Eye Health Systems Assessment of England

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INTRODUCTION

The World Health Organization (WHO) World Report on Vision advocates for the development of integrated people-centered eye care that benefits all members of society.[1] To achieve this goal, policy that targets systemic shortcomings and utilizes available resources is paramount.

Eye care policy development is a labour-intensive task that requires careful assessment of current health systems and local needs. This undertaking benefits from the use of a structured health assessment tool.

The Eye Health Systems Assessment (EHSA) is a concise modified version of the widely used Health System's Assessment approach.[2] It contains seven modules (Fig. 1) which enable users to conduct a rapid and thorough evaluation of the strengths and weaknesses of a country's eye services.[2]

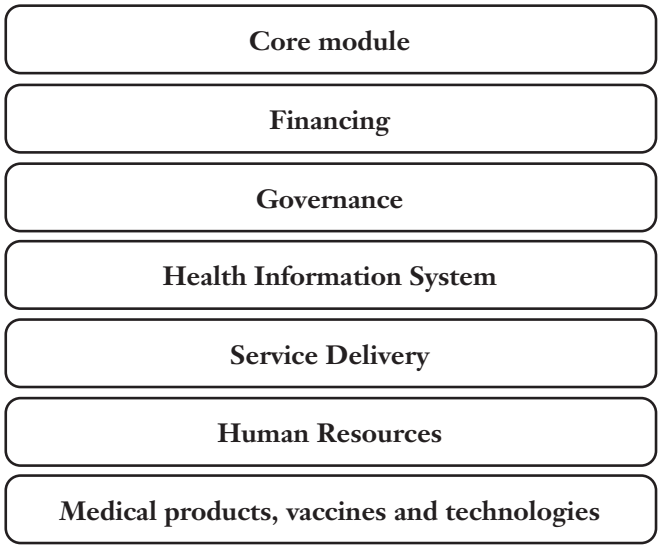

Figure 1: Eye Health Care Assessment Seven Modules.

This review aims to evaluate the eye services and eye care strategy in England using the EHSA tool. In accordance with World Report on Vision recommendations,[1] special attention has been paid to eye care integration. To conclude, prioritised policy recommendations have been made.

CORE MODULE

Health care in England is primarily tax funded and delivered through the National Health Service (NHS). The NHS operates with the objective of providing comprehensive health care that is available to all on the basis of clinical need rather than ability to pay.[3]

The structure of eye services in England is best explained by tracing the funding at different levels. Centrally, the Department of Health and Social Care fund NHS England.[4] NHS England directly fund General Ophthalmic Services (GOS), which are run by optometrists and carry out activities such as sight tests.[5] NHS England also fund clinical commissioning groups (CCGs).[4] CCGs fund Hospital Eye Services (HES), Primary Eye Care Services and community ophthalmology services according to local needs.[5] There are 135 CCGs which are each responsible for commissioning in their allocated area.[6] There are 217 secondary care units receiving funding to providing urgent and planned care.[7]

FINANCING

The total health care expenditure for 2018 in the UK was £214.4 billion and represented 10% of gross domestic product (GDP).[8] This figure is similar to the 2019 budget in Canada (another high-income country with a similar health system), whose health spending accounted for 11.6% of GDP.[9] £3 billion of the UK budget was directly used for the provision of eye care.[10] This was significantly less than Canada who spent approximately £5 billion for a far smaller population.[11]

In England, eye services can generally be accessed free of charge with the exception of GOS.[12] Sight tests are conducted at the expense of service users unless the patient meets certain criteria such as being over 60 years old.[12] Prescription glasses are also not covered by the NHS, although selected patients receive vouchers.[12]

There is relative equity within the NHS as everyone is entitled to free eye care regardless of income. However, free eye care is not absolute, and England remains behind its neighbouring country Scotland, who offers GOS free of charge.[13] In spite of this, GOS compensation schemes are a positive step forward for reducing avoidable blindness in high-risk groups.

GOVERNANCE AND HEALTH INFORMATION SYSTEM

When making commissioning decisions, CCGs are informed by a variety of stakeholders including the Clinical Council of Eye Health Commissioning (CCEHC).[14] CCEHC is an advisory body comprised of eye professionals, social care services and eye charity representatives.[15] There are a number of active eye charities in the UK such as the Royal National Institute of Blind People who regularly produce reports using recent publications and Office of National Statistics data to inform CCEHC of the population's needs.[16] Recently, CCEHC has developed the Systems and Assurance Framework for Eye-Health (SAFE), which emphases the opportune of community eye care services to CCGs.[14] Such use of stakeholders for advising CCGs enables vulnerable patient groups to be represented in decision making.

Although using CCGs for commissioning enables funders to remain sensitive to local needs, there are concerns that too much local variation may compromise high quality care due to lack of standardisation. This has resulted in a post-code lottery for some services. For example, in spite of UK national screening committee recommendations, only 47% of local authorities offer vision screening for primary school children aged 4 to 5 years old.[17]

Due to the successes of the UK Vision Strategy, preventable sight loss indicators have been integrated into central government plans such as the Public Health

Outcomes Framework Indicators 2019-2022.[18] Although this is a positive start, more progress is needed as many important government health plans that should include eye care, still do not. Examples include the Public Health Supplement of the NHS Constitution and the Sustainability and Transformation Plans (STPs).[19] STPs are government plans aiming to implement integrated models of care for local populations.[20] Integrated eye care is at the heart of the ethos of the World Report on Vision and yet only 23 of the 44 STPs mention eye care and those that do only mention it briefly.[21]

The lack of an overarching national strategy for eye care in England is a point of concern. The other nations in the UK have a clear national strategy but England does not. Instituting a national strategy alongside current CCG local commissioning may allow care provision to remain local and patient focused whilst offering a national reference point to ensure high standards of care are upheld.

SERVICE DELIVERY

1.82 million people experience significant visual impairment in England. The majority of cases are preventable and are caused by conditions common in the elderly such as refractive error (38.9%), age related macular degeneration (AMD) (23.1%) and cataracts (18.7%).[10,22] Over the next few decades, the elderly population in England will rapidly increase.[23] As the population ages, the burden of eye disease will also increase.[23] Estimates have been made that there will be a 50% increase in demand for cataract surgery, 44% increase in glaucoma cases and 60% increase in cases of diabetic retinopathy and AMD by 2035.[24] These figures highlight the importance of prioritising eye diseases common in the elderly in future service delivery policy.

There are 452,000 cataracts surgeries carried out annually in England, which is just over 8000 per 1 million of the population.[25] Canada has a higher rate of cataract surgery with an annual rate of around 1,130 per 1 million of the population.[26] Referral pathways for cataracts in the UK are inefficient with only 77% of patient who meet the criteria for referral actually receiving surgery.[24] In some parts of the country, this figure falls below 60%.[24] With the increasing demand for cataract surgery due to the ageing population, streamlining cataracts referral pathways may help the UK catch up with the surgical rates of other high-income countries. In addition, an explanation must be sought for the discrepancies in cataract surgical rates in different regions within the UK. This could be achieved by auditing cataract services.

HUMAN RESOURCES AND MEDICAL PRODUCTS, VACCINES AND TECHNOLOGIES

The number of ophthalmologists in the UK is frequently highlighted as an area requiring improvement.[24] In 2018, it was recorded that there were 1,260 consultant ophthalmologists and 600 specialty doctors, staff grades and associate specialists. Estimates have been made that a further 230 consultants along with additional ophthalmic staff are required to meet growing patient demands.[24,27] Since the ophthalmology specialty training pathway is heavily oversubscribed, it is likely that if more posts were opened, they would be filled.[28]

Limitations due to infrastructure are also commonly reported. One study reported that 49 out of the 52 NHS eye care providers they interviewed felt service delivery was limited by lack of space.[24] One innovative solution to this issue is the growing use of virtual clinics.[24] This is a promising option that overcomes the need for physical space and has been driven by the COVID-19 pandemic.

Due to staff shortages, 63% of eye care units in the UK are now using locums.[24] This costs the NHS more than £25 million each year.[24] Additionally, many NHS trusts are required to commission independent providers for eye services.[24] There are concerns that independent providers do not integrate well into local health care systems as they are independently managed and often have different goals.[24] Although outsourcing provides short-term solutions, investing in infrastructure and hiring full time staff may be a better long-term investment.

CONCLUSION

Although some evidence of integrated universal eye health coverage exists, in many regards England falls behind its neighbouring countries. In particular, the lack of an overarching national strategy for eye care is a significant weakness.

Use of the EHSA tool has indicated four main recommendations for England's eye services. Of these recommendations, establishing a national eye care strategy and increasing the NHS eye care workforce are urgent priorities. The remaining recommendations to improve cataract referral pathways and invest in infrastructure should be viewed as longer term goals.

Simply formulating recommendations is often inadequate to bring about change; significant efforts must also be put into public health advocacy. For advocacy purposes the four recommendations can be summarised as: strategy, staff, surgery and space.

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BIBLIOGRAPHY

1. World Health Organization. World report on vision. Vol. 214, World Health Organization. 2019. 1–160 p.
2. Blanchet K, Gilbert C, Lindfield R, Crook S. Eye Health Systems Assessment (EHSA): How to connect eye care with the general health. IAPB Tech Rep. 2012;(April). Available at: https://iceh.lshtm.ac.uk/files/2014/03/Eye-health-systems-assessment.pdf (accessed 28.01.2021).
3. Health Education England. The NHS constitutional values hub. Available at: https://www.hee.nhs.uk/about/our-values/nhs-constitutional-values-hub-0 (accessed 28.01.2021).
4. The King's Fund. How is the NHS structured? Available at: https://www.kingsfund.org.uk/audio-video/how-is-nhs-structured-funding-flow#&gid=1&pid=1 (accessed 28.01.2021).
5. Royal College of Ophthalmologists. Primary Eye Care, Community Ophthalmology and General Ophthalmology. 2019;(February):1–16. Available at: https://www.college-optometrists.org/resourceLibrary/ophthalmic-services-guidance--primary-eye-care--community-ophthalmology-and-general-ophthalmology.html (accessed 28.01.2021).
6. NHS Clinical Commissioners. About CCGs. Available at: https://www.nhscc.org/ccgs/ (accessed 28.01.2021).

7. NHS Providers. The NHS provider sector. 2020. Available from: https://nhsproviders.org/topics/delivery-and-performance/the-nhs-provider-sector#:~:text=Secondary care%2C. (accessed 28.01.2021).
8. Cooper J. Healthcare expenditure, UK Health Accounts 2018. Off Natl Stat. 2018;(June):1–28. Available at: https://www.ons.gov.uk/ (accessed 28.01.2021).
9. Canadian Institute for Health Information. Health spending. Available at: https://www.cihi.ca/en/health-spending#:~:text=In 2019%2C total health expenditure,gross domestic product (GDP) (accessed 28.01.2021).
10. Pezzullo L, Streatfeild J, Simkiss P, Shickle D. The economic impact of sight loss and blindness in the UK adult population. BMC Health Serv Res. 2018;18(1):1–13.
11. Cruess A, Gordon K, Bellan L, Mitchell S, Pezzullo L. The cost of vision loss in Canada. 2. Results. Can J Ophthalmol. 2011;46(4):315–8.
12. NHS. Free NHS eye tests and optical vouchers. Available at: https://www.nhs.uk/using-the-nhs/help-with-health-costs/free-nhs-eye-tests-and-optical-vouchers/ (accessed 28.01.2021).
13. Public Health Scotland. General Ophthalmic Services. Available at: https://www.isdscotland.org/health-topics/eye-care/general-ophthalmic-services/ (accessed 28.01.2021).
14. The College of Optometrists. Tools for planning and commissioning. Available at: https://www.college-optometrists.org/the-college/ccehc/planning-commissioning.html (accessed 28.01.2021).
15. 15. The College of Optometrists. How the CCEHC works. Available at: https://www.college-optometrists.org/the-college/ccehc/how-ccehc-works.html (accessed 28.01.2021)
16. Royal National Institute of Blind People. Key information and statistics on sight loss in the UK. Available at: https://www.rnib.org.uk/professionals/knowledge-and-research-hub/key-information-and-statistics (accessed 28.01.2021).
17. British and Irish Orthoptic Society, Clinical Council for Eye Health Commissioning. Vision screening provision in children aged 4-5 years in England Findings from a Freedom of Information Request 2019. 2020. Available at: https://www.college-optometrists.org/uploads/assets/5dd36414-fcdc-4df3-80d9a012c846a4bc/CCEHC-Child-Vision-Screening-report.pdf (accessed 28.01.2021).
18. Public Health England. Public health outcomes framework. Available at: https://www.gov.uk/government/collections/public-health-outcomes-framework#review-of-phof-indicators-2019-to-2022- (accessed 18.02.21).
19. Public Health England. Public health supplement to the NHS Constitution. 2013. Available at: https://www.gov.uk/government/publications/nhs-constitution-public-health-supplement (accessed 28.01.2021).
20. The King's Fund. Sustainability and transformation plans (STPs) explained. Available at: https://www.kingsfund.org.uk/topics/integrated-care/sustainability-transformation-plans-explained (accessed 28.01.2021).
21. Royal National Institute of Blind People. Improving eyecare commissioning. 2017.
22. Royal National Institute of Blind People. Sight Loss Data Tool. 2020. Available at: https://www.rnib.org.uk/professionals/knowledge-and-research-hub/key-information-and-statistics/sight-loss-data-tool (accessed 28.01.2021).
23. abpi. Better vision for all. 2013. Available at: https://www.abpi.org.uk/publications/better-vision-for-all/ (accessed 28.01.2021).
24. MacEwen C, Davis A, Chang L. Ophthalmology GIRFT Programme National Specialty Report. 2019. Available at: https://www.gettingitrightfirsttime.co.uk/ophthalmology-national-report/ (accessed 28.01.2021).
25. Donachie PHJ, Sparrow JM, Johnston RL. National Ophthalmology Database Audit. R Coll Ophthalmol. 2020;(August 2018):1–45.
26. OECD.Stat. Health Care Utilisation: Surgical Procedures. Available at: https://stats.oecd.org/index.aspx?queryid=30167 (accessed 28.01.2021).
27. The Royal College of Ophthalmologists. Workforce Census 2018. 2018;1–24. Available at: https://www.rcophth.ac.uk/wp-content/uploads/2019/02/RCOphth-Workforce-Census-2018.pdf (accessed 28.01.2021).
28. Health Education England. Specialty Recruitment Competition Ratios 2019. Available at: https://specialtytraining.hee.nhs.uk/Portals/1/Competition Ratios 2019_1.pdf (accessed 28.01.2021).