?

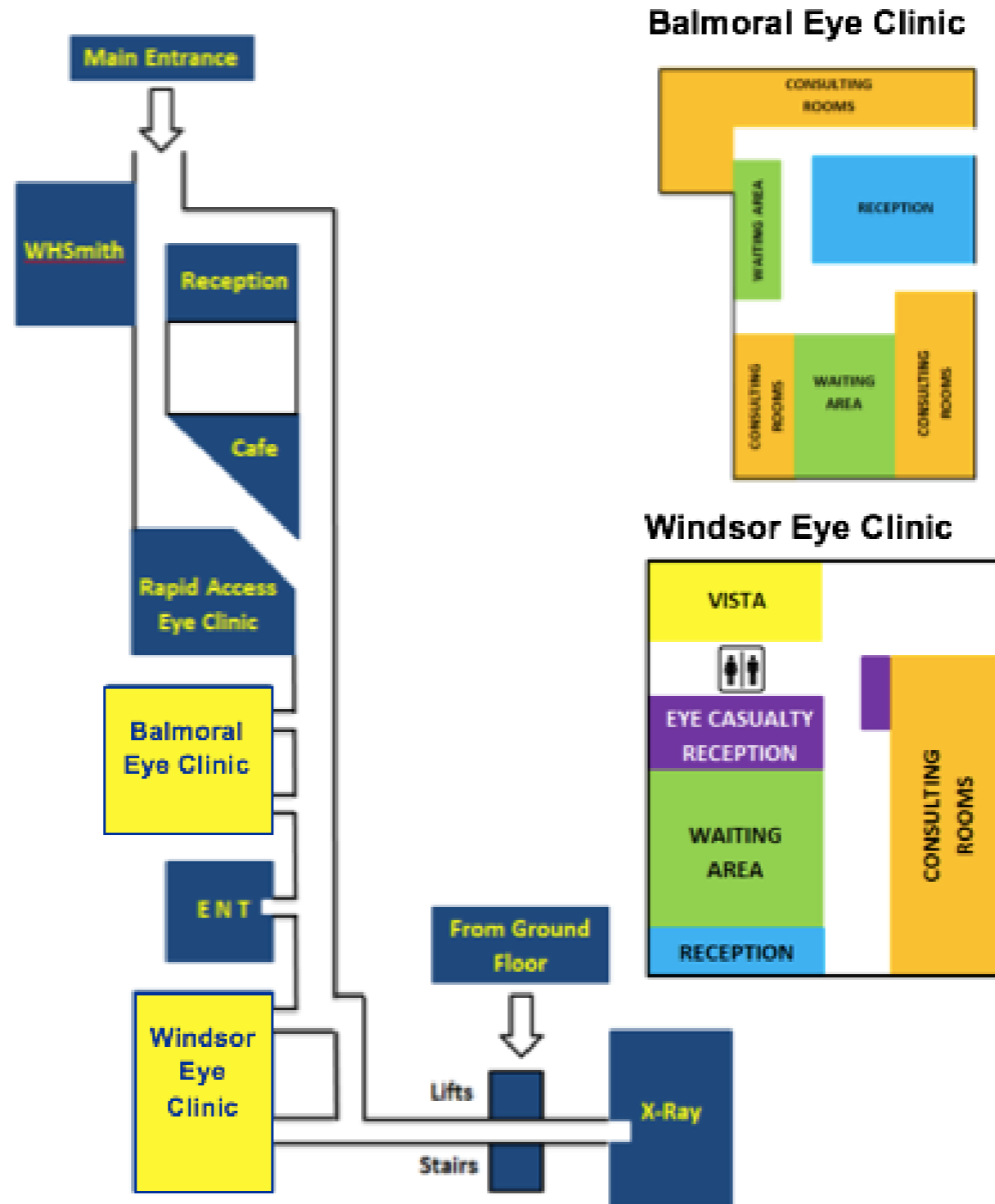
Waiting times do vary depending on how many members of our team you need to see, we recommend allowing up to 3 hours for your visit, although it could take longer

How do I contact you if I have other questions?

Please contact ophthalmology reception on 0116 258 5928

I am a diabetic, do I need to bring anything else with me?

As there may be a long wait on any clinic, we ask that all diabetic patients ensure that they bring sufficient food (and medication if needed) to their appointment.

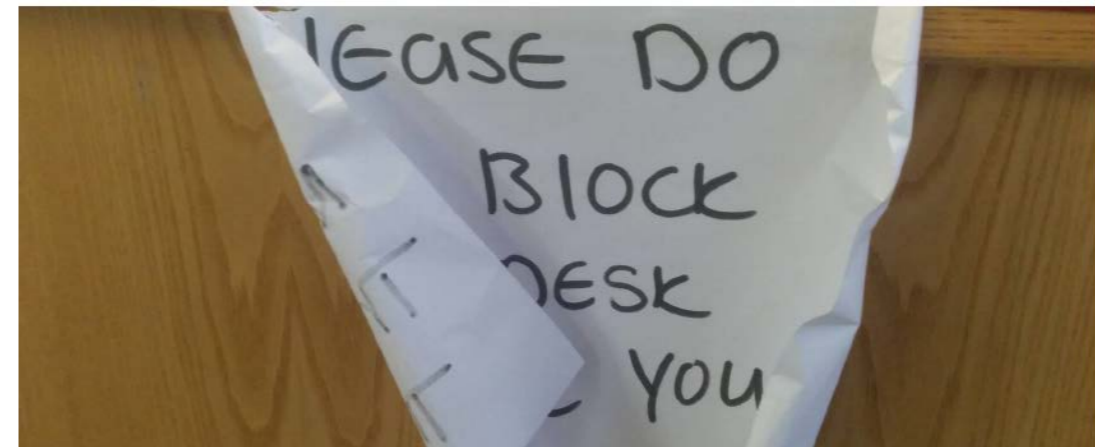
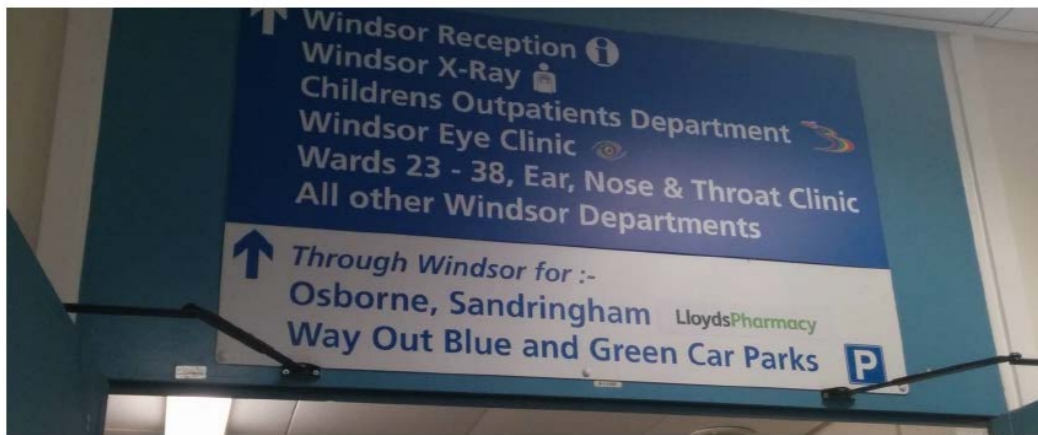


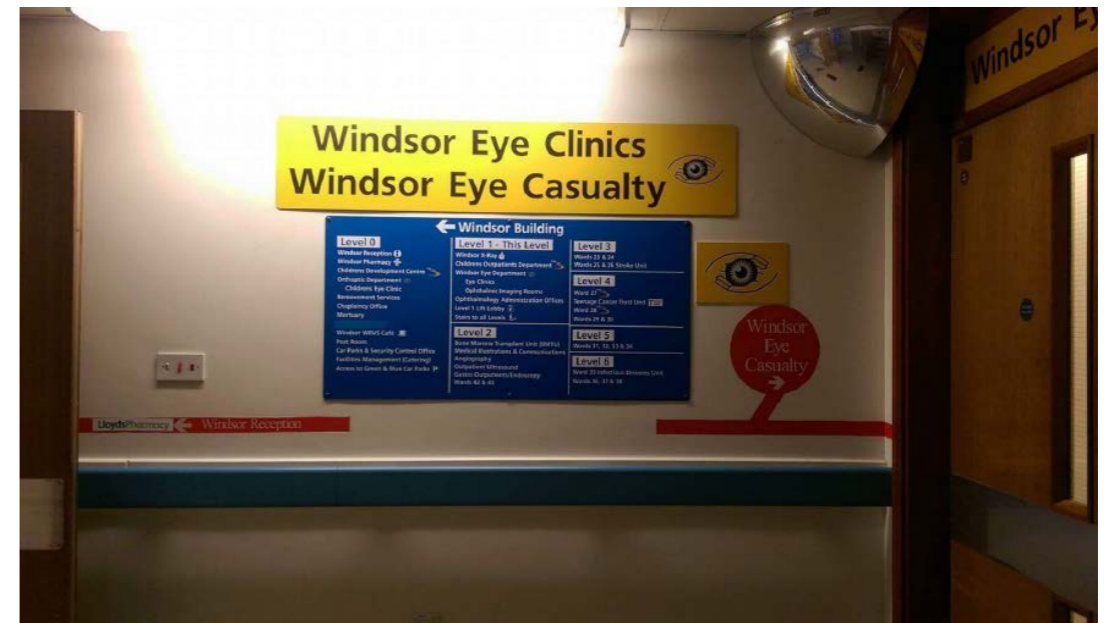
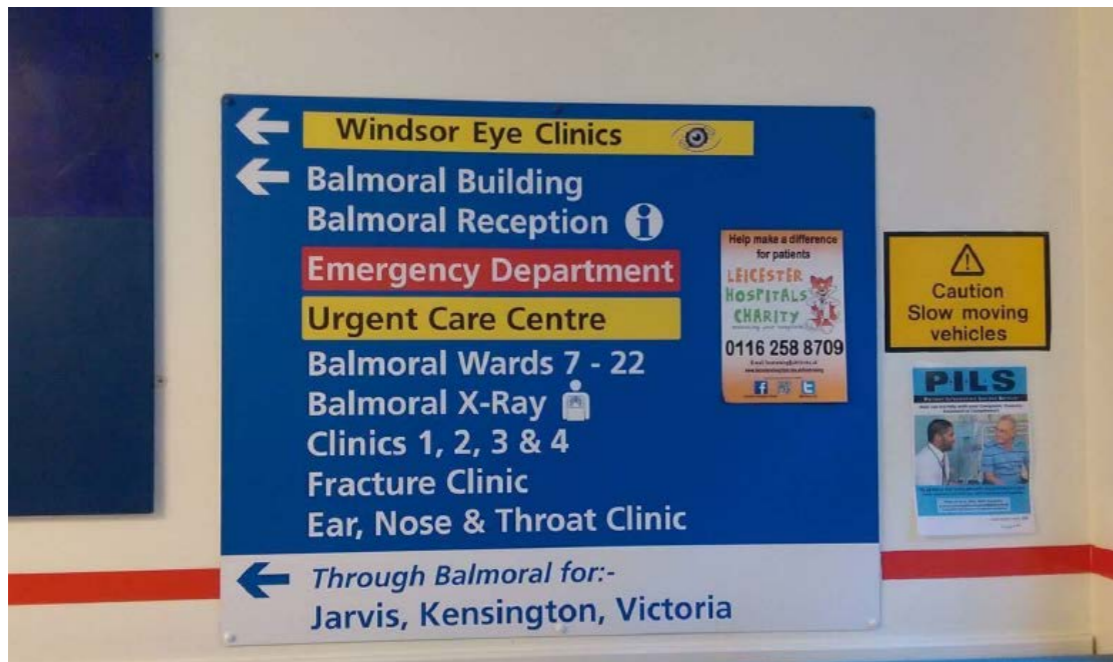
SIGNAGE



Identified Problems

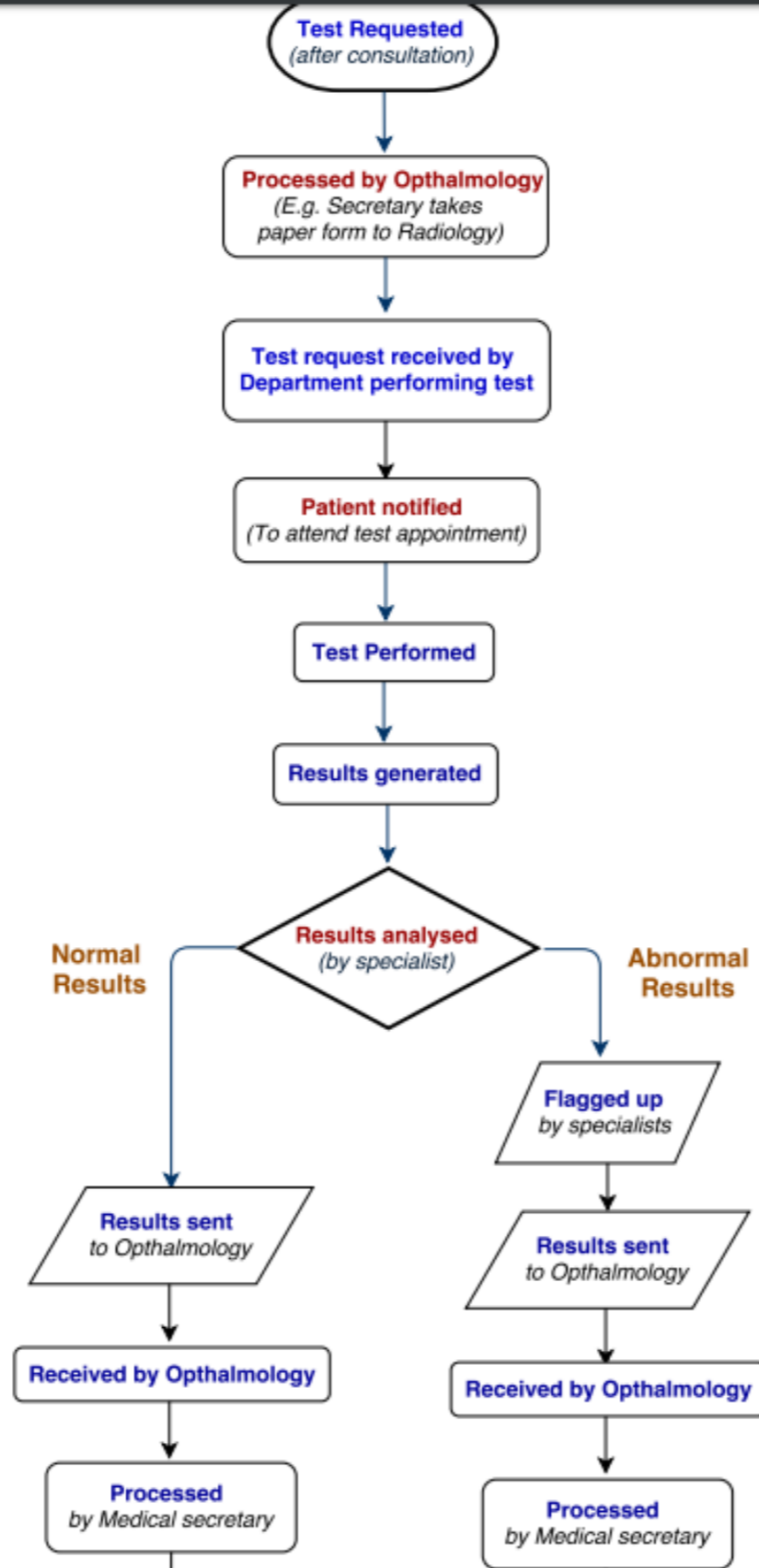
- Signage from Balmoral main reception to eye clinics
- Differentiating between eye casualty and eye clinic receptions
- Differentiating between Balmoral and Windsor eye clinics





above door plaque 150mm x 1000mm	Waiting Room	Reception	SIGNDIRECT Signage Solutions
	Optometry Unit	hanging double sided 1500mm x 250mm	Door plaques 150mm x 150mm
			1 2 3
		2mtr x 3mtrs wall printed graphic to main reception corridor wall	Over lay cover graphics to existing directional NHS signage
		Welcome to Windsor Eye Clinics	Balmoral eye clinic ← Balmoral eye clinic
			Eye Clinics Additional Waiting Area
		High Tack Window Graphics 700mm x 800mm	Eye Clinics Additional Waiting Area
			wall mounted plaques along the RED line route
			A4
Job No:	Client:	Notes:	T:01530 244332 F:01530 245063 www.signdirect.co.uk sales@signdirect.co.uk
Order No:			

Acting on results



Minimum (days)	Maximum (days)		
1	50	Referral to Vetted	MRI
2	197	Vetted to Scan	
0	48	Scan to Report	
9	201	Total Wait (referral to report)	
0	47	Referral to Vetted	CT
0	46	Vetted to Scan	
0	28	Scan to Report	
0	121	Total Wait (referral to report)	

The students proposed the following processes to improve acting on results.

- **Patient database:**
 - To centralise patient demographics, diagnosis and tests into an accessible and easily updatable database
- **Patient card:**
 - The card includes the date of the next appointment and tests the patient needs to have before that appointment. Providing patients with a phone number allows them to chase their appointments.
- **Amend the current 'Patient Outcome Form':**
 - Made the current form more user-friendly and added a section where clinicians could indicate if patients are suitable for virtual clinics.
- **Implementation of virtual clinics:**
 - Virtual clinics allow tracking patient results without them attending the department.