Transforming cataract referral pathway

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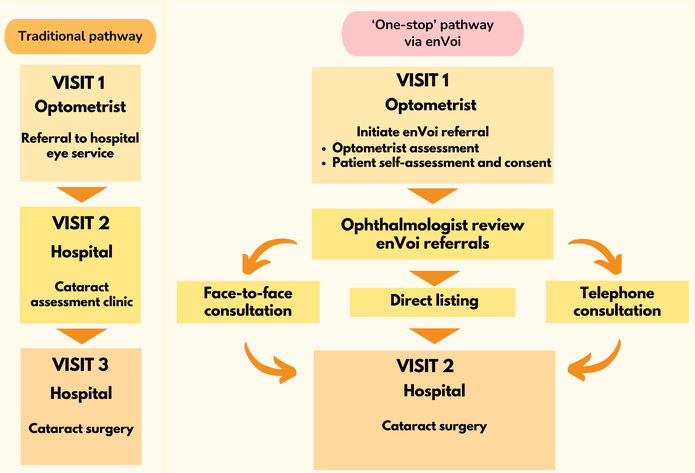
Background

- Cataract surgery is the most commonly performed surgical procedure in the UK. With an ageing population, the number of cataract operations are expected to increase by 25% over the next 10 years.
- Approximately 499,000 cataract operations was performed in England and Wales in 2021.
- Since the COVID-19 pandemic, the number of cataracts done in Scotland has dropped from 40,999 in 2019/20 to 32,983 in 2021/22. This represents a backlog of 8,016 cases in Scotland.
- In response to backlog of cases:
  - High volume cataract lists and ISBCS has been introduced in NHS Tayside to increase surgical capacity.
  - The next bottleneck was identified to be our capacity to see patients in the cataract assessment clinics prior to listing for surgery.
- Of the increase in ophthalmology backlogs, outpatient backlog have seen a disproportionate increase of 59% from 2019-2022 compared to 14% for surgical backlogs.
- With finite resources and a strained health service, the existing cataract referral pathway needs to be adapted. Patient Initiated Follow Up (PIFU) rolled out in many units to reduce unecessary outpatient visits safely

Proposed solution

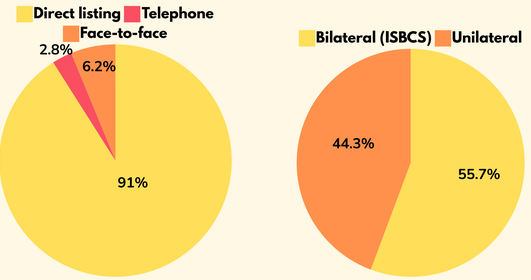


- 'One-stop' cataract referral pathway
- Utilizing innovation enVoi webapp by LutraHealth
- Improves quality of cataract referrals, including at referral:
  - Optometrist objective assessment
  - Patient self-assessment and impact on ADLs
  - Information allowing risk stratification for surgery
  - Digital consent for cataract surgery
- Allows for direct listing for surgery, reducing attendance to outpatient cataract assessment clinic.
- Telephone consultation or face-to-face appointment available for patients not directly listed for surgery



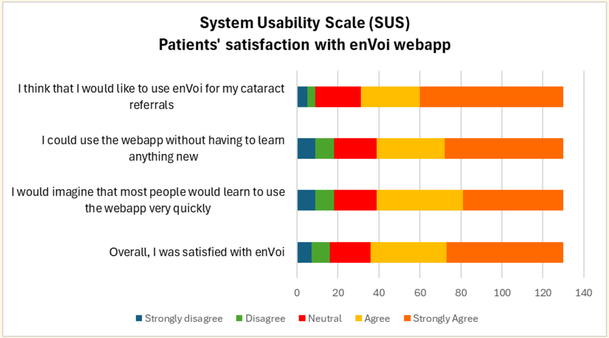
Method

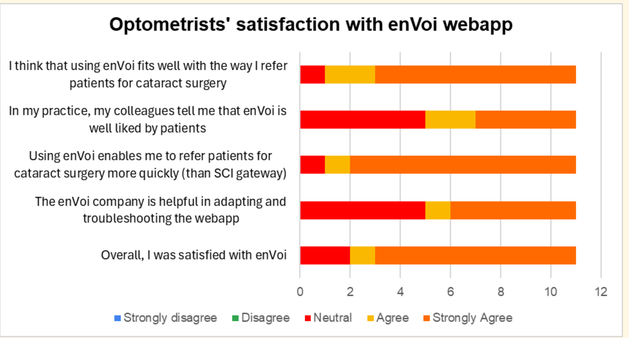
- Prospective pilot study involving 348 cataract referrals over 10 months (July 23 - Apr 24)
- Three participating community optometrist of varying sizes:
  - Specsavers Dundee (largest)
  - Specsavers Arbroath
  - Optix Angus (Smallest)
- Cataract referrals made to Ninewells Hospital, Dundee.
- Number of patients directly listed for surgery, requiring face to face or telephone appointment collected. Savings estimated.
- Conversion rate calculated
- Referral to listing/surgery time calculated
- Users' satisfaction evaluated
  - Patients' satisfaction evaluated using validated questionnaire (SUS)
  - Optometrist and ophthalmologist questionnaire
  - Admin staff feedback



Results

- 91% (n=263) directly listed for surgery. 2.8% (n=8) required telephone consultation and 6.2% (n=18) required face-to-face appointments
- Cataract conversion rate 97.4% (n=339)
- Referral to listing time 11 days from 182 days
- To date, only 10 patients had surgery:-
  - Referral to surgery time 133 days from 304 days (routine = 123 days; soon 152 days; urgent 75 days)
- 55.7% (n=175) listed for ISBCS, 44.3% (n=139) listed for single eye cataract surgery.





Conclusion

- Streamlined cataract referral pathway allows for direct listing of 91% patients, significantly reducing outpatient clinic attendance.
- If scaled up to UK, frees up 454,000 outpatient clinic appointments yearly. This creates releasable opportunities for ophthalmologists to work at the top of their license. Yearly savings of up to £77.8 million.
- Significantly reduces waiting time for cataract surgery. Improving QOL of patients. (Referral to listing time reduced to 11 days from 182 days)
- Users are satisfied with enVoi
  - Huge majority of patients are satisfied
  - Optometrists and ophthalmologist are very satisfied
  - Admin is satisfied however reports increased workload. Suggests this process could be automated in the future.
- Reduces carbon footprint

Ophthalmologist's perception of the utility of the system was ovewhelmingly positive

Admin reports increased workload of uploading completed referrals to TRAK

References

1) Public Health Scotland. Scottish Atlas of Healthcare Variation. Dec 2022.
2) The Royal College of Ophthalmologist. Developing patient-initiated follow-up in ophthalmology, a case study. Apr 2023.
3) Gaskell A et al. Direct Optometrist referral of cataract patients into a pilot 'one-stop' cataract surgery facility . J R SurgEdinb. 2001.

What's next?

- Region wide adoption
- Test of change adoption and integration into patients pathway
- Cat-PROM5 integration