

# TeleOphthalmology NHS Wales

---

Miss Ebube Obi BSc, MB BS, MRCSEd, FRCOPHth



Consultant Ophthalmic Surgeon - ABUHB

[Ebube.Obi@wales.nhs.uk](mailto:Ebube.Obi@wales.nhs.uk)

# Introduction







---

- The Problem
- What Is *Already* In Place
- Our *Aims & Objectives*
- The Project – *Approach*
- The Project – *Local Impact*
- The Project – *National Impact*
- Conclusion

Date (  November 2022 ) 

Date

Area code

Indicator Health Board Number of patient pathways, assessed as Health Risk Factor R1, waiting within target date or within 25% beyond target date for an outpatient appointment. Number of patient pathways, which have a target date allocated and are assessed as Health Risk Factor R1, waiting for an outpatient appointment. Percentage of patient pathways, which have a target date allocated and are assessed as Health Risk Factor R1, waiting within target date or within 25% beyond target date for an outpatient appointment. Total number of patient pathways, assessed as Health Risk Factor R1, waiting for an outpatient appointment. 

Wales	66,517	135,103	49.2	135,308
Betsi Cadwaladr University Local Health Board	13,329	34,599	38.5	34,712
Powys Teaching Local Health Board	1,454	1,647	88.3	1,647
Hywel Dda University Local Health Board	6,888	14,846	46.4	14,847
Swansea Bay University Local Health Board	11,499	20,771	55.4	20,771
Cwm Taf Morgannwg University Local Health Board	9,295	23,457	39.6	23,457
Aneurin Bevan University Local Health Board	13,009	22,895	56.8	22,895
Cardiff and Vale University Local Health Board	11,043	16,888	65.4	16,979

# Financial Costs

---

Service Code	Service Description	Currency Code	Currency Description	Number of Attendances	National Average Unit Cost	Total Costs
130	Ophthalmology	WF01A	Non-Admitted Face-to-Face Attendance, Follow-up	1510578	£166.35	£251,277,742.92

# Ophthalmology Referrals

Date of sight test ..... Date of referral (if different) .....

**Optometrist/OMP Name and Practice Address**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Post Code: \_\_\_\_\_ Tel: \_\_\_\_\_  
 NHS mail: \_\_\_\_\_

**GP Name and Practice Address**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Patient details**    
 Title \_\_\_\_\_ Gender M / F  
 Surname \_\_\_\_\_  
 Forenames \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_  
 Post Code: \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 Date of Birth \_\_\_\_\_  
 NHS Number (if known) \_\_\_\_\_

**GP Action required:** (Also see "additional information" below)  
 This letter is for INFORMATION ONLY  
 Patient asked to telephone/visit GP  
 Patient sent to Eye Casualty  
 Advise Referral to Eye Dept (**URGENT**)  
 Advise Referral to Eye Dept (Routine)

**CHILDREN: Clinic Type suggested for referral to HES (tick most urgent one)**  
 Strabismus and Amblyopia  
 Paediatric non-strabismus  
 Orthoptic (only)

**ADULTS (16 or older): Clinic Type suggested (tick most urgent one)**  
 Cataract  
 Cornea  
 Diabetic Medical Retina  
 External Eye Disease  
 Glaucoma  
 Laser (YAG capsulotomy)  
 Low Vision  
 Oculoplastics / Orbits / Lacrimal  
 Other Medical Retina (incl ARMD)  
 Squint / Ocular motility  
 Vitreoretinal  
 Not Otherwise Specified

**CLINICAL TERM(S):**  
 Enter relevant keyword(s) (these are to help the GP to find correct HES service)  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

	Sph	Cyl	Axis	Prism	Base	VA	Pinhole	Add	Near Vision	Previous corrected VA on (date)
<b>Right</b>										
<b>Left</b>										

	Right eye	Left eye
Visual fields	Normal/enclosed (if abnormal)	Normal/enclosed (if abnormal)
Optic nerve heads	C:D	C:D
Intraocular pressure	mm Hg	mm Hg
Time		
Additional information	Cycloplegic refraction <input type="checkbox"/>	Dilated fundus examination <input type="checkbox"/>

Applanation/non contact/ Other NCT

# The Problem

---



# The Problem

- Sight Threatening Disease – Anterior Segment



- Non-Sight Threatening Disease – Anterior Segment



# What Is Already In Place

---

- Diabetic Retinopathy Screening – All Health Boards in Wales
- NHS Wales University Eye Care Centre – CAVUHB
- New Eye Theatres 2022 – UHW, Singleton Hospital Swansea
- Community Eye Clinics – Cwm Taf Morgannwg, Hywel Dda
- Supporting Additional Community Optom Services – Betsi Cadwaladr UHB



# What Is NOT Already In Place

---

- Mandatory Referrals of Anterior Segment Problems with Photography
  - Optometry to Hospital Eye Service (HES)
  - Community Optometry to Specialist Optometry
- Equipping Optometrists with Low Cost Digitalised Accessories for Slit lamps
- No National Universal Online resource & Information for Patients, GPs & Optometrists – (Eye Disease Info, Referral Info & Criteria, Advice Guidance, Management Info, Surgical Consent Info, Digital Consent, etc)
- Regional Centres of Excellence

# Our Goals

---

- Not a Short Term Answer, but Long Term Answer to long waiting times
- Sustainable Solution across all Health boards in Wales
- “No” Maintenance Equipment
- Universally adaptable to all eye examination machines (Slit lamps) & Mobile Phones
- Financially very cost effective
- National Universal reputable online source of reference and for Patients, GP's & Optometrists in NHS Wales

# Our Aims & Objectives

---

1. Enabling optometrists who don't have digital slit lamps to be able to access & utilise digital solutions to produce digital photos of anterior segment pathology to accompany all referrals, enabling appropriate clinician "signpost" triaging of these referrals. [The Accessory Device.](#)
2. Provide a mutually agreed health care information in the community for optometrists, GPs and Patients, on what can be safely monitored and treated in the community and what needs to be referred in to secondary care - via a new Tele-Ophthalmology website.
3. Listing patients for surgery directly from the community following a review of digital photographs accompanying the referral as well as providing electronic patient information on the operation and digital consent forms.

# Our Aims & Objectives

---

1. Enabling optometrists who don't have digital slit lamps to be able to access & utilise digital solutions to produce digital photos of anterior segment pathology to accompany all referrals, enabling appropriate clinician "signpost" triaging of these referrals. [The Accessory Device.](#)
2. Provide a mutually agreed health care information in the community for optometrists, GPs and Patients, on what can be safely monitored and treated in the community and what needs to be referred in to secondary care - via a new Tele-Ophthalmology website.
3. Listing patients for surgery directly from the community following a review of digital photographs accompanying the referral as well as providing electronic patient information on the operation and digital consent forms.

# The Project – Approach

---

1. Optometrists Digitalisation - A digital questionnaire sent to the Optometrists enquiring about their opinions and comments on digitalising their slit lamps. 89% of respondents did not have digital slit lamps.
2. Funding applied for and granted for a limited number of optometry practices. Unfortunately the funds could not be used directly due to NHS policy restrictions. As a result, I used my personal funds to obtain the digitisation kits – Given to optoms in the pilot study who requested the adaptor.
3. Digital health care information in the community for optometrists, GPs and Patients - via a new Tele-Ophthalmology website. Funding applied for but not granted. Hoping that this is revisited due to its pivotal role in the community.
4. 2 pilot studies (Cataract & Ant Segment) was set up & approved by R&D. Liaised with the Directorate manager, medical photographers, and another consultant ophthalmologist to run virtual cataract clinics first and later virtual anterior segment clinics.

# The Project – Local Impact

---

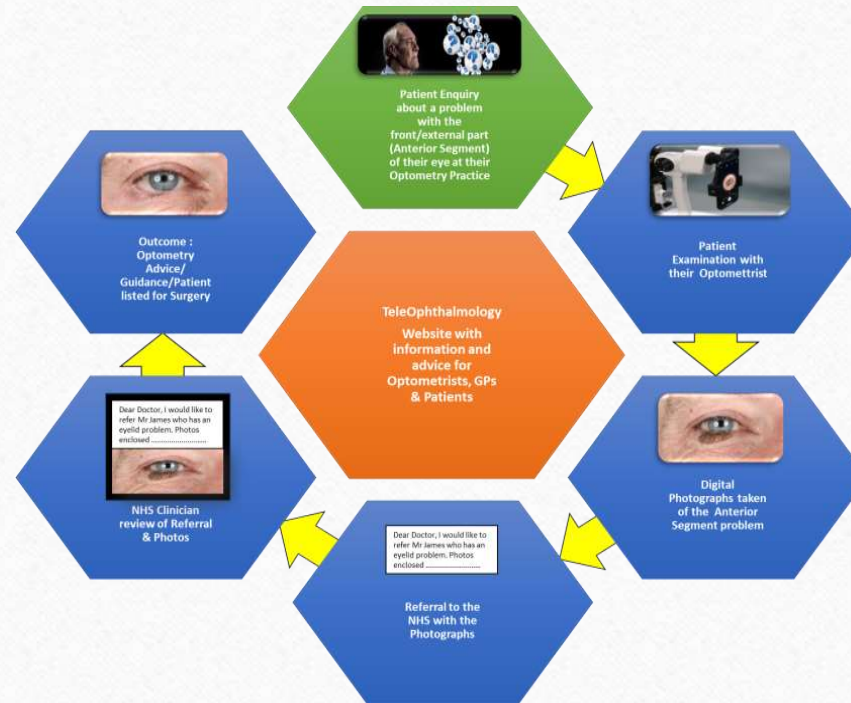
1. Optometrists digitalisation – All Optometrists in this pilot study with slit lamp adaptors are able to send in anterior segment referrals with photography. Clinicians can now prioritise referrals for advice for therapeutic management in the community, list patients for clinic or directly for surgery.
2. Digital health care information in the community for optometrists, GPs and Patients – via a new Tele-Ophthalmology website. Funding applied for but not granted – Hopefully once funding is available, the impact will be huge.
3. Listing patients for surgery directly from the community following a review of the digital photographs of the patients pathology – we now have a R&D approved virtual cataract clinics running and a number of patients have been operated on from the virtual cataract clinics. We are able to review 50% more patients in the virtual cataract clinics than in face to face clinics. In addition this does not require a clinic room.

# The Project – National Impact

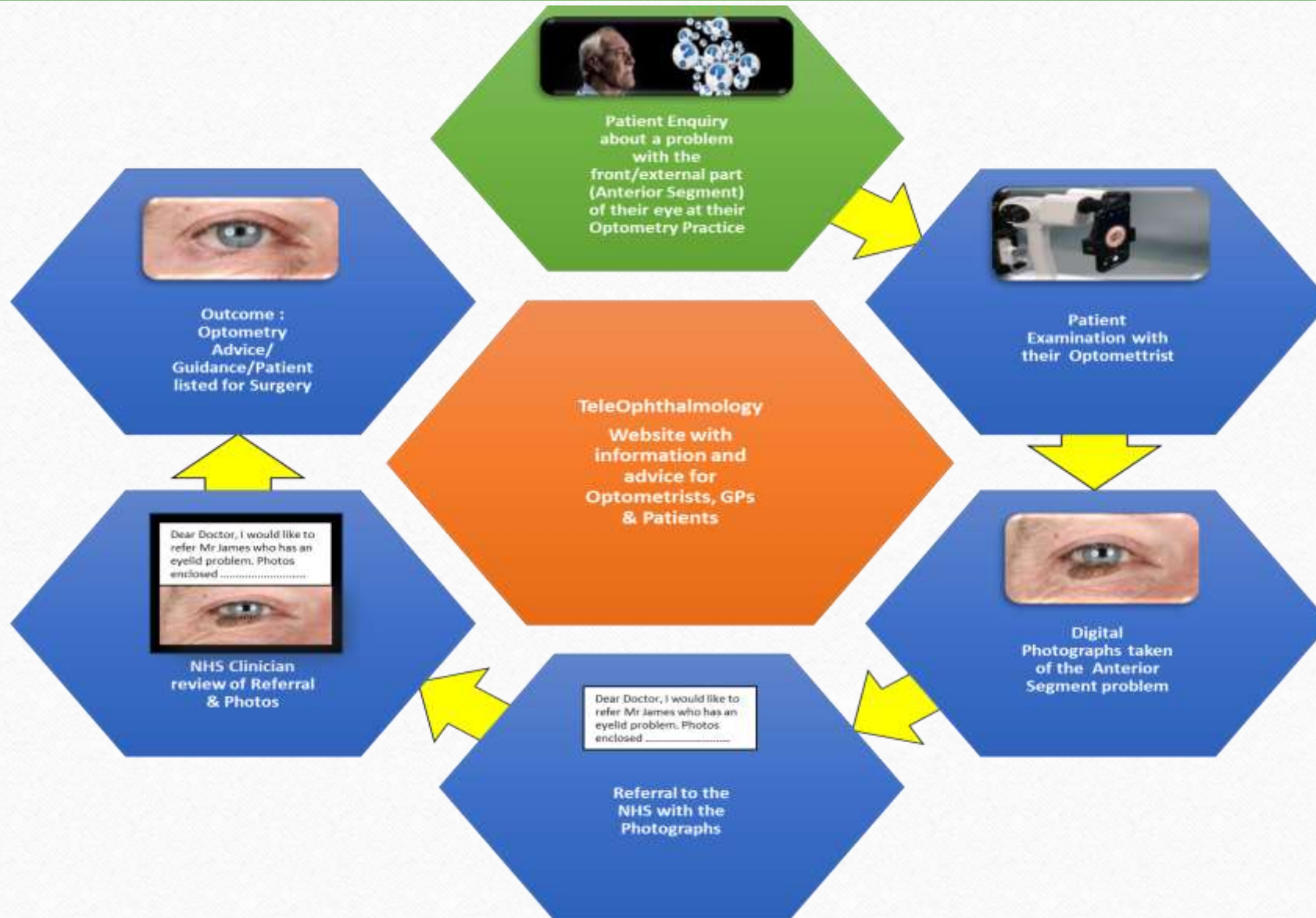
---

- Improved efficiency of providing eye care both within the primary and secondary care settings.
- Decreased waiting times for patients, as a number of them can be seen much earlier in the community and managed there as opposed to waiting months to be seen.
- Improved health care outcomes for all patients (R1-R3) and especially R1/USC, due to the resultant inherent efficiency within this project idea.
- Improved patient experience - being seen locally at their local optometrist means less travelling time in a less stressful setting compared to coming into secondary care settings.
- Significant Financial Savings
- External Review of Eye Care Services in Wales (Andy Pyott, Sept 2021) – Recommendation 1, 2, 4, 5, 6, 7, 10

# Summary







# Conclusion

---

- Digitalisation of Healthcare in Ophthalmology as well as other specialties is an essential pivotal part (not an optional part) of the NHS and needs to be encouraged, actively facilitated, fully funded and incorporated in all relevant clinical services & practice.
- A Tele-Ophthalmology / Tele-Specialty Lead is also vital in establishing this.

# References

- 
- <https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Hospital-Waiting-Times/Eye-care/eyecaremeasuresforhnsoutpatients>  
<https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Hospital-Waiting-Times/Eye-care/eyecaremeasuresforhnsoutpatients>
  - <https://www.gov.wales/new-eye-care-facilities-will-help-cut-waiting-time>
  - <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-outpatient-activity/2020-21>
  - <https://www.rcophth.ac.uk/news-views/gwyn-williams-llywydd-of-the-royal-college-of-ophthalmologists-wales-committee-reflects-on-the-minister-for-health-and-social-services-in-wales-encouragement-to-the-eyecare-community-to-dev/>
  - <https://www.rcophth.ac.uk/wp-content/uploads/2022/06/The-Pyott-Report-External-Review-of-Eye-Services-in-Wales-Nov-2021-FINAL.pdf>  
<https://www.rcophth.ac.uk/wp-content/uploads/2022/06/The-Pyott-Report-External-Review-of-Eye-Services-in-Wales-Nov-2021-FINAL.pdf>  
<https://www.rcophth.ac.uk/wp-content/uploads/2022/06/The-Pyott-Report-External-Review-of-Eye-Services-in-Wales-Nov-2021-FINAL.pdf>
  - [https://commons.wikimedia.org/wiki/File:Proptosis\\_and\\_lid\\_retraction\\_from\\_Graves%27\\_Disease.jpg](https://commons.wikimedia.org/wiki/File:Proptosis_and_lid_retraction_from_Graves%27_Disease.jpg)  
[https://commons.wikimedia.org/wiki/File:Proptosis\\_and\\_lid\\_retraction\\_from\\_Graves%27\\_Disease.jpg](https://commons.wikimedia.org/wiki/File:Proptosis_and_lid_retraction_from_Graves%27_Disease.jpg)  
Jonathan Trobe, M.D. - University of Michigan Kellogg Eye Center

# External Review of Eye Care services in Wales

**Recommendation 1: Data management** – It is imperative that for services to run smoothly data needs to be accessed and managed in a straightforward way. Access to accurate and real time informatics should be at the forefront of managing ophthalmic services. This includes data on cancellation where health boards should be held accountable for the number of hospital cancellations and scrutiny mechanisms put in place to ensure that hospital cancellations are avoided where possible

**Recommendation 2: Improved communication within the service** – For an optimal multidisciplinary approach to care to be effective, issues with communication need to be resolved. Regular meetings with managerial and clinical colleagues should be implemented to ensure a resilient and efficient workforce can reach its potential. It is also advised that the sharing of best practice and the encouragement of new innovations should be instilled within the workforce.

**Recommendation 3: Reduction of a reliance on Service Level Agreements with English Health Boards** - Whilst it is recognised that a long term reliance on cross border support for Eye Services in Powys is inevitable, the number of patients transferring to Bristol and Liverpool should be reduced if it is in the patients interest to do so, and the service can be safely provided in NHS Wales.

**Recommendation 4: Corneal Services** – Consideration should be given to the expansion of specialist corneal services.

**Recommendation 5: Cross-linking** – Consideration should be given to how and when a service for cross-linking should be developed. Appropriate education needs to be given to community optometrists to ensure that the service is well managed

**Recommendation 6: Integration of services** – Over time, out of date practices have led to a disjointed patient journey through some services. This can be problematic for the patient and the workforce. The implementation of workshops with all relevant stakeholders to establish new, leaner ways of working should be established.

**Recommendation 7: Appropriate use of non-medical staff** -Wales has made good use of non-medical staff. It is important that everyone is encouraged to perform to the top of their licence. A unified approach is to be encouraged.

External Review of Eye  
Care Services in Wales

September 2021

**Recommendation 8: Cataract Services redesign** – Centres need to be engaging in efficient high volume surgery on a regular basis.

**Recommendation 9: Anaesthetic cover in theatre** – The use of anaesthetic cover in Wales is variable and depends on both the surgeon and the procedure. A streamlined cataract pathway with agreed anaesthesiology cover is recommended for a sustainable cataract service.

**Recommendation 10: Independent Prescribing and Ophthalmic Diagnostic Treatment Centres (ODTCs)** – For both of these services to thrive, consideration should be given to rolling out independent prescribing initiatives to all ODTCs as well as expanding ODTC services to meet the needs of the population.

