The Effectiveness, cost-effectiveness and acceptability of Community versus Hospital Eye Service follow-up for patients with neovascular age-related macular degeneration with quiescent disease (ECHoES): a virtual randomised balanced incomplete block trial

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Plain English summary

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Plain English summary

Wet age-related macular degeneration (AMD) is common and causes severe sight loss and blindness. Active disease is treated monthly until it becomes inactive; patients are then monitored regularly in hospital in case the disease reactivates, at which point further treatment is needed. Monitoring is burdensome to patients, their carers and the NHS. This study investigated whether or not community-based optometrists, after appropriate training, can make decisions about disease reactivation as accurately as hospital-based ophthalmologists. We also investigated whether or not monitoring by community-based optometrists would provide value for money for the NHS.

Profiles were created summarising anonymous information about patients with wet AMD twice during their treatment: once when the disease was inactive and subsequently when the disease was inactive or active. Profiles comprised the pictures of the eye used by doctors to make retreatment decisions and age, gender and other summary patient details. A total of 155 ophthalmologists and optometrists volunteered. Forty-eight of each profession completed training and studied 42 profiles. By comparing the two pictures taken, the professionals decided whether or not the disease had reactivated. Optometrists and ophthalmologists made correct decisions for 84.4% and 85.4% of profiles, respectively. Optometrists were more cautious than ophthalmologists, correctly identifying more reactivated profiles, but also incorrectly classifying more inactive profiles as reactivated. Average costs for monitoring were very similar: £397.33 and £410.78 for ophthalmologists and optometrists, respectively.

We concluded that, with adequate training, optometrists’ retreatment decisions are as good as those of ophthalmologists. Monitoring by community-based optometrists is likely to be more patient-centred and reduce NHS workload but may be challenging to implement.
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