

# Developing decision support tools incorporating personalised predictions of likely visual benefit versus harm for cataract surgery: research programme

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## Plain English summary

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## Plain English summary

Decisions about whether to opt for cataract surgery right away or hold off are mostly based on a patient's ability to read letters on a test chart, rather than on their real-world experience of their vision. This can mean that patients are sent for surgery before they really need it or (more commonly) that they have to wait longer, that is until their vision is deemed poor enough. For the decision-making process to be more patient friendly, we developed and tested a series of decision support 'tools' that give individual patients and their doctors a better understanding of how cataracts affect everyday vision.

To enable patients to express how their vision affects them day to day, we developed a short questionnaire, Cataract Patient-Reported Outcome Measure, five items (Cat-PROM5), which has been shown to work well. Cat-PROM5 can be completed by patients before they see their eye doctor and can then be considered alongside the letter test chart results. Cat-PROM5 can also be completed after surgery, which is useful for doctors to assess how much a patient has benefited from surgery. Furthermore, our analysis allows the eye doctor to predict how good a patient's vision is likely to be after the surgery, should they decide to go ahead with it.

People considering an operation usually also want to know what the risk is of things turning out badly. We have, therefore, developed a way to predict the risk of a complication occurring during the surgery and of loss of vision following the surgery, based on things like age and eye health.

Using these predictions, we created a cataract decision aid that also includes general cataract surgery information and frequently asked questions. This was tested and most of the patients and doctors thought it was useful, although the cataract decision aid and the way it is used could still be improved.



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