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## INTRODUCTION

Due to an ageing population and increase in life expectancy, the number of people with glaucoma in the UK is set to increase,<sup>1</sup> placing an increasing burden on Hospital Eye Service (HES) resources.<sup>2</sup> The publication of the National Institute of Clinical Excellence (NICE) on glaucoma has led to a rise in glaucoma related referrals<sup>3</sup> and various referral refinement schemes are now in place to help reduce the number of false positive referrals.<sup>4</sup>

A referral refinement clinic was set up at St. Thomas' Hospital in 2011. Patients referred with high IOP (22-30mmHg), using non-contact tonometry, undergo examination by a hospital based optometrist. Patients are then either discharged from this clinic or referred on to a consultant ophthalmologist.

## PURPOSE

To investigate visit outcomes for patients seen in a glaucoma referral refinement clinic over a three year period.

## METHODS

This study was registered as an audit with Guy's and St Thomas' NHS Foundation Trust. Patients referred to a NHS Trust from community optometrists, with elevated IOP using non-contact tonometry, are seen initially by an optometrist in a hospital-based referral refinement clinic. Patients undergo visual field testing, Goldmann Applanation Tonometry, van Herick grading, optic disc assessment and are then either discharged back to their community optometrist or referred on to a consultant ophthalmologist. Data on patient outcomes and the reasons for any onward referral were analyzed for patients seen over a 5 month period (October to February) from 2013 to 2016.

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## RESULTS

Figure 1

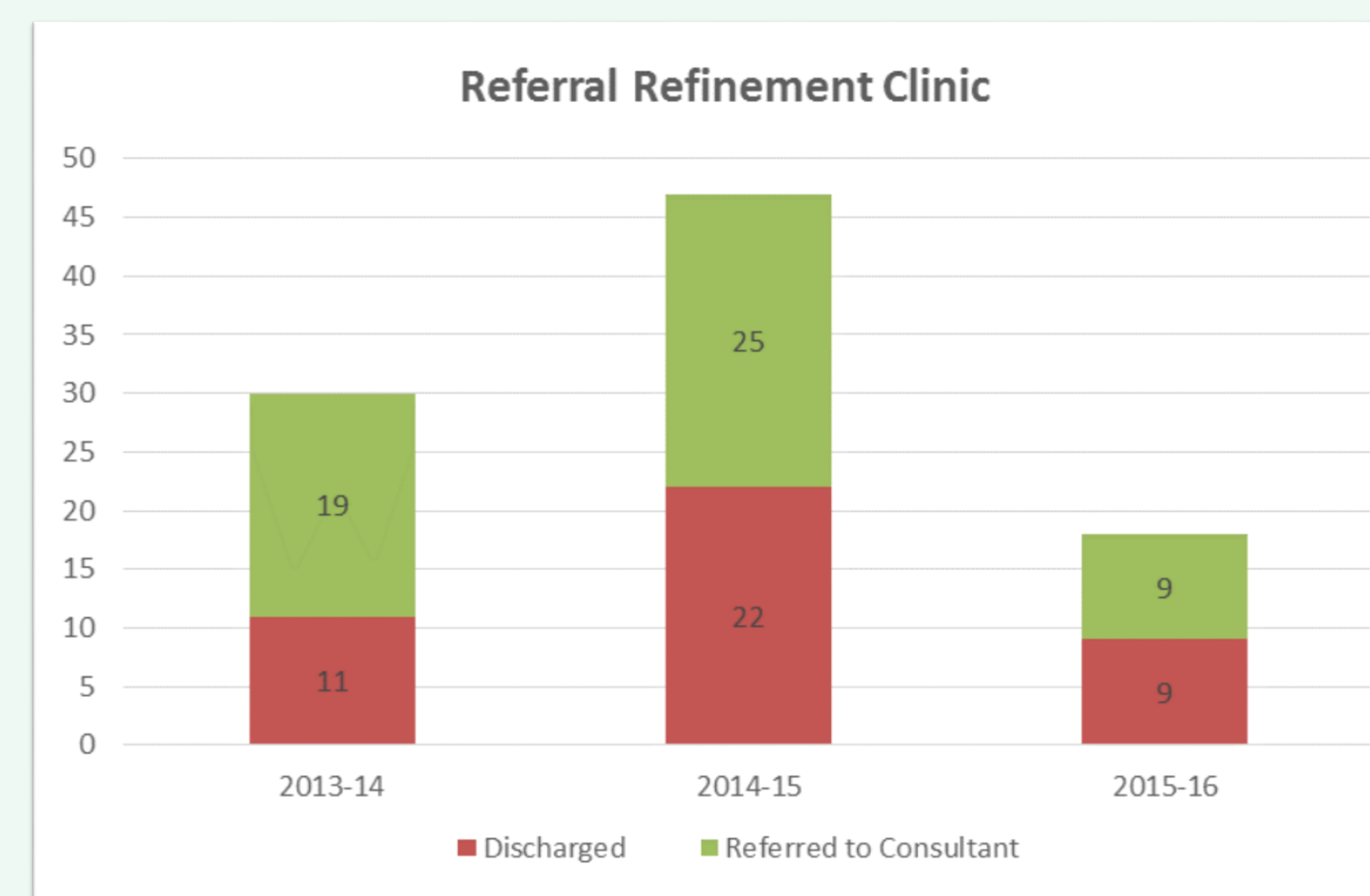
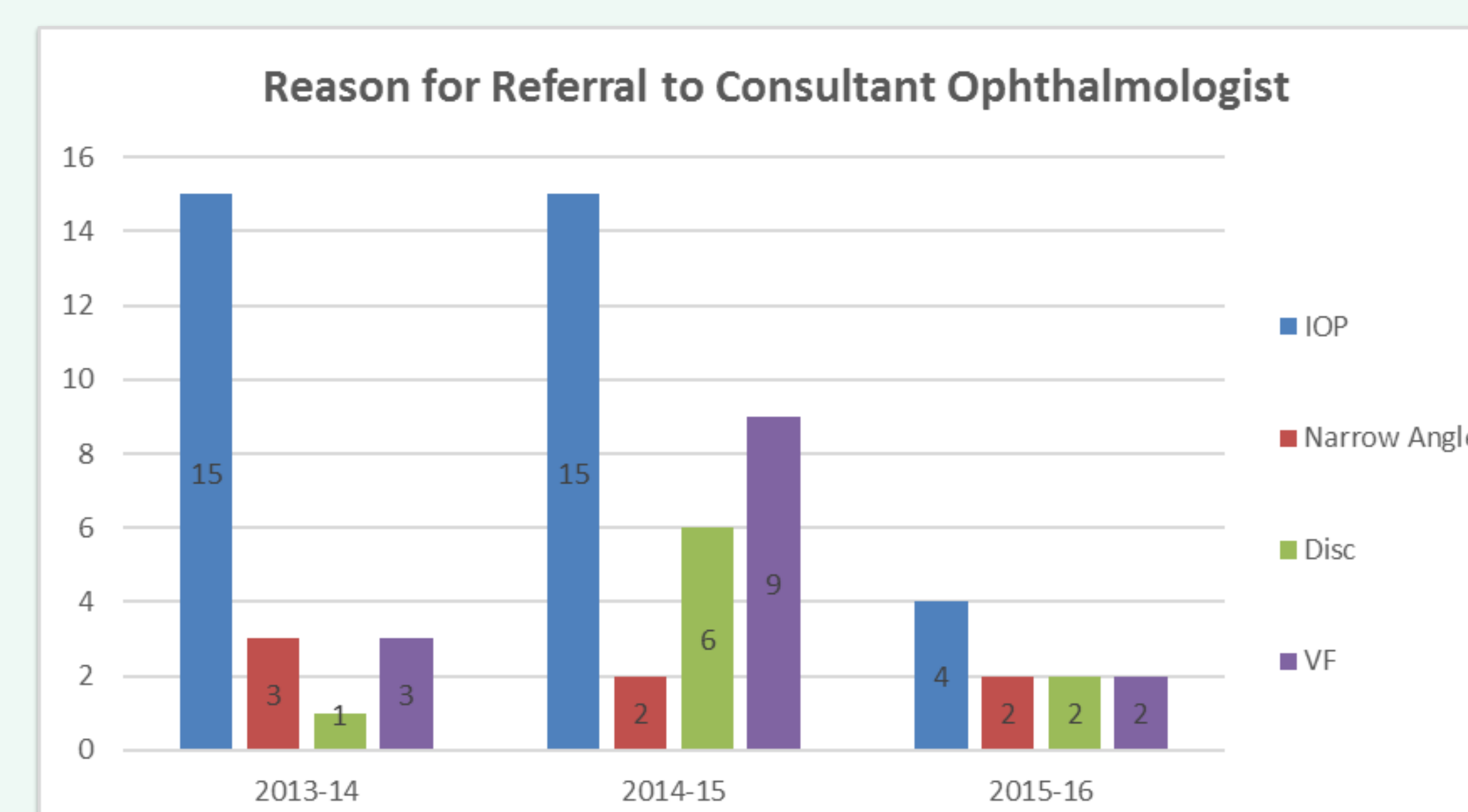


Figure 1 shows the outcomes of patients seen in this clinic over the 3 years. The percentages of patients discharged were 37%, 47% and 50% respectively. There was no significant change in the proportion of patients discharged over this time period ( $\chi^2=1.06$ ,  $p=0.59$ ).

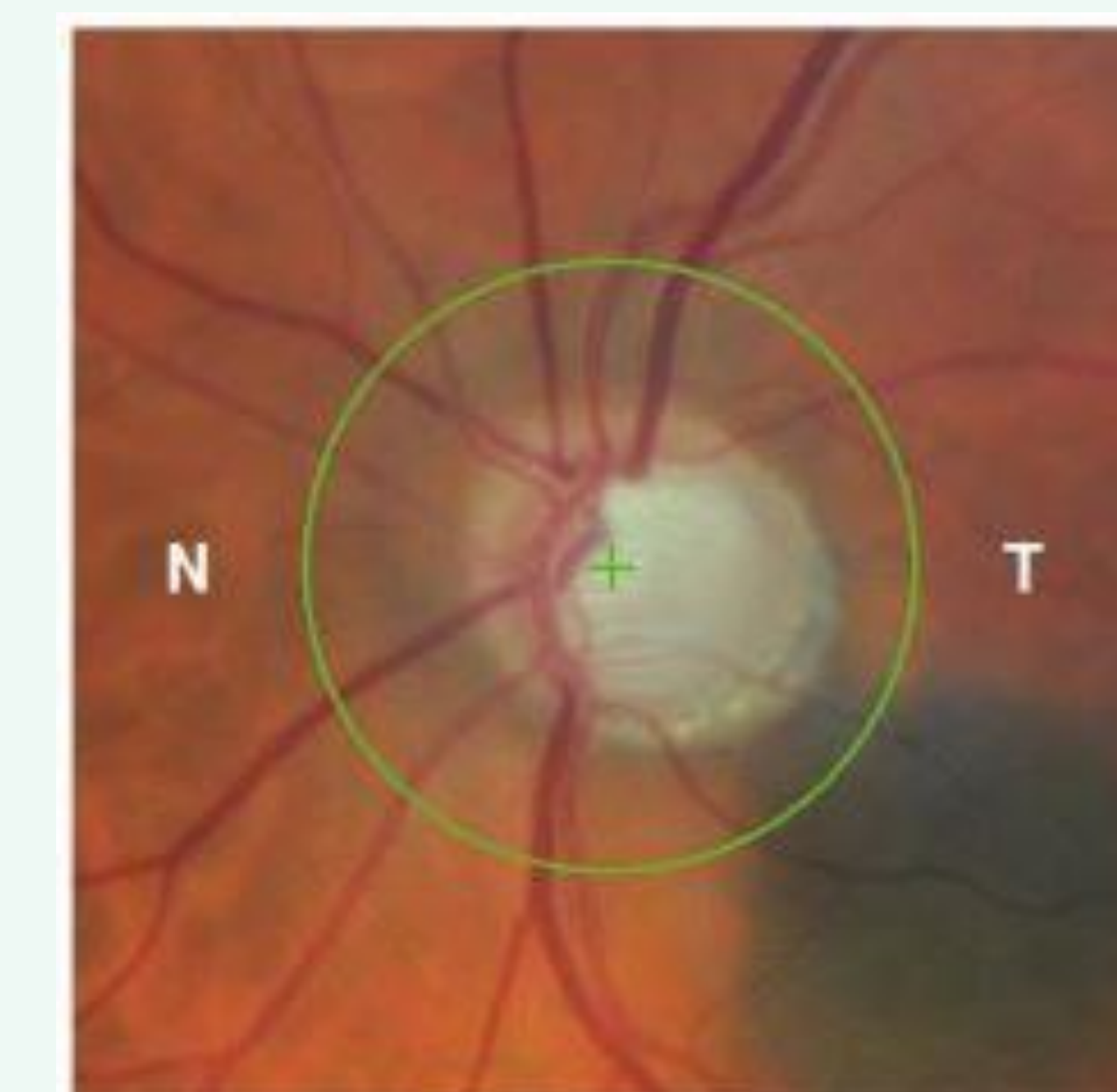
Figure 2 gives the reasons for onward referral to a consultant ophthalmologist. The main reason for referring on to the consultant led clinic was elevated IOP.

Figure 2



## DISCUSSION

The percentage of patients discharged from our referral refinement clinic has not changed significantly over the last three years. This would appear to be similar to other schemes.<sup>5</sup> The number of patients seen in 2015-16 was less than in previous years. This may in part be due to an increase in community based glaucoma referral refinement clinics<sup>4</sup> and an increase in the practice of Goldmann Applanation Tonometry by community optometrists, leading to a reduction in unnecessary referrals.<sup>6</sup>



Monitoring and treating patients with glaucoma accounts for 20% of current ophthalmology hospital outpatient activity in the UK.<sup>7</sup> In view of the expected increase in glaucoma cases in the UK, community optometrists would therefore appear well placed to undertake an increased role in glaucoma and ocular hypertension co-management in years to come.

## DISCLOSURES

None

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