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Patient pathways for macular disease: what will the new optometrist with special interest achieve?

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Stephen Gallagher, outpatient's programme manager for the Scottish NHS Centre for Change and Innovation is quoted as saying 'Change is something I think works best when the ideas come from those who do the job.' No doubt a laudable sentiment but organisational change, especially in an organisation as monolithic as the NHS, is always resisted. Indeed Newton's first law of thermodynamics has been astutely misquoted; 'for each and every action there is an equal and opposite criticism.'

In defence of the proposed patient pathways for detection and treatment of macular degeneration,^{1,2} it is tempting to respond simply that 'screening detects disease therefore screening must be good.' As sound-bites go one might assume this statement to be beyond reproach. On the contrary it invites legitimate, even facile criticism, and is certainly not original. The sentiment was first expressed, with deliberate irony, in an editorial in The Lancet, which followed the high profile failure of the cervical screening programme in Kent and Canterbury Hospitals NHS Trust.3 In large measure the problems that beset that screening scenario threaten this one; namely the limited precision of screening tests.4 Or rather the limited understanding by lay and professional of the limited precision of screening tests. Compounding the already unstable situation is the peculiar haste and confidence with which the medico-political establishment installs such schemes. This often results in odd decisions regarding screening strategies⁵ and inadequate pilot work or funding for audit of newly instituted schemes.6

One cardinal error is the result of a certain 'belt and braces' approach to patient assessment. This strategy, which usually takes the form of dual or multiple tests, has a certain first principles appeal but only confuses matters. It is proposed in the patient pathways for macular disease to add a level of patient assessment provided by an expert optometrist. Patients suspected of having exudative age related macular degeneration (AMD) will be referred to this practitioner with a special interest (OSI) rather than direct to the hospital specialist. The attraction of such a system, of course, is the apparent addition of expertise to the existing referral chain. In fact precisely what this interposed OSI achieves is less clear cut.

All primary care patient contacts (high-street optometrists) will have a given sensitivity and specificity for the diagnosis of exudative AMD. It is inconceivable that treatable pathology will never be missed (sensitivity will never be 100%). Furthermore other pathology will be referred incorrectly labelled as AMD to the specialist optometrist (specificity will never be 100%). No matter. The OSI, working in the primary care setting, will filter or triage these cases. This is indeed his/her *raison d'etre*. He/ she will not refer on all the cases that come for review.

It is precisely here that difficulties arises. Unless this test is diagnostic (carries with it the authority to decide which membranes require PDT and which do not) it is simply the penultimate assessment. This then can add specificity (some cases are sent no further up the patient pathway) but not sensitivity (it does not add new cases). Thus, the second tier expert must always decrease the yield of cases. Let us stress, this is not a pejorative indictment of the practitioners competence so much as an

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inherent limitation imposed by the place and nature of this examination within the referral chain.

Furthermore, unless there is a radical change to the basis of contemporary society, this service will not be free. It will be countered that the community-based expert optometrist's hourly rate is less than that of the medical retina specialist and hence the system will be cost effective. But this is too rash and simplistic a claim. All patients referred on to the Hospital Eye Service by the community expert will incur the cost of the retinal specialist (as they did before) but now also the additional cost of the second tier community expert. The latter cost is also incurred by those not referred to the Hospital Eye Service who none the less get as far as the specialist optometrist. If this number is a substantial proportion of the total number referred, and the hourly rate is indeed lower (training costs will need to be factored into the equation) then the cost of such a proposed service may indeed be lower overall. Even so it may not be lower per case detected (a far more useful benchmark statistic) since the yield of cases will fall as discussed above. The dilemma then is not primarily an economical one but a philosophical one. What does society wish to achieve with the implementation of the new patient pathway for macular disease? If the aim is to detect the maximum number of cases (that is to minimise the number who might receive benefit from treatment who fail to be appropriately channelled to the specialist service) then, sadly but axiomatically, the new model will not achieve this. If, however, the aim is simply to reduce costs then this service may help achieve that, although this will be

at the expense of an increase in the number of cases unwittingly denied access to treatment. It would be particularly ironic if the new system was more expensive. This would be to pay more to treat less, in which case philosophy becomes redundant to common sense. One thing however is certain; unless funding to measure the impact and effectiveness of these new changes to the patient journey is forthcoming, we may never be informed enough to make such a choice. Worse still we may be left with the nagging feeling that we could have just have made a bad situation worse.

References

- 1 NHS Centre for Change and Innovation. Age related macular degeneration (ARMD) patient pathway. http://www.cci. scot.nhs.uk/cci/files/Pathway%20Ophthalmology% 20AMD%2023Feb05%20.pdf, 2005.
- 2 Department of Health National Eye Care Steering Group. National Eye Care Services Steering Group—First reporthttp://www.dh.gov.uk/PublicationsAndStatistics/ Publications/PublicationsPolicyAndGuidance/Publications PolicyAndGuidanceArticle/fs/en?CONTENT_ID = 4080998&chk = 0cdaYD, 2005.
- 3 Anon. The screening muddle. Lancet 1998; 351(9101): 489.
- 4 Last JM. A Dictionary of Epidemiology. 3rd ed. Oxford University Press: New York, 1995.
- 5 Hackshaw AK, Paul EA. Breast self examination and death from breast cancer: a meta-analysis. *Br J Cancer* 2003; **88**: 1047–1053.
- 6 Law M. Screening without evidence of efficacy—screening of unproved value should not be advocated. *BMJ* 2004; 328: 301–302.