

Research Article

The Effect of a Shared Decision-Making Tool on Cataract Conversion Rate

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Introduction

Due to the ever-increasing demand for cataract surgery, the UK has streamlined the referral pathway to a 2-step process [1]. Patients referred from the community are assessed face-to-face by service providers and then listed for surgery if suitable. Further approaches to address demand include reducing unsuitable referrals.

The NHS service improvement programme Getting It Right First Time (GIRFT) suggests using Cataract Conversion Rate (CCR) as a metric to monitor service and referral quality. GIRFT defines CCR as 'What proportion of new referrals/new outpatient attendances for cataract surgery are listed following the first outpatient attendance' [2].

GIRFT's 2019 report suggested a minimum CCR of 80-85%. To improve CCR, GIRFT recommended using a Shared Decision-

Abstract

Background: The NHS service improvement programme Getting It Right First Time (GIRFT) suggests UK cataract surgery providers use 'cataract conversion rate' (CCR) as a metric to monitor referral and service quality. They advised providers with CCRs below 80% (with 80-85% as the current gateway metric target) to use a Shared Decision-Making Tool (SDMT), which allows unsuitable referrals to exit before the face-to-face appointment, increasing the CCR. In response to GIRFT's recommendations and NHS trust reported CCRs of 69-71%, the Bath and North East Somerset, Swindon and Wiltshire (BSW) Eyecare Network produced an SDMT and implemented a pilot study assessing its effectiveness.

Methods: In August 2021, cataract referrals received by BSW were randomised to either receive the SDMT (n=140) or standard care (n=145). In May 2022, the groups' CCRs were calculated and compared with chi-squared testing.

Results: In the study group, 106 engaged with the SDMT, of which only 5 (4.7%) exited their pathway after using it. The control group and study group's CCRs were 87.8% and 88.9% respectively, showing no significant difference (p-value 0.82).

Conclusions: Our findings demonstrate that the SDMT did not significantly improve the CCR. The reasons being, firstly, the control group's CCR (87.8%) was higher than in the trust's initial report (69-71%) making any potential further impact only marginal and secondly, because many patients still wanted a face-to-face consultation regardless. BSW has therefore not implemented the tool and cautions other ICBs to carefully assess their true CCR before investing resources implementing one.

Keywords: Cataract referrals; Decision-making tools

Making Tool (SDMT) [2] which creates another stage in the pathway where an unsuitable referral can exit before reaching the face-to-face appointment, increasing the CCR. A review of published literature showed no evidence of the SDMT improving CCR despite these tools having evidence for improving pre-operative decision making in cataract surgery [3]. In 2020, NHS trusts Bath and North East Somerset, Swindon and Wiltshire (BSW) reported CCRs of 69-71% on their gateway metrics. In response to GIRFT's recommendations the BSW Eyecare Network produced an SDMT and implemented a pilot study assessing its effectiveness.

Methods

The SDMT was a hardcopy leaflet posted to referred patients before their initial face-to-face appointment. It contained

cataract surgery information and a short questionnaire using a CatPROM5-questionnaire points system. Their score advised if they would 'unlikely', 'possibly' or 'likely' benefit from surgery based on their day-to-day symptoms. A phone call from Referral Management Centre staff would check patient understanding, and qualified optometrists would answer any questions. At this point, the patient decided if they wished their referral to continue or end.

In August 2021 cataract referrals received at the BSW Referral Management Centre were assigned alternately into a control group (n=145) who received standard care, or study group (n=140) who were sent the SDMT. In May 2022, outcome data was gathered from the providers (both Independent and NHS). The outcome was classified as a successful cataract conversion if a patient was on a waiting list or had completed surgery. Bilateral surgery was counted as a single conversion. The groups' CCRs were then calculated and compared using chi-squared testing.

Results

Within the study group (n=140), 12 patients declined to partake and 22 were uncontactable by RMC staff, leaving 106 patients (75.7%) who engaged with the tool. Of those who engaged with the tool only 5 patients (4.7%) decided not to proceed to outpatient appointments, whereas 101 did.

Of the 145 control group referrals, 30 patients did not attend a first outpatient appointment during the study period (reasons included switching providers, delaying or going privately), leaving a cohort of 115. Similarly, 25 of the 106-study cohort did not attend, leaving 81 patients.

In the control group and study group, 101 and 72 successfully converted respectively, resulting in CCRs of 87.8% and 88.9%. The difference in CCRs was not significant (p-value 0.82).

Conclusion

Our findings suggest that this SDMT did not improve the CCR within our cohort. The reasons being, firstly, the actual CCR (87.8% in the control group) was higher than in the trust's initial report (69-71%) making any potential further impact only marginal and secondly, because many patients still wanted a face-to-face consultation even if they had mild symptoms.

Centralized recommendations based on data gathered exclusively from NHS providers is problematic, given that approximately 60% of cataract surgery is provided by independent

providers [4]. Independent and NHS providers do not have comparable patient profiles and therefore centralized recommendations ought to be drawn from data that reflects the proportion of independent and NHS providers in a region. Also, self-reported CCRs from NHS trusts seem to be inaccurate.

NHS England later published an SDMT [5] which, despite including helpful statistics for the patients, was otherwise similar to ours. We therefore feel the results from our SDMT study are transferable.

As a result of this pilot study BSW has not implemented continued use and cautions others to carefully assess their overall CCR before investing resources implementing one without the guaranteed increase of CCR. For providers with a particularly low CCR, an SDMT may be helpful.

Author Statements

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References

1. Dhillon N, Ghazal D, Harcourt J, Kumarasamy M. A proposed re-design of elective cataract services in Scotland - pilot project. *Eye (Lond)*. 2022; 36: 2116-21.
2. MacEwen C, Davis A, Chang L. Ophthalmology GIRFT programme national specialty report December 2019.
3. Sparrow JM, Grzeda M, Frost A, Liu C, Johnston RL, Scanlon P, et al. Developing decision support tools incorporating personalised predictions of likely visual benefit versus harm for cataract surgery [research program]. Southampton (UK). National Institute for Health and Care Research. 2022.
4. The Royal College of Ophthalmologists. Changes in NHS cataract surgery in England 2016-2021: an analysis of national, regional and independent sector trends. 2022.
5. Winton centre for risk and evidence communication and NHS England. NHS cataracts decision tool July 2022.