Exploring the barriers to performing fundoscopy in general practice: a quality improvement project

S. Mohammed, M. Poudevigne, S. Mamtora
Bristol Eye Hospital, United Kingdom

Introduction

- Direct ophthalmoscopy is a cornerstone diagnostic tool in primary care, essential for identifying the early signs of vision-threatening pathologies
- Despite its clinical significance, clinicians including general practitioners (GPs) often report challenges with fundoscopy, citing low confidence in both performing the procedure and interpreting findings
- This study aimed to explore the extent of fundoscopy utilisation in primary care for specific indications such as new diagnosis of hypertension or a new presentation with headache. We aimed to investigate the barriers faced by GPs when it came to performing fundoscopy and evaluate if introducing a handheld retinal camera as an alternative to the direct ophthalmoscope could address these. Check that US language hasn't been used



Figure 1: Handheld fundus camera used in the study (Aurora, Optomed)

Methods

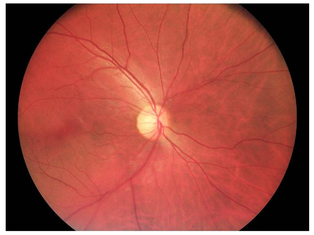


Figure 2: Sample fundus Photograph captured by the camera used in the study.

- We initially audited a single GP practice to determine the number of fundoscopy exams documented for two specific indications in which NICE recommends fundal examination: new diagnosis of hypertension (2) and patients presenting with a new headache
- After the implementation of a handheld fundus camera with appropriate training and the development of a standard operating procedure we undertook a reaudit to assess if there was an improvement in the number of fundal examinations being performed

Results

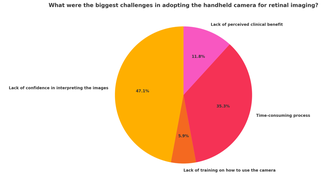
- Our results show a minimal and statistically insignificant improvement in the number of fundus examinations being performed.

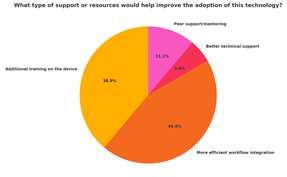
Condition	Audit Period & Examination Method	Number of Consultations	Number of Fundus Exams	Fundus Exam Rate (%)
Hypertension	Initial 6-month audit (Direct ophthalmoscope)	158	1	0.63
Headache	Initial 6-month audit (Direct ophthalmoscope)	359	0	0.00
Hypertension	Re-audit (Handheld fundus camera)	143	1	0.70
Headache	Re-audit (Handheld fundus camera)	315	7	2.22

Figure 3: Table demonstrating the number of eye examinations performed before And after the implementation of the handheld fundus camera

Discussion

- Our findings emphasize the considerable deficiency in the number of patients receiving retinal examinations in the community for NICE recommended indications both with an ophthalmoscope and even after the implementation of a handheld fundus camera.





Discussion continued

- This study highlights the difficulties that are faced in attempting to increase fundoscopic assessment in primary care despite the implementation of new technologies that make this examination easier.

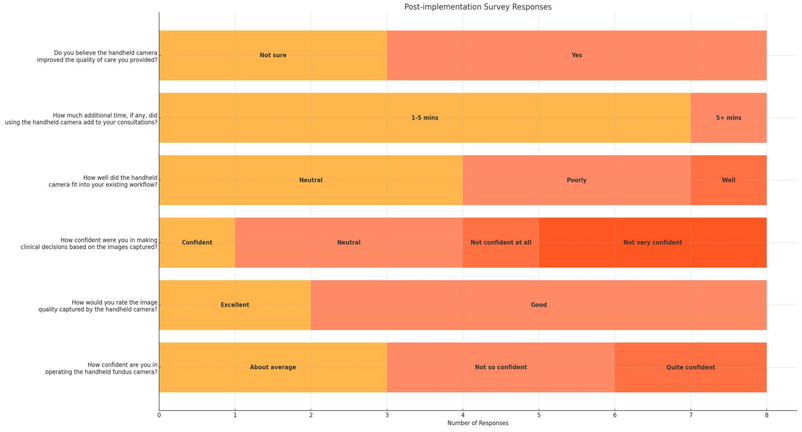


Figure 4: Post-implementation survey results

Conclusions

- Cultural barriers within primary care remain an obstacle to fundus assessment beyond difficulties encountered with examination using the direct ophthalmoscope
- Changing the perception of eye examination within primary care may require significant resources including education, training and culture.
- With the shift in primary eye care being delivered by optometrists rather than GPs there is a risk that GPs become further deskilled in eye examination.