Nottingham and Nottinghamshire ICS

Eye Health

Clinical and Community Services Strategy

October 2020

Contents

1. Executive Summary

2. Introduction

3. Scope and Approach

4. Content

5. Priorities for Change

6. Proposed Future Care System

7. Transformation Proposal

8. Enabling Requirements

9. Service Vision

10. Conclusions and Next Steps

11. List of Common Abbreviations

12. Data Sources

1. Executive Summary

The Integrated Care System (ICS) ambition across Nottinghamshire is to both increase the duration of people's lives and to improve the quality of those additional years, allowing people to live longer, happier, healthier and more independently into their old age. The aim of the Clinical and Community Services Strategy (CCSS) is to support the system to achieve this by shifting the focus of our health and care delivery from reactive, hospital based treatment models to a pro-active approach of prevention and early intervention, delivered in people's homes or in community locations where this is appropriate with a long term view of beyond 5 years.

In the UK, there are almost 2 million people living with sight loss. Of these, around 360,000 are registered as blind or partially sighted. Being told you have a visual impairment that cannot be treated can be difficult to come to terms with. Some people go through a process similar to bereavement, where they experience a range of emotions including shock, anger, and denial, before eventually coming to accept their condition. The NHS Long Term Plan (LTP) makes strong reference to ensuring improvements are made in the integration of health and social care and in particular access to mental health services. People living with sight loss are twice as likely to experience depression, hence the local services need to align to the LTP by improving access to mental health support.

Estimates show that 50% of sight loss can be avoided (a third of this can be avoided through eye tests and appropriate glasses) and for this reason commissioned pathways of eye healthcare are essential to achieve improvements in eye health. For conditions such as diabetic eye disease, glaucoma and wet age-related macular degeneration (AMD) it is crucial to have an early diagnosis and the right timely treatment to prevent avoidable sight loss – this would also help to manage the demand on mental health services with fewer cases of depression through early intervention. Waiting times for these conditions are long and variable when measured against national guidance and with the prevalence of health inequalities in eye care in some parts of the region, access to services can be a very variable. The recent 30% growth in activity over the last five years is set to continue, driven by an increase in the aged population, new treatments and patients requiring monitoring rather than discharge. It is fundamental that these services are transformed to ensure eye care services are sustainable for the increasing demand, which means shorter waiting times, new ways of working through effective use of resources, especially in primary care and the community setting.

This eye health service review has been undertaken as part of the ICS CCSS work stream. It has been supported by clinical experts and stakeholders in the development of place based service models for the future, to support the long term needs of our existing citizens. The review also focuses on embedding prevention in our population over the next 5-10 years, by shifting our culture from one of illness to one of healthier lifestyles and self-care.

The strategy identifies major stages in the eye health patient's journey and stresses a need to reorganise the way in which these services are delivered, from prevention through to longer term support for those at highest risk or those living with sight loss or visual impairment. A whole pathway approach in the provision of eye health services is crucial in order to maximise the clinical outcome for patients, their quality of life and experience of eye health services.

Key themes have been identified along with key transformational opportunities and potential impacts have been developed which include: prevention strategies to promote healthy living and independence; improved access & shared communication about patients' past medical history from acute care settings to community optometrists; appropriate levels of workforce skill mix across the ICS; standardise access to services and support such as Eye Clinic Liaison Officers (ECLO) or equivalent role and mental health.

A transformational 'Bridge to the Future' highlights current service offers across the ICS and identifies some potential long term next steps that can be taken to achieve the identified opportunities with proposed timelines and the expected outcome for our citizens of Nottinghamshire.

The recommended next steps are vital in keeping the momentum of change in the future offer of improved prevention and better health for our citizens; providing the right tools for our population to support their wellbeing; providing strong communication links for our staff is vital to enable them to provide the best care for our citizens; the most appropriate models of care in acute settings, neighbourhood and home need to be provided equitably across the ICS and be provided using best evidence, flexibly and in a patient centred way for them to fulfil their maximum potential throughout their lifetime.

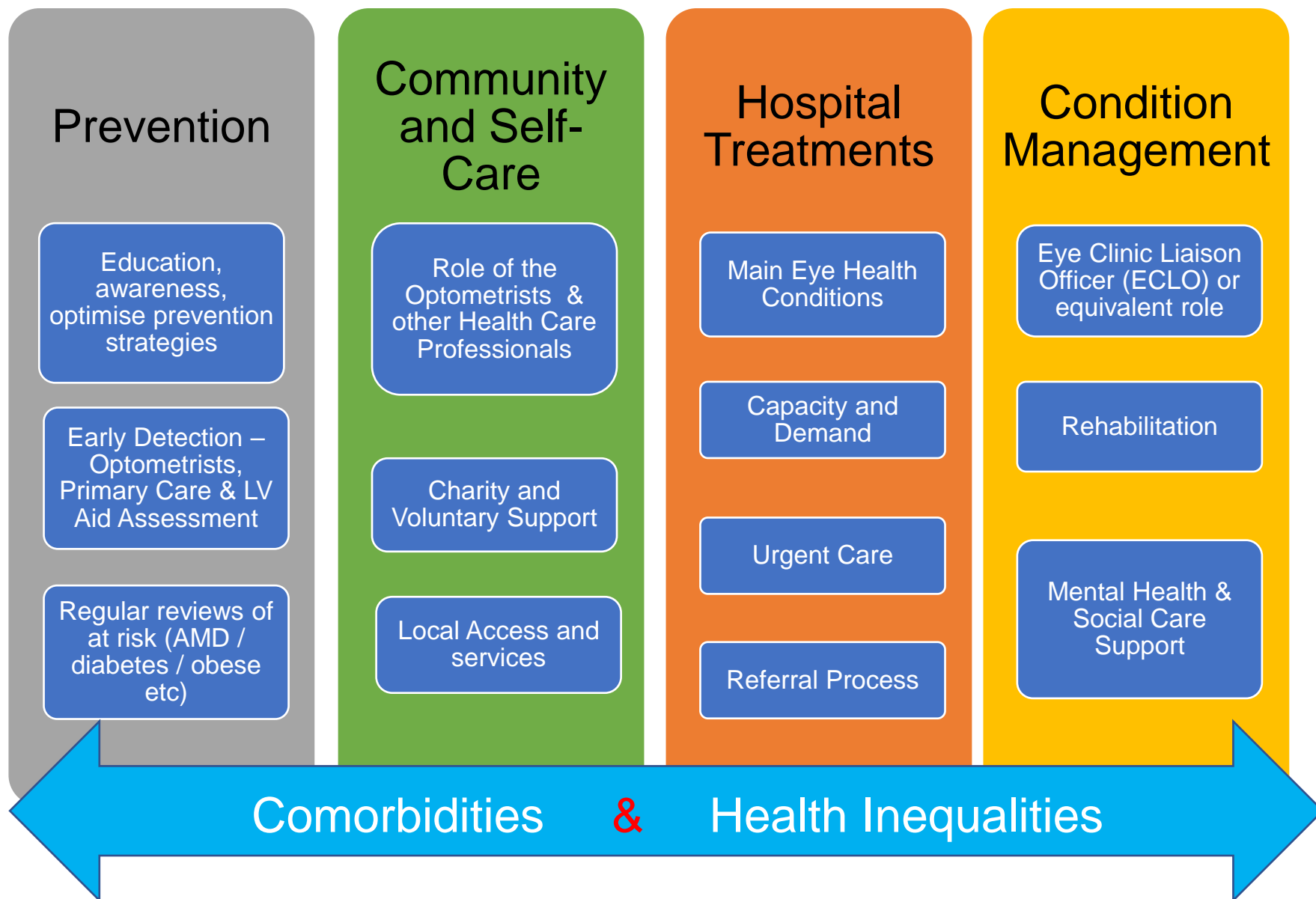| **Background and Purpose**	In Nottinghamshire we have made great progress in improving people's health and wellbeing. Today, we can treat diseases and conditions we once thought untreatable. However, our health and care system faces change and this will impact on our services, for example, the growing prevalence of long-term health conditions places new strains on our system. There is inequality evident in both the location of services and in access to services. In some areas, it is easier to access a GP or optical professional than in others, or to find things to do to enable citizens to stay active and fit. The ICS ambition across Nottinghamshire is to both increase the duration of people's lives and to improve those additional years, allowing people to live longer, happier, healthier and more independently into their old age. The requirement for a CCSS came from the recognition that to achieve this ambition the system has to change as a whole, rather than just in its individual acute, primary care, community and social care elements. It is recognised that only by working together to describe changes in how care is provided across the system, rather than through individual organisations, will we deliver the scale of change required.
The ICS Clinical and Community Services Strategy	The aim of the CCSS is to support the system to achieve this by shifting the focus of our health and care delivery from reactive, hospital based treatment models to a pro-active approach of prevention and early intervention. This should be delivered closer to people's homes or in community locations where this enables better prevention, more supported self-care and earlier intervention to support citizens. The Strategy recognises that achieving this change is a long term programme that will be delivered over the next 5 years and beyond. This is also to enable a necessary long term investment in the health and care buildings and infrastructure in the system. An overall CCSS whole life model framework has been developed to focus on the need to support people through their lives from living healthy, supporting people with illness and urgent and emergency care through to end of life care. Citizens can experience different parts of the system at different stages in their lives. With the development of the overall Strategy framework the next phase of work is to review the 20 areas of service across the ICS that collectively form approximately 80% of the volume of clinical work in the ICS. This will ensure that overall the Strategy is described as a coherent whole and generates a programme of change for the whole ICS. This review of Eye Health Services is one such review and is part of the second phase of work.
NHS Long Term Plan	The NHS LTP is clear that to meet the challenges that face the NHS it will increasingly need to be more joined up and coordinated in its care; More proactive in the services it provides; More differentiated in its support offer to its individuals. The ICS has focused on describing 5 areas of focus for the delivery of the NHS LTP. These requirements are reflected in each of the service reviews that collectively will describe the CCSS **1. Prevention and the wider determinants of health -** More action on and improvements in the upstream prevention of avoidable illness and its exacerbations **2. Proactive care, self management and personalisation -** Improve support to people at risk of and living with single and multiple long term conditions and disabilities through greater proactive care, self-management and personalisation **3. Urgent and emergency care -** Redesign the urgent and emergency care system, including integrated primary care models, to ensure timely care in the most appropriate setting **4. Mental health** - Re-shape and transform services and other interventions so they better respond to the mental health and care needs of our population **5. Value, resilience and sustainability -** Deliver increased value, resilience and sustainability across the system (including estates)

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Nottingham & Nottinghamshire

Approach	This strategy has been developed through an open and inclusive process which weaves together the expertise of clinicians and care experts with commissioners and citizens in determining the future shape of services across the system. There have been a variety of stakeholder and service user events to develop a clinical and community services model. An extensive system wide piece of work is taking place across a minimum of 20 services. The CCSS Programme Board have reviewed these services against a range of quantitative and qualitative criteria and agreed the second phase of six service reviews. These include; Diabetes; Eye Health; Skin Health; Women's Health; Heart Health and Urgent Care. Due to lockdown following the outbreak of the pandemic, Corona Virus Disease 2019 (COVID19), it was decided to postpone Heart Health and Urgent Care, which will be resumed in-line with clinical commitments in response to the pandemic.
	This document discusses the approach, scope, the key issues and potential transformational opportunities within Eye Health services across the ICS. Health, social care, public health and the voluntary sectors have all been considered through reviewing the current service offer across the ICS. The service review was taken over approximately 24 weeks and there was one workshop held with stakeholders across the ICS. An evidence review pack was developed which considered national and local best practice to inform the development of potential themes and new models of care where transformational change may take place across the ICS in the future.
Scope	**In scope:** Eye health conditions can be associated with a number of other comorbidities, such as hypertension, frailty, diabetes, depression, chronic kidney disease and chronic heart disease. Whilst this review does not focus on these conditions it is recognised the general awareness and history is paramount to aid the prevention agenda. In order to make services more effective, those patients with comorbidities need to be recognised for the care needs and there is an opportunity to reduce the number of appointments for these patients, particularly as it is recognised that Eye Health services generate the most outpatient appointments compared to any other single specialty. Additionally, there should be more focus to target prevention in those groups where patients are at higher risk, including BAME groups, that have higher incidence of diabetes, or even advanced keratoconus.
	The conditions agreed in the scope of this review were: • Glaucoma • AMD • Cataracts • Diabetic Eye Disease • Paediatrics • Eye Casualty • Retinal Vascular Disease
	Not in scope: The general ophthalmic service (GOS) contract was agreed to sit outside the scope of this review, although it was agreed recommendations could be fed through this process.
Engagement	The Eye Health service review has been supported by a tailored Eye Health Steering Group involving stakeholders and clinical experts from across the ICS. They have provided expert advice, guided, confirmed and challenged assumptions throughout the period of review and connected to other workstreams. This group has formed part of the governance process along with the CCSS Programme Board.
	One workshop has been held enabling a wide breadth of stakeholders (Patients, Clinicians, Allied Health Professional (AHP), Nurses, MySight, Heads of Service, Social Care, Public Health, Commissioners and others) to be proactively involved in re-evaluating current service offers across the ICS, in developing potential themes and agreeing transformational change for the future Clinical and Community Services Strategy.
	In addition a patient focus group has been held, organised in collaboration with MySight representatives, Patients involved covered a wide range of conditions, but carers were also present to reflect the impact on family life. This enabled them to confirm and challenge assumptions and play an active part in the co-design of any future service changes across the ICS. A second patient group was planned with a different cohort from Mid Notts, however, due to the COVID19 lockdown this was cancelled but would still be beneficial when social distancing rules allow this to be organised. Furthermore, to ensure the LTP plans for improved access through appropriate adjustment for those with learning disabilities were included in the review, engagement with SeeAbility and the Learning Disabilities Team from CityCare was made

Strategy Development	This Strategy Document consists of five key elements. These have been developed through a process of design and iteration at the workshop and steering groups. The strategy has been developed with reference to the Evidence Review document and the patient focus group that has been held.
Priorities for Change	The work of the Steering Group and the first workshop identified four key areas of focus that need to change in the ICS for Eye Health care. These were based on a review of the current issues facing the ICS and the views of the Steering Group and workshop attendees.
Proposed Future Care System	Following the evidence review at subsequent steering group meetings, attendees started to develop the future care system for Eye Health to address the Priorities for Change. The future care system is described against two dimensions • **Location** split between - Home (usual place of residence) – Acute Hospital with 24/7 medical presence – Neighbourhood representing all community/primary care and ambulatory care settings • **Urgency** split between - **Emergency/Crisis** requiring a service provided 24/7 to avoid crisis or risk to life – **Urgent** requiring a service 7/7 but not 24/7 to meet urgent care needs – **Planned/Scheduled** reflecting any arrangement where an appointment is agreed between a professional and a citizen The intention of the system model is to focus future care delivery closer to home and also with greater levels of scheduled care to best use the available resources and reduce demand on urgent and emergency care services. The new system to address the Priorities for Change is presented for each location and then summarised overall for the ICS.
Transformation Proposal	The Transformation proposal described the key initiatives or programmes that are required to deliver this new model. Namely, • **Priority** – What is the priority of the initiative in the view of the steering group and workshop attendees • **Alignment** – At what level of the system should we aim for a consistent approach for each initiative? In most instances this is ICS level where with the greater value is perceived to be in an overall consistent approach. However there are some instances where the recommendation is for delivery to be at Integrated Care Provider (ICP) level where. Alternatively, it is at Primary Care Network (PCN) level where differential delivery would benefit the needs of very local populations • **Enabling Requirements** – What is required to enable each Programme to deliver? This includes workforce, technology, estate or service configuration. There are also requirements of culture or finance and commissioning to allow the system to work together differently • **Benefits and Costs** – Where available, the key benefits of the initiative at system level are summarised
Service Vision	The 'Bridge to the Future' was generated at a further virtual steering group meeting. It summarises the current challenges for the eye health system in the ICS now (Priorities for Change), what the ambition is and the outline steps to get there. Progress with the 'Bridge to the Future' and the partnering vision can be returned to with stakeholders as the work develops to review progress.

Eye Health Key Themes and Areas of Priority

Prevention

- Education, awareness, optimise prevention strategies
- Early Detection – Optometrists, Primary Care & LV Aid Assessment
- Regular reviews of at risk (AMD / diabetes / obese etc)

Community and Self-Care

- Role of the Optometrists & other Health Care Professionals
- Charity and Voluntary Support
- Local Access and services

Hospital Treatments

- Main Eye Health Conditions
- Capacity and Demand
- Urgent Care
- Referral Process

Condition Management

- Eye Clinic Liaison Officer (ECLO) or equivalent role
- Rehabilitation
- Mental Health & Social Care Support

Comorbidities & Health Inequalities

In the UK half of sight loss is avoidable, with a third of this correctable with glasses

RNIB

1 in 5 children have an undetected eye problem. 93% of 5 year olds have never had an eye test.

Smoking:

DOUBLES the chance of losing your sight
DOUBLES the risk of developing AMD

Department of H&SC ambition for 12% smoking prevalence by 2022

MANSFIELD & ASHFIELD
20.5%

NEWARK & SHERWOOD
16.7%

NOTTINGHAM NORTH & EAST
16.2%

NOTTINGHAM WEST
15.3%

NOTTINGHAM CITY
20.8%

RUSHCLIFFE PRINCIPIA
10.7%
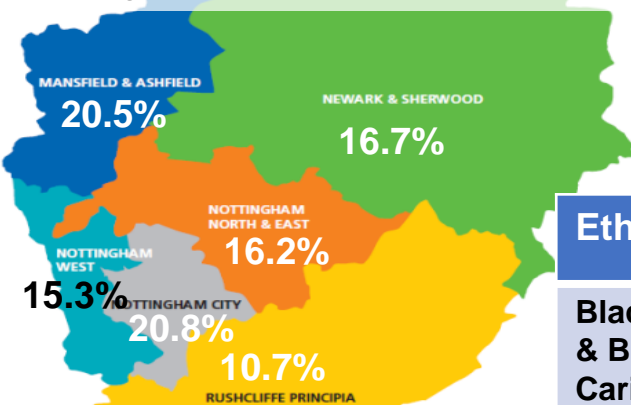
Our ICS has higher smoking than the England average (except in Rushcliffe)

Children with learning difficulties are

28 times more likely to have serious eye problems

Adults are **10 times** more likely. **Yet those with learning difficulties are less likely to use eye health services.**

THERE IS NO SCHOOL ENTRY VISION SCREENING IN OUR ICS

No vision screening 6%

Orthoptic-led vision screening following PHE guidelines 47%

Vision screening not following PHE guidelines 47%

Local Authority vision screening in UK

Ethnicity	Condition likelihood in UK (RNIB)
Black African & Black Caribbean people	**4-8 times more** likely to develop certain types of glaucoma*
South Asian people	**3 times more** likely to develop diabetic eye disease*

* than white people

Ethnicity	Diagnosed in our ICS (eHealthScope)
Black African, Black Caribbean & Black British people	**17% fewer** GP registered patients with a recorded diagnosis of glaucoma or ocular hypertension*
Asian & Asian British people	**35% fewer** GP registered patients with a recorded diagnosis of diabetic eye disease*

* than white people

NB Ethnicity is not recorded for 10% of our ICS

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Ophthalmology Outpatients

Legend: NUH — SFHFT — OTHER

Y-axis: 10,000 / 5,000 / 0
X-axis: 01/20, 06/20, 11/20, 04/20, 09/20, 02/20, 07/20, 12/20, 05/20, 10/20, 03/20, 08/20, 01/20, 06/20, 11/20

INCREASED DEMAND

Macular Injections at NUH

Y-axis (Injections): 750, 650, 550, 450
X-axis: Jan-17, Apr-17, Jul-17, Oct-17, Jan-18, Apr-18, Jul-18, Oct-18, Jan-19, Apr-19, Jul-19, Oct-19

& delayed appointments

Demand is rising

Glaucoma: **22%** ⬆ by 2025 (2015-25)   **44%** ⬆ by 2050   (2015-50)

Diabetic Eye Disease   **20-80%** ⬆ in 20 years

Cataract **25%** ⬆ in 10 years (2015 -25)

AMD by 2035- Drusen: **34%** ⬆ Wet AMD: **50%** ⬆ Dry AMD: **48%** ⬆

Ophthalmology has **2nd highest** outpatient appointments in our ICS.

NHS Long Term Plan

LTP to reduce by 1/3

Treatment for one eye condition can affect my other eye condition, but hospital staff only specialise in one condition and can't answer if it will affect my other condition.
Patient Focus Group

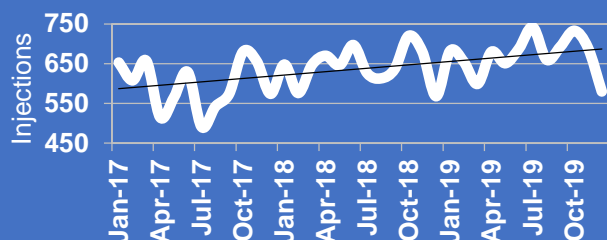**In our ICS many citizens have multiple eye conditions.**

AMD patients also have:
13% Glaucoma and Ocular Hypertension
10% Diabetic Eye Disease
7% Cataract
4% Retinal Vascular Disease

Eye Condition	Notts Citizens affected
Glaucoma & Ocular Hypertension	16,267
Diabetic Eye Disease	15,771
Age-Related Macular Degeneration	7,537
Cataract	5,354

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Notts ICS:
120 optometrist practices
360,000 sight tests pa (2/3 NHS, 1/3 private)

Nationally **13.8M** in the UK haven't had an eye test in the last 2 years.

Sight Loss Nationally
Total Direct Cost: £5.65B
Inpatient & DC: £735M
Outpatients: £771M

Value of loss of healthy life £5.9-23.3B

Nottinghamshire has a **higher** rate of people living with sight loss.

20% of those with eye conditions in our ICS also have depression (1/3 more than those with no eye condition)

¾
of those registered blind or partially sighted live in poverty or on its margins

Those living with sight loss are set to

double by 2050

40% of blind or partially sighted people of working age struggle financially to make ends meet

Nationally, people registered blind and partially sighted only
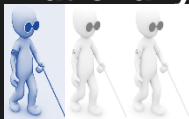
are offered mobility training
receive any practical help around the home
people of working age are in employment.

1 in 5 people will experience significant sight loss

The review identified 4 key areas of focus highlighting potential areas of change which include:

- Prevention (with emphasis on education, awareness and optimising prevention strategies whilst improving early detection in the neighbourhood setting, with regular reviews of those at risk);
- Community and Self-Care (reviewing the role of the optometrist and other HCPs improving accessibility locally, but ensuring citizens are aware of and have access to charity and voluntary support);
- Hospital treatments (ensuring the right treatment is available in the right place in a timely manner, effectively reducing avoidable hospital visits through effective triage and referral from the community, with development of an urgent care offer closer to home with increased follow-up of appropriate conditions by community optometrist under HES supervision);
- Condition management – Enabling equitable and universal access to supporting patients to come to terms with and manage their condition (e.g. use of ECLO or equivalent role) s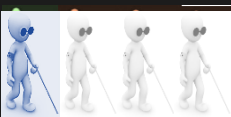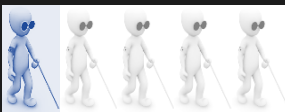upporting self-management, also helping to ensure patients' referrals to social care are not delayed for appropriate and timely Certification of Vision Impairment (CVI) and rehabilitation can be provided with mental health support where the need for this has been identified as early as possible).

Prevention	Sight loss affects over 2 million people in the UK and the Royal National Institute of Blind People (RNIB) report this number is expected to double by 2050. This assumes the underlying risk factors associated with sight loss do not change and demographic changes linked to the aging population, levels of deprivation and ethnic diversity continue. Half of sight loss is avoidable. For many of those individuals, around a third of those who have sight loss, this may simply be correctable with the right spectacles, however, many people living in areas of deprivation do not visit optical practices for sight tests, partly because these practices tend to be in shopping areas away from these areas. For others their sight loss is more permanent, however may have been avoidable through early identification of a disease process and treatment or by avoiding factors, such as smoking, that are harmful to vision. For all who live with sight loss now or potentially in the future, it is important to raise awareness of the issues and the positive actions that can be taken. But a reduction in avoidable loss also needs to be met by additional measures, such as vision screening of children's eyes being offered to all children aged 4-5 years (as recommended by the UK National Screening Committee). However, it is still important for early detection and treatment of other eye conditions to help avoid some sight loss or the rate at which sight loss occurs, including conditions such as glaucoma, age-related macular degeneration (AMD) and diabetic retinopathy. Education and raising awareness early can influence crucial lifestyle changes that increase the risk of eye conditions. These include protection from sun, stopping or not smoking, healthy eating and weight management all of which help to reduce the risk of developing eye health conditions. In addition to general practitioners (GP) and optometrists, the role of health care professionals (HCP) in primary care can significantly contribute to not only primary prevention, but also to the secondary prevention agenda where issues are caught early. Basic education and an understanding of who the high risk groups are, can help HCPs to make initial observations and sign-post those deemed at risk as and when appropriate. High risk groups include children with learning disabilities, those born prematurely, those with low birth weight; elderly citizens (there is a higher likelihood of sight loss the older you are); deprived populations are reportedly less likely to have eye tests due to concerns of the cost of glasses and so are more likely to experience eye health conditions going undiagnosed until latter stages (75% of blind or partially sighted, are living in poverty or on its margins); diabetic eye disease and glaucoma are more likely to occur in people from black, asian and minority ethnic (BAME) groups. A higher proportion of these high risk groups reside in the Nottingham and Nottinghamshire ICS compared to the England average and these groups need to be targeted to raise awareness and education. Overall, the estimated level of sight loss is greater in Nottinghamshire compared to England, due to higher risk factors such as obesity, smoking, hypertension and deprivation in the region. A review of the total national 2013-14 NHS spend on "problems of vision", performed by the RNIB, revealed that approximately 64% was classified as secondary care or urgent/ emergency care spend whereas 0.1% was prevention or health promotion spend. In order to improve the lives of the ICS population through prevention of eye conditions, this spend trend needs to be reviewed ensuring the risk factors linked to eye health conditions are known and understood and so exposure to these is minimised through education and awareness.

Community and Self-Care	The eye health pathways in the Nottingham and Nottinghamshire ICS appear quite intricate and probably not the most optimal to deliver the best quality care and patient experience. For optical professionals the full extent of the roles are often misunderstood and underutilised. There is more optical professionals can do for the wider eye health conditions in the community setting. Other HCPs can also play a bigger role in helping to simplify the offer in the community to allow patients to receive more care closer to home. Part of the solution is for the health workforce in the widest sense to think about visual health in their daily interaction with patients. This can create a powerful team. A collaborative, multi-disciplinary, patient-centred team from primary care and home care, through community care to the acute sector and voluntary organisations. With improved partnership working and eye health awareness education delivered to HCPs in preventing eye health conditions, a holistic approach to patient care may also allow comorbidities, such as diabetes mellitus, mental health and learning disabilities, falls and dementia, together with their impact on eye health, to be better appreciated. It is vital that 3rd sector voluntary services and charities are accessible to all patients and therefore all HCPs should play an active part in understanding which charities can support a patient's needs. This is particularly important once the treatment and care from health and social care colleagues has ended, as quite often the support needs for the patient will continue. Furthermore, charities can often play a vital role in supporting patients through crisis, for example if newly diagnosed with an eye health condition and not yet on a care pathway, patients may obtain help to understand their options or get emotional support to help them cope with the news of having developed sight loss. This is a stage where it can often be a challenge if the patient is not signposted nor do they know of specific charities that may be able to support them. There is a risk the patient may become anxious or depressed with the uncertainty of what lies ahead. Again demonstrating why HCPs should maintain close links to both local and national charities.
Hospital Treatments	With the timely interventions required in the acute hospitals for certain eye conditions (such as wet AMD, which is recommended by NICE to be seen and treated within 14 days of first contact) it is crucial that capacity is available to prevent avoidable delays that may result in increased rate of sight loss. The Macular Society report that in 2013/2014, 8.5% of NHS outpatient appointments were for ophthalmology making this is the largest outpatient specialty. The All Party Parliamentary Group (APPG 2018) also indicates this is an area of growth, where by ophthalmology appointments have grown 10% in the last 4 years. Evidence also indicates a high cost associated with eye care (Pezzulo et al, 2018), and the results from a survey across UK eye clinics conducted by RNIB (2013) were consistent with high demand and costs indicating a struggle to keep pace with rising demand, where 94% of respondents reported that 'future demand will not be met by available capacity'. By making effective use of 'enhanced service roles' this can help alleviate some of this pressure. Optical professionals are often seen as spectacle sellers, however they are a regulated profession through the General Optical Council/Opticians Act and they present a huge opportunity to address some of the capacity and demand challenges through improved pathway efficiencies and resource utilisation allowing optical professionals to provide more patient care in the community setting. Depending on the nature of the work and whether prescribing medication is required in the community setting, this can be supported with the appropriate registration and training. This can permit optometrists can help make eye health pathways far more effective and simplified. In some regions across the UK, 'enhanced services' are being offered by optometrists. NHS Wales commission optometrists to see all primary care eye problems, by-passing the GP and this allows improved triaging to determine whether the patient can be treated and discharged, referred back to the GP, or referred straight to the ophthalmologist. Through appropriate training and guidance, it is feasible to also include additional clinical roles traditionally performed by ophthalmologists, which is more common within the hospital eye sector. This is of particular interest for the urgent ophthalmology sector, which would also adopt the increased use of technology and virtual partnership working and consultations with an opportunity to implement transformation in this area quickly via the proposed Corona Virus Disease 2019 (COVID19) Urgent Eye-care System (CUES) that has been effective in both Nottingham University Hospitals, NHS Trust (NUH) and Sherwood Forest Hospitals, NHS Foundation Trust (SFH) during the COVID19 lockdown. With the COVID19 interrupting normal service provision for ophthalmology, it is vital to adopt virtual working through use of technology. The Royal College of Ophthalmology (RCOphth) has produced guidance to support reopening ophthalmology services after lockdown from COVID19 and plan the recovery phase whilst incorporating service transformation beneficial for the long term sustainability of ophthalmology care. This guidance is based on learning during the pandemic covering principles to consider in planning for a 'new normal' in the future.

Condition Management

Supporting patients to come to terms with and manage their sight loss condition is a vital part of their care experience. The ECLO role that has developed in ophthalmology clinics across the country recognises this and is there to provide valuable support to patients particularly in relation to CVI registration process, and providing continuity of care for patients when they are discharged from medical treatment. ECLOs relieve pressure on clinical staff by taking on information giving and referring duties, allowing other staff to focus on their clinical responsibilities. The impact of ELCOs requires efficient communication with the clinical team, being trusted by other staff and having a good knowledge of local and national sight loss support services outside of the hospital setting.

The patient focus group for the Eye Health review made particular reference to the benefit of the support provided by ECLOs was patients came to terms with their sight loss. Further research could enhance our understanding of how much time and associated costs ECLOs substitute in the ophthalmology clinic. However there is some evidence that for every £1 spent on an ECLO, a return of £10.57 to the health economy is realised.

Locally, within the ICS, there are two ECLOs, both of whom work at the QMC. There are no ECLOs working in SFH and there is evidence that this impacts the referrals of patients with Visual Impairment (VI) to social services, who are responsible for issuing the Certificate of Vision Impairment. In SFH there is a greater waiting time before social care services are offered to those developing sight loss and this needs addressing.

Vision rehabilitation services are crucial to ensuring blind and partially sighted people remain as independent as possible. For some this journey back to independence can be relatively quick with basic support, however, for others it is a longer road to gaining the confidence required managing with sight loss. Under the Care Act 2014, ablement/ reablement should be provided within 28 days and for up to 6 weeks, after which further support required is referred onto the social care reablement.

The Rehabilitation Officer for Visually Impaired (ROVI) support patients to manage in a number of areas, such as:

- Personal care
- In the kitchen
- Personal cleaning
- Indoor/ outdoor mobility
- Tackling stairs (sometimes requires input from occupational therapy)
- Mobility aids

As they provide person-centred-practice, the patient needs to be agreeable to receiving the services provided. If counselling is required, patients may be referred onto Improving Access to Psychological Therapy (IAPT) services.

The role the ROVI plays is fundamental to preventing some patients from readmissions that may result from falls, emotional impacts and depression. It is therefore clearly important to ensure the referral to rehabilitation as appropriate, is made and provided as soon as possible.

The mental health problems that can sometimes arise from sight loss are too often side-lined, leaving people to cope with depression and anxiety on their own. Sight loss can have a significant emotional and psychological impact on people's lives, with fear, isolation, loss of self-esteem and depression often resulting from loss of employment and the economic impact this may have.

Longitudinal work in a cohort of 4216 participants suggests bi-directionality between depression and visual impairment (VI), where VI may amplify depressive symptoms and depression may amplify visual impairment (Carrière et al., 2013).

Yet according to a new study by Royal Blind and the Mental Health Foundation Scotland, emotional support is rarely offered on diagnosis by statutory health services, leaving many people with sight loss to cope on their own.

6. Proposed future care system

Planned/Scheduled	Urgent – 24 hours	Emergency/Crisis – 4 hours

Prevention – education, early detection, regular risk reviews
- Assessments in care homes would allow multiple patients to be seen – domiciliary eye examinations for hard to reach and high risk patients
- Education of the general population on eye health, implications of risk factors on eye health – smoking, diet, diabetes - Target 'at risk' groups
- Eye care included in literature sent by mail, email, texts, etc.
- Mental Health/ Social care support for anxiety management at home for eye health patients suffering from depression, loneliness, peer support groups
- Health visitor and other HCPs raising awareness, e.g. in expectant women's Red books to raise awareness for parents, making healthy choices as easy as possible
- Support at home from voluntary/ charitable sector groups (especially during COVID)

Sustainable by:
- Improved support and understanding of risks allows early prevention
- Promotes awareness to support self-care and independence
- Improved outcomes - reduced rate of disease progression and improved management by lowering prevalence and improving awareness

Community and Self Care – Healthcare Professional roles, Charity support, Local access
- Diabetic screening in home setting
- Accessibility websites/ social media, synaptic phones
- Adult sensory teams in home to help navigate systems (social care teams) provide core training, e.g. BeMyEyes, MyGuide, low vision (LV) aids – elderly support for meds
- Directing people to sites they will find useful, e.g. Sightline Directory – lists charities and their core objectives

Sustainable by:
- Encourages early detection
- Early intervention and support from social care – reduces avoidable admissions due to falls, depression, etc.

Hospital Treatments – Capacity and Demand, Urgent Care, Referral Process
- Access to clinical notes – system wide across providers to aid home visits/ support
- Wider use of intra-ocular pressure testing kits
- Use of developing Apps for visual assessment
- Leaflets educational aids to avoid hospital visit/ stays e.g. Self administering eye drops
- Home visits for those with Learning Disabilities, if appropriate – digital FU appointments

Sustainable by:
- Prevents admissions, speeds up home support as appropriate

Condition Management – Patient support, rehabilitation, mental health support
- Home rehab - engage falls teams/ occupational health etc. - low vision aids provided in the home – best place to carry out assessments
- MDT style joined up services – rehab, social prescribers PCN level
- Technology – eye pressure testing – upload results before appt.

Sustainable by:
- Provides home support and promotes self-care and awareness for prevention but also enables people to live more independently, reduces care packages
- Reduced hospital and social care appointments

Prevention
- Loneliness, quality of life, secondary prevention
- Domiciliary eye care provision
- Mental health telephone support, online access to 'chat' support

Sustainable by:
- Provides quick response enables earlier intervention and support to avoid crisis services

Community and Self Care
- Access to relevant support or professionals through handheld devices, e.g. photos for red-eye triage
- Software to report your health, video/ telephone consultations – video consultations already started

Sustainable by:
- Provides quick response enables earlier intervention and support to avoid crisis services
- Reduces hospital visits

Hospital Treatments
- Telephone/ media advice, e.g. instructions on drops, repeat Rx, compliance meds
- Access to clinical notes – system wide across providers to aid home visits/ support

Sustainable by:
- Reduces chance of admission, communication with patient through technology Apps – provides timely response for urgent intervention promoting self-care.

Condition Management
- Aids – synaptic phones to contact family/ friends
- Better training & management for NHS 111

Sustainable by:
- Home support for urgent care needs

Prevention
- Access to mental health support, for extreme cases of depression/ suicidal thoughts
- Information on access in an emergency, technology e.g. Alexa

Sustainable by:
- Allows emergency contact to be made swiftly, prevents delayed response

Hospital Treatments
- Telephone/ virtual triage – 4-hour response system wide – would require access to basic records

Sustainable by:
- May prevent acute admission

Colour KEY to information source: Steering Group/ Workshop 1   Evidence Document/ Guideline   Patient Focus Groups

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6. Proposed future care system

Planned/Scheduled	**Urgent – 24 hours**	**Emergency/Crisis – 4 hours**

Prevention – education, early detection, regular risk reviews
- Targeting of diverse groups for diabetic screening - access to screening OOH
- Vision screening in schools (4-5 year olds); following the recommended Framework for eye care for those with learning disabilities (all ages) in special schools; sensory teams more comprehensively involved
- Education, information and knowledge for appropriately trained professionals LOCs to be able to support patient education days in community
- Full health checks for children before they start school
- GP support to raise awareness of available services to refer into – partnership working between GP, appropriately trained professionals and consultant
- Education on prevention, healthy living available in optical practices

Sustainable by:
- Improved support and understanding of risks allows prevention and early detection
- Promotes awareness to support self-care and independence – reduced episodes
- Improved outcomes - reduced prevalence

Prevention
- Education, information and signposting, i.e. where to go for a urgent problem

Sustainable by:
- Provides quick response enables earlier intervention and support to avoid crisis services

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Community and Self Care – Healthcare Professional roles, Charity support, Local access
- Role of appropriately trained professionals - defining what can be seen in community setting, e.g. follow up cataracts
- Training for supporting HCPs for some eye conditions, i.e. links to PCN, opticians, dentists, pharmacists to develop education plan based on identifying those at risk and raising awareness/ signposting – standardisation of provision across ICS
- Clinics in community with video support from ophthalmologists for certain conditions (following accredited training) – including OCT – technology to enable info sharing
- LV clinics in the community optical practice with appropriate funding

Sustainable by:
- Reduce demand on acute hospitals supporting reduced waiting times
- Access locally improves patients satisfaction

Community and Self Care
- Telemedicine via local practices to provide information on urgency to HES.
- 7 day/ week access to advice in optical practices and access to pharmacy for meds/ drops
- Access to acute clinician for urgent advice and guidance

Sustainable by:
- Provides quick response enables earlier intervention and support to avoid crisis services
- Community urgent care with ophthalmologist guidance/ support – reduced admission/ acute episodes

Community and Self Care
- Appropriate OOH support for on-call across East Midlands region

Sustainable by:
- May prevent acute admission

Hospital Treatments – Capacity and Demand, Urgent Care, Referral Process
- Community hub model for diagnostics and promote virtual review of tests to aid triage
- Referrals to social care before certification of vision impaired (CVI)
- Training for appropriately trained professionals to do some of the assessments done in hospital; direct and informed referrals from optoms - confidence to discuss with patients (NUH 20% of cataract patients referred don't want surgery) – feedback to aid learning

Sustainable by:
- Care closer to home, whilst reducing demand on 2° care, partnership working
- Provides much needed social care input early to better support and manage MH

Hospital Treatments
- Sharing of information and images to avoid duplication and re-assessment (radiology model)
- appropriately trained professionals to test and refer directly to acute (needs access to eSCR)
- Patient-centred clinical management, not condition based
- Urgent care for some cases (minor in community supported by ophthalmologists – adapting COVID Urgent Eye-care System

Sustainable by:
- Develop efficiencies. - shared care and reduces d burden on GPs

Hospital Treatments
- Access to acute clinician for emergency advice guidance

Sustainable by:
- Prevent acute admission

Condition Management – Patient support, rehabilitation, mental health support
- Add on test s for OCT during routine eye tests for surveillance
- ECLO type role in community – Patient Engagement Officer
- Enhance comms between rehab and acute to transfer between
- CYP rehab and habilitation – education for parents
- More focus on children with learning disabilities – engaging with LD teams

Sustainable by:
- Supports early age prevention and early detection – less burden on healthcare

Condition Management
- ECLO type role to support early signposting
- Increase support for mental health wellbeing whilst undergoing 'sight loss' journey

Sustainable by:
- Prevent hospital attendance
- Reduces hospital visits

Colour KEY to information source: Steering Group/ Workshop 1   Evidence Document/ Guideline   Patient Focus Groups

6. Proposed future care system

Acute Hospital

Planned/Scheduled	Urgent – 24 hours	Emergency/Crisis – 4 hours

Prevention – education, early detection, regular risk reviews
- Need to provide eye tests for VI to support improvement of eye health
- Education days in acute setting for patients – condition specific
- Prevention messages at every hospital visit – leaflets, verbal, media (e.g. smoking cessation, blood pressure management, diet/ healthy eating)
- eSCR to clearly indicate where patient is in their eye health journey – prevents repetition
- Single appointment for patients with multiple eye conditions
- Holistic approach in MDTs

Sustainable by:
- Promotes awareness to support self-care and independence – reduced hospital visits
- Improved outcomes - reduced prevalence/ rate of sight loss

Prevention
- Ensure weekend cover is consistent at both acute trusts

Sustainable by:
- Avoids patients having to be seen at NUH, improves patient satisfaction

Prevention
- Complex cases need attention of consultants
- Eye casualty – need consistent joint approach with clear pathways across both acute trusts

Sustainable by:
- May prevent acute admission

Community and Self Care – Healthcare Professional roles, Charity support, Local access
- Make more use of AHPs/ appropriate professionals – need training package in place, supported by acute ophthalmologists
- Patient-centred care, not condition centred – HCPs to communicate in partnership working and know their patients
- Informed referrals – patient choice and informed choice

Sustainable by:
- Reduce demand on acute hospital capacity including reduced waiting times
- Access locally improves patients satisfaction

Community and Self Care
- GP/ optometrists aware of trust protocols to refer appropriately – supported by acute trusts
- Provision of advice and guidance to community providers in real time – telemedicine

Sustainable by:
- Provides quick response enables earlier intervention and support to treat

Community and Self Care
- Advice and guidance in real time

Sustainable by:
- May prevent acute admission

Hospital Treatments – Capacity and Demand, Urgent Care, Referral Process
- Single point of access – possibly in community/ surgeries
- Eye casualty service – develop with GPs and appropriately trained professionals
- Shared data between optometrist, GP, HES
- Book appointment same date – OCT field ophthalmologist
- Partnership working to streamline pathways and make referrals efficient and effective
- Reduce inappropriate hospital episodes through improved community care
- In-patient communication for eye appointments decentralise scheduling of appointments
- Pro-forma for CVI – consultant to reduce time pressures for completing CVI
- Expand specialist nurse to support patient education on conditions
- MDTs – provision of opportunity for community provider to shadow and learn – needs user competency framework
- Use of alternative workforce in clinics – optometrists, nurses, orthoptists, technicians
- Refer eye conditions picked up through falls assessments directly to optometrists

Sustainable by:
- Improve efficiency of care in acute setting – right care, right place, right time
- Promotes true partnership working to simplify triaging and referrals

Hospital Treatments
- Treatment for relevant conditions accessible within 24 hours across both acute trusts
- Eye casualty accessible
- Use appropriately trained professionals in eye casualty – making use of alternative workforce

Sustainable by:
- Develop efficiencies. - shared care and reduces d burden on hospital

Hospital Treatments
- 111 emergency needs smooth referral to eye casualty
- Eye casualty accessible – retinal detachment, penetrating injury – emergency theatre access
- Chemical injury, acute glaucoma access via ED

Sustainable by:
- Timely intervention with right care in appropriate setting by appropriate person

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Condition Management – Patient support, rehabilitation, mental health support
- Universal access to ECLO or equivalent role in acute trusts
- To stay in hospital: specialist paeds, new macular detachment, surgery, active diabetic retinopathy, neuro ophthalmology – virtual clinics for curable conditions

Sustainable by:
- Appropriate support and specialist treatment and care

Condition Management
- Better delivery of devastating messages needed with improved follow-up and after-care with checks on well-being

Sustainable by:
- Reduce risk of depression

Colour KEY to information source: Steering Group/ Workshop 1   Evidence Document/ Guideline   Patient Focus Groups

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Availability

Level of Care

	Availability	Acute/ MH Hospital	Neighbourhood	Home
4 hours or less	24/7	• Consistent and joint approach to eye casualty (both Trusts) • Access needs to be reviewed – Currently emergencies go to NUH ED after 7.30pm and SFH after 4pm. Consideration to have eye casualty access at both trusts until 7.30pm	• Optometrist Out of Hours (OOH) Service with clear signposting/ pathway – where to go, Optometrist or Eye Casualty	• Rapid access to MH Teams to avoid crisis management
Urgent Care/ within 24 hours	7 days	• Advice/ Helpline (triage) and availability of specialist appointments, especially for patients with comorbidities • Longer term goal to train different levels of staff to carry out competent assessment for urgent cases – *Urgent Eye Service* • Ensure weekend cover consistent across both acute hospitals • Referral process - specific phone numbers, single point of contact for optometrists • Telephone triage	• Urgent access to MH services to avoid crisis management • Reduce repetition of testing of some urgent cases via better PCR sharing (IT) • Feedback on referrals to support learning – clear protocols on referrals to acute • Access to acute clinicians for advice and guidance • Urgent care for some cases (minor in community) supported by ophthalmologists – *Urgent Eye Service*	• Accessible software to report your health, video/ telephone consultations – video consultations already started • Domiciliary eye health provision
Planned/ Scheduled	Appt based	• Universal access to ECLO or equivalent role in acute trusts • Reduce inappropriate hospital usage through community service expansion • Commissioned clear pathways • Single point of access – possibly in community/ surgeries • Clear communication/ alerts for eye appointments, prevent DNAs (letters confusing) – de-centralisation of appointments • Holistic patient care – one MDT for all eye conditions, system partnership working	• ECLO type role in community setting - patient engagement officer • Partnership working across roles and organisations • Single point of access into system – via community • School entry vision screening – free sight tests for CYP – section in red book to raise awareness in parents, including the recommended Framework in special schools and access to adjusted appointments for LD • Habilitation and CYP education • Appropriate systems to enable sharing of eSCR across all providers • Routine OCT testing in community • Community hub model for diagnostics and promote virtual review of tests to aid triage	• Mental Health/ Social care support at home – to support independent living • Home eye assessments for elderly– may need some tech. equipment advances as some equipment not portable (make assessments routine in care homes seeing multiple people in single visit) • Wider use of intra-ocular pressure testing kits • Use of developing Apps for visual assessment • Home education, awareness plus Low Vision aid training (LV aids available via Rehab teams) and third sector services • Specific attention to meeting the needs of those with learning difficulties • Low Vision aids accessible through ROVIs

Prevention through 3 tier approach to education and awareness across the ICS: **High Priority**	In the ICS Population we need to target high risk groups (diabetes, smokers, high blood pressure), build in regular health checks, improve education in schools from early age, including parents (awareness in baby red book) – educational material to raise awareness of sight tests and lifestyle factors promoting healthy living for eyes. Perhaps use Social Prescribers for raising awareness of what services are locally available and how to access, including 3rd sector charities. HCPs/ support services, Eye health professionals, can all play a part in improved knowledge of whole Eye Health agenda, incl. social care; other HCPs including dentists, pharmacists can help with signposting, GPs closely involved with Optoms and ophthalmologists for whole system education programme and partnership working and ensuring MECC works. Patients need to be educated on services and support available, and where to go; ROVIs and sensory teams supporting on LV aids, devices (voice activated phones, Apps – Be My Eyes, My Guide); 3rd sector, peer support to share learning of same conditions; Meds – eye drops, compliance through patient education days; ECLO or equivalent role/ consultant raising awareness of journey, clear signposting with information (varied formats). Hospital Consultants involved in the education of Community HCPs to create a stronger link between the community and the hospital and sharing of knowledge. Improved awareness to target health inequalities – BAME, deprived, Learning disabilities (see below), demographically isolated population pockets. **Impact & Benefit** • Reduce prevalence of eye health conditions through awareness and prevention, improve self-care and independent living with reduced costs to health economy. • Earlier intervention to prevent of reduce degree of sight loss **Alignment –**.For prevention and education it is key that a universal approach is taken and alignment across the ICS to ensure consistency. This approach needs to delivered through a structured education programme to reach all HCPs, enabling improved detection and signposting.
Enable local access and capacity planning through improved resource utilisation and true partnership working across the ICS. Effect urgent care in each ICP with 7 days access through prescribing opticians **High Priority**	There is an increasing demand seen for ophthalmic services across the UK and 8.5% of hospital outpatient appointments are for ophthalmic problems, with a 10% rise realised over the last four years. For some conditions, NICE guidelines recommend patients are treated within 14 days of referral to prevent irrecoverable sight loss, with evidence showing poor visual outcomes for other conditions where treatment is delayed. With the increase in demand both at current levels and forecast demand for eye health services over the coming years, it is crucial to identify a robust solution that fits within current pathways and practices. Part of the solution is for the health workforce in the widest sense to think about visual health in their daily interaction with patients. There is more that can be done locally in the community setting and emerging models of care across the UK demonstrate this quite well, reducing the pressure on both GPs and acute hospitals. This is particularly important for urgent eye care assessments. Appropriate training and accreditation across a range of health care professionals can help deliver a range of emergency or urgent pathways across the community. This would need a single point of accountability and strong governance and audit systems in place. The recent process for provision of urgent eye care services due to COVID19 highlights some of this need and can be used as a framework using a collaborative approach. The RCOphth has produced guidance to support reopening ophthalmology services after lockdown from COVID19 and plan the recovery phase whilst incorporating service transformation beneficial for the long term sustainability of ophthalmology care. **Impact & Benefit** • Managing demand in the long run with the ageing population • Free up ophthalmologist time to deliver treatment and reduce inequality in access to eye health care • Single point of accountability allowing whole pathway integration and strong governance mechanisms • Reduced fragmentation of care • Easier access to care and reduced waiting times for patients **Alignment –** Local access and capacity planning should be aligned at ICP level with the same approaches applied across the ICS

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Appropriate support, care and access to eye health services for patients with **Learning Disabilities** (LD) – following the recommended Framework in special schools for children with LDs and vision screening in schools for all 4-5year olds **Medium Priority**	Adults with learning disabilities (LD) are 10 times more likely to have serious sight problems than other adults and children with LD are 28 times more likely. People with high support needs may not know they have a sight problem and may not be able to tell people – support teams, teachers or carers often think they can see very well. Following recent research, Van Splunder stated that *'people with more severe or profound learning disabilities should be considered visually impaired unless proven otherwise'*. Sight problems which are not picked up early on in life can lead to permanent damage. Because of this an orthoptic led vision screen within the 'school entry health check' for 4 to 5 year olds is recommended by the National Screening Committee, and is commissioned by most local authorities (not currently commissioned in the Notts ICS). Public Health England's service specification for the child vision screening programme **does not** recommend screening for special schools, instead they recommend more comprehensive and regular eye care. A vision screen is not a full eye examination and does not pick up all eye conditions and so a full eye examination is recommended for children with learning disabilities and autism. The 'Framework for provision of eye care in special schools in England' provides that children attending special schools need a targeted in-school eye care service that provides full, regular, routine, eye examinations and spectacle provision. In line with this framework, PHE have issued guidance which describes what reasonable adjustments need to be made to support eye care of people with learning disabilities. **Impact & Benefit** • Aligns with NHS LTP, which has learning disability and autism as one of only four clinical priorities. • Reduce rate of DNAs through improved support and appropriate adjustments • Earlier detection through reintroduction of orthoptic led children's vision screening at school entry (aged 4-5 years) and using the recommended Framework for eye care in special schools **Alignment –** Adopting the Framework for provision of eye care in special schools and ensuring appropriate adjustments and support is available for those with Learning Disabilities should be aligned across the ICS
Simplified **Referral Processes** to enable new ways of working across all eye health partners including GPs Optometrists and acute hospital professionals **High Priority**	The current referral process in the ICS is complex – not only for patients but for providers. It is crucial to get this right to reduce waiting times for referrals into secondary care, which would also reduce DNAs. Optometrists are able to refer directly and for more conditions, though this would require review of the GOS contract to allow additional examinations to take place in the community setting and specific training in the triage of patients. It would also require access and governance controls for sharing of patient information. This model operates in NHS Scotland and has led to an increase in true-positive referrals and a reduction in false-positive referrals. Those with the highest level of need should be seen by a consultant more quickly, thus reducing clinical risk. Clear referral pathway and processes are needed to ensure prioritisation and signposting to most appropriate level of care. Utilise health care professionals across the system to treat or work up patients before referring to acute hospitals ensuring most effective use of clinical resources. This may include advanced optometrists, nurses, HCPs and enhance service provisions. **Impact & Benefit** • Shorter waits, earlier intervention reduced duplication more efficient working with reduced costs, reduced GP time in reviewing referrals • Streamlined referral pathway with no duplication involving optometrists • Vastly improved patient experience. • Earlier social care support, help reduce deterioration of mental health, reduce falls and distress caused when newly diagnosed and experiencing sight loss. **Alignment –** The focus to simplify referral processes should be across the ICS, but aligned to ICP level, where specific population needs can be met and healthcare inequalities can be addressed to help ensure DNAs are minimised

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7. Transformation Proposal

| Social care and support services to be provided earlier in the patients' journey in the ICS to support patients.

High Priority |

Social care services include vision rehabilitation that ensures blind and partially sighted people remain as independent as possible. Under the Care Act 2014, ablement/ reablement should be provided within 28 days and for up to 6 weeks, with further support requirements referred to social care reablement teams. Vision rehabilitation services need to be accessible as soon as an individual is in need of support following a diagnosis or loss of sight that is certifiable. Rehabilitation officers for the visually impaired (ROVI) deliver vision rehabilitation that provides mobility training so that people can develop the skills and confidence to use a white cane, get on a bus, and cross a road safely. Eligibility is confirmed by consultant ophthalmologists who sign a CVI form.

The CVI also acts as the route to a social care assessment. In mid-Notts this process is often delayed with no formal process to forward the CVIs from SFH (normal duty of an ECLO). Patients can be left vulnerable to accidents, risks of not being able to carry out simple tasks and feeling lonely and depressed. The RNIB recommend a See, Plan Provide steps should be adopted by local authorities as there is evidence that many local authorities fall short of meeting the support that blind or partially sighted people need. Independent research by the Office for Public Management (OPM) demonstrated the economic impact of vision rehabilitation in a case study provided by Sight of Surrey, where £3.4M of health and social care costs were avoided, reduced or deferred annually based on a service which cost an estimated £900k a year to deliver.

Improving referrals can be achieved through electronic registration, eCVIs, which were piloted by Medisoft Ltd in Moorfields. This needs to be adapted for routine use by both acute trusts in the region.

Impact & Benefit
- Consistent provision of vision rehabilitation support for blind and partially sighted people that need it
- Earlier return to independence/ self management, aiding in reduced avoidable admissions (falls/ depression)
- Reduced cases of depression in those with sight loss, reducing burden on healthcare services

Alignment – The strong partnership working between Nottingham City Council and Nottinghamshire County Council for eye health and sensory teams needs to be collaborated with primary, secondary and community health care partners. This can enable true partnership working aligned at an ICS level.

| Improvements in the effectiveness and access to an Eye Clinic Liaison Officer (ECLO), or equivalent type of role.

Medium Priority |

In the ICS there is a need to ensure there is a service that provides early intervention at the eye clinic, as this is where the majority of patients are given their diagnosis and where some are told that they have permanently lost their vision and will go through the CVI process. The support required at this time is crucial, and the emotional care that can be provided by an ECLO or equivalent role is invaluable, Currently, the RNIB estimate 53% of outpatient ophthalmology clinics have some form of early intervention support available to service users.

In the patient focus groups the majority of patients that were able to see an ECLO, commended the positive impact this had on their care journey. They felt they were better navigated around a complex referral system and were able to access more A&G.

Impact & Benefit
- Every £1 spent on an ECLO returns £10.57 to the health and social care economy.
- ECLOs are effective at sending CVIs forward, saving time for the referral to social care and patients getting relevant entitlements sooner
- Expanding this role to the community can bring further benefits, particularly early on in the patients' journey

Alignment – Access to an ECLO or equivalent provides a strong point of support for patients in the acute setting. In order to ensure all areas of the ICS have appropriate access, it was agreed to align this to an ICP level which will allow consideration of the diverse population and health inequalities.

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Priority (High/Med/Low)	Alignment (ICS/ICP/PCN)	Workforce	Technology	Estate/Configuration	Culture	Finance/Commissioning	Benefits (*Less than £20,000 per QALY is cost effective)
Prevention through 3 tier approach to education and awareness across the ICS: • ICS Population – target high risk groups • Health Care Professionals/ support services (e.g.111), including social care, 3rd sector • Patients – Educate on available services and much improved awareness — **High**	ICS	PH consultants, cross role training for HCPs. ECLOs to gain experience working with paediatrics through interaction with teachers for visually impaired. Optometrists trained to support provision of an enhanced role.	Further App development under trusted governance (e.g. NHS App) to control accuracy of available information and advice.	ICS central information hub for governance and quality control of information and advice for education across the system.	Raising profile of eye health on agenda of transformation discussions, particularly around supporting the need to change working models.	Effectively funding to raise awareness of health inequalities. Funding the right message – information is there, needs to be focused, e.g. NHS App, patient knows best (PKB) – system approach	Reduce prevalence of eye health conditions – resulting reduced burden to the healthcare economy. Earlier intervention to prevent or reduce rate of degree/ rate of sight loss
Enable local **access and capacity** planning through improved resource utilisation and true partnership working across the ICS. Effect urgent care in each ICP with 7 days access through prescribing opticians — **High**	ICP	Partnership working (to include multi professional working relationships (i.e. ophthalmology MDT)	IT systems to enable sharing of patient records and imaging – single system or transfer. Tele-ophthalmology (NHSE/I document). Urgent advice/ guidance and virtual clinics.	Effective use of existing community infrastructure with provision close to isolated areas. Local community hubs for images to be uploaded and allowing virtual consultation.	Bringing together multi-disciplinary models of partnership working between all eye health professionals across primary, community and secondary care.	Agreed some models to be supported by appropriate and cost effective contracting mechanisms	Managing demand in long run with aging population. Free up ophthalmologist time to deliver treatment and reduce inequality in access to eye health care. Reduced fragmentation of care. Easier access to care and reduced waiting times for patients
Appropriate support, care and access to eye health services for patients with **Learning Disabilities** (LD) – following the recommended Framework in special schools for children with LDs and vision screening in schools for all 4-5year olds — **Med**	ICS	Training and education of all HCPs to raise awareness of the needs of those with learning disabilities. LDs nurse to support ophthalmologists to make appropriate adjustments ECLO or equivalent role to provide enhanced support for those with LDs.		Provision to allow access at community level	All physical, emotional, social and needs of the families with children, young people and young adults who have complex disabilities, needs are met nearer to their home in a timely, co-ordinated and integrated approach.	Appropriate commissioning arrangements for testing of LD patients	Aligns with NHSE long term plan, which has learning disability and autism as one of only four clinical priorities. Reduce rate of DNAs through improved support. Vision screening in schools for 4-5 year olds provides qualitative benefits – reduced sight loss through early diagnosis and intervention
Simplified **Referral Processes** to enable new ways of working across all eye health partners including GPs Optometrists and acute hospital professionals. — **High**	ICS/ ICP	Appropriate training/accreditation of health care professionals across the system to support provision of enhanced services	Optoms to be linked to NHS to IT systems to access eSCR. Video consultations and digital platforms, including imaging. e-Referrals to become routine way.	Reduced demand on acute estate	Right person , right place, right time. Single point of access with virtual or actual triage system to improve quality of deliver and its data, providing the tool captures data correctly.	Funding for independent prescribing to help take some of the work load from acute trusts Senior decision makers recognised for referral decision making within SPA	Shorter waits, earlier intervention reduced duplication more efficient working with reduced costs. Streamlined referral pathway with no duplication. Vastly improved patient experience. Earlier social care support, help reduce deterioration of mental health, reduce falls and distress caused when newly diagnosed and experiencing sight loss.
Social care and support services to be provided earlier in the patients' journey in the ICS to support home care, urgent and crisis care in order to prevent unnecessary attendance or admission. — **High**	ICS	Commitment to provide/maintain vision rehab support (ROVI) Appropriately trained HCPs to support and signpost accordingly. Charitable support	Deploy eCVIs Existing and new technology rolled out sooner (low vision aids, magnifiers, digital voice reorders, synaptic phones) 24 hour access to mental health with single point of call.	Support out of local community hub from social care staff.	Patient centred route map developed once patient needs identified early in journey – social care working with healthcare to ensure this partnership approach applies through out patient journey	Low vision aids – review of contract, charity role, training and advice. Some community contracts – limited range	Social services meeting obligations to provide timely support for blind or partially sighted early. Reduced avoidable admissions. Earlier return to independence/ self management. Reduced cases of loneliness and depression and improved patient experience.
Improvements in the effectiveness and access to an ECLO or equivalent role, with greater awareness and understanding of this role for all eye health professionals. — **Med**	ICP	Improved support across both Trusts and community. Development of this role for closer working with paediatrics, teachers and those with LDs.		A similar role in a community hub playing pivotal role in supporting early signposting preventing hospital attendance	Peer support groups for other conditions.	Funding flow to support these roles across organisations.	Every £1 spent on an ECLO returns £10.57 to the health and social care economy. This type of role is effective at sending CVIs forward, saving time for the referral to social care and patients getting relevant entitlements sooner.

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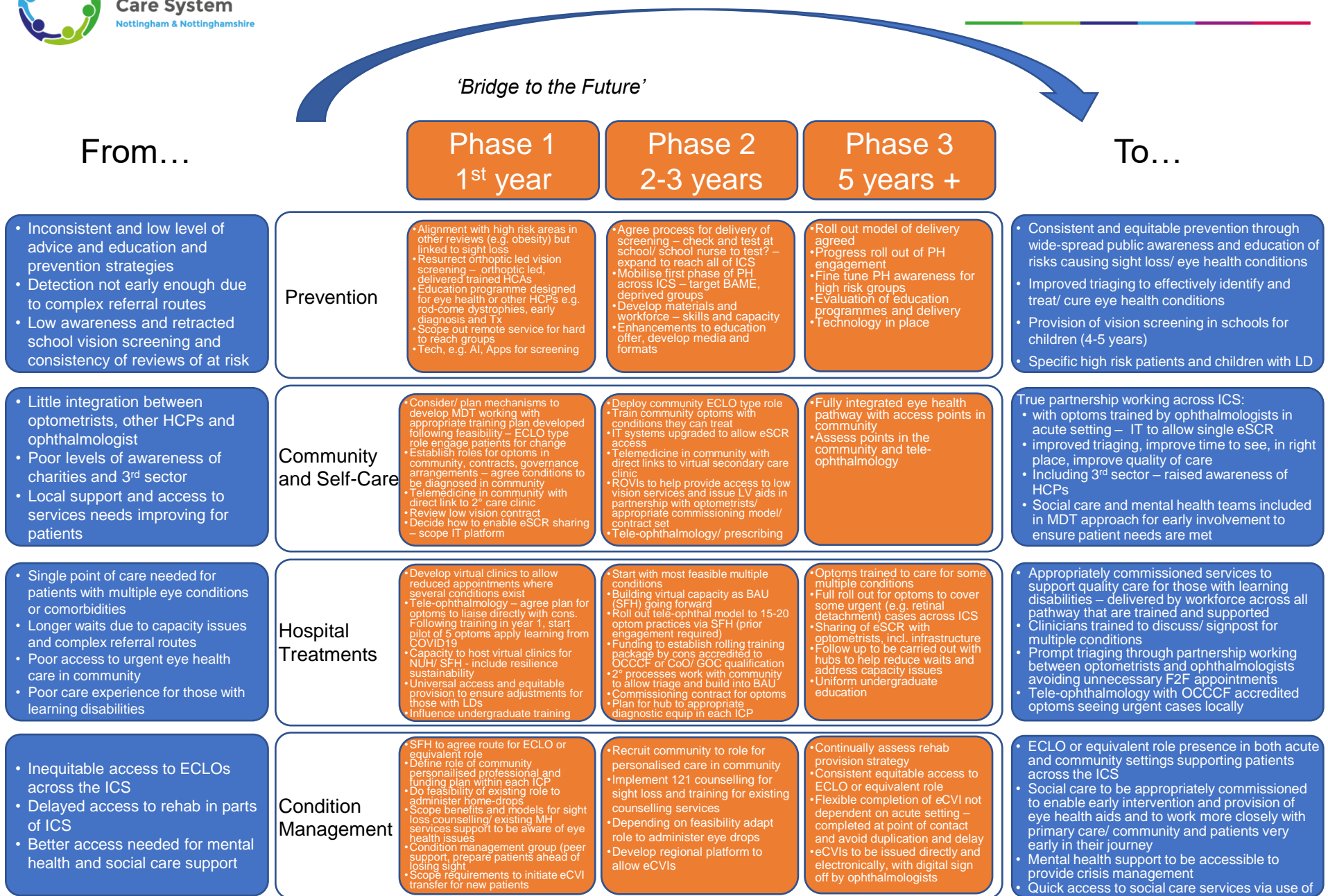
Workforce	Enhancing the future health and social care for eye health services, requires the following main considerations for workforce: • Cross pathway working (primary and secondary and community care) for clinicians and eye health professionals, perhaps introducing apprenticeship opportunities • Strong involvement from Public Health consultants to lead the prevention agenda, providing appropriate training across the service • Widespread training of healthcare professionals (HCPs) to empower them to provide appropriate advice or signposting for prevention of eye health conditions through healthy living • Maximise resource utilisation through greater engagement with HCPs (including optometrists)with an offer to expand their roles with structured education and appropriate accreditation • Ensure access to a personalised support professional across both acute trusts and the community
Technology	The main areas in which technology can effect transformation for eye health care include: • A single IT system providing appropriate access to electronic shared care records – across primary, secondary and community care settings • App development/ promotion for signposting locally, but also visual testing at home. Waiting rooms in various health and social care settings to use screens with rolling information on health and social care advice/ support services available – promote healthier living • Better use of reliable handheld devices across community and home settings to improve access to records • Use of tele-medicine and specifically tele-ophthalmology and slit-lamp real-time video access for virtual working – also introducing artificial intelligence (AI) – looking to pick up issues through AI
Estate	• Maximise opportunities to utilise optometry practices, health centres and GP practices • Local requirements to increase space to meet demand, but any space release through movement of activity to community settings should be considered. It is also crucial to ensure better local access is made available in some of the more remote regions and areas of higher deprivation. • Provision of care closer to home, can also help to optimise the space footprint required in acute hospital departments.
Culture	• To drive a culture change we need shared and integrated use of workforce across organisations to enable the sharing of resources as there are limited staff groups and expertise, with the introduction of MDTs this should improve education across the workforce. • Organisational trust and changes in how future services are commissioned will provide the greatest influence on the future of integrated service provision and how best evidence can influence the future eye health service offer across the ICS.

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9. Eye Health Services Vision

'Bridge to the Future'

From…		Phase 1 1st year	Phase 2 2-3 years	Phase 3 5 years +	To…
• Inconsistent and low level of advice and education and prevention strategies • Detection not early enough due to complex referral routes • Low awareness and retracted school vision screening and consistency of reviews of at risk	Prevention	• Alignment with high risk areas in other reviews (e.g. obesity) but linked to sight loss • Resurrect orthoptic led vision screening – orthoptic led, delivered trained HCAs • Education programme designed for eye health or other HCPs e.g. rod-come dystrophies, early diagnosis and Tx • Scope out remote service for hard to reach groups • Tech, e.g. AI, Apps for screening	• Agree process for delivery of screening – check and test at school/ school nurse to test? – expand to reach all of ICS • Mobilise first phase of PH across ICS – target BAME, deprived groups • Develop materials and workforce – skills and capacity • Enhancements to education offer, develop media and formats	• Roll out model of delivery agreed • Progress roll out of PH engagement • Fine tune PH awareness for high risk groups • Evaluation of education programmes and delivery • Technology in place	• Consistent and equitable prevention through wide-spread public awareness and education of risks causing sight loss/ eye health conditions • Improved triaging to effectively identify and treat/ cure eye health conditions • Provision of vision screening in schools for children (4-5 years) • Specific high risk patients and children with LD
• Little integration between optometrists, other HCPs and ophthalmologist • Poor levels of awareness of charities and 3rd sector • Local support and access to services needs improving for patients	Community and Self-Care	• Consider/ plan mechanisms to develop MDT working with appropriate training plan developed following feasibility – ECLO type role engage patients for change • Establish roles for optoms in community, contracts, governance arrangements – agree conditions to be diagnosed in community • Telemedicine in community with direct link to 2° care clinic • Review low vision contract • Decide how to enable eSCR sharing – scope IT platform	• Deploy community ECLO type role • Train community optoms with conditions they can treat • IT systems upgraded to allow eSCR access • Telemedicine in community with direct links to virtual secondary care clinic • ROVIs to help provide access to low vision services and issue LV aids in partnership with optometrists/ appropriate commissioning model/ contract set • Tele-ophthalmology/ prescribing	• Fully integrated eye health pathway with access points in community • Assess points in the community and tele-ophthalmology	True partnership working across ICS: • with optoms trained by ophthalmologists in acute setting – IT to allow single eSCR • improved triaging, improve time to see, in right place, improve quality of care • Including 3rd sector – raised awareness of HCPs • Social care and mental health teams included in MDT approach for early involvement to ensure patient needs are met
• Single point of care needed for patients with multiple eye conditions or comorbidities • Longer waits due to capacity issues and complex referral routes • Poor access to urgent eye health care in community • Poor care experience for those with learning disabilities	Hospital Treatments	• Develop virtual clinics to allow reduced appointments where several conditions exist • Tele-ophthalmology – agree plan for optoms to liaise directly with cons. Following training in year 1, start pilot of 5 optoms apply learning from COVID19 • Capacity to host virtual clinics for NUH/ SFH - include resilience sustainability • Universal access and equitable provision to ensure adjustments for those with LDs • Influence undergraduate training	• Start with most feasible multiple conditions • Building virtual capacity as BAU (SFH) going forward • Roll out tele-ophthal model to 15-20 optom practices via SFH (prior engagement required) • Funding to establish rolling training package by cons accredited to OCCCF or CoO/ GOC qualification • 2° processes work with community to allow triage and build into BAU • Commissioning contract for optoms • Plan for hub to appropriate diagnostic equip in each ICP	• Optoms trained to care for some multiple conditions • Full roll out for optoms to cover some urgent (e.g. retinal detachment) cases across ICS • Sharing of eSCR with optometrists, incl. infrastructure • Follow up to be carried out with hubs to help reduce waits and address capacity issues • Uniform undergraduate education	• Appropriately commissioned services to support quality care for those with learning disabilities – delivered by workforce across all pathway that are trained and supported • Clinicians trained to discuss/ signpost for multiple conditions • Prompt triaging through partnership working between optometrists and ophthalmologists avoiding unnecessary F2F appointments • Tele-ophthalmology with OCCCF accredited optoms seeing urgent cases locally
• Inequitable access to ECLOs across the ICS • Delayed access to rehab in parts of ICS • Better access needed for mental health and social care support	Condition Management	• SFH to agree route for ECLO or equivalent role • Define role of community personalised professional and funding plan within each ICP • Do feasibility of existing role to administer home-drops • Scope benefits and models for sight loss counselling/ existing MH services support to be aware of eye health issues • Condition management group (peer support, prepare patients ahead of losing sight) • Scope requirements to initiate eCVI transfer for new patients	• Recruit community to role for personalised care in community • Implement 121 counselling for sight loss and training for existing counselling services • Depending on feasibility adapt role to administer eye drops • Develop regional platform to allow eCVIs	• Continually assess rehab provision strategy • Consistent equitable access to ECLO or equivalent role • Flexible completion of eCVI not dependent on acute setting – completed at point of contact and avoid duplication and delay • eCVIs to be issued directly and electronically, with digital sign off by ophthalmologists	• ECLO or equivalent role presence in both acute and community settings supporting patients across the ICS • Social care to be appropriately commissioned to enable early intervention and provision of eye health aids and to work more closely with primary care/ community and patients very early in their journey • Mental health support to be accessible to provide crisis management • Quick access to social care services via use of

Conclusions	The review of Eye Health services as part of the development of a Clinical and Community Services Strategy for Nottingham and Nottinghamshire ICS has been undertaken using a co-design model where patients, carers, key stakeholders and voluntary sector groups such as MySight and SeeAbility, have collaboratively worked together to shape a vision for the future care system. Although work has progressed quite well working remotely and holding video meetings, additional patient engagement would have been beneficial and will be revisited when the system allows this safely. The four key themes for improvement identified are: • Prevention (with emphasis on education, awareness and optimising prevention strategies whilst improving early detection in the neighbourhood setting, with regular reviews of those at risk); • Community and Self-Care (reviewing the role of the optometrist and other HCPs improving accessibility locally, but ensuring citizens are aware of and have access to charity and voluntary support); • Hospital treatments (ensuring the right treatment is available in the right place in a timely manner, effectively reducing avoidable hospital visits through effective triage and referral from the community, with development of an urgent care offer closer to home with increased follow-up of appropriate conditions by community optometrist under HES supervision); • Condition management – Enabling equitable and universal access to supporting patients to come to terms with and manage their condition (e.g. use of ECLO or equivalent role) supporting self-management, also helping to ensure patients' referrals to social care are not delayed for appropriate and timely Certification of Vision Impairment (CVI) and rehabilitation can be provided with mental health support where the need for this has been identified as early as possible). The review describes a future care system in optimal care settings and with care provided at different levels of urgency and envisages 4 high priority and 2 medium priority programmes to transform care: • **High** – Prevention through a 3 tier approach to education and awareness across the ICS • **High** – Enabling access and capacity planning through improved resource utilisation and true partnership working across Nottinghamshire • **Med** – Appropriate support, care and access to eye health services for patients with Learning Disabilities (LD) – following the recommended Framework in special schools for children with LDs • **High** – Simplified referral pathways across all eye health professionals and organisation in primary, secondary and social care settings • **High** – Social care interventions to be provided earlier in the patients journey, including vision rehabilitation • **Med** – Improve the effectiveness and consistency of access to ECLOs or equivalent role To achieve these there are a range of enabling requirements for the ICS across workforce, estate, technology, culture and financial systems. Collectively these initiatives can transform and provide long term health improvement and sustainability in the area of eye health care in the Nottingham and Nottinghamshire ICS.
Next Steps	This strategy sets the future direction of development for eye health care in the ICS and it is proposed it will shape future work of the ICS in a number of ways: • The identified priorities and programmes should be used to inform commissioning ICS, ICP and PCN activity • The enabling activities require development and inclusion in the relevant ICS workstreams to inform their work programmes • The impact on estate and configuration changes require inclusion in a programme of pre-consultation business case development alongside the service changes recommended from other reviews, although the impact for eye health is less specific in relation to community hub space • The aggregate impact of the collective suite of service reviews should be used to shape focus of future service provision in acute and community settings in the ICS

11. List of Common Abbreviations

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
1°, 2° Care	Primary, Secondary Care	EFI	Electronic Frailty Index	NHFT	Nottinghamshire Healthcare Foundation Trust
A&E	Accident and Emergency	ELBG	Ear Lobe Blood Gas	NHS	National Health Service
ACE	Adverse Childhood Experience	EM ODN	East Midlands Operational Delivery Network	NHSE	National Health Service England
ACP	Advanced Care Practitioner	EMAS	East Midlands Ambulance Service	NHSI	National Health Service Improvement
ADHD	Attention Deficit Hyperactivity Disorder	EMRAD	East Midlands Ambulance Radiography	NICE	National Institute for Health and Care Excellence
AF	Atrial Fibrillation	ENCH	Enhanced Health in Care Homes	NICU	Neonatal Intensive Care Unit
AI	Artifical Intelligence	EoL	End of Life	NNU	Neonatal Unit
AMD	Age-related Macular Degeneration	eSCR	Electronic Shared Care Record	Notts.	Nottinghamshire
ANP	Advanced Nurse Practitioner	ESD	Early Supportive Discharge	NRC	National Rehabilitation Centre
App	Application	ESDT	Early Supportive Discharge Teams	NRCP	National Register of Certified Professionals
APPG	All Party Parliamentary Group	FeNO	Frasntonal Exhaled Nitric Oxide	NRT	Nicotine Replacement Therapy
ARTP	Association for Respiratory Technology and Physiology	FT	Foundation Trust	NUH	Nottingham University Hospitals
ASC	Autism Spectrum Conditions	FTE	Full Time Equivalent	O_2	Oxygen
AT	Assisitive Technology	FU	Follow Up	OCCCF	Ophthalmic Common Clinical Competency Framework
ATAIN	Avoiding Term Admission Into Neonatal units	GOC	General Optical Council	OCT	Optical Coherence Tomography
BAME	Black, Asian and Minority Ethnic	GOS	General Ophthalmic Service	OOH	Out of Hours
BB	Better Births	GP	General Practitioner	OPM	Office of Public Management
BEH	Behavioural and Emotional Health	GPRCC	General Practice Repository for Clinical Care	PCN	Primary Care Network
BF	Breast Feeding	GRASP-COPD	Guidance on Risk Assessment on Stroke Prevention for COPD	PCP	Personalised Care Plan
BFI	Baby Friendly Initiative	H&SC	Health and Social Care	PCR	Patient Care Record
BLF	British Lung Foundation	HCP	Healthcare Professional	PH	Public Health
BMI	Body Mass Index	HES	Hospital Episode Statistics	PHE	Public Health England
BMJ	British Medical Journal	HES	Hospital Eye Service	PHM	Population Health Management
BP	Blood Pressure	HV	Health Visitor	PID	Project Initiation Document
BSG	British Society of Geriatrics	IAPT	Improving Access to Psychological Therapies	PN	Practitioner Nurse
BTS	British Thoracic Society	ICP	Integrated Care Partnership	PR	Pulmonary Rehabilitation
CBT	Cognitive Behaviour Therapy	ICS	Integrated Care System	QALY	Quality Adjusted Life Years
CCG	Clinical Commissioning Group	ICT	Information and Communication Technology	QIPP	Quality, Innovation, Productivity and Prevention
CCSS	Clinical and Community Services Strategy	IT	Information Technology	QMC	Queen's Medical Centre
CFS	Clinical Frailty Scale	IUT	In-Utero Transfer	RCN	Royal College of Nursing
CGA	Clinical Geriatric Assessment	KMH	Kings Mill Hospital	RCOG	Royal College of Obstetricians and Gynaecologists
CoC T&F	Continuity of Care Task and Finish	LD	Learning Disability	RCOphth	Royal College of Ophthalmology
CoO	College of Optometrists	LMNS	Local Maternity and Neonatal System	RNIB	Royal National Institute for the Blind
COPD	Chronic Obstructive Pulmonary Disease	LNU	Local Neonatal Unit	ROI	Return on Investment
COVID19	Corona Virus Disease 2019	LOC	Local Optical Council	ROVI	Rehabilitation Officer for Visually Impaired
CQUIN	Commissioning for Quality and Innovation	LoS	Length of Stay	SALT	Speech and Language Therapy
CUES	COVID Urgent Eye-care System	LTC	Long Term Conditions	SaToD	Smoking at Time of Delivery
CVD	Cardio Vascular Disease	LTOT	Long Term Oxygen Therapy	SBLCB	Saving Babies Lives Care Bundle
CVI	Certification of Vision Impairment	LTP	Long Term Plan	SC	Social Care
CYP	Children and Young People	LTV	Long Term Ventilation	SEND	Special Educational Needs and Disabilities
CYPF	Children, Young People and Families	LV	Low Vision	SFH	Sherwood Forest Hospitals
DASV	Domestic Abuse and Secual Violence	MDT	Multi-Disciplinary Team	SIGN	Scottish Intercollegiate Guidelines Network
DNA	Did Not Attend	MECC	Make Every Contact Count	SPA	Single Point of Access
DOS	Directory of Service	$MgSO_4$	Magnesium Sulphate	STP	Sustainability and Transformation Partnership
ECG	Electrocardiogram	MH	Mental Healthcare	TIA	Trans-Ischaemic Attack
ECLO	Eye Clinic Liaison Officer	Mid Notts.	Mansfield & Ashfield, Newark & Sherwood	VI	Visual Impairment
eCVI	Electronic Certfication of Vision Impairment	MMR	Measles, Mumps, Rubella	WHO	World Health Organisation
ED	Emergency Department	NCH	Nottingham City Hospital		

Data Sources	British Medical Journal College of Optometrists Local Data from NUH, SFH, Social Care, CCGs, GPRCC, eHealthscope National Institute for Health and Care Excellence NHS England NHS Health and Social Care Boards NHS Long Term Plan NHS Wales Office of National Statistics Patient Focus Group, 28 Feb 2020 Public Health England Royal College of Ophthalmologists Royal National Institute for the Blind SeeAbility Sightline Directory UK National Screening Committee Welsh Government Register of physically/ sensory disabled persons World Health Organisation

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