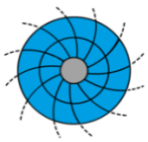

ImpACT GROUP

Health Education England NHS UEA University of East Anglia | SCHOOL OF HEALTH SCIENCES

East of England Eyecare Workforce Transformation through increasing capacity and capability, integrating advancing practice initiatives and the Ophthalmic Practitioner Training programme (OPT)

Phase 1: Final Report

Professor Kim Manley CBE
Associate Professor Carrie Jackson

ImpACT Research Group
School of Health Sciences
University of East Anglia

26th October 2022

Contents

Executive Summary

1. Purpose and scope of Project

1.1. A three phased project aims to address the integration of eyecare workforce development within wider initiatives (across population groups/specialties) and strengthen workforce capability and capacity to deliver eyecare on a whole-system basis across East of England.

1.2. Phase 1 aimed to 1) build the foundation for growing capability and capability of the whole workforce across different contexts to meet the needs of people with actual/potential eye conditions to optimise existing workforce 'assets', while taking a supportive approach to identifying and addressing learning needs and 2) make recommendations for Health Education England (Eastern); Integrated Care Systems (ICSs) and Higher Education Institutes (HEIs) to inform subsequent stages.

2. Introduction

2.1. Demand for eye care is increasing with a need for greater accessibility, especially across rural and coastal communities and with greater focus on what matters to people.

2.2. Many different professions and disciplines contribute to eye care services located across different contexts. There is much potential for workforce transformation through greater collaboration, drawing on the assets of the workforce and working more smartly, recognising that recruitment and retention of staff is a key challenge both regionally and nationally.

2.3. Key imperatives to optimising workforce deployment and multi-disciplinary/multi-agency collaboration with a focus on timely, integrated care, is how services are commissioned and how their delivery is supported by joined-up data-sharing/digital platforms.

3. National context: the need to work differently

3.1. The implementation of integrated care systems provides an opportunity to take a whole system approach, optimise structural and workforce factors, to work differently and achieve greater effectiveness and productivity of eye care services across communities towards providing and sustaining timely person-centred care.

3.2. Growing capabilities across ophthalmic registered professions requires collaborative working and a joined-up approach between the 'Ophthalmology training programme' (OPT) developed by The Royal College of Ophthalmologists in collaboration with other eye professions; Health Education England's Multi-professional Advanced Practice Framework; and Higher Education Institutes to support the workforce transformation required.

3.3. Developing the capabilities of ophthalmic technical and support staff also have much to offer to the eye care workforce to support improvements in eye care, effectiveness, quality and productivity.

4. Regional context

4.1. Innovations in relation to eye care exist across East of England region together with its six universities with an MSc programme in multi professional advanced practice provides an asset-based foundation for workforce transformation.

5. Purpose and Outputs from Phase 1

5.1. Phase 1 aimed to build the foundation for growing capability and capability of the whole workforce across different contexts to meet the needs of people with actual/potential eye conditions and to optimise existing workforce 'assets', through three workshops with stakeholders to co-create key outputs.

5.2. Workshop 1 outputs included a shared purpose for eye care services across Eastern region; with three priorities to achieve the purpose, a development framework to guide implementation and evaluation of the shared purpose, and four recommendations.

5.3. Workshops 2 outputs included identifying key relationships and approaches for providing person centred eye care across Integrated Care Systems (ICSs); the relationship between the citizens with actual or potential eyecare needs, their journey and the providers and the workforce capabilities required and four recommendations.

5.4. Workshop 3 outputs included a detailed single multi-professional capability framework wrapped around the needs of citizens; the identified capabilities required for priority development; and the priorities for both upskilling and working differently and seven further recommendations.

6. Implications of workshop outputs

6.1. These outputs will enable commissioners and providers to begin an implementation process and undertake a gap analysis in Phase 2 to consider:

- What enablers, attributes and outcomes are being achieved and where the gaps and challenges lie in terms of recruiting, retaining and developing the workforce.
- How to take account of career progression at all levels of the NHS Career framework including from enhanced to advanced and to consultant-level practice.
- Further analysis of where investments need to be made to retain and develop the existing workforce, including across all the pillars of practice.

7. Conclusion and Recommendations

7.1 Phase one has identified the overall direction, specific objectives, the enablers and indicators of impact and a capability framework wrapped around the needs of citizens rather than professions. Recommendations for meeting the actual and potential eye care needs of people across Eastern Region characterised by its predominantly rural and coastal contexts are identified for transforming where and what the workforce do; the capabilities required to be developed; and how to work differently using the full potential of the workforce.

7.2 Recommendations arising from each workshop have been synthesised into a set of short-term and medium-term recommendations directed at three key stakeholder groups:

7.2.1 Health Education East of England

Short term recommendations:

1. Explore the potential value of developing a national eyecare credential(s) with Health Education England's Centre for Advancing Practice, building on level 3 of the Ophthalmic Practitioner training (OPT) Curriculum in the four high volume areas: Cataract, Glaucoma, Medical Retina, Acute & Emergency Eye Care Needs.

2. Identify eyecare facilitators of learning and supervisors to support the development of workforce capabilities and performance outcomes across different contexts and all Integrated Care systems (ICSs) in Eastern Region.

3. Identify assets and gaps in existing workforce capability and capacity within teams using learning needs analysis approaches across services.

4. Identify how university partners across Eastern region can work together to address advanced practice workforce development needs in eyecare and study routes through existing advanced practice MSc provision and programmes that can feed into this at academic levels 6 and 7.

5. Work with the six Integrated Care Systems ICS's to identify complementary opportunities for supporting/funding at least two advanced practice ophthalmic level practitioners per ICS, to work in community hubs or community-based services such as community clinics, CUES; MECS:
    a. Across the four high volume areas identified by the Royal College of Ophthalmologists.
    b. To assess priority age groups, i.e. children; older people, people with learning disabilities
    c. Ongoing monitoring of people with urgent/emergency eye conditions in the community.
    d. Prescribing capabilities e.g. managing ocular allergies or pre-cataract assessment in the community.
    e. Monitoring people in the community with stable long-term conditions e.g. glaucoma, macula conditions.

6. Work with the six ICS's to identify sponsorship opportunities with providers and developmental funding and support for at least one ICS to attract a Multi-professional Consultant Practitioner (from any eye profession) as a system leader **OR** support an aspirant multi-professional consultant in their development pathway to begin to address the workforce enablers, implementation activities and evaluate of impact as a pilot across one/more Integrated care systems (ICS).

Medium Term Recommendations:

1. Develop continuous professional development (CPD) indicators that enable unregistered and registered practitioners at all levels of the career framework to evidence impact on services for people with potential or actual eye needs following investment in learning and development opportunities.
2. Develop a learning network or community of practice for sharing learning, improvement and innovation across Eastern region in relation to developing workforce expertise, practice and service innovation in ophthalmic care.

3. Identify focused learning and development opportunities for non-registered workforce such as technicians and care navigators to work at the top of their license in ophthalmic care services in any context and contribute to smarter working.

7.2.2. The Six East of England Integrated Care systems with their interdependent partners and stakeholders

Short term recommendations:

1. Recruit or sponsor from inside/outside the region OR grow aspiring clinical systems leaders in collaboration with HEE (EoE) through appointment of a multi-professional consultant practitioner or aspiring consultant. The practitioner should have the capabilities required for systems leadership, embedded research skills and the proven ability to facilitate workforce transformation or be on a development programme to achieve them.
2. Support systems leaders to work with all partners and other ICSs to:

    - Identify gaps in the enablers required to include:

        a. gaps in capabilities required to meet community needs;
        b. capability development in the community and general practice;
        c. first contact, Triage as close to home as possible, based on continuity of care, knowledge of person, and person as expert in own condition;
        d. Signposting, screening, gatekeeper and future role of Telemedicine.

    - Develop community hubs across boundaries in accessible centres near to where people live.

    - Agree key data bases to focus on what matters and evaluate progress and impact.

3. Develop plans for establishing community hubs in rural and coastal centres, supported by investment and informed by evidence to:

    - increase accessibility and timeliness of assessment and care to improve outcomes and reduce pressure on tertiary care;

    - provide physical space and resources in empty open plan shops/popup facilities/ existing community clinics that lend themselves to efficient flow and performance of hubs as well as safety;
    - support and supervise development of staff capabilities and confidence;

- increase IT interactivity and telemedicine across system partners.

4. Support more efficient ways of working in acute hospital Outpatient departments through an evidence-based approach to managing patient flow; consistent equipment pods and upskilling and educating orthoptists and optometrists, ophthalmic nurses and technicians.

5. Sign up to a disease coding system so that vulnerable urgent patients in times of crisis e.g., pandemic) can be identified and supported.

Medium Term recommendations

1. Implement system enablers and engage ICS partners to address future strategic direction for ophthalmic services, infrastructure challenges for system transformation and IT connectivity.
2. Identify the priority patient pathways relevant to Eastern Region and build capabilities against these across the system.
3. Develop/agree triage protocols for first contact areas and referral criteria for referral between community hubs; community and general practice and tertiary care, within governance systems.
4. Support clinical systems leaders with the implementation of Community Hubs, practice and service development and workforce development across each system, and evaluation of impact working collaboratively with each other to establish region wide data and coding systems that will inform continuing impact evaluation.
5. Subject to the outcome of progressing the short-term recommendation on exploratory activity (7.2.1; 1), adopt an Advanced level practice credential, with the implied governance and assurance systems, for all ophthalmic care professions in line with workforce development and deployment needs.
6. Identify career development opportunities for all levels of the eyecare service to grow and sustain the eyecare workforce.

7.2.3. The Six Universities across Eastern region providing MSc Programmes in Advanced practice

Short term recommendations

1. Develop partnerships across universities in Eastern region to address advanced practice workforce development needs in eyecare and study routes (including potentially credentials; see above) through existing advanced practice MSc provision for all regulated eye professions.

2. Identify how university partners across Eastern region can work together.

Medium Term recommendations

1. Identify how generic learning across the pillars in MSc Advanced practice can complement a flexible range of different practice credentials aligned with different professional groups, health and care needs to enable greater recognition of professional practice outcomes aligned with Master's level academic outcomes.

Purpose and Scope of Project

This report focuses on the first of three phases of support for East of England to develop the capacity, capability and progression of the eyecare workforce in response to gaps and challenges identified with key leaders.

The goal across the three phases is to "*To update & integrate multi-professional eyecare workforce development to achieve clarity for all parties & optimise solutions to meeting urgent population, patient & service delivery needs in safe, effective and sustainable ways".*

Two specific needs are being addressed:

1. Integration of eyecare workforce development within wider initiatives across population groups/specialties.
2. Strengthening of workforce capability and capacity to deliver eyecare on a whole-system basis.

External to the scope of the project is pre-registration education, how workforce development needs are met and service commissioning models.

Phase 1 aimed to build the foundation for growing capability and capability of the whole workforce across different contexts to meet the needs of people with actual/potential eye conditions to optimise existing workforce 'assets', while taking a supportive approach to identifying and addressing learning needs through co-creation with stakeholders.

Introduction

Demand for eye care is increasing due to an aging population, and increasing rates of diabetes and obesity (Whittington, 2019), causing greater pressure on secondary care (Public health England, 2021) with eye appointments constituting the largest speciality of outpatient appointments (Whittington, 2019). There is also need for greater accessibility to eyecare services by moving services nearer to peoples' homes particularly relevant to the rural and coastal communities that characterise the East of England. In addition, eye care needs to be more person centred and focus on what matters to people in collaboration with both providers of care and those experiencing the service.

A range of regulated professionals (optometrists, orthoptists; ophthalmologists, dispensing opticians, vision scientists and ophthalmic nurses) and other disciplines such as healthcare scientists who specialise in eyecare (with some (clinical scientists) subject to regulation via the HCPC and others on the Academy for Healthcare Science PSA-accredited register), technicians, healthcare assistants and other support services contribute to improving vision and preventing vision impairment. This workforce is located across the NHS, local government, independent sectors and third sector with NHS eye services predominantly located within secondary care. There is much potential for workforce transformation through greater collaboration across integrated health and care systems; upskilling staff, moving staff nearer to communities, and working more smartly.

Key imperatives to optimising workforce deployment and multi-disciplinary/multi-agency collaboration with a focus on timely, integrated care, is how services are commissioned and how their delivery is supported by joined-up data-sharing/digital platforms.

Investing in the workforce is related to having the right enablers and opportunities in place, and the data and impact indicators to provide feedback on the direction of travel and its sustainability. An underlying challenge influencing both health and care sectors is the recruitment and retention of staff to meet both current needs and future demand.

National Context: The need to work differently

> *'The key to transformation is to ensure that patients access care from the most appropriate and qualified eye health professional, irrespective of location. Often primary care can offer the most appropriate and timely care. Peer-reviewed studies show that the introduction of a Minor Eye Conditions Service (MECS) can deflect significant numbers from both GP surgeries and A&E.'* (Whittington, 2019)

With the recent implementation of integrated care systems, there is potential to work both differently and smartly to provide eyecare services relevant to local communities. A whole system approach requires both a structural foundation for example, a single information and financial system, interdependent partners committed to work together and a workforce fit for purpose (Manley et al. 2016). Three specific workforce enablers are recognised as key to supporting transformation; 1) clinical systems leadership with expertise in achieving cross boundary working enhanced by professional credibility, to focus on what matters; 2) facilitation expertise to draw on the workplace as a key resource for integrating learning, developing and improving at every level of the system, and 3) a single multi professional capability framework wrapped around the citizens journey rather than the profession (Manley et al; 2016). However, the context in which the workforce is operating is also highly influential on learning and learning cultures (Germaine et al; 2022) and how capabilities, policies and evidence based care are implemented to achieve impact through the catalysts of leadership, workplace culture and an evaluation ethos (Rycroft-Malone et al; 2013).

Within the context of eye services, Harrison's analysis (2022a, 2022b) of the research combined with insights from an international travel scholarship has led to the identification of several common themes (Box 1). Although most relevant to acute hospital ophthalmology departments these themes emphasize how good design in patient flow in outpatient departments, combined with upskilling of technicians' and multi professional team members' roles, and enhancing multi-professional practice can increase efficiency, enabling ophthalmologists to review a greater number of patients, timeliness and better quality of care (e.g. Moorfields Diagnostic hubs; https://www.moorfields.nhs.uk/news/diagnostic-hubs-provide-new-career-pathway-eye-care-technicians). This direction can also inform community and diagnostic hubs provided locally within integrated care systems (Clinical Council for Health Care Commissioning, 2020).

Box 1: Themes identified from research and the organisation of ophthalmic services in the United States that can support increased efficiency in hospital outpatients (Harrison 2022b)

- Improve referrals
- Maximise use of consultant time and expertise
- Identify optimum flow through hospital clinics, treatment rooms and operating theatres
- Develop discharge policies
- Enhance the ophthalmology multi-disciplinary team and working practises

National innovations in eye care are being supported through NHS Ophthalmic transformation of elective care programme providing examples and resources to support ophthalmic services to transform (ophthalmology-elective-care-handbook-v1.1.pdf (england.nhs.uk) with patient experiences being used to inform redesign of ophthalmology services (McKoy 2019).

The EyeWise Virtual Development Collaborative is supporting five local systems (Greater Manchester, Kettering, Brighton and Hove, Southampton and the area served by Central Middlesex Hospital) to introduce virtual clinics for glaucoma. Virtual clinics enable diagnostic information to be gathered without the need for patients to travel to a hospital. This is then reviewed by an ophthalmologist and patients are called in for a face-to-face appointment only if necessary. This ensures that the people most at risk of sight loss get faster treatment and saves others unnecessary journeys. (NHS England » EyesWise)

> *'Post-diagnosis, nearly all patients receive follow-up care in hospital. In fact, it is recognised that around half of glaucoma patients can be managed by a suitably-qualified optometrist in a local practice, providing care much closer to patients' homes.'* (Whittingham 2019)

Growing capabilities across Ophthalmic Registered Professions

The Ophthalmic Practitioner Training (OPT) programme is derived from the Ophthalmic Common Clinical Competency Framework (OCCCF) (2019)[1] which resulted from an influential multi professional initiative led by the Royal College of Ophthalmologists involving The College of Optometrists (CoO), British and Irish Orthoptic Society (BIOS), The Royal College of Nursing (RCN) and others. The framework focuses on the four highest volume areas in ophthalmology services, namely supporting people with:

- Cataract
- Glaucoma
- Medical Retina
- Acute & Emergency Eye Care Needs

Three assessment levels of OPT are aligned to the NHS career framework in Table 1 (See Appendix 4 for the NHS career framework), creating a common educational pathway for post-registration optometrists, orthoptists and ophthalmic nurses in secondary eye care. Health Education England's (HEE) on-going support

[1] https://www.hee.nhs.uk/our-work/advanced-clinical-practice/ophthalmology-common-clinical-competency-framework-curriculum

to the OPT is focused on achieving its integration within wider workforce transformation structures, including enabling eyecare practitioners' development at advanced practice level (and beyond).

Table 1: Ophthalmic Common Clinical Competency Framework (OPT) levels and alignment to the NHS Career Framework Level

Level 1 OPT	Level 2 OPT	Level 3 OPT
• Perform clinical work to assist medical decision-making • Participate in triage/screening • Monitor low risk patients with an established diagnosis to a clearly defined protocol	• Work to protocol with clearly defined decision-making • Make a preliminary diagnosis within a specific area • Manage under specific protocols	• Make decisions independently with appropriate support and back up • Diagnose, manage and discharge within specific areas • Role in service development and teaching
Ophthalmic CLINICAL Practitioner	Ophthalmic SPECIALIST Practitioner	Ophthalmic ADVANCED Practitioner
NHS Career Level 5 (Registered practice)	**NHS Career Framework Level 6 (Enhanced practice)**	**NHS Career level 7 (Advanced Practice**
More recently - graduate prepared		Masters prepared

In the Royal College of Ophthalmologists overseen but locally implemented scheme, competencies[2] are assessed at each level in each area, resulting in award of a 'Certificate of Competence', for example in "Level 1: People with Cataracts". The Levels define the role of the practitioner in that area. Achievement of the curriculum is through self-directed learning, workplace clinical teaching and supervised workplace experience supported through on-line resources mapped to the curriculum. A portfolio route comprises Workplace Based Assessments (WBAs) and evidence of other activities (e.g. reflection, audit, teaching, research, leadership) performed to the required standard). Whilst this shared pathway is an excellent foundation towards multi professional consistent standards and quality, its focus is predominantly on secondary care, whilst recognising 'newer' models of delivery with community-based locations that are part of the Consultant-led service. '*These secondary care services receive referrals from primary care services, which include General Practitioners and Community Optometrists'* (p2).

Whilst the OPT has a strong focus on performance outcomes/capabilities in practice it is also necessary to demonstrate Master's level outcomes for recognition at advanced level practice (HEE, 2017), achieved when developed in conjunction with a HEI programme in advanced practice.

[2] The OCCF document draws on different spellings (e. g. competencies; competency rather than competence) associated with different models of competence, although the examples in table 1 are aligned with an outcome model which focuses on the performance outcomes expected in practice (capabilities in practice) underpinned by the relevant knowledge, understanding and skills. This report uses performance outcomes to inform the capability framework structured around the needs of people with actual/potential eye conditions. Capability is defined 'the attributes (skills, knowledge and behaviours) which individuals bring to the workplace. This includes the ability to be competent and beyond this, to manage change, be flexible, deal with situations which may be complex or unpredictable and continue to improve performance.' Health Education England, NHS England and Skills for Health, 2020

Advanced practice education opportunities are open to eyecare practitioners within/supported by the HEE advancing practice regional faculty, as well as at national level (even though there isn't eyecare advanced practice education provision currently delivered within the region). Health Education England is seeking to assure that the OPT level 3 is fully integrated with advanced practice education, rather than sitting outside of these arrangements, as some commissioned MSc programmes outside of the region have started to address.

Developing capabilities of ophthalmic technical and support staff

While the intended focus of this project was on the regulated professions that contribute to meeting population/individual eyecare needs, its scope was effectively broadened through workshop discussion, given the recognition of the different occupational roles within MDT/multi-agency teams who are involved (across secondary care, extended primary/community services, and third sector provision).

Most staff at career levels 2 – 5 currently have no accredited training or qualifications and have a variety of job titles. They undertake diagnostic tests but do not make diagnostic and treatment decisions. The NHS Healthcare Science Career Framework provides apprenticeships, diplomas and degrees for staff at career levels 2 to 7.

Table 2: Relationship between ophthalmic technical and support roles and the NHS career levels. (NB: Career levels are NOT equivalent to pay bands, or academic levels)

NHS Career levels	**Levels 2 and 3**	**Level 4**	**Level 5**
Job title/role	Healthcare Assistant (Nursing) HCS* Ophthalmic Assistant Senior Healthcare Support Worker Ophthalmic Technician Orthoptic Assistant	Ophthalmic HCS Associate Ophthalmic Technician Ophthalmic Imager Senior Orthoptic Assistant Ophthalmic Assistant Practitioner	HCS Ophthalmic Science Practitioner Senior Ophthalmic Imager
Qualifications	HCS Assistant Apprenticeship with BTEC Diploma Senior Healthcare Support Worker Apprenticeship and L3 Diploma in Healthcare Support *(now available with ophthalmic content)*	HCS Associate Apprenticeship with BTEC Diploma HCS Assistant Practitioner Apprenticeship with FdSc *(under development for delivery to ophthalmic staff and will be a progression route from Associate apprenticeship)*	HCS Degree Apprenticeship with BSc in Ophthalmic Imaging

* HCS = Healthcare Science

HCS staff at level 5 who have the degree apprenticeship or can demonstrate equivalence can join the Academy for Healthcare Science (AHCS) Assured Voluntary Practitioner Register.

HCS staff who have completed the Scientific Training Programme / MSc (Level 6/7) or who can demonstrate equivalence can join the Health and Care Professions Council (HCPC) statutory register.

Regional Context

Across East of England, there are also examples of innovative approaches in relation to eye care provision that can inform or act as a foundation for capability development (Box 2). All have the potential to feed into an integrated 'joined-up' approach to the provision of eye services if facilitated by clinical systems leadership across integrated care systems (HEE, 2020).

Box 2: Examples of innovative provision across Eastern Region that can provide opportunities for/support of capability development

Primary Eyecare an optometry federation which aims to support optical practices and patients by broadening the eye care services available from local optical practices**.** Provides online search facility to identify Minor Eyecare Conditions services (MEWS) and Urgent eyecare services (CUES) and include rural and coastal communities. It is the largest single primary eye care provider in England with NHS contracts to make NHS-funded eyecare services available from local eye care practices, from small independent practices to large national chains. (***https://primaryeyecare.co.uk/find-a-practice/***)

Ipswich and East Suffolk CCG provide examples of website Advice to opticians and GPs with referral templates
(https://ipswichandeastsuffolkccg.nhs.uk/GPpracticememberarea/Practicesupport/Opticians.aspx)

Norfolk and Waveney Local Optical Committee provides updates and information for optometrists **https://www.norfolkwaveneyloc.org.uk/**

Beds and Luton Community Eye Service provide dedicated eye services to children across different community settings https://www.cambscommunityservices.nhs.uk/Bedfordshire/services/eye-service

Norfolk case study Triage of glaucoma referrals into secondary care. Part of the NHS transforming elective care programme p19-20 ophthalmology-elective-care-handbook-v1.1.pdf (england.nhs.uk)

Two Higher Education Institutes (HEIs) across the region provide pre-registration eye education programmes and include innovative approaches in research terms, with Anglia Ruskin University (ARU) covering both optometry and dispensing optics, while University of Hertfordshire (UH) provides a range of post-registration education opportunities (including optometry independent prescribing, as well as some multi-professional provision). None provide either Orthoptist or Ophthalmic Nursing. Six universities in East of England provide an MSc in Advanced Practice programme but none are aligned with mainstream education transformation initiatives, including advanced practice education, although provision is available adjacently in London via University College London, City and University of West London.

Developing ophthalmological practice requires good workplace learning placements, skilled facilitators and workplace supervisors who can use the workplace as the main resource for learning, developing and improving (Manley and Jackson; 2020). The design of ophthalmic clinics in both hospitals and the community as previously mentioned when combined with upskilling technicians can positively impact on efficiency and the number of patients assessed, but also, can positively impact on the supervision and support of ophthalmic practitioners (Harrison 2022 a,b).

Purpose, Processes and Outputs of Phase One

Phase 1 aimed to build the foundation for growing capability and capability of the whole workforce across different contexts to meet the needs of people with actual/potential eye conditions to optimise existing workforce 'assets', while taking a supportive approach to identifying and addressing learning needs through co-creation with stakeholders the following outputs.

- a shared purpose and direction across Eastern region for eyecare;
- the development of an integrated implementation and impact framework for growing the workforce to achieve the purpose;
- a single multi professional capability framework wrapped around the needs of people and communities;
- recommendations for Health Education England (Eastern); Integrated Care Systems (ICSs) and Higher Education Institutes (HEIs) that would inform subsequent stages.

Three virtual workshops were undertaken between March-July, 2022 drawing on the practice development principles (Hardy et al, 2021) of:

- Collaboration, inclusion and participation drawing on all the stakeholders involved in delivery and receiving eyecare and eyecare workforce development in the region.
- Co-creation of outputs with stakeholders to enable engagement and ownership – drawing on expertise and experience.
- Intention to provide seamless, person centred, safe and effective care across health economy that optimises existing workforce 'assets', while taking a supportive approach to identifying and addressing learning needs.

Workshop 1 used values clarification to co-create a shared purpose and direction with an overarching implementation and impact framework to identify what needs to be in place (enablers), what the service would be doing (attributes) and the consequences and outcomes for citizens, workforce and the system.

Workshop 2 focused on contexts and relationships across the system to identify where capabilities are most needed for enabling services to be as close to citizens' homes as possible and the implications of this on the system as well as priority pathways and relationships.

Workshop 3 focused on developing a single multi-professional capability framework wrapped around citizens and communities rather than professions and workforce development progression, including through identifying the key capabilities, performance indicators. The outputs of this stage were informed by the OPT, the HEE multi-professional advanced clinical practice framework (2017), the evidence base and other capability frameworks[3] . Existing frameworks weren't used explicitly as most workshop participants weren't familiar with the existing frameworks, while some had concerns about them (e.g. in the case of the OPT).

[3] Health Education England, NHS England and Skills for Health, (2020) NHS Core Capabilities Framework for Advanced Clinical Practice (Nurses) Working in General Practice/ Primary Care in England; Curriculum for Ophthalmic Specialist Training Royal College of Ophthalmology https://curriculum.rcophth.ac.uk/curriculum/ost/; *To preserve and maximise each person's sight, preventing avoidable sight loss across the lifespan through safe,* Registered Eyecare Professionals – multi-professional skills to deliver new pathways of care file:///C:/Users/Admin/Downloads/Registered-eyecare-professionals%20(2).pdf

Participants and Contributors

Participants in workshops and contributors to interim reports have included all the eye professions as well as county council sensory teams; vision charities and transformation leads and higher education providers, national and UK organisations (see Appendix 3).

Workshop 1 Outputs

Workshop 1 outputs included a shared purpose for eye care services across Eastern region; identified priorities to achieve the purpose, a development framework to guide implementation and evaluation of the shared purpose, and four recommendations.

Ultimate Purpose

The ultimate purpose of care and services for people with eye conditions across Eastern region is identified in Box 1.

> **Box 1: The ultimate purpose of care and services to people** (adults, children and young people and older people) **experiencing eye conditions**
>
> *To preserve and maximise each person's sight, preventing avoidable sight loss across the lifespan through* safe, quality, compassionate care that *empowers people through meaningful involvement in their healthcare journey. Enabled by:*
>
> - *Integrated services across organisational boundaries, patient pathways and between services to maximise resources* for individuals' timely access to joined-up care.
> - *Using the whole multi-disciplinary workforce to provide the right skills in the right place*
> - *Developing the capabilities and quality placements to support service delivery* optimising workforce development and deployment in response to population, individual and service delivery needs

Priorities Identified to achieve the purpose

Built on a person-centred foundation, involving service users in co-design and co-production, three priority objectives were identified:

1. To develop connectivity across integrated systems, to enable clearly defined pathways showing how services interact to provide, seamless care, supported by unified IT and conversations involving all stakeholders including service users

2. To upskill the workforce, improving capacity and capability to meet population/persons' needs through equitable and flexible access to appropriate learning, development and training opportunities that enable staff to work at the top of their licence within a multi-professional capability framework that addresses current and future workforce needs with robust governance.

3. To Invest in growing the workforce, bringing the workforce to East of England and supporting the non-registered workforce through supervision by the registered workforce and linked to community hubs.

Implementation and Impact framework

The objectives above, together with the detailed data analysis resulting from workshop one (See Workshop 1 report) frame the activities expected of the system, the enablers required to support them, and the indicators required to evaluate impact brought together in a single implementation and impact framework providing a foundation for transformation (Table 3).

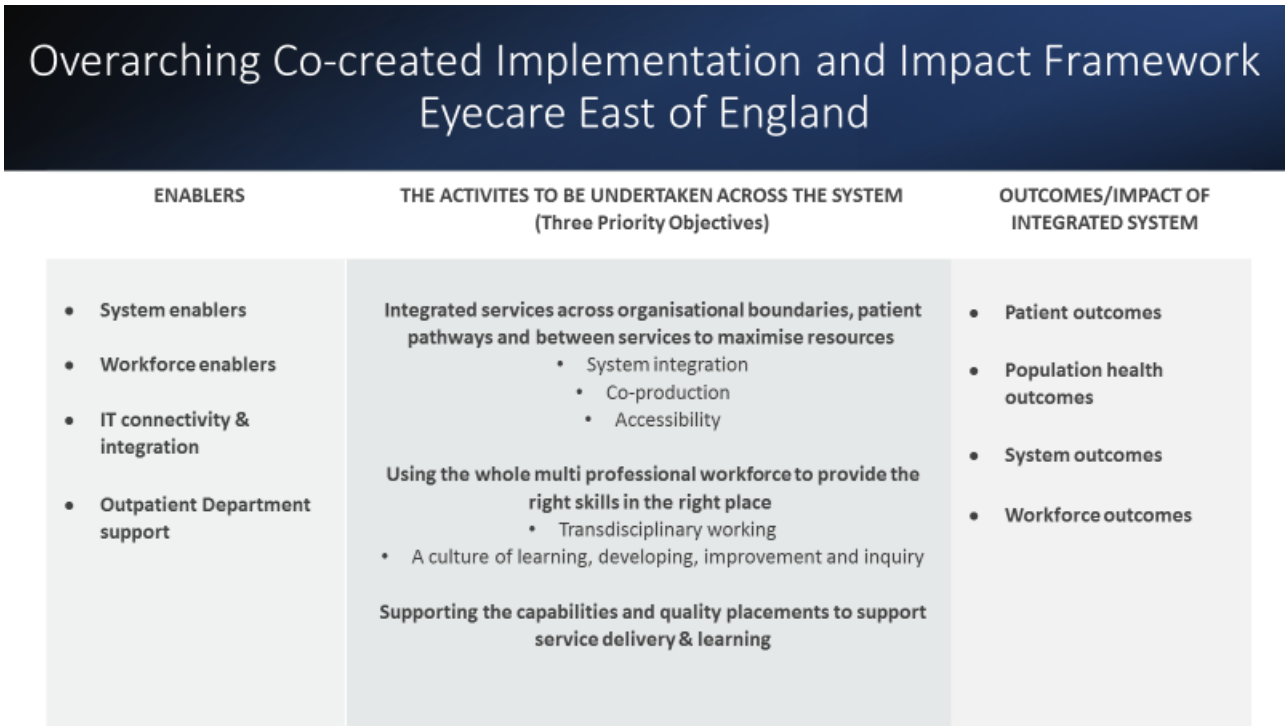

Table 3: Overarching Implementation and Impact Framework for developing the workforce to meet the actual and potential needs of people regarding eye health (See Appendix 1 for detail under each heading)

Key Capabilities

There was recognition in workshop 1 of the importance of a strong focus on systems leadership and quality as well as ensuring that evidence-based guidelines and capability frameworks already existing are linked and not reinvented. Specific capabilities identified for early potential to support system wide development, built on a person-centred approach included:

- Key assessment priorities for children, young people, adults and older adults
- Treatments and ongoing monitoring of people with:
    - urgent/emergency eye conditions in primary care,
    - prescribing capabilities e.g. – managing ocular allergies or pre-cataract assessment.
- Monitoring of people with:
    - stable long-term conditions such as:
        - glaucoma,
        - macula conditions,

- refractive correction for children following school screening,

These capabilities therefore constitute a priority for upskilling staff through the three levels of Ophthalmic Practitioner Training (OPT) Curriculum culminating in level 3 OPT consistent with advanced level practice (level 7 in the NHS career framework) and the recognition of an ophthalmic credential registered with the Centre for Advanced Practice.

Recommendations from Workshop 1

From workshop 1, four key recommendations resulted:

1. To assess system enablers and ICS engagement for strategic direction of ophthalmic services, to address infrastructure challenges for system transformation and IT connectivity.
2. To address the need for systems leadership to enable a joined up approach through appointment of a multi-professional consultant practitioner **OR** an aspirant multi-professional consultant to support achievement of the workforce enablers, implementation of framework activities and evaluate impact as a pilot across one/more Integrated care systems (ICS). The practitioner should have the capabilities of required for clinical systems leadership, embedded research skills and the proven ability to facilitate workforce transformation (HEE, 2020; Manley et al; in press) or be on a development programme to achieve them.
3. To develop multi-professional workforce capabilities to address assessment priorities for children, young people, adults and older adults in the community.
4. To develop multi-professional workforce capabilities building on a person-centered approach for:
    a. Treatments and ongoing monitoring of people with urgent/emergency eye conditions in the community
    b. Prescribing capabilities e.g. – managing ocular allergies or pre-cataract assessment in the community.
    c. Monitoring people in the community with stable long-term conditions such as:
        i. glaucoma,
        ii. macula conditions,
        iii. refractive correction for children following school screening.

> *'there are around 600,000 people with glaucoma – the second biggest cause of blindness – in the UK today. Early diagnosis and treatment is vital to prevent irreversible sight loss. 80% of all glaucoma cases annually originate from primary care, but a significant number of patients with glaucoma remain undiagnosed as some patients do not routinely have their sight checked – the principle route for spotting potential glaucoma.' (Whittingham 2019)*

Workshop 2 Outputs

Workshop 2 outputs included identifying key relationships and approaches for providing person centred eye care across Integrated Care Systems (ICSs); the relationship between the citizens with actual or potential eyecare needs, their journey and the providers and the workforce capabilities required. Four recommendations are identified.

Future relationships across the system providing system-wide eyecare

The person's care journey and what matters to them provides the central focus for person centred holistic eyecare. Relationships across integrated care providers need to coalesce around this focal point, wrapped around the person's needs underpinned by a single multi-professional capability framework for the whole workforce. This moves away from a profession specific silo approach to eyecare and matches the philosophy of the integrated care systems. The key outputs from Workshop 2 have resulted in an integrated model to achieve this purpose represented in Figure 1 below.

Three interdependent providers have been identified as contributing to the system across ICS's Informed by population data, epidemiological models and demand, where demand activity informs capacity and skill mix, namely

- **Community providers i**ncluding general practice (GPs, nurses, AHPs), community health and care teams, dispensing opticians, optometrists and pharmacists.
- **A specialised community hub** which involves specialist practitioners from different eye professions and disciplines working fluidly across providers to enable care to be located as near to peoples' homes as possible.
- **Tertiary provider**s based in acute regional hospitals which is currently where most care is provided, but in the future would focus on complex care and surgery.

> *'Cataract is the most commonly performed surgical procedure in the NHS. Pre- and post-operative care can be delivered via a community optical practice; up to 90% of post-cataract patients can be managed in the community.' (Whittingham 2019)*

The person with actual or potential eye care needs are the centre of Figure 1 and the broad capabilities required from the whole workforce through interdependent providers across the citizens journey are identified in the continuum (blue) at the top of Figure 1.

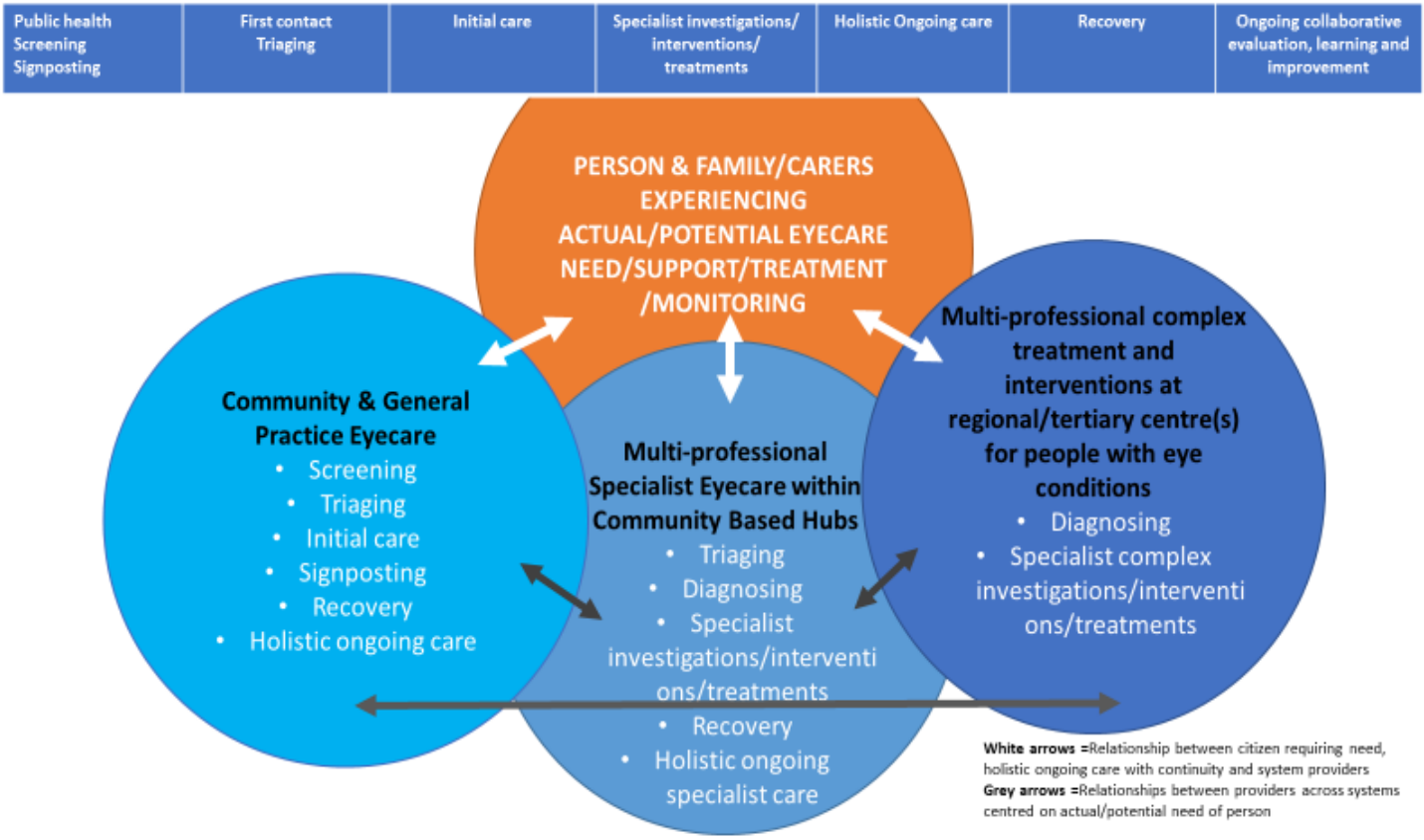

Figure 1: Visual Representation of relationships between 1) community and general practice capabilities 2) specialist multi-professional team capabilities though a community hub and 3) regional/tertiary centre capabilities providing system-wide eyecare based around the holistic needs of citizens and person-centred approaches with overarching capability framework at the top.

Purpose and focus of interdependent providers in the system

The purpose of each interdependent partner is outlined in Table 4. Participants in the workshop recognised that the eyecare specialist team community hubs had the greatest potential for benefit.

Table 4: Interdependent providers contributing to the systems with key purpose and focus

Community and General Practice Contexts (Working title)	**Eyecare Specialist Team Community Hubs (Working title)** Interfaces both community and tertiary centres through community hub with virtual clinic model	**Regional Centre Complex Specialist Care Requiring Acute Hospital Context (Working Title)**
PURPOSE: Best placed to provide: ✓ First point of contact ✓ Triage as close to home as possible, based on continuity of care, knowledge of person, and person as expert in own condition ✓ Signposting, screening, gatekeeper ✓ Increasing use of telemedicine	**PURPOSE:** Specialist care available in community close to citizens' homes, minimising travel and need for additional appointments, with equity of access across the region. Has access to specialist diagnostic equipment to minimise travel. **Has greatest potential for benefit**.	**PURPOSE:** To provide complex treatment services that can only be provided in regional/tertiary centres and the microbiological support required. Least controversial as current practice
Includes: • Monitoring of people with stable glaucoma • Management of simple/non urgent conditions • Initial diagnosis, general medical tests and then refer • Separating 1) Symptoms and diagnosis 2) Children and Adults	• Provides diagnosis with referral to community for monitoring as well as management and referral to regional centres (T3) • Need to review which conditions or aspects of the patient's journey sits in the system e.g. Children, glaucoma, AMD and routine post-op. • Frame around the capabilities (rather than the diagnosis) to ensure safe effective practice • Interface with other services required by person e.g. hearing, mobility, rehab, diabetes care • Includes extended contact lens opticians	• Individuals with expertise and equipment can move to community hubs to achieve high volume for low risk conditions and unnecessary referrals • Early and late treatments can be provided in community with clean room and suitable training • Monitoring can be provided in community Need to review: • Conditions and treatments that require hospital attendance • Number of regional centres required for a rural region such as Eastern

Recommendations from Workshop 2

From workshop 2, four key recommendations were identified:

1. To develop Community diagnostic hubs with physical space and resources supported by investment from each Integrated care System (ICS) in the East of England to increase accessibility and timeliness of assessment and care, increase diagnostic capacity, and relieve pressure on secondary care.

2. To ensure that Community Hubs are accessible to rural and coastal communities to address underrepresented areas replicating the positive community outcomes of the 'banking hub' innovation in Rochford Essex (https://www.bbc.co.uk/sounds/play/m001bkxb) but applied to improving eye health outcomes through using empty shops/pop-up opportunities.

3. The priority focus for capability development needs to take place in the community and general practice to focus on 'First point of contact', Triage as close to home as possible, based on continuity of care, knowledge of person, and person as expert in own condition; signposting, screening, gatekeeper and future role of Telemedicine.

4. The capabilities that can be developed within a Community Hub and the equipment required need to be clarified, as this will be dependent on access to Ophthalmic expertise, supervision and support, although the physical structure of such facilities is well documented (Harrison, 2022a).

> *'Care navigation services can also help to guide patients to the most appropriate care. In a pilot in West Wakefield, of 6,000 calls more than 5,800 were directed to a more appropriate local service. Within the study, around one quarter were directed to the optical practice for eye-related treatment, saving more than 185 hours of GP appointments.' (Whittingham 2019)*

Workshop 3 Outputs

Workshop 3 outputs included a detailed single multi-professional capability framework wrapped around the needs of citizens; the identified capabilities required for priority development; and the priorities for both upskilling and working more smartly. It concludes with seven further recommendations.

The overarching multi-professional capability practice framework for eyecare

Building on the two previous workshop outputs, and Figure 1, workshop 3 identified the multi-professional capabilities of the Eyecare workforce wrapped around the person's journey. Figure 2 summarises the relationship between citizen need for actual or potential eyecare and workforce capabilities to meet these needs.

Figure 2: The overarching framework wrapped around the citizens journey based on actual/potential eyecare need (green shaded needs can all be met in the community through community services and eye community hubs, blue shaded areas are needs that can be met by community hubs and tertiary centres) and linked system wide workforce capabilities

Overarching need aligned to citizen journey	**BROAD SYSTEM CAPABILITIES REQUIRED FROM THE MULTI-PROFESSIONAL WORKFORCE**
PUBLIC HEALTH, SCREENING, HEALTH PROMOTION AND SIGNPOSTING	1. Screen for early detection & safeguarding vulnerable people across the lifespan across communities 2. Provide health promotion for prevention in relation to actual/potential eye conditions
FIRST POINT OF CONTACT WITH HEALTH CARE **TRIAGE & INITIAL CARE**	3. Triage people with eye related conditions to identify the level of urgency and the appropriate provider of care 4. Provide first aid 5. Provide urgent care
ASSESSMENT, INVESTIGATIONS & DIAGNOSTICS TO INFORM CARE & TREATMENT	6. Assess health and eyes in different contexts (e.g. Community hubs) to inform investigations, diagnostics, diagnosis, treatment and care 7. Undertake and/or request Investigations across different contexts/settings to inform diagnosis treatment and care 8. Facilitate decision-making with the person to inform treatment/care plan Care and treatment interventions 9. Identify, provide and evaluate care and/or treatment interventions
HOLISTIC ONGOING CARE & RECOVERY	10. Complete a holistic assessment of the impact on the person with an eye condition to inform a comprehensive care plan in partnership with the person and their carers (bio-psycho-social 11. Provide information, advice, support and education about the person's eyecare need, its course and management to enhance self-management
ONGOING COLLABORATION, EVALUATION, LEARNING, IMPROVEMENT THROUGH CLINICAL GOVERNANCE, RESEARCH & INNOVATION ACROSS SYSTEM	12. Participate in continuous learning, development, improvement – through clinical governance, co-production, systems leadership and embedded research

The detailed multi-professional capability framework is provided in Appendix 2 where the capabilities are linked to specific practitioner performance outcomes expected in practice, informed by the relevant knowledge, understanding, know-how (skills) and the evidence base to demonstrate competence. These performance outcomes are mapped to the Royal College of Ophthalmologists' Specialist Practitioner and Ophthalmic Practitioner Training (OPT) curricula, the latter having been developed in collaboration with other professional bodies where the understanding, knowledge and skills are specified. Each performance outcome is also linked in brackets to the NHS Career pathway with capabilities identified for unregistered practitioners (Level 4 and lower, NHS Career framework see Appendix 4) and registered practitioners (Level 5, NHS Career framework) responsibility and accountable for the quality and safety of their care. Eye care protocols will need to be present to support practitioners operating at NHS Career level 6 and below.

The minimum level of practitioner that would be capable of each performance outcome following learning and development in the relevant health profession/specialism is identified in the context of the NHS career framework (Level 1-8) in Appendix 2, as are links to key resources and the evidence base.

Workshop 3 therefore identifies the need to 1) develop the capabilities and capacity of the Eyecare workforce at every level wrapped around the citizen's journey, and 2) create a career progression and development pathway for specialist to advanced practice and beyond to multi-professional consultant level practice. Multi-professional consultant practice is enhanced by professional credibility in one's own eyecare profession and when combined with expertise in its other domains provide the capabilities to support systems leadership, learning, developing and improving in the workplace, workforce transformation and embedded research and evaluation through influencing impact at every level of the system (HEE; 2020; Manley et al; *in press*).

The capabilities identified for priority development across Eastern Region

The capabilities and areas that require priority focus across ICSs in Eastern region include the following:

- Developing or standardizing and disseminate signposting and triaging protocols for first contact e.g. as developed by Local Optical Committees Support Unit (LOCSU) https://www.locsu.co.uk/wp-content/uploads/Files/Members_Area/Clinical_Pathways/MECS/LOCSU-MECS-Pathway-diagram-Feb-2019-V1.pdf.
- Expanding opportunities to develop capabilities as a basis for building community hubs:
    - in both Minor Eye Condition Services (MECS) and Community Urgent Eyecare Services (CUES). These initiatives have resulted as specific responses to the impact of the pandemic on eye services access.
    - Safe post- surgical operative care, monitoring for side-effects and complications e.g. following cataract surgery.
    - Follow-up treatment and ongoing monitoring of person's condition and treatment/care.
    - Pathways in the community e.g., Glaucoma pathways and follow up.
    - Across the four priority biggest volume areas identified by the Royal College of Ophthalmologists i.e. Cataract, Glaucoma, Medical Retina, Acute & Emergency Eye Care Needs.

Potential for working differently and more smartly

These include:

- Optimising capabilities and how these are deployed across all the professions, all levels of the workforce and across sectors and settings, for example;
    - upskilling technicians (e.g. in history taking) in both acute out-patient settings and community hubs to enable Ophthalmologists to increase the number of patients they can see (Harrison 2022a); and to extend their skills, to include the assessment of vision, instillation of eye drops, supporting patients through the care pathway, as well as performing clinical test throughout the pathway
    - upskilling optometrists; e.g. community optometrists will see children 4 years old or younger who present with emergency eye conditions, although current guidelines say they should be referred directly to A&E. Even if an optometrist couldn't examine or treat a young child they should be able to refer directly to an eye department / eye casualty and thus so much better than a child spending hours waiting in A&E to be seen by someone who has no eye expertise at all!
    - attracting, upskilling and educating ophthalmic nurses;
    - utilising care navigators more extensively .
- Realising and deploying the full potential of all parts of the workforce.
- Supporting the workforce through building a culture of learning and development and skilled facilitation using the workplace as a key resource for learning, developing and improving - this will contribute to portfolio development demonstrating capability acquisition but requires both skilled facilitators and enabling leadership.
- Optimising the development and deployment of multi-professional workplace-based supervisory capability and capacity so that workforce development can be progressed on a sustainable basis, strengthen trust/confidence and collaboration across sectors and settings and settings.
- Optimising existing apprenticeships to develop workforce capability at each level (including via the enhanced clinical practitioner and advanced clinical practitioner apprenticeships).
- Developing multi-professional advanced practice across the four pillars of practice, (i.e. leadership, research and supporting others' learning in clinical practice, as well as the more specific clinical capabilities required to manage high levels of complexity, risk and uncertainty in independent clinical-reasoning and decision-making) to lead urgent care in general practice or community hubs with access to ophthalmology support.
- Systems leader in each ICS to enable the workforce development and joined up approaches to happen across silos, reducing supplication of resources. This could also attract expert multi professional or aspiring consultant practitioners into the region to create a magnet to others.
- Digital skills embracing technology and virtual working.
- Disease coding to enable key vulnerable people with serious eye conditions to be identified at times of e.g. pandemic.
- Collaborative working across silos and professions with a stronger focus on developing professional/career development opportunities as a means of addressing recruitment and retention, and therefore creating a more sustainable approach to meeting population/individual needs.

Recommendations from Workshop 3

From this third workshop seven key recommendations have been identified for further work.

1. Identify the priority patient pathways relevant to Eastern Region to address defined priorities (based on data on prevalence, service pressures, waiting times, levels of unmet need, health inequalities, etc.) and map capabilities against these.
2. Develop/agree triage protocols for first contact areas and referral criteria for referral between community hubs; community and general practice and tertiary care.
3. Support each ICS to identify clinical systems leaders to implement Community Hubs and workforce development objectives across each system, working collaboratively with each other to establish region wide data and coding systems that will inform impact evaluation.
4. Explore the value of developing and implementing a multi-professional advanced practice credential in eyecare, investing in the portfolio route to prioritise development of this workforce.
5. Identify and develop lead facilitators to support development of workforce capabilities and enable shared learning through the Community Hub for prioritising achievement of OPT curriculum, ensuring that each of the four priority high volume areas are focussed on across the region.
6. A focus on optimising collaborative working within/across Higher Education Institutes (HEIs) in the region to address advanced practice workforce development needs in eyecare and study routes through existing advanced practice MSc provision (academic level 7) and those that feed into this level (i.e., academic level 6).
7. Achieve credential recognition with Health Education England's Centre for Advanced Practice for the OPT Curriculum comprising the four high volume areas: Cataract, Glaucoma, Medical Retina, Acute & Emergency Eye Care Needs.

Implications for 'Making this happen.'

The workshop outputs resulting from Phase 1 of this funded work will enable commissioners and providers to begin an implementation process and undertake a gap analysis in Phase 2 to consider:

- What enablers, attributes and outcomes are being achieved and where the gaps and challenges lie in terms of recruiting, retaining and developing the workforce.
- How to take account of career progression at all levels of the NHS Career framework including from enhanced to advanced and to consultant-level practice.
- Further analysis of where investments need to be made to retain and develop the existing workforce, including across all the pillars of practice.

Enablers identify the new way of thinking about the provision of eye care services, so that staff are upskilled in more accessible community locations to provide care required. This has implications for how community health care spaces are used, and the facilities required, with the case well made for many aspects of eye care being provided outside of hospital settings.

Different professions have potential to become upskilled, some are regulated, others are not. Ophthalmic nursing has much potential to be developed at Advanced level practice level together with Orthoptics, Optometrists and level 6 dispensing opticians who if supported can move to Community Hubs. Technicians and unregulated staff, for example care navigators have huge potential for positive impact if supported through learning and development programmes, evidence-based protocols and developmental opportunities such as apprenticeships.

Credentials (See Box 2), is one approach to growing the workforce in relation to advanced practice and could inform university education and flexible portfolio approaches. This in turn requires support from skilled facilitators who can use the workplace as the main resource for learning, developing and improving. This point is pivotal to achieving the recommendations and will be enhanced if more community hubs are established with support from, for example, rotating ophthalmologists and other ophthalmic profession expertise. Community hubs would embrace both face to face and virtual components and designs of workplace services need to optimise efficiency and develop further the role of technicians (Harrison, 2022b). Ophthalmologists in some areas of the region and other regions of England already provide outreach services to community practices and urgent care centres to meet the eye care needs of children, adults and older adults.

Box 2 Credentials

'The Centre uses 'credential' to describe standardised, structured units of assessed learning that are designed to develop advanced-level practice capability in a particular area. We use 'credential specification' to describe the open-source documents that set out the learning experience and outcomes (including the advanced practice area-specific capabilities) that a credential should develop and assess.

Credential specifications are intended for delivery by education providers. This includes as modules integrated within universities'

Centre-accredited advanced practice Master's degree programmes.' https://advanced-practice.hee.nhs.uk/credentials/

Community hubs have potential to meet the needs of citizens in rural and coastal communities using empty open plan premises in town centres for rapid eye clinics. To enable such a vison to happen requires facilitation of a joined-up approach to evidence based practice; service development; workforce development and systems transformation based on the shared purpose developed at each level of the system. Sponsorship opportunities of aspiring multi-professional consultant practitioners within the region supported by developmental grants or, attracting those with these skills from outside the region would act as a magnet to further grow capacity in ophthalmic care across the region. This needs to be combined with focused support for advanced practice, apprenticeships and other learning and development opportunities in eyecare for both registered and unregistered staff supported by learning and development opportunities that directly impact eye services and evidenced through Continuous Professional Development (CPD) Indicators of impact.

Conclusions and Overarching Recommendations

Phase one has identified an overall direction for meeting eye care needs across Eastern Region through transforming where and what the workforce do through developing the capabilities required flexibly and working more smartly to meet the eye care needs of communities, particularly characterised in Eastern region by rural and coastal contexts.

Recommendations

The recommendations arising from each workshop have been synthesised into an overarching set of short-term and medium-term recommendations for three key stakeholder groups, although their nature is interdependent. First are recommendations for Health Education England East of England Region, then the six Integrated Care Systems comprising Eastern region, and finally the five universities sited within Eastern region providing MSc Advanced practice programmes.

Health Education East of England

Short term recommendations

1. Explore development of a national eyecare credential with Health Education England's Centre for Advanced Practice for the Ophthalmic Practitioner training (OPT) Curriculum comprising the four high volume areas: Cataract, Glaucoma, Medical Retina, Acute & Emergency Eye Care Needs.

2. Identify eyecare facilitators of learning and supervisors to support the development of workforce capabilities and performance outcomes across different contexts and all Integrated Care systems (ICSs) in Eastern Region.

3. Identify assets and gaps in existing workforce capability and capacity within teams using learning needs analysis approaches across services.

4. Identify how university partners across Eastern region can work together to address advanced practice workforce development needs in eyecare and study routes through existing advanced practice MSc provision and programmes that feed into this at academic level 6.

5. Work with the six Integrated Care Systems ICS's to identify complementary opportunities for supporting/funding at least two advanced practice ophthalmic level practitioners per ICS, to work in community hubs or community-based services such as community clinics, CUES; MECS:
    a. Across the four high volume areas identified by the Royal College of Ophthalmology.
    b. To assess priority age groups, i.e. children; older people, people with learning disabilities
    c. Ongoing monitoring of people with urgent/emergency eye conditions in the community.
    d. Prescribing capabilities e.g. managing ocular allergies or pre-cataract assessment in the community.
    e. Monitoring people in the community with stable long-term conditions e.g. glaucoma, macula conditions.
6. Work with the six ICS's to identify sponsorship opportunities with providers and developmental funding and support for at least one ICS to attract a Multi-professional Consultant Practitioner (from any eye profession) as a system leader **OR** support an aspirant multi-professional consultant in their development pathway to begin to address the workforce enablers, implementation activities and evaluate of impact as a pilot across one/more Integrated care systems (ICS).

Medium Term Recommendations

1. Develop continuous professional development (CPD) indicators that enable unregistered and registered practitioners at all levels of the career framework to evidence impact on services for people with potential or actual eye needs following investment in learning and development opportunities.

2. Develop a learning network or community of practice for sharing learning, improvement and innovation across Eastern region in relation to developing workforce expertise, practice and service innovation in ophthalmic care.
3. Identify focused learning and development opportunities for non-registered workforce such as technicians and care navigators to work at the top of their license in ophthalmic care services in any context and contribute to smarter working.

The Six Integrated Care systems across the East of England with their interdependent partners and stakeholders

Short term recommendations

1. Recruit or sponsor from inside/outside the region OR grow aspiring clinical systems leaders in collaboration with HEE EoE through appointment of a multi-professional consultant practitioner or aspiring consultant. The practitioner should have the capabilities required for systems leadership, embedded research skills and the proven ability to facilitate workforce transformation or be on a development programme to achieve them.
2. Support systems leaders to work with all partners and other ICSs to:

- Identify gaps in the enablers required to include:
    a. gaps in capabilities required to meet community needs;
    b. capability development in the community and general practice;
    c. first contact, Triage as close to home as possible, based on continuity of care, knowledge of person, and person as expert in own condition;
    d. Signposting, screening, gatekeeper and future role of Telemedicine.
- Develop community hubs across boundaries in accessible centres near to where people live.
- Agree key data bases to focus on what matters and evaluate progress and impact.

3. Develop plans for establishing community hubs in rural and coastal centres, supported by investment and informed by evidence to:

- increase accessibility and timeliness of assessment and care to improve outcomes and reduce pressure on tertiary care;
- provide physical space and resources in empty open plan shops/popup facilities/ existing community clinics that lend themselves to efficient flow and performance of hubs as well as safety;
- support and supervise development of staff capabilities and confidence;
- increase IT interactivity and telemedicine across system partners.

4. Support more efficient ways of working in acute hospital Outpatient departments through an evidence-based approach to managing patient flow; consistent equipment pods and upskilling and educating ophthalmic nurses and technicians.
5. Sign up to a disease coding system so that vulnerable urgent patients in times of crisis e.g. pandemic) can be identified and supported.

Medium Term recommendations

1. Implement system enablers and engage ICS partners to address future strategic direction for ophthalmic services, infrastructure challenges for system transformation and IT connectivity.
2. Identify the priority patient pathways relevant to Eastern Region and build capabilities against these across the system.

3. Develop/agree triage protocols for first contact areas and referral criteria for referral between community hubs; community and general practice and tertiary care, within governance systems.
4. Support clinical systems leaders with the implementation of Community Hubs, practice and service development and workforce development across each system, and evaluation of impact working collaboratively with each other to establish region wide data and coding systems that will inform continuing impact evaluation.
5. Adopt an Advanced level practice credential with governance and assurance systems for all ophthalmic care professions.
6. Identify career development opportunities for all levels of the eyecare service to grow and sustain the eyecare workforce.

The Six Universities across the East of England providing MSc Programmes in Advanced practice

Short term recommendations

1. Develop partnerships across universities in Eastern region to address advanced practice workforce development needs in eyecare and study routes through existing advanced practice MSc provision for all regulated eye professions.
2. Identify how university partners across Eastern region can work together.

Medium Term recommendations

1. Identify how generic learning across the pillars in MSc Advanced practice can complement a flexible range of different practice credentials aligned with different professional groups, health and care needs to enable greater recognition of professional practice outcomes aligned with Master's level academic outcomes.

References

Clinical Council for Health Care Commissioning (2020) Community Eye service framework for the management and monitoring of less complex acute conditions and long term conditions at low risk of deterioration January 2020, reviewed November 2021.

Germaine, R.; Manley, K, Stillman, K and Nicholls, PJ (2022) Growing the interprofessional workforce for integrated people-centred care through developing place-based learning cultures across the system *International Practice Development Journal* Volume 12, Issue 1, Article 4 May. https://doi.org/10.19043/ipdj.121.004

Hardy, S; Clarke, S; Frei, IA; Morley, C; Odell J; White C; Wilson V. (2021) A Global Manifesto for Practice Development: Revisiting Core Principles. Chapter 8 in Manley, Wilson, Øye. International Practice Development in Health and Social care, Wiley, Chichester pp99-117.

Harrison, R (2022a) Working smarter not harder: How to transform eyecare delivery in the United Kingdom (part 1) Eye News DECEMBER/JANUARY 2022 VOL 28 NO 4 www.eyenews.uk.com http://www.eyenews.uk.com/

Harrison, R (2022b) Working smarter not harder: How to transform eyecare delivery in the United Kingdom (part 2) Eye News FEBRUARY/MARCH 2022 VOL 28 NO 5 www.eyenews.uk.com.

Health Education England (2017) Multi-professional framework for advanced clinical practice in England, NHS, HEE. Multi-professional framework for advanced clinical practice in England - Advanced Practice (hee.nhs.uk)

Health Education England (HEE) (2020) Multi-professional consultant practice capability and impact framework https://www.hee.nhs.uk/sites/default/files/documents/Sept%202020%20HEE%20Consultant%20Practice%20Capability%20and%20Impact%20Framework.pdf

Manley, K; Martin, A; Jackson, C; Wright , T. (2016) Using Systems Thinking to identify workforce enablers for a whole systems approach to urgent and emergency care delivery: A multiple case study *BMC Health Services Research* **16**:368 https://doi.org/10.1186/s12913-016-1616-y

Manley, K. & Jackson C. (2020) The Venus model for integrating practitioner-led workforce transformation and complex change across the health care system. *Journal of Evaluation in Clinical Practice- International Journal of Public Health Policy and Health Services Research*, 20 January, https://doi.org/10.1111/jep.13377

Manley, K; Crouch, R.,Ward, R.; Clift, E.; Jackson,; C. Christie, J.; Williams, H. and Harden, B (*in press*) The role of the multi-professional consultant practitioner in supporting workforce transformation in England. *Advanced Journal of Professional Practice.*

McKoy, O. (2019) Patient experiences to inform redesign of ophthalmology services Blog NHS 25 September https://www.england.nhs.uk/blog/patient-experiences-to-inform-redesign-of-ophthalmology-services/

Rycroft-Malone, J., Seers, K., Chandler, J., Hawkes, C., Crichton, N., Allen, C., Bullock, I. and Strunin, L. (2013) The role of evidence, context, and facilitation in an implementation trial: implications for the development of the PARiHS framework. *Implementation Science*. Vol. 8. Article 28. https://doi. org/10.1186/1748-5908-8-28.

The Ophthalmic Common Clinical Competency Framework (OCCCF) (June 2019) https://www.hee.nhs.uk/our-work/advanced-clinical-practice/ophthalmology-common-clinical-competency-framework-curriculum

Public health England, 2021 Atlas of variation in risk factors and healthcare for vision in England August 2021 file:///C:/Users/Admin/Downloads/VisionAtlas_v1.1_20210817.pdf

Whittington R (2019) Blog: Creating a community of care on eye health
9 January, NHS England https://www.england.nhs.uk/blog/creating-a-community-of-care-on-eye-health/ (accessed 30th August 2022)

Appendix 1: An implementation and impact framework for providing integrated care to people with eye conditions across integrated services in East of England.

ENABLERS	THE ACTIVITES UNDERTAKEN ACROSS THE SYSTEM	OUTCOMES/IMPACT OF INTEGRATED SYSTEM
SYSTEM ENABLERS • A shared person-centred purpose across the eyecare landscape and a belief that this can happen • Integrated care system support and action • Commissioning and investment in community hubs in community/general practice and robust governance system • A service that values staff, invests in them and looks after their wellbeing • Enabling and empowering proactive managers & leaders within flat structure • Appropriate costed patient care • Public awareness & campaigns **WORKFORCE ENABLERS** • Value and respect for different professional knowledge and skills across and within teams with kindness, space and time to value selves and support for each other • Clear career pathways across system-single multi-professional capability framework • Comprehensive education and training scheme/programme across boundaries • Facilitators who can use the workplace as a key resource for learning development and improvement • Clinical and Systems leadership linked to academic accreditation • Funding and investment to expand workforce opportunities and recruitment	**Integrated services across organisational boundaries, patient pathways and between services to maximise resources (Objective 1)** **System integration** • Streamlined person-centred approach service across the system as one large team for all purposes • Staff working across boundaries and patient pathways seamlessly • Emphasis on prevention and screening to recognise and treat unmet need • Combining opportunities for learning, improving and developing services together using the workplace as a key resource • Effective and responsible use of resources (human and infrastructure) across the system to work smarter based on evaluation **Co-production** • Collaboration between different professionals and service users 'experts by experience' to keep focused on the person and what matters to them • Empowering people through meaningful involvement in their healthcare journey • Working with service users (including children and young people) to co create/co-design person centred services • Engagement of staff in development and appraisal **Accessibility** • Timely consultation with the right person • Seamless communication and access to patient records • Providing people with accessible information and choice • Convenient follow up, onward referral and follow on support • Accessible expanded services, using community hubs with elimination of backlog • Open access to emergency and urgent services and advice to patients and referrers **Using the whole multi professional workforce to provide the right skills in the right place (Objective 2)** **Transdisciplinary working**	**PATIENT OUTCOMES** • Improved patient experience with uninterrupted care across the system • Increased patient satisfaction • Improved waiting times, more accessible appointments, services, closer to home nearer to home • Improved quality of life, independence • Reduced depression, social isolation and falls **POPULATION HEALTH OUTCOMES** • Public health indicators for prevention met • Reduced incidence of preventable irreversible loss of vision across lifespan **SYSTEM OUTCOMES** • Greater engagement with end users and increased communication across pathways and boundaries • Supply meeting demand • Earlier diagnosis, earlier intervention support in pathway • Smooth transition from children to young people services • Increased capacity-reduced backlog/waiting lists • Working more smartly with reduced duplication • A reputation for excellence that attracts and develops the best staff • Increased efficiency in outpatient consultation process

across system boundaries for both registered and unregistered health and care professionals
 	
IT CONNECTIVITY & INTEGRATION
• Integrated IT records to support:
  ○ 'one history' & patient coding
  ○ communication to individual,
  ○ integrated care and quality improvement
 	
OPD SUPPORT
• Technician in each consulting room
• Volunteers to assist patient into waiting rooms and with appointment
	• Transdisciplinary working, with respectful sharing of knowledge and skills between professions
	• Developing a trans-professional workforce with skills and knowledge to meet patient needs mostly in the community
	• Consistent opportunities for career progression across system boundaries and all health care locations
	A culture of learning, developing, improvement and inquiry
	• Developing a culture of openness focussing on collaborative learning and improvement that enables traditional views and behaviours to be challenged
	• A link to research to enhance care provided
	
	Supporting the competences and quality placements to support service delivery & learning (Objective 3)
	• Lifelong learning, placements for learning and learning from feedback
	• Develop sustainable workforce development, environments and patient pathways
		WORKFORCE OUTCOMES
		• Improved staff morale, retention, recruitment Increased applications to work in region
		• Flexible workforce who understand each other's roles

Appendix 2: Detailed Multi-Professional Capability Framework Wrapped Around the actual or potential Eye Care Needs of citizens across the lifespan, to Inform System-Wide Workforce Development in Eastern Region V4 29 8 22

Purpose: The ultimate purpose of care and services to people (adults, children and young people) experiencing eye conditions is,

To preserve and maximise each person's sight, preventing avoidable sight loss across the lifespan through safe, quality, compassionate care that empowers people through meaningful involvement in their healthcare journey. Enabled by:

- *Integrated services across organisational boundaries, patient pathways and between services to maximise resources* for individuals' timely access to joined-up care.
- *Using the whole multi-disciplinary workforce to provide the right skills in the right place*
- *Developing the capabilities and quality placements to support service delivery* Optimising workforce development and deployment in response to population, individual and service delivery needs.

The multi professional capability framework presents the following aligned to overarching citizen need:

Column 1: Overarching eyecare need in citizens' journey
Column 2: Broad system capability of the combined workforce
Column 3: Performance outcomes expected of individual practitioner
Column 4: Relevant evidence-based guidelines, information sources and resources relevant to supporting the capability
Column 5: Modules mapped from the Ophthalmic Common Clinical Competency Framework (OCCCF) (2019)[4]

Performance outcomes identify the actions expected of individual practitioners to contribute to the workforce capabilities across the system informed by the relevant knowledge, understanding, know-how (skills) and evidence base to demonstrate the outcome.

The 'L' figure in brackets identifies the MINIMUM level of eye practitioner expected to perform this activity from the relevant health profession/specialism in the NHS career framework (L1-8) – (See Appendix 4). Items in mauve pertain in whole or part to Children and Young People (CYP)

[4] https://www.hee.nhs.uk/our-work/advanced-clinical-practice/ophthalmology-common-clinical-competency-framework-curriculum

Column 1	Column 2	Column 3	Column 4	Column 5
Overarching eyecare need in citizens' journey	**Broad system capability of the combined Workforce**	**PERFORMANCE OUTCOMES expected of individual practitioner aligned to minimum level in the NHS Career framework** informed by the relevant knowledge, understanding, know-how (skills) and evidence base to demonstrate competence	**Relevant guidelines, information sources and resources**	**Module title and code mapped from the Ophthalmic Common Clinical Competency Framework (OCCCF)**
PUBLIC HEALTH, SCREENING, HEALTH PROMOTION AND SIGNPOSTING	1. Screen for early detection & safeguarding vulnerable people across the lifespan across communities	1.1. Provide local screening programmes based on clinical expertise based on population data to identify people (L8) to identify: • Early signs of eye diseases, • diabetic eye, • early detection of glaucoma (L5 optometrists) • Retinopathy of Prematurity (ROP) 1.2. Adopt public health strategies in planning and managing eye care programmes (L8) 1.3. Perform community vision screening in children and people with learning difficulties 1.4. Assessment of vision (L5) 1.5. Identify need, safeguarding vulnerable people (adults, children and young people) across the lifespan (L3) 1.6. Refer or signpost to relevant service for expert advice Inform relevant members of the multi-disciplinary team (L3)	https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#gid/1000044 https://www.gov.uk/topic/population-screening-programmes/diabetic-eye https://www.rcpch.ac.uk/sites/default/files/2022-06/ROP%20guideline%20summary%20June.pdf https://www.gov.uk/government/publications/adult-safeguarding-statement-of-government-policy-10-may-2013 https://www.nice.org.uk/guidance/cg89 https://www.locsu.co.uk/what-we-do/pathways/childrens-vision/ http://www.nspcc.org.uk/inform/ https://www.seeability.org/sites/default/files/2021-06/Delivering%20an%20equal%20right%20to%20sight%20DESIGN_0.pdf	Screening (HDPD1) BCS11 Medical sociology AER15 Safeguarding HS6 Safeguarding

			https://www.nhs.uk/conditions/eye-tests-in-children/	
	2. Provide health promotion for prevention in relation to actual/potential eye conditions	2.1. Identify and address health and lifestyle risks related to the person's actual/potential or eye condition (L3) 2.2. Signpost the person to relevant quality assured information, charities, support groups, social media and advice lines. (L3) 2.3. Provide occupational health advice to prevent eye injury in the workplace, associated with high risk industries (L6) 2.4. Advise on: • how dietary deficiencies and nutritional problems can lead to ophthalmic disease, providing general dietary advice including the role of nutritional supplements (L5) • how to avoid allergens or other triggers that cause relapses and exacerbations (L5) • basic contact lens care, with emphasis on the prevention of infection • NHS funded eye care services such as General ophthalmic Services sight tests and help towards the cost of spectacles • the time spent outdoors by children reduces risk of onset and progression of myopia, with progression reduced by glasses or contact lenses. (not available on the NHS but at least parents / carers should know that they are available). 2.5. Promote immunisation, listening to and acting on concerns informed by an evidence informed approach (L5)	https://curriculum.rcophth.ac.uk/pagetags/clinical-guidelines/ https://www.rnib.org.uk/eye-health/looking-after-your-eyes/nutrition-and-eye https://www.nei.nih.gov/research/clinical-trials/age-related-eye-disease-studies-aredsareds2 https://www.nutrition.org.uk/ https://www.rcpch.ac.uk/sites/default/files/2022-03/UK-screening-retinopathy-prematurity-information-parents-carers.pdf https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule/the-complete-routine-immunisation-schedule-from-february-2022 https://www.college-optometrists.org/clinical-guidance/guidance/safety-and-quality/infection-control#Reusingcontactlensesandophthalmicdevices	PM18 Diet and nutrition HPDP4 (Prevention of eye injury) HPDP5 (Disease risk reduction) HPDP6 (Contact lens care) HPDP7 (Diagnostic contact lens care HPDP8 (Avoidance of allergens) HPDP9 (Promotion of immunisation)

		2.6. Develop, agree, monitor and evaluate a long-term collaborative plan with the person to reduce and manage lifestyle risks (L4)		
FIRST POINT OF CONTACT WITH HEALTH CARE (e.g. Optician, pharmacist, general practice) **TRIAGE & INITIAL CARE**	3. Triage people with eye related conditions to identify the level of urgency and the appropriate provider of care 4. Provide first aid 5. Provide urgent care	3.1.Signpost/refer people with eye related symptoms and conditions based on protocols to appropriate provider of care (L4), including: • High St" NHS funded eyecare services such as MECS/CUES • A&E • Direct to eye departments/ rapid access clinics 3.2 .Review and interpret electronic referral data (L3) 3.3. Deliver clinical triage, assessment, treatment and advice by telephone or video to reduce the need for face-to-face contact, where appropriate, avoiding the need for many patients to leave their home. (L5) 4.1. Provide first aid and manage minor eye conditions (L5) 4.2. .Recognise medical emergencies and provide Basic Life Support until expert help arrives	https://www.locsu.co.uk/what-we-do/pathways/minor-eye-conditions-service-2/ https://www.rcophth.ac.uk/wp-content/uploads/2021/01/Emergency-eye-care-in-hospital-eye-units-and-secondary-care-Copy.pdf https://www.optometryscotland.org.uk/wp-content/uploads/2019/05/Emergency-triage-protocol.pdf https://www.loc-online.co.uk/cheshire-loc/wp-content/uploads/sites/8/2020/11/CUES-Pathway-and-protocols-v3.pdf https://nottsloc.org.uk/wp-content/uploads/2019/02/eyecastriagetool.pdf https://www.locsu.co.uk/what-we-do/pathways/covid-19-urgent-eyecare-service-cues/	PM8 Emergencies and Basic life support

		5.1. Undertake an initial health assessment and document (L5) 5.2. Assess vision acuity of adults, children and those with communication challenges (L3, higher levels for pre-verbal children) 5.3. Provide urgent care (L5) 5.4. Prioritise, act on or refer on people with urgent health needs within national standards (L5)	https://medlineplus.gov/eyeinjuries.html	CA1 Conduct a consultation CA2 Assess vision
ASSESSMENT, INVESTIGATIONS & DIAGNOSTICS TO INFORM CARE & TREATMENT	6. Assess health and eyes in different contexts (e.g. Community hubs) to inform investigations, diagnostics, diagnosis, treatment and care	**HEALTH ASSESSMENT** 6.1. Undertake a comprehensive history (L4) 6.2. Assess, investigate and recommend treatment for all people including woman of reproductive age to minimise adverse implications for the women and her unborn child. 6.3. Perform an appropriate assessment of a child's ophthalmic developmental milestones, identifying any associations between systemic and ophthalmic diseases. (L7) 6.4. Recognise when it is appropriate to seek a paediatric ophthalmic opinion. (L7) 6.5. Perform a proficient medical examination relevant to ophthalmic disease, including examination of the neck, skin and joints. (L7) 6.6. Perform an appropriate neurological assessment with emphasis on the cranial nerves and examining for conditions relevant to ophthalmic disease. 6.7. Recognise when serious neurological problems are present that require the opinion of a neurologist and act appropriately on neurological emergencies. 6.8. Interpret findings accurately, modifying examination and utilising techniques indicated by your findings to identify next steps in partnership with the person being assessed (L6)	http://mrcpch.paediatrics.co.uk/development/development-videos/	CA11 General medicine CA12 Paediatric & developmental examination BCS5 Growth and senescence CA 13 Neurological assessment PM13 Systemic illness implications IH6 Referral

		EYE ASSESSMENT 7.2. Accurately assess and interpret normal and abnormal visual fields by confrontation, identifying when to arrange more detailed visual field analysis (L5) 7.3. Perform an examination of the external eye, ocular adnexae, eyelids, orbits and face. (L5) 7.4. Assess the pupil for abnormalities of shape, size and reactions and accurately interpret your findings. (L4/5) 7.5. Perform and interpret appropriate pharmacological tests for specific pupil abnormalities(L?) 7.6. Perform a cover test, assess ocular movements (including the prism cover test in relation to fixation on internal and external targets). (L4/5) 7.7. Accurately recognise and describe nystagmus where present. (L?) 7.8. Measure the intraocular pressure (IOP) accurately using a variety of applanation techniques, non-Goldmann (L3), Goldmann (L5) 7.9. Perform slit lamp biomicroscopy of the eye and adjacent structures using appropriate illumination techniques, stains and diagnostic contact lenses. (L?) 7.10. Examine the fundus of the eye using appropriate techniques excluding imaging, without diagnostic contact lenses (L5) or with diagnostic contact lenses (L6) 7.11. Assess lacrimal function (L5) 7.12. Care for/calibrate all equipment for optimum function and to prevent cross infection (L3)		CA3 Fields by confrontation CA5 External examination CA6 Pupils CA7 Ocular Motility Testing CA8 Measure intraocular pressure CA9 Slit lamp Biomicroscopy CA10 Fundus examination PS2 Retinoscopy and an accurate subjective refraction PS8 Lacrimal function PS9 Anterior chamber paracentesis PS10 Corneal scrapings

	7. Undertake and/or request Investigations across different contexts/settings to inform diagnosis treatment and care	**DIAGNOSTICS** 7.1. Complete an Orthoptic assessment to identify the relevant investigations and when to request them. (L5 Orthoptist) 7.2. Request and interpret an orthoptic report, and perform a basic ocular motility examination and visual acuity assessment in older children. 7.3. Explain the benefits, risks and potential discomfort to the person/carer. (L5) 7.4. Refer for or request appropriately the following investigations: • A retinal/optic nerve imagining • Ocular angiograph • Ultrasonography • Radiology & neuroimaging • Histopathology • Microbiology • Visual Fields • Immunology • Bone scans • blood cultures under sterile precautions • basic ultrasound examination of the eye and orbit and employing a systematic method. 7.5. Perform venous cannulation safely for obtaining blood sample(L3) 7.6. Take an accurate and detailed refractive history (L5) 7.7. Perform the following diagnostics linked to purpose: • Visual acuity (L3)		PI1 Orthoptic assessment PI2 Cornea/anterior segment assessment PI3 Retinal Imagining PI4 Angiography PI5 Ultrasonography PS17 Ultrasonography PI6 Radiography and neuroimaging PI9 Blood tests PS20 Blood culture PI10 Histopathology PI11 Microbiology Pi12 Biometry PS 25 Biometry skills PI13 Visual Fields PI14 Immunology PI 16 Bone scans PS19 Aqueous and vitreous sampling

		• Focimetry (L3) • Auto refraction (L3) • optical biometry and scan ultrasound biometry in uncomplicated situations (L5), more complex situations (L6) • retinoscopy and an accurate subjective refraction in adults and children and provide appropriate prescription • Cornea/anterior segment assessment (L5-6) • an anterior chamber paracentesis for diagnostic or therapeutic purposes. • a corneal scrape for diagnostic and therapeutic purposes. • aqueous and vitreous sampling • basic forced duction test as part of a clinical assessment. 7.7. Interpret the results and within the limitations of the investigation 7.8. Ensure that the results of the investigation are sufficient, reliable and accurate (up to level 6) 7.9. Make a clinical decision utilising the results act upon these in partnership with the person/carer (level 7).		PS22 Forced duction Testing
	8. Facilitate decision-making with the person to inform	8.1. Evaluate clinical assessment to identify and explore a working diagnosis (L7) 8.2. Make a preliminary diagnosis based on history and assessment (L7) 8.3. Accurately diagnose based on history, diagnostics and assessment skills with constant critical review(L7/8).	https://www.nice.org.uk/guidance/conditions-and-diseases/eye-conditions https://www.nice.org.uk/guidance/ng3 https://curriculum.rcophth.ac.uk/standards-publications-research/clinical-guidelines/	DMCRJ1 Evidence based approach BSC Basic and clinical sciences BSC 1-17 IH3 Guidelines

	treatment/care plan	8.4. Recognise when a patient's ocular problem is a manifestation of a systemic disorder or indicates an increased risk of a systemic illness. (L7/8) 8.5. Recognise when a patient's clinical presentation needs priority, making appropriate arrangements to expedite their care. 8.6. Discuss treatment options and choices and agree treatment plan in collaboration with the person and their carers (L7) 8.7. Formulate a management plan based upon clinical assessment, relevant investigations and evidence-based guidelines within the context of multi-professional team and the person's own choices and self-management (L7) 8.8. Organise, referral where appropriate and evaluate treatment options (L7)	http://www.cochrane.org/ http://www.cochranelibrary.com/review-group/Eyes%20and%20Vision%20Group/ https://curriculum.rcophth.ac.uk/wp-content/uploads/2014/12/2013-SCI-301-FINAL-DR-GUIDELINES-DEC-2012-updated-July-2013.pdf	PM13 Systemic illness implications PM2 Prioritising PM1 Management plan IH6 Referral

	9. Identify, provide and evaluate care and/or treatment interventions	9.1. Manage person's care within agreed protocols and capability (L5) **EXTERNAL VISION CORRECTION** 9.2. Identify when a person may benefit from the use of spectacle lenses and prisms. (L5) 9.3. Assess the type and strength of lens or prism and provide an appropriate prescription. (L5) 9.4. Advise on basic contact lens care. 9.5. Recognise and manage the complications of contact lens us **URGENT CARE** 9.6. Irrigate and debride ocular contaminants as part of the emergency management of ocular injury. (L6) 9.7. Remove an ocular surface foreign body safely. (L6) 9.8. Liaise with and, where indicated, seek advice from optometrists and orthoptists. (L6) 9.9. Advise a patient on the purpose, duration and optical effects of the prescription (L6) **PHARMACOLOGICAL TREATMENTS** 9.10. Take measures for the prevention of disease by using appropriate prophylaxis. 9.11. Prescribe and administer pharmacological treatments safely, monitoring their impact and effectiveness: • topical pharmacological treatments • Systemic treatments • Intravenous drugs and infusions • directly into ocular and periocular tissues (L6) 9.12. Administer topical pharmacological treatments safely and effectively i.e. eyedrops (L3) 9.13. Teach person, carers and others how to administer topical treatments safely and effectively (L3) 9.14. Use botulinum toxin safely, particularly for protection of the ocular surface	http://www.glaucoma-association.com/about-glaucoma/living-with-glaucoma/eye-drops-and-tablets-during-pregnancy/	AER6 Limits of competence PM14 Spectacle lenses and prisms PM15 Contact lenses PS21 Hand Hygiene HPDP2 (Infection control) PS11 Ocular body PS22 Ocular irrigation PM3 Use of drugs HPDP10 (Tests and drugs in pregnancy) BC38 Therapeutics PS3 Periocular and intraocular drug delivery PS4 Intravenous access and cannulation

		LASER TREATMENTS 9.15. Explain the main indications, limitations and contra-indications of various refractive techniques, including excimer laser, femtosecond laser, advanced surface ablation, LASIK, LASEK, SMILE, and refractive lens exchange. 9.16. Identify when a patient could benefit from laser treatment and make appropriate arrangements or provide appropriate advice about the different laser techniques available. 9.17. Safely use Laser capsulotomy, and Yag Laser and diagnostic contact lenses to include their cleansing and care **SURGERY** 9.18. Prepare person preoperatively and complete preoperative assessment 9.19. Provide safe and appropriate local anaesthesia for ophthalmic procedures, recognising and managing potential complications. 9.20. Use diathermy safely for intraocular and extraocular procedures. 9.21. Use temporary, reversible and permanent occlusion techniques to occlude the lacrimal puncta/canaliculi when indicated 9.22. Provide safe and effective cataract and lid surgery (L7) 9.23. Provide safe and effective complex surgical procedures on the eye specifically outlined in OPD curriculum modules SS1-SS16 (L8)		PM17 Laser surgery BCS12 Safe use of ophthalmic lasers PM5 Pre-operative assessment PS5 Local anaesthetic PM16 Refractive surgery PS6 Diathermy PS12 Punctual occlusion PS14 Therapeutic bandage contact lens PS16 corneal Gluing PM6 Monitor progress

		9.24. Use therapeutic bandage contact lens safely 9.25. Use corneal gluing appropriately 9.26. Provide safe post- surgical operative care, monitoring for side-effects and complications e.g. cataracts (L3) 9.27. Explain and demonstrate the use of lid hygiene to a patient with lid margin disease. (L5) 9.28. Follow-up treatment and provide ongoing monitoring of person's condition and treatment where appropriate(L5) 9.29. Follow local and national guidance on the prevention of surgical infection. 9.30. Remove sutures from the eye and adnexal tissue. 9.31. Recognise and act on any complications and deterioration. 9.32. Initiate management of medical emergencies and anaphylaxis including first aid or Basic Life Support until expert help arrives	https://www.rcophth.ac.uk/news-views/interim-recommendations-uncomplicated-cataract-surgery/	PM7 Complications of treatment PS13 Removal of sutures PS18 Lid hygiene PM8 Emergencies and Basic life support
HOLISTIC ONGOING CARE & RECOVERY	10. Complete a holistic assessment of the impact on the person with an eye condition to inform a comprehensive care plan in	10.1. Build person centred relationships based on compassionate, kind and ethical principles that focus on what matters to the person and their carers, respecting confidentiality and consent 10.2. Assess the impact of the eye condition on the person (L3) 10.3. Identify what matters to the person (L4) 10.4. Perform a holistic person centred assessment in relation to functional needs associated with the home and workplace (L4)	https://www.devon.gov.uk/care-and-health/disabilities/physical-sensory/what-is-a-rovi/ https://childrenandfamilyhealthdevon.nhs.uk/rehabilitation-officers-for-visually-impaired-children-rovic/#:~:text=A%20rehabilitation%20officer	C1- C5 Communication values AER1-AER5 Attitudes, ethics and responsibilities PM10 Visual Standards

	partnership with the person and their carers (bio-psycho-social)	10.5. Refer to Rehabilitation Officer Visual Impairment (ROVI) for help with remaining at home and staying independent. 10.6. Refer to sensory services for support with equipment and assistive technology 10.7. Assess and advise person using occupational visual standards. 10.8. Assist the visually impaired person with accessibility 10.9. Recognise when a patient might benefit from a low vision aid assessment or other rehabilitation services or support groups for visual impairment. 10.10. Apply in a sensitive manner, the criteria for the completion of the Certificate of Visual Impairment or equivalent. 10.11. Perform a complex needs assessment for people with dementia or those with more complex or special education needs 10.12. Access support from children's and adult disability teams (Council) for support with complex social needs 10.13. Organise care as close to home as possible maintaining continuity (L3) 10.14. Plan, implement and evaluate care according to national standards and guidelines (L4) 10.15. Liaise with, consult, update or refer to appropriate agencies required to support the plan (L5) 10.16. Make appropriate referrals in a timely and efficient manner and in accordance with local protocols and guidelines. 10.17. Accord appropriate priority to referrals based upon clinical need.	%20for%20visually,they%20reach%20and%20develop%20skills. https://www.gov.uk/guidance/visual-disorders-assessing-fitness-to-drive https://www.gov.uk/government/collections/assessing-fitness-to-drive-guide-for-medical-professionals www.guidedogs.org.uk	PM12 Referral to other professionals PS1, Visual impairment IH6 Referrals
			https://www.rnib.org.uk/	PM11 Support and certification of the visually impaired

		10.18. Develop and agree a collaborative care plan with the person based on best practice and tailored to the individual and (L5)		
	11. Provide information, advice, support and education about the person's eyecare need, its course and management to enhance self-management	11.1. Act appropriately upon query or advice need (L3). 11.2. Provide accessible information to the person and their GP in relation to the electronic record (L3) 11.3. Provide on-going information and education about diagnosis, the course of disease and care options (L3) 11.4. Educate patients to self-manage their condition. (L4) 11.5. Provide formal or informal one to one or group support and education, including support available from relevant agencies (L4)		PM18 Nutritional guidance IH5 Electronic record

ONGOING COLLABORATION, EVALUATION, LEARNING, IMPROVEMENT THROUGH CLINICAL GOVERNANCE, RESEARCH & INNOVATION ACROSS SYSTEM	12. Participate in continuous learning, development, improvement – through clinical governance, co-production, systems leadership and embedded research	12.1. Work in partnership with all stakeholders and service users across the health economy to improve services using co-production, acting on feedback and patient experience data (L3-8) 12.2. Participate actively in interdisciplinary peer review, audit, risk management, evaluation and learning opportunities enabling knowledge translation and evidence-based practice (L3-8) 12.3. Model critical thinking, high support high challenge, the giving and receiving of feedback to enable mutual learning and a learning culture across the system(L5) 12.4. Monitor efficacy and changing demands of the service and population (L7/8) 12.5. Act on formal and informal service review feedback through clinical governance structures (L3-8) 12.6. Provide clinical systems leadership to enable consistent, equitable approach to quality care, safeguarding, evaluation, improvement, research and innovation across the health system (L8)	https://curriculum.rcophth.ac.uk/curriculum/ost/learning-outcomes/ HEE Multi-professional consultant practice capability and impact framework as a system leader and embedded researcher – link https://www.hee.nhs.uk/sites/default/files/documents/Sept%202020%20HEE%20Consultant%20Practice%20Capability%20and%20Impact%20Framework.pdf	HS1-HS10 Role in health service AER 1-16 Attitudes, ethics, responsibility CPD1-CPD7 Personal development DMCRJ2 Quality improvement IH9 Incident reporting DMCRJ3 Personal audit DMCRJ4 Research principles DMCRJ5 Service Management

Appendix 3: Project group members, participants in workshop (s) or contributor of feedback

Project Group

Name	Title/Role
Tom Butler	Ophthalmologist James Paget Hospital and project team
Katie Cooper	Advanced Practice lead Health education England Eastern region
Sally Gosling	Health Education England and project team
Carrie Jackson	Associate Professor Practice Transformation, Director ImpACT Research Group, School of Health Sciences, University of East Anglia
Kim Manley	Professor for Practice Development, Co-Director ImpACT Research Group, School of Health Sciences, University of East Anglia

Participants in workshops or contributors of feedback

Name	Title/Role
Rosie Auld	Chair British and Irish Orthoptic Society Sandwell and West Birmingham
Edward Bates	Vision Norfolk
Bhairavi Bhatia	Specialist Registrar and OPT fellow
Rob Brady	Specialist Registrar and OPT fellow, ESNEFT
Alistair Bridge	Association of British Dispensing Opticians – head of strategy for Association of British Dispensing Opticians (ABDO)
Rob Brookes	HEE EoE regional apprenticeship lead
Tom Butler	Ophthalmologist James Paget Hospital and project team
Alex Chiu	NHSE/I national eyecare recovery and transformation programme (NECRTP) team
Suzanne Clarke	Head Orthoptist, Wye Valley NHS Foundation Trust
Robert Collins	Vision Norfolk
Katie Cooper	Advanced Practice lead Health education England Eastern region
Helen Davis	Ophthalmology Sister and Unit OPT Lead, Norfolk & Norwich University Hospital
Leenese Davis	Hertfordshire vision team
Joanne Finch	Head Orthoptist –Ophthalmology Services Chesterfield
Anthony Geraets	NHSE/I national eyecare recovery and transformation programme (NECRTP) team
Veronica Greenwood	Chair of the British & Irish Orthoptics Society
Sally Gosling	Health Education England and project team
Lynn Hadley	Association of Ophthalmic Nurses and Technicians - her email for your mailing list is
Max Halford	Clinical Lead Association of British Dispensing Opticians
Daniel Hardiman-McCartney	Professional Rep, mix of roles. Clinical advisor in the College, works in the EoE and involved in the workforce strand of the NHSE eyecare programme
Rosalind Harrison	Head of Centre of Association of Healthcare Professions in Ophthalmology (AHPO)
Ryan Heard	Development Manager | Sensory Services | Adult Care Services Hertfordshire County Council

Julie Hughes	Director of vision education- Anglia Ruskin University
Shaheryar Khan	Specialist Registrar and OPT fellow
Sabina Lqbal	Hertfordshire vision team
Alison Lask	Commissioning lead for Cambridgeshire and Peterborough Local Optical Committee
Rupal Lovell-Patel	Rupal Lovell-Patel: East of England Senior Regional Optometry Adviser and Chair of East Anglia Local Eye Health Network.
Marc Lyall	NHSE/I national eyecare recovery and transformation programme (NECRTP) team
Shaheryar Khan	Specialist Registrar and OPT fellow
Silvana Madi	Consultant ophthalmologist Princess Alexandra Hospital and OPT TPD
Linda Melvin	Orthoptist, Mid and South Essex NHS Foundation Trust
Joy Myint	Head of Optometry - University of Hertfordshire
Jayna Mistry	Orthoptic Community Lead
Sarah Naylor	Sarah Naylor
Nuwan Niyadurupola	consultant ophthalmologist Norfolk and Norwich Hospital Trust and OPT TPD
Yvonne Norgett	Optometry Course Leader
Louise Nunney	Ophthalmology Sister and Unit OPT Lead, James Paget University Hospital
Simon Orr	HEE south-east workforce transformation team
Linda Pawelcyzk	Orthoptist Paediatric Eyecare service, Birmingham Community Healthcare
Narman Puvanachandra	Head of School for Ophthalmology EoE
Ruth Pye	Essex, Council Vision Team
Muhammad Raja	Consultant ophthalmologist James Paget University Hospital and OPT TPD
Dan Rosser	Head of Optometry, Norfolk & Norwich Hospital
Helen Simpson	Helen Simpson
Rachel Smyth	NHSE/I EoE Assistant Director of Programmes
Penelope Stanford	Manchester university and Chair of the RCN ophthalmic nursing forum
Carl Svasti-Salee	Fellow in Emergency Ophthalmology and OPT
Emma Wilton	HEE South-East Workforce Transformation team
Boena Zeneli	Business Manager, North East Essex ICB

Appendix 4: The NHS Career Framework https://www.skillsforhealth.org.uk/wp-content/uploads/2020/11/Career_framework_key_elements.pdf

Key Elements of the Career Framework

Skills for Health

9 Career Framework Level 9
People working at level 9 require knowledge at the most advanced frontier of the field of work and at the interface between fields. They will have responsibility for the development and delivery of a service to a population, at the highest level of the organisation. **Indicative or Reference title: Director**

8 Career Framework Level 8
People at level 8 of the career framework require highly specialised knowledge, some of which is at the forefront of knowledge in a field of work, which they use as the basis for original thinking and/or research. They are leaders with considerable responsibility, and the ability to research and analyse complex processes. They have responsibility for service improvement or development. They may have considerable clinical and/or management responsibilities, be accountable for service delivery or have a leading education or commissioning role.
Indicative or Reference title: Consultant

7 Career Framework Level 7
People at level 7 of the career framework have a critical awareness of knowledge issues in the field and at the interface between different fields. They are innovative, and have a responsibility for developing and changing practice and/or services in a complex and unpredictable environment. **Indicative or Reference title: Advanced Practitioner**

6 Career Framework Level 6
People at level 6 require a critical understanding of detailed theoretical and practical knowledge, are specialist and / or have management and leadership responsibilities. They demonstrate initiative and are creative in finding solutions to problems. They have some responsibility for team performance and service development and they consistently undertake self development. **Indicative or Reference title: Specialist/Senior Practitioner**

5 Career Framework Level 5
People at level 5 will have a comprehensive, specialised, factual and theoretical knowledge within a field of work and an awareness of the boundaries of that knowledge. They are able to use knowledge to solve problems creatively, make judgements which require analysis and interpretation, and actively contribute to service and self development. They may have responsibility for supervision of staff or training. **Indicative or Reference title: Practitioner**

4 Career Framework Level 4
People at level 4 require factual and theoretical knowledge in broad contexts within a field of work. Work is guided by standard operating procedures, protocols or systems of work, but the worker makes judgements, plans activities, contributes to service development and demonstrates self development. They may have responsibility for supervision of some staff. **Indicative or Reference title: Assistant/Associate Practitioner**

3 Career Framework Level 3
People at level 3 require knowledge of facts, principles, processes and general concepts in a field of work. They may carry out a wider range of duties than the person working at level 2, and will have more responsibility, with guidance and supervision available when needed. They will contribute to service development, and are responsible for self development. **Indicative or Reference title: Senior Healthcare Assistants/Technicians**

2 Career Framework Level 2
People at level 2 require basic factual knowledge of a field of work. They may carry out clinical, technical, scientific or administrative duties according to established protocols or procedures, or systems of work.
Indicative or Reference title: Support Worker

1 Career Framework Level 1
People at level 1 are at entry level, and require basic general knowledge. They undertake a limited number of straightforward tasks under direct supervision. They could be any new starter to work in the Health sector, and progress rapidly to Level 2. **Indicative or Reference title: Cadet**