NHS Education for Scotland
Equality Impact Assessment Report

Name of function, policy or programme: Ophthalmology
Reform: community eye care services during the COVID-19 pandemic
NES directorate or department: NES Digital Service (NDS)

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1. Define the function

1. The national digital platform (NDP) seeks to enhance health and care services across Scotland by ensuring the right information is available to the right people, in the right way, at the right time.

2. During the COVID-19 pandemic, a need has been identified to support community eye care services. Community opticians have ceased opening practices due to the pandemic restrictions. However, there remains a need to treat patients in emergency situations and this often involves an associated need to share information between optometrists (community based) and ophthalmologists (hospital based).

3. This work will align with the Scottish Government's National Ophthalmology Workstream. This has identified the need for an ophthalmology Electronic Patient Record (oEPR). This will support the drive to protect sight through improved access to information, particularly during the pandemic period. We know that there is an increasing demand on eye services so the work can also play a role in improving outcome data to inform planning.

4. To support that strategic priority, NDS has initiated work with Toukan Labs to deploy OpenEyes, an open source oEPR, developed over several years in close collaboration with the ophthalmology community (see https://openeyes.org.uk). OpenEyes aligns well with the NDP. With integration support from NDS, it offers the potential for a new model of national implementation to improve information flows across care pathways.

5. Under the current COVID-19 restrictions, there is an opportunity to accelerate current work on the delivery of an oEPR to support COVID-19 priority areas. These can be summarised as:

    - supporting community eye care services to provide emergency and essential eye care services safely with the absolute minimum of infection risk to clinicians, colleagues and patients.

- facilitating and simplifying:
    - virtual consultations between patients and staff; and
    - sharing of information needed to treat patients between optometrists and ophthalmologists.

6. For the short-term COVID-19 situation, this will be a standalone deployment of OpenEyes with access over the internet. There will be no integration with existing Health Board or optometrist systems. Integration with existing systems – such as CHI and Trakcare – will be a key strand of the more strategic oEPR development.

7. NDS will introduce OpenEyes, a leading open source oEPR onto the NDP in order to enable virtual consultations with patients and to share the information needed to treat patients, between optometrists and ophthalmologists.

8. Building on relationships already in place for the strategic work around oEPR implementation, NDS will work with two external companies – ABEHR (https://www.abehr.com) and Toukan Labs (https://toukanlabs.com) – to deliver the OpenEyes product to support the key COVID-19 priority areas.

9. The initial scope for this work will be to:
    - deploy OpenEyes on the national digital platform, including shared audit activity logging
    - support community eye care services to provide emergency and essential eye care services safely with the absolute minimum of infection risk to clinicians, colleagues and patients.

10. The initial focus will be only for patients with no symptoms of COVID-19 who, following a telephone consultation, who are identified as requiring to be seen at one of the Emergency Eyecare Treatment Centres (hubs) in the community and subsequently in a hospital setting.

11. The work is an acceleration of previously planned work on a more strategic solution for eye care services across Scotland. This should allow the work to proceed on a solid foundation. Initial tactical work to support COVID-19 needs will be reusable for the delivery of strategic priorities. A clear timeline for the strategic work needs to be collaboratively developed and understood.

2. Evidence used to inform assessment

1. Ophthalmology and optometry services have been subject to some activity around equalities and diversity. Often this has concentrated on sensory accessibility. There has been considerable work to reduce regional variation in access across and between Health Boards, while creating a more consistent user experience in support of the national vision for a safe and more sustainable service.

2. Key metrics have been gathered around service uptake and both workforce numbers and skills. There is the expectation of a dramatic increase in ophthalmology service uptake, particularly from older people, over the coming years. This is coupled with increased numbers of people managing long term eye conditions through community ophthalmology services.

3. During the COVID-19 pandemic, people from all strata in society may lose life unnecessarily. For ophthalmology services, loss of sight is the key aspect to be guarded against. It is unclear what impact COVID-19 will have for eye care services, but at a time when all aspects of the health and care system are strained to breaking point, anything that can make processes for efficient handling of consultations, sharing of information, and minimising risk will likely have a positive impact.

4. Approaches to accessibility of digital services – particularly screen readers, high visibility, and clear design – are vital in the development of services that will have people with sight impairment as a key partner. Improving access to information in an equalities and health literacy responsive way has the potential for a positive impact.

5. As the oEPR product becomes available to support citizens accessing and updating their information, there are likely to be issues relating to digital skills that need consideration. There may be a need to develop approaches to address the needs of groups that are known to face greater barriers to digital engagement.

2. Results from analysis of evidence and engagement

1. Equalities issues have often been poorly considered by digital and technology programmes across the public sector. While there is strong understanding and adherence to equalities legislation and regulation at organisational level, the fragmentation of the approach to technology development – as identified in reports such as the Expert Panel report on digital health and care in Scotland – has led to a lack of clarity on who is responsible for maintaining high standards of accessibility. This is often heightened by a lack of clarity around “ownership” of parts of processes being supported and the products and tools used to support those processes. The NDS approach to bringing greater consistency to digital services for health and social care means it has an excellent opportunity to

address this fragmentation and lack of clarity to create conditions where diverse needs are both recognised and met.

2. While there has been significant policy effort over the past fifteen years to reform eyecare policy, an unintended consequence of the approach has been the widening of the socio-economic inequalities in the utilisation of eye care services in Scotland. Set against this, evidence suggests that the free eye care reform in Scotland has led to an increase in the detection of wider health conditions such as hypertension through a higher uptake of eye examinations.

3. Almost 2.5 million NHS-funded eye appointments were carried out across Scotland in 2018/19. 95.2% of appointments were managed within primary care. Only 25% of eyecare claims required supplementary exams and 'unscheduled appointments' (37%) was the most common. There are almost 57,000 people with a sight-threatening condition such as glaucoma or ocular hypertension, a number which has doubled since 2006/07. Currently, there are an additional 91,000 people at risk of a sight-threatening condition linked to the combined factors of being over 40 years old and being a relative of a glaucoma sufferer.

4. Ophthalmology is the largest outpatient speciality in Scotland and pressure on the service will only continue to increase. Preventative services are essential in saving sight. Access to eye care services in primary and secondary care in a timely manner is important as delayed treatment may lead to either sight deterioration or sight loss.

5. The equalities impact assessment work undertaken in ophthalmology services provides an initial examination of the impacts on the groups that will be directly impacted by the oEPR application. The equalities impact assessment work undertaken for ReSPECT provides a good starting point for evidence around digital and health inequalities.

6. A digital platform, such as an oEPR, offers the opportunity of more effective communication with patients. People can have their preferences logged on their records to ensure that their preferred form of communication is used consistently. For instance, the oEPR can make it clear that the patient would prefer to be contacted by telephone rather than being offered an online appointment, or vice versa.

7. When documenting equality impacts of a given policy, it is important to consider things from a breadth of perspectives. We have an obligation to consider things from viewpoint of protected groups. We know there are also a range of cross-cutting factors that go beyond these groups. We have structured evidence of those issues under an emerging "barriers to access" framework, which sets out challenges from the perspective of the motivations that drive people to engage or not with particular activities.

8. During the pandemic period, eyecare services responded quickly with the publication of updated guidance with the aim to "preserve sight, where we can, but not at the expense of life itself." It is in this context that the NDS Eyecare service has been initially deployed. Lessons from this initial

implementation will inform next steps towards a more comprehensive oEPR service across Scotland.

9. Also during the pandemic period, RNIB conducted a UK-wide survey to ask blind and partially sighted people about the impact the coronavirus pandemic was having on their lives. A quarter (26 per cent) of respondents said that they had struggled to get written information in a format that they could read and 17 per cent said that they had struggled to access online information.

10. There is emerging concern that the uptake of eye examinations in Scotland, since the recommencement of routine eye appointments, will be low due to people's uncertainties about health and safety, and not wanting to feel a burden on the health service.

Protected characteristics

11. Equalities impact for the following protected groups was considered as part of the eyecare development:
    - age
    - disability (for example ongoing respiratory conditions)
    - gender reassignment
    - marriage and civil partnership
    - pregnancy and maternity
    - race
    - religion or belief
    - sex
    - sexual orientation

12. Given the broad nature of ophthalmology services, there will be a need to consider most if not all protected characteristics, alongside a strong consideration of wider social determinants of health. While the breadth of the work could impact across most or all of these groups, we looked in detail at **age, disability,** and **race.**

13. In terms of **age**, older people within the general population may experience particular issues. These may include:
    - lower levels of digital enablement, with fewer people likely to have access to and/or be proficient in the use of technologies which could support them;
    - frailty may lead to lower engagement with the programme due to poorer health and greater sensitivity to stressors;
    - there may also be practical issues around participating. These may relate to things like access to technology to take part in collaborative conversations over video call; and
    - maintaining physical and social distancing during the pandemic period may have strong impacts for older people. Aside from the effects of isolation on mental health, practical challenges of daily living – food preparation for example – may have an impact on physical wellbeing. Priorities and preferences around What Matters to You are likely to be

impacted by the current constraints on movement and interaction with the community.

In addition, one of the target eye conditions, age-related macular degeneration, has a strong coherence with age (as the name suggests). This places a clear obligation on the service to ensure it is responsive to the needs of an ageing population.

14. In terms of **disability** people could experience a number of barriers to engaging with eyecare services. These could include:
    - information in inaccessible formats or languages. Various accessible formats need to be considered, including plain English, easy read, coloured background (dyslexia), braille, image-driven approaches, BSL and clear verbal communications or tactile communications.
    - people with dementia and with neuro-diverse conditions such as autism may feel distressed around the style and format of conversations over video call. Accommodating these concerns has an applicability to all cases, recognising that healthcare interactions are often intrinsically stressful or anxiety-inducing. Effort needs to be focussed on preparing all people in advance of an online consultation, to put them at their ease as far as possible. Only then can people and practitioners best contribute. Thought should be given to advocacy or supporting mechanisms to ensure people can best cope with what might be an unfamiliar approach.
    - Again, issues relating to isolation may create increased practical barriers to supporting everyday health and wellbeing.

15. In terms of **race** people of black, Asian and minority ethnic (BAME) backgrounds may experience barriers that include:
    - a recent Scottish Government report on COVID-19 and ethnicity reported:

      > "The COVID-19 pandemic has highlighted the lack of adequate data to monitor the needs of different minority ethnic groups, particularly in relation to the health consequences of the pandemic. However, a lack of ongoing monitoring of ethnic inequalities in health within Scotland has been longstanding. Data on ethnicity has been recorded in many NHS Scotland administrative systems for some time, but levels of recording and data quality have often been too poor to allow meaningful analysis."

    - there is therefore a significant challenge across the system in meeting equality duties in terms of race and ethnicity due to the lack of data to inform action. However, the data that we do have provides a basis for required action;

- racially aggravated hate crime is the most frequently recorded category of hate crime in Scotland. Therefore, with people already experiencing the impacts of isolation, further reluctance to engage in healthcare could develop;
- there may be a greater number of people for whom English is not a first language. They may therefore be unable to understand any information provided or engage fully in collaborative conversations if services are not designed to be responsive to those needs.
- black and minority ethnic people are more likely to live in poverty and therefore the issues around digital access noted above could also apply;
- as alluded to above, there is evidence of much greater impact of COVID-19 in terms of infection and mortality in BAME populations. This will have a correlation to socioeconomic factors, but we will need to monitor further evidence for additional impacts.

Service design

16. A service design approach – aligned with the Scottish Approach to Service Design – has been adopted across NDS. This ensures inclusive, user-centred approaches to involving those directly impacted upon by the implementation of the new product in its design and delivery. It also helps our continuing work to mitigate against the potential for digital to widen health inequalities, a key element of wider equalities activity across NDS products.

17. But additional recently published research suggests that even when careful and inclusive design approaches are taken, there is still potential for significant challenges, particularly with elderly and ageing populations.

18. Doteveryone's Consequence Scanning approach initially informed our consideration of equalities issues and how to embed thinking into everyday agile processes.

19. Since then, work in this sphere has developed as the NDS approach to service design has progressed. As part of that, the following challenges have been formulated relating to what may influence whether people engage with health-related activities. These reflect ongoing discussions with the Government Digital Service on this and other topics. These barriers have been identified to help wider considerations about the needs of those interacting with the NDP. They include:
    - Enthusiasm
    - Emotional states
    - Awareness
    - Self-confidence
    - Access
    - Comprehension skills
    - Interface & interaction skills

- Trust
- Time
- Evidence
- Finance

19. These have some resonance with the domains of digital inclusion outlined in the New Zealand government's blueprint which articulates them both as barriers and areas for action.

Barriers

20. In terms of **enthusiasm**, people could experience a number of barriers to engaging with eyecare services:
    - The engagement and enthusiasm levels of people and practitioners fundamentally needs to shape the level and pace of care interactions such as those supported by the NDS Eyecare service.
    - People who are more engaged with their healthcare, understand their likely clinical pathway and are motivated to self-manage, often have a greater understanding of the benefits of proactive approaches. It would be anticipated in these instances, that people would recognise the benefits to online interactions and be more willing to engage in these conversations.
    - By extension, people with less understanding of their health situation, may be less likely to realise the relevance of collaborative conversations and shared decision making. This creates an opportunity to include guidance around good conversations at point of diagnosis or when a condition emerges.
    - Although the term is sometimes viewed as problematic, there is research and practice around a concept called patient activation. This is understood to be the knowledge, skills and confidence a person has to manage their own health and health care, so has a strong coherence with health literacy, but has a focus in the domain of enthusiasm. It is a stronger predictor of health outcomes than socio-demographic factors alone such as age and ethnicity.
    - A 2014 report from The King's Fund, highlighted patient activation as a mechanism to address health inequalities beyond traditional socio-demographic factors, and consider tailored support to those least engaged. This correlates with helping those furthest behind, as articulated by the World Health Organization, and described in Tudor Hart's Inverse Care Law.
    - The importance of What Matters to You? as the starting question for collaborative conversations is clear. This has been embraced in settings such as medications reviews and is increasingly a cornerstone of anticipatory care planning. The need for open and collaborative approaches to engagement to enable future online interactions about eyecare should remain a priority.

21. In terms of **emotional state**, people could experience barriers to engaging with eyecare services:

- During the current pandemic period, it is likely that those with significant long-term health conditions – and this may be experienced in more severe ways for those identified as part of the "shielding" group – will feel very isolated due to the lack of social and health care interactions and anxieties around COVID-19 infection risk.
- While everyone is different, it should be expected that the emotional challenges this brings may mean that people feel less resilient to have conversations relating to health issues. However, we know from initial evidence from a survey of the shielding group that 70% of people have reported they are coping OK with staying at home during the current phase.
- It is reported that people shielding, welcomed the opportunity to discuss their health concerns and future planning with GPs when they phoned.
- Mental health is an area of particular concern, as isolation is a recognised contributor to decreased mental health wellbeing and resilience. Set against the figure of 70% of people feeling they are coping OK with shielding is the fact that 76% of people reported a negative impact on their mental health. The move of mental health support services to an online/digital/telephone options will be a sizeable shift for those previously accessing face to face support.
- Evidence from previous pandemics such as the 2001 UK foot and mouth disease epidemic, highlight the challenges public health emergencies put on mental health and people's ability to cope with the uncertainties associated.
- A recent RNIB survey reported that two-thirds (66%) of blind and partially sighted respondents felt less independent compared to before the pandemic period. Many people depend on a guide to get out and about but one in four (25%) blind and partially sighted people told us they didn't have someone in the same household as them who can guide. The close contact required when guiding meant many people had lost this way of leaving the house, leaving people feeling much less independent.
- Social isolation and loneliness can have a detrimental long-term effect on mental health.
- When someone is diagnosed with an eye condition it can have a massive emotional and physical impact on their life. RNIB's Eye Clinic Liaison Officers (ECLOs) act as an important bridge between health and social services and are central to the support and wellbeing of patients in eye clinics. Having an ECLO is one of the most effective ways of supporting patients in the eye clinic. ECLOs are key in helping patients understand the impact of their diagnosis and providing them with emotional and practical support for their next steps.

22. In terms of **awareness**:
    - As with enthusiasm, people who are more engaged with their healthcare, understand their likely clinical pathway and are motivated to self-manage, often have a greater understanding of the benefits of proactive approaches. This links to inequalities of access along the lines of the Inverse Care Law – those that can access, will and do

access – so there's a need to ensure that a broad and diverse range of people are aware of the benefits of proactive eyecare approaches.

- In the current pandemic period, work has been undertaken to promote the benefits of collaborative care planning conversations to consider future care wishes. A report completed by the Healthcare Improvement Scotland iHub recommended a national awareness raising campaign delivered by trusted figures. This would have the aim of building a clearer understanding across the general population, both in terms of COVID-19 as population-wide public health emergency and for those at highest risk of severe impact if they were to become infected.
- A key builder of awareness is community connection and word of mouth. At a time when the whole population has been isolating and routine health and care services have been paused or reduced, many will have limited interactions with their usual healthcare professional such as their GP. Those isolating may have either limited carer support or no-one interacting with them in their homely settings. Effort needs to be focused on ensuring people who are isolating are connected to those important to them. This has been an increasing motivator for the use of digital solutions such as online remote consultations (Attend Anywhere, NHS Near Me etc) but phone and SMS services have played an important role, as well.
- In the wider oEPR context, awareness is a key barrier around current referral processes function. The ad hoc nature of current referrals sometimes contributes to a widening of inequalities. A systematic approach supported by an oEPR would create a more level flow of referrals from a range of sources and points of access.

23. **Self-confidence**, or the lack of it, may be a barrier to engaging with eyecare services. This has many facets to it, some of which have been emphasised during the current pandemic period:
    - A decline in self-confidence and self-belief may correlate to lower resilience to uncertainty. Reduced mental and physical health as indirect consequences of shielding and the associated social isolation would be expected to lead to people experiencing lower self-confidence.
    - Employment and financial uncertainty may impact self confidence and self-esteem. This is a major concern at the current time for many people. Younger people shielding may have significant concerns around continuing engagement with education or employment. The immediate and longer-term financial effects may affect their self-belief and self-esteem.
    - Disability, physical and mental health conditions, particularly long-term ones, can have a range of positive and negative impacts on self-esteem. These alone, aside from social isolation and anxieties, are significant factors in people's self-belief to understand complex and sensitive subjects, such as future treatment preferences.

24. **Access** covers many aspects and is both sweeping and nuanced:
    - Barriers may arise in terms of access to healthcare services, access to relevant equipment, access to digital infrastructure and services, access to support that in turn supports access (for example library

services that promote access to health information), and then the accessibility of the information associated with all of these aspects.

- In terms of the digital aspects, much of the existing evidence in relation to digital equalities relates strongly to socio-economic factors – income, status, access to technology devices such as smartphones etc – and location-based factors – network coverage in remote/rural areas (and for ambulances in transit), broadband availability, service accessibility – and digital skills and usage.
- The initial phases of product delivery are with digitally skilled clinical teams, keen to move away from paper processes, so the implementation of the application should have a positive impact.
- Such service improvements are part of wider health system improvement goals, as a recent European Commission paper on Digital Transformation says:

  > "Attainment of the broad health system goals, including quality, accessibility, efficiency and equity, are objectives against which to judge new digital health services. These goals are unaltered by the process of digitalisation."

- However, it seems unlikely that 'unaltered' is the correct formulation, as there is emerging evidence of greater complexity to consider.
- The interplay between digital and health inequalities has been identified as both a potential solution, but often a potential problem for health inequalities. Meta-analyses such as Latulippe et al are clear that many previous digital health solutions have contributed to the widening of the divide between those at risk of social health inequalities and the rest of the population.
- Recently published research (November 2019) by Azzopardi-Muscat and Sorensen is stronger in cautioning digital transformation programmes to address the issue of health inequality directly in their design. This needs to be in place to stem the flow of exacerbations of inequalities that most digital transformations have brought, particularly associated with increased age, lower level of educational attainment and lower socio-economic status.
- This highlights that this area is likely more nuanced than to say that health system goals are unaltered by the process of digitisation. Given the context of the Fairer Scotland Duty, which places a legal responsibility on public bodies in Scotland to actively consider how they can reduce inequalities of outcome caused by socioeconomic disadvantage, this will be a key consideration for the wider work of NDS.
- Access to service issues (including but also beyond the **awareness** issues highlighted above) along the lines of Tudor Hart's Inverse Care Law might need further exploration. Collaborative care plans are often instrumental in prolonging life or maintaining wellbeing, depending on people's preference, so there may be inherent access issues for the wider health system to explore and understand.
- In the current pandemic period, the move towards remote/virtual appointments and the challenges of initiating these, may be a barrier to those who would otherwise proactively seek face to face interactions. The positive experiences of digital solutions such as Zoom as part of more widespread day-to-day interactions may prove to be a catalyst for

wider adoption of technology, particularly for those people and communities that have not felt engaged or motivated to use these tools previously.

- For eyecare services specifically, the attempt to address access barriers formed part of the rationale for introducing free, NHS-funded, eye examinations. However, as research by Zangelidis shows, this attempt to address the previous socioeconomic inequalities in demand for eyecare have, if anything, been widened by the policy:

  > "our research showed that there was an increase in the uptake of eye examinations, but this was primarily evident in the upper part of the income distribution. Individuals in this group were already more likely to undergo an eye examination and so our research concluded that the policy had inadvertently increased socioeconomic inequalities in the demand for eye care in Scotland."

- A range of work has subsequently been commissioned to address these issues under the banner of Scottish Eyecare for Everyone (SEE).
- Included within this are the Royal National Institute of Blind People (RNIB) Eye Clinic Liaison Officer (ECLO) services. This covers a range of supports for people, including the use digital services.

25. **Comprehension skills** are another potential barrier to consider:
    - The ability to fully understand spoken advice or written content is fundamental, but we know that there are widespread difficulties. Health literacy statistics are stark on the subject – 43% of people struggling with basic written dosage information rising to 61% when numbers and calculation are included. So this is a population level issue with the burden firmly on the health and care system to make itself more understandable and accessible, in line with Scotland's health literacy action plan.
    - The work of NDS will take a health literacy responsive approach. This is in line with the New Scots strategy on refugee integration, as well as the wider health literacy action plan.
    - There is a requirement for accessible information formats such as plain English, easy read, high-contrast backgrounds (for people with dyslexia), braille, image-driven approaches, BSL and clear verbal or tactile communications.
    - Any digital solution forms part of a spectrum of different formats offered to support the conversation, based on people's preferences.
    - Managing blind and partially sighted people's requests for accessible formats, in a timely and consistent manner, creates clear communication and understanding between the individual and the health service. It can also prevent any unnecessary delays that could lead to a greater risk of sight deterioration for patients.
    - When requests have not been met, it can lead to people with sight loss feeling frustrated and misunderstood.
    - Demand for healthcare services continues to increase whilst costs are rising, and more people are waiting longer to be seen. The consequences of giving patients inaccessible information adds to the burden on services and patients.

- Translation services may also need to be organised ahead of online eyecare interactions. Time may be needed between the clinician and translator to discuss the sensitivities of the proposed conversation in advance, to ensure clarity of communication and nuances that may be difficult to translate.

26. **Interface and interactions skills** may be experienced as barriers to care planning conversations. These could include:
    - Lack of digital skills. A recent NHS Digital report into widening digital participation highlighted the most frequent users of the NHS also most likely to be socially as well as digitally excluded. Digital exclusion risks exacerbating existing health inequalities.
    - One in five adults lack basic digital skills, with age and disability identified in the same report as being the protected characteristic groups disadvantaged most by digital services.
    - A recent SCVO report identified the most common reason for not using the internet is a lack of confidence, motivation or understanding. Action is needed to ensure the move to digital services enables participation for all, not widening these well-known inequalities or creating further barriers to care planning conversations.
    - Levels of digital uptake can be significantly lower for people with disabilities. Accessing online information, for example, filling in forms online, can be very time consuming or completely inaccessible. Visual barriers such as inconsistent font sizes prevent blind and partially sighted people from accessing information with ease.
    - People with Parkinson's Disease, dementia, neuro-diverse conditions such as autism and Huntington's Disease, may find verbal interaction a barrier to online eyecare interactions. Mitigations are required to ensure that the needs of this wide group of conditions are supported to ensure full participation in conversations.
    - Collaborative conversations need to be conducted bearing in mind the citizen's ability to understand the subject and also allow them to be able to communicate back to the GP/clinician. For example, non-verbal citizens may be able to communicate via email or handwriting, but when conversations are remote online or by phone rather than face-to-face there needs to be mitigations to allow sharing of their thoughts and wishes with the clinician.
    - In some instances and stages of conditions, some citizens may not be able to advocate for themselves while at others times they may be well placed to cope. This variation is ability to interact needs to be supported.
    - 16% of people age 60-79 use the internet for managing physical and mental health conditions. Digital engagement is highest in younger adults, with this engagement declining with age.
    - For age, a recent Office of National Statistics report says that 47% of adults aged 75 years and over were recent internet users, set against 95% of adults aged 16 to 74 years. This highlights a fact that lower digital usage is linked to increasing age.
    - In terms of disability, the same report says that the number of disabled adults who were recent internet users reached over 10 million for the first time. This represents 78% of disabled adults. We need to factor-in

how well represented people living with conditions such as dementia are in disability adult statistics. This may reflect a much lower percentage than that quoted in this study. In addition, as statistics emerge from various initiatives supporting citizen access to health information and services, these may provide more accurate and/or relevant evidence.

27. When considering **trust** and collaborative relationships, four of the most common elements needed to develop trust are **competence, reliability, integrity and communication**. These have a complex interplay and without any one of these, it can be difficult to create the trust needed for a sustainable trust relationship. People may experience a number of trust barriers to engaging with online eyecare appointments such as:
    - Trust is central to citizen-clinician relationships. It is understood to influence adherence to treatment, perceptions of clinician's motivations, cooperation with a healthcare system. Healthcare system experience has been shown to affect public trust in wider authorities.
    - Trust of healthcare practitioners goes beyond building rapport. Maintenance of trust, often delivered through continuity of care practitioners involved in particular cases, and the boundaries and limits of what the clinician can deliver, need to be clearly communicated.
    - Lack of awareness or understanding of how the conversation information will be used and by whom can also be a barrier. These concerns should be addressed before eyecare conversations take place. Explanation of conversation information being recorded either on paper or digitally, together with discussion of the instances and health care professionals who would access the care plan is essential.
    - There may be a need to develop a sense of "restorative trust" to address previous negative experiences of a health deterioration point or healthcare service engagement.
    - There may be a lack of confidence in the technology, both in terms of protecting personal data and concerns the care plan information may not be widely available across the appropriate healthcare estate. This could lead to people questioning the value of these conversations.

28. In terms of **time**, people may experience barriers such as:
    - Health literacy inequalities may mean that some people don't fully understand various aspects the conversation with their practitioner, but don't express their lack of understanding. This further emphasises the importance of health literacy good conversation practices, but also means that time could and should be allowed for confirmation and re-confirmation of information and decisions.
    - During the current pandemic period, increased practical barriers to supporting everyday health and wellbeing may arise as a result of shielding and isolation. This may limit time available for other health supporting activities such as gathering information or spending time on phone calls to understand information.
    - A move to remote consultations coupled with an asynchronous approach to viewing of eye images (and other relevant information that people could upload/share through an oEPR) would promote more efficient working practices. This will allow for better prioritisation

particularly at points of deterioration for people who are managing long-term eyecare conditions.

29. In terms of **evidence**, this barrier could be experienced in a number of ways:
    - Blind and partially sighted people have varied experiences of finding out about their entitlement to access appropriate formats. Information about accessible documents does not always come directly from the health service but from other sources.
    - A barrier is often created where people are asked to provide or assert types of evidence – ‘upload a picture’, ‘submit an online form’, or even ‘register with an email address’ – where different approaches could be taken to gain access to services.
    - This may have relevance in eyecare services, particularly where images may be uploaded for practitioners to view at a future date (along the lines of asynchronous appointments). Care and attention will need to be taken the ensuring clarity of information for people to promote equitable access.

30. In terms of **finance**, people may experience barriers such as:
    - Additional costs accessing information and services. This could include device and infrastructure barriers to engaging digitally or online.
    - Eyecare services in the community often experience a perceived financial barrier due to their location within high-street optician shops. This is despite services being available free of charge.

4. Actions taken or planned in response to issues identified in the analysis

Issue identified	Action to be taken in response to issue	Responsibility	Timescale (indicate whether actions have already been completed, or provide timescale for carrying out the action)	Resources required	What is the expected outcome?
Need to embed equality and diversity thinking into agile product management practices	"Barriers to access" approach adopted into design and development processes	Eyecare product manager	ONGOING – initiated in June 2020 as a continuous improvement practice	Continued refinement of approach in collaboration with Government Digital Service (GDS)	Equality considerations become an everyday part of NDS product development
Need to consider the wider issues of how digital solutions and health inequalities interact – particularly the impact of wider socio-economic factors on care planning – to guard against a 'double inequality'	Continued interactions with the NHS Scotland, local government and third sector equality & diversity networks to collaboratively and continuously co-design the wider NDS approach to equalities	NDS team	ONGOING – initiated in May 2020 as a continuous improvement practice	Time identified within NDS staff roles to progress the work; supporting resources will need scoped	An approach to embedding equalities thinking across all NDS work is developed and implemented

The user interface of the eyecare digital solution presents problems for clinicians in safely accessing information	Consider accessibility review for future phases	NDS team working with OpenEyes	From September 2020	Development time – factored into product management	Product fully meets accessibility standards
There is a need to align the work on implementing the NDS eyecare service with the wider work on addressing inequalities in eyecare, for example through the Scottish Eyecare for Everyone (SEE) programme	Align digital equalities work with wider improvement work across eyecare sector	NDS team	From September 2020	NDS equalities team time working with wider eyecare stakeholders	Potential for widening of inequalities guarded against

5. Risk Management

1. In this assessment, have you identified any equality and diversity related risks which require ongoing management? If so, please attach a risk register identifying the risks and arrangements for managing the risks.

2. High-level risks and mitigations have been identified, summarised below:

    - Users of the eyecare application do not have the required digital skills to use the application
      Mitigation – user-focussed design principles adopted into application development.
      Mitigation – digital skills of users assessed with training and support made available to all to ensure equity of access.

    - The user interface of the eyecare digital solution presents problems for clinicians in safely accessing information
      Mitigation – product developed to design and accessibility standards
      Mitigation – ongoing approach to development and refinement of the eyecare product, based on user feedback

    - Equality or health inequality issues are exacerbated by the implementation of the eyecare application
      Mitigation – 'barriers to access' approach adopted into application development.
      Mitigation – consider more detailed research work on this topic, working with clinical colleagues.
      Mitigation – align digital work on eyecare with wider effort on addressing health inequalities across the sector.

6. Consideration of Alternatives and Implementation

1. The accessibility review led to changes to the coding of the eyecare application. With these changes made, no additional alternatives or changes to the proposed implementation were identified.

2. Eyecare is currently running as a face-to-face process – prior to implementation of the digital product – so will continue to be available in this way, based on people's preferences.

7. Monitoring and Review

1. This EQIA for the NDS Eyecare service builds on previous EQIAs undertaken by NDS. It is a continuing part of the documented output from NDS' wider programme of equalities activity. It sits as part of the NDS compliance approach, which documents various aspects of impact activity (clinical safety review, data protection impact assessment, system security protocol etc) to ensure that NDS products meet a series of quality criteria.

2. Both the compliance and equalities strands are ongoing parts of NDS activity, with continuous improvement, regular monitoring and review a core part of the work.

3. In terms of data, the initial approach to collection will focus on the qualitative experience of implementation with the NHS Forth Valley and NHS Grampian clinical teams involved.

4. Incrementally, quantitative measures will be considered for adoption. These will include the development of commonly agreed metrics around uptake and diversity of those using the eyecare process.

5. Continuous monitoring against standards (such as accessibility) will be undertaken as part the product release strategy. In terms of roles and responsibilities for ongoing review, there will be input from the NDS compliance manager, the eyecare product manager, and the NDS equalities team.

Sign off (by accountable director):

Geoff Huggins
November 2020