

# Improving funduscopic examination in patients with a headache who are discharged from the emergency department.

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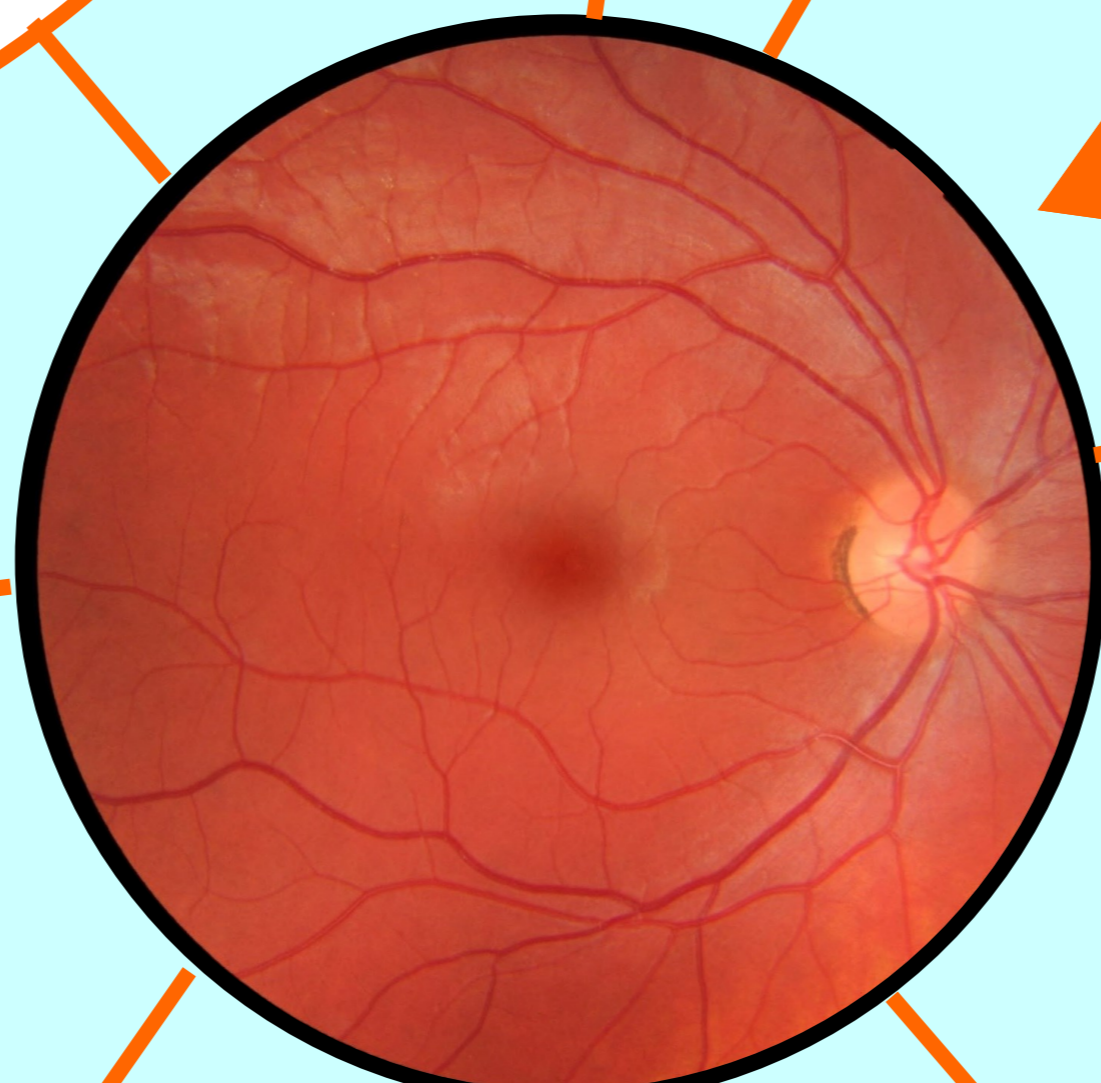
## Background

Patients presenting to the Emergency Department with a headache must have potentially life-threatening causes, such as raised intracranial pressure, excluded prior to discharge.

Raised intracranial pressure can be identified by the presence of papilloedema (swollen optic discs) on fundoscopy (examination of the retina using a retinal camera or ophthalmoscope). NICE recommends examination of patients with a headache should include fundoscopy.

However, fundoscopy is a difficult skill and there are many barriers to performing fundoscopy in the emergency department. A retinal camera exists to facilitate fundoscopy but it is rarely used.

Through improving fundoscopy this project aims to reduce the risk of discharging patients with headache due to the serious underlying cause of raised intracranial pressure.



## Next Steps

Tackling barriers to fundoscopy

**Barriers** – Barriers to fundoscopy were identified as broken ophthalmoscopes, difficult to use or difficult to locate ophthalmoscopes and confidence in interpreting images. The retinal camera not being located in the ED was a significant barrier to its use as was the lack of a quality control procedure for the acquired images.

## Implications

**This project has demonstrated that it is feasible for 50% of discharged patients to have had fundoscopy.**

Awareness has been raised about the need to perform fundoscopy and about the presence of the retinal camera.

The results are limited by the analysis of only the first week of each month. This sampling may have missed further examples of retinal photography and fundoscopy. In addition the number of patients presenting with headache each week is small (6 to 17 patients). Some of the headache presentations analysed may not have required fundoscopy but were still included.

**Learning points** – the most successful intervention involved physical presence with the demonstration of the retinal camera and discussing the need for fundoscopy.

## Aim

For **30% of adult patients discharged** from GRH and CGH Emergency Departments (ED) having presented with a headache to have **fundoscopy documented** by March 2018.

## Method

**Primary Outcome Measure:** Percentage of patients with headache who are discharged from CGH and GRH ED who have fundoscopy documented.

Data on fundoscopy use was collected from analysing patient notes where the chief complaint notes documented "headache" on Trakcare. Data was collected from cases over a five day period (Mon-Friday) after each PDSA cycle and in the first week of each month.

Cases secondary to head trauma were excluded as were cases referred directly to the medical team and therefore not clerked by ED clinical staff.

## PDSA cycles

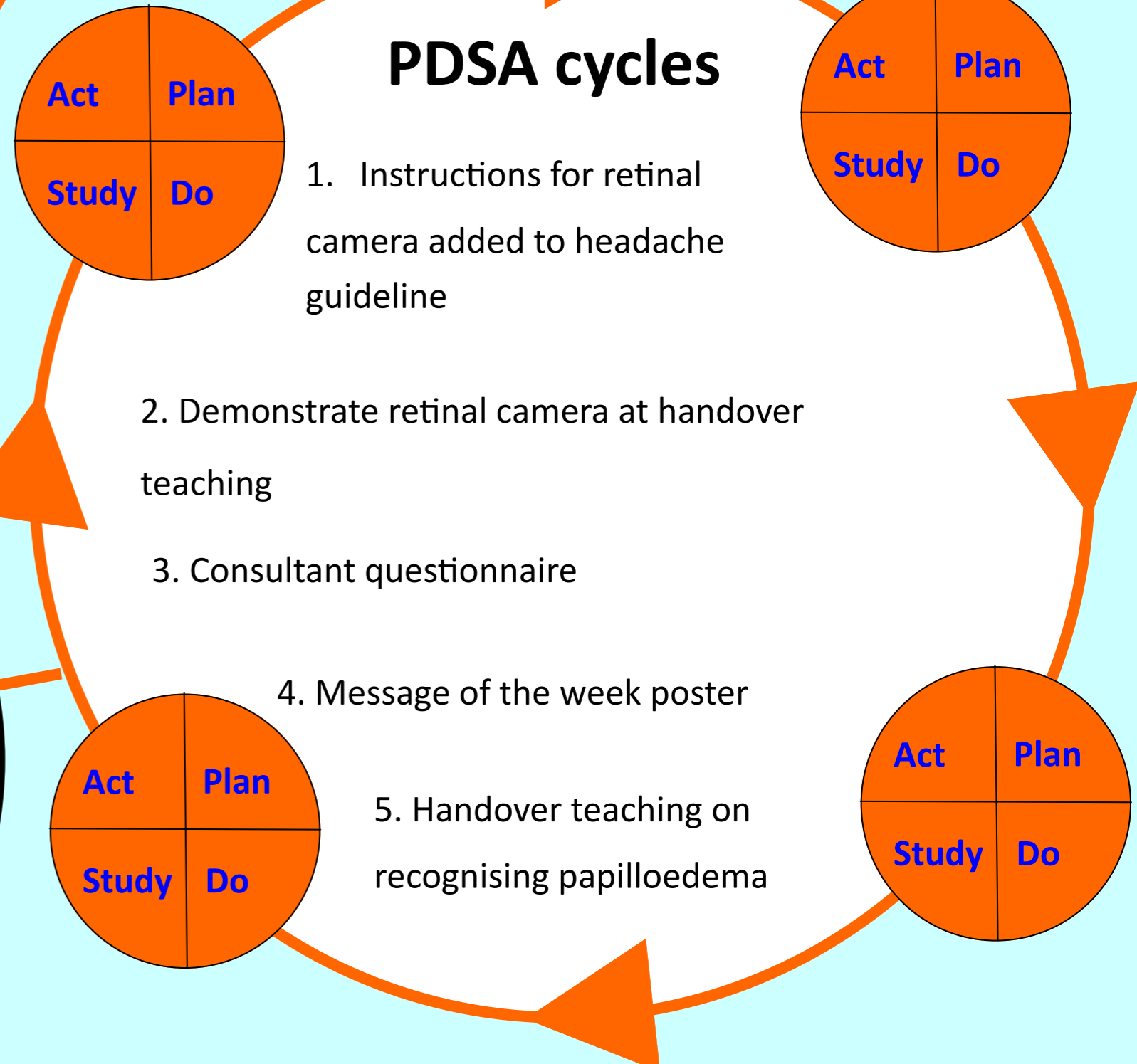
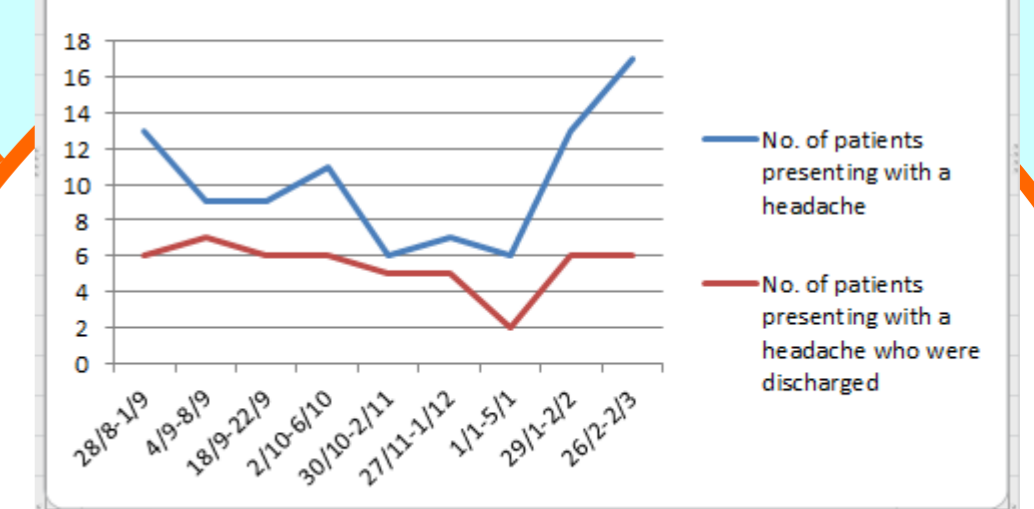
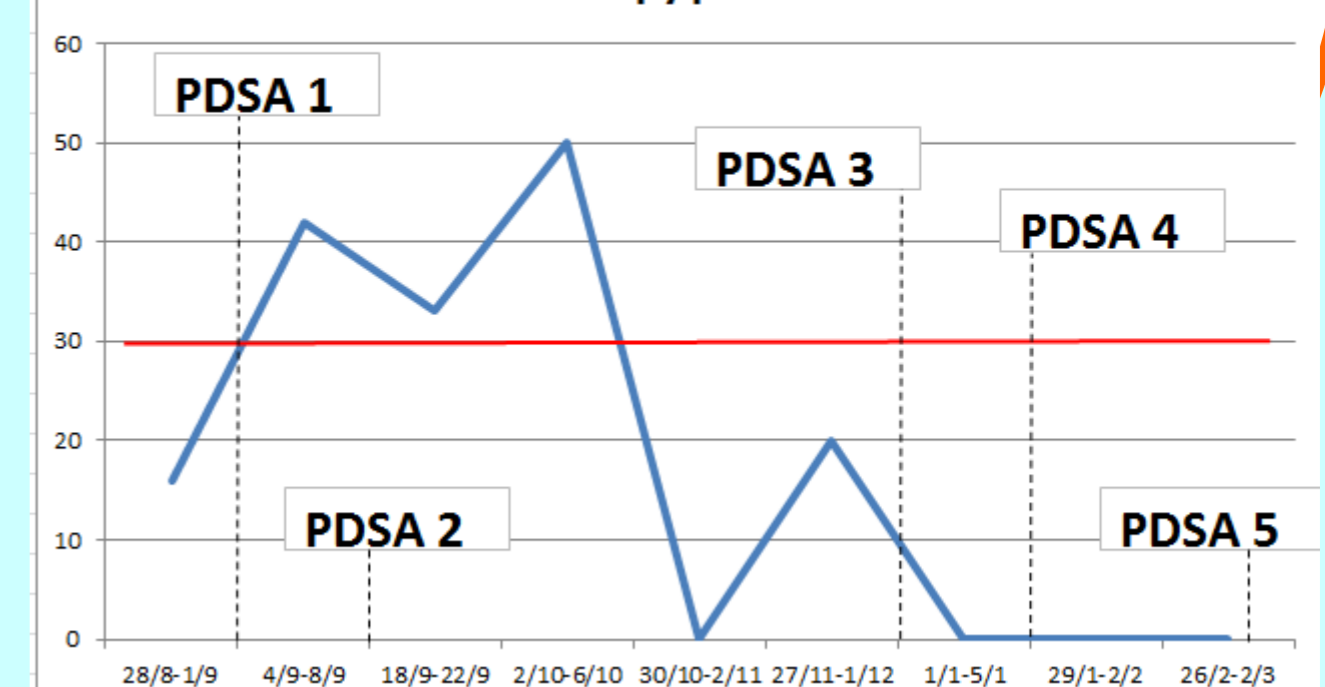


Chart to show how many patients presented and were discharged with headache



## Results

Runchart showing % of discharged patients with fundoscopy performed



## Acknowledgements

Dr Helen Mansfield, QI Mentor  
GHNHSFT Ophthalmology  
Consultants