

Nottingham and Nottinghamshire ICS Ear, Nose and Throat and Hearing Services Clinical and Community Services Strategy March 2021

This information has been placed in the public domain in order to benefit patients across the country as we believe the experience and approach may be useful for others, however we request that acknowledgement to the work in Nottinghamshire is made and referenced in all materials. This helps us to understand the wider impact benefits of our programme. Please cite 'this work has been informed by the Nottingham and Nottinghamshire ICS' when referencing.

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

Hearing loss can happen in small stages over a small period of time, unless there is something like a loud noise event that causes acoustic trauma. Hearing loss may start out situational, where everything can be heard but not background noise. Or where everyone can be heard, except those that speak softly. Currently, some people are finding it difficult to hear people wearing masks. Hearing loss can have a lot of negative impact on one's life and on their overall brain health. There are a number of studies linking untreated hearing loss to accelerated cognitive decline or even dementia. Yet for many people with any of these symptoms, a simple hearing test performed by an audiologist can prevent some of the longer term impacts, including depression and isolation.

A survey (*Family Practice, Hanaford*) carried out in Scotland to assess the prevalence of ear, nose and throat (ENT) symptoms experienced by individuals, showed that ENT problems occur frequently in the community and mostly managed without consulting medical services such as a GP or audiologist. Hearing problems were experienced by 20% of respondents, including having difficulty following conversations when there is background noise and hearing problems causing worrying or upset, a few wore a hearing aid regularly. One fifth of the respondents reported hearing noises in their head or ears (tinnitus) more than five minutes. Around 16% reported persistent nasal symptoms or hayfever, 7% sneezing or voice problems and 31% had at least one episode of severe sore throat or tonsillitis. Between 13% and 29% reports having experienced dizziness in which things seemed to spin around or they felt they were moving, or unsteadiness, light-headedness or feeling faint. The survey also showed important gender, age, occupation and deprivation differences existed in the occurrence of these ENT symptoms, with considerable variation in the proportion of individuals consulting their GP or being referred to hospital for different problems.

The Royal National Institute for the Deaf (RNID) state that evidence suggests, that people wait on average 10 years before seeking help for their hearing loss and that when they do, GPs fail to refer 30-45% to NHS audiology services. They go to say, it is expected that the UK will have 14.2 million people with permanent hearing loss by 2035, representing a 14% increase on today's number.

Hearing loss can lead to withdrawal social situations, emotional distress and depression, where the risk of loneliness is also increased for those that do not wear hearing aids. The NHS Long Term Plan (LTP) makes strong reference to ensuring improvements are made in the integration of health and social care and in particular access to mental health services. With people living with hearing loss more likely to experience depression, the local services need to align to the LTP by improving access to mental health support.

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

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

Fundamental themes have been identified along with key transformational opportunities and potential impacts have been developed which include: prevention strategies to promote healthy living and independence; improved access and shared communication about patients' past medical history from secondary care settings to community and primary care; earlier interventions for people with hearing loss accessible across the ICS; standardise access to services through improved integration between secondary and primary care with a strong focus early access to audiology support in primary care.

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

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



Background and Purpose

In Nottinghamshire we have made great progress in improving people's health and wellbeing. Today, we can treat diseases and conditions we once thought untreatable. However, our health and care system faces change and this will impact on our services, for example, the growing prevalence of long-term health conditions places new strains on our system. There is inequality evident in both the location of services and in access to services. In some areas, it is easier to access a GP than in others, or to find things to do to enable citizens to stay active and fit.

The ICS ambition across Nottinghamshire is to both increase the duration of people's lives and to improve those additional years, allowing people to live longer, happier, healthier and more independently into their old age.

The requirement for a CCSS came from the recognition that to achieve this ambition the system has to change as a whole, rather than just in its individual acute, primary care, community and social care elements. It is recognised that only by working together to describe changes in how care is provided across the system, rather than through individual organisations, will we deliver the scale of change required.

The ICS Clinical and Community Services Strategy

The aim of the CCSS is to support the system to achieve this by shifting the focus of our health and care delivery from reactive, hospital based treatment models to a pro-active approach of prevention and early intervention. This should be delivered closer to people's homes or in community locations where this enables better prevention, more supported self-care and earlier intervention to support citizens. The Strategy recognises that achieving this change is a long term programme that will be delivered over the next 5 years and beyond. This is also to enable a necessary long term investment in the health and care buildings and infrastructure in the system.

An overall CCSS whole life model framework has been developed to focus on the need to support people through their lives from living healthy, supporting people with illness and urgent and emergency care through to end of life care. Citizens can experience different parts of the system at different stages in their lives. With the development of the overall Strategy framework the next phase of work is to review the 20 areas of service across the ICS that collectively form approximately 80% of the volume of clinical work in the ICS. This will ensure that overall the Strategy is described as a coherent whole and generates a programme of change for the whole ICS. This review of ENT and Hearing Services provides the opportunity to be such a review and is part of the final phase of work.

NHS Long Term Plan

The NHS LTP is clear that to meet the challenges that face the NHS it will increasingly need to be more joined up and coordinated in its care; More proactive in the services it provides; More differentiated in its support offer to its individuals.

The ICS has focused on describing 5 areas of focus for the delivery of the NHS LTP. These requirements are reflected in each of the service reviews that collectively will describe the CCSS

- 1. Prevention and the wider determinants of health** - More action on and improvements in the upstream prevention of avoidable illness and its exacerbations
- 2. Proactive care, self management and personalisation** - Improve support to people at risk of and living with single and multiple long term conditions and disabilities through greater proactive care, self-management and personalisation
- 3. Urgent and emergency care** - Redesign the urgent and emergency care system, including integrated primary care models, to ensure timely care in the most appropriate setting
- 4. Mental health** - Re-shape and transform services and other interventions so they better respond to the MH and care needs of our population
- 5. Value, resilience and sustainability** - Deliver increased value, resilience and sustainability across the system (including estates)



Approach	<p>This strategy has been developed through an open and inclusive process which weaves together the expertise of clinicians and care experts with commissioners and citizens in determining the future shape of services across the system. There have been a variety of stakeholder and service user events to develop a clinical and community services model. An extensive system wide piece of work is taking place across a minimum of 20 services. The CCSS Programme Board have reviewed these services against a range of quantitative and qualitative criteria and agreed the final phase of three service reviews. These include ENT and Hearing Services, Personality Disorders and MSK to Elective Orthopaedic services.</p> <p>This document discusses the approach, scope, the key issues and potential transformational opportunities within ENT and hearing services across the ICS. Health, social care, public health and the voluntary sectors have all been considered through reviewing the current service offer across the ICS. The service review was taken over approximately 10 weeks and there were two workshop held with stakeholders from across the ICS. An evidence review pack was developed which considered national and local best practice to inform the development of potential themes and new models of care where transformational change may take place across the ICS in the future.</p>
Scope	<p>Most of the service reviews have been fairly focused, allowing the approach to be specific in describing and making recommendations on the key priorities. The ENT and hearing service has similar breadth and aligned to the CCSS approach and timelines. This review describes key areas of attention that further work can build upon with the respective engagement. The recommendations articulate those areas of focus that were evidenced through the process as areas of significant issue that can be further shaped with the level of detail required.</p> <p>The following focus was agreed in the scope of this review:</p> <p>In scope:</p> <ul style="list-style-type: none">• Adults & children (age over 1, Maternity & neonates up to age 1 – bearing in mind cross over of under 1s for early audiology referrals and diagnostics)• Scope not narrowed, to include: allergic rhinitis, ear ache, earwax build up, hearing loss, labyrinthitis, laryngitis, middle ear infection (otitis media), Meniere's disease, nose bleed, otitis externa, sinusitis, sore throat, tinnitus, tonsillitis, vertigo• Hearing aids – dual aids• Care and shared care provided or commissioned by health (primary, secondary, tertiary) and social care services• Care and support provided by 3rd sector organisations <p>Not in scope:</p> <ul style="list-style-type: none">• Specialised commissioned services• New born hearing test
Engagement	<p>The ENT and hearing service review has been supported by a tailored ENT and Hearing Steering Group involving stakeholders and clinical experts from across the ICS. They have provided expert advice, guided, confirmed and challenged assumptions throughout the period of review and connected to other workstreams. This group has formed part of the governance process along with the CCSS Programme Board.</p> <p>Two virtual workshops have been held enabling a wide breadth of stakeholders (GPs, consultant ENT surgeons, audiologists, nurses, speech and language therapists, voluntary 3rd sector groups, Service Managers, Heads of Service, Social Care, Public Health, Commissioners and others) to be proactively involved in re-evaluating current service offers across the ICS, in developing potential themes and agreeing transformational change for the future Clinical and Community Services Strategy.</p> <p>In addition patient engagement has been organised via a survey to establish user experiences targeted through teenage and young adults and their families, users of British Sign Language (BSL). Patients were asked about their experience with using ENT and hearing services to establish what worked well for them and where improvements could be made. This helps play an active part in the co-design of any future service changes across the ICS.</p>

Strategy Development	This Strategy Document consists of five key elements. These have been developed through a process of design and iteration at the workshop and steering group meetings and includes key stakeholders from across the system. The strategy has been developed with reference to the Evidence Review document and the patient focus group survey.
Priorities for Change	The work of the Steering Group and the workshop stakeholders identified and confirmed four key areas of focus that need to change in the ICS for ENT and hearing care. These were based on a review of the current issues facing the ICS and the views of the Steering Group and workshop attendees. Some service user experience has also been incorporated into the development of the strategy.
Proposed Future Care System	<p>Following the initial engagement, at subsequent steering group meetings, attendees started to develop the future care system for ENT and Hearing to address the Priorities for Change. The future care system is described against two dimensions:</p> <ul style="list-style-type: none"> • Location split between - Home (usual place of residence) – Hospital (including both acute and MH) with 24/7 medical presence – Neighbourhood representing all community/primary care and ambulatory care settings • Urgency split between - Emergency/Crisis requiring a service provided 24/7 to avoid crisis or risk to life – Urgent requiring a service 7/7 but not 24/7 to meet urgent care needs – Planned/Scheduled reflecting any arrangement where an appointment is agreed between a professional and a citizen <p>The intention of the system model is to focus future care delivery closer to home and also with greater levels of scheduled care to best use the available resources and reduce demand on urgent and emergency care services. The new system to address the Priorities for Change is presented for each location and then summarised overall for the ICS.</p>
Transformation Proposal	<p>The Transformation proposal describes the key initiatives or programmes that are required to deliver this new mode. As described earlier, for ENT and Hearing services, some of these programmes need to be developed in more detail. Namely,</p> <ul style="list-style-type: none"> • Priority – What is the priority of the initiative in the view of the steering group and workshop attendees • Alignment – At what level of the system should we aim for a consistent approach for each initiative? This was split into two categories: <ul style="list-style-type: none"> ▪ Alignment to achieve consistency - In most instances this is ICS or Integrated Care Provider (ICP) level where with the greater value is perceived to be in an overall consistent approach. ▪ Alignment for delivery of the proposal - There are some instances where the recommendation is for delivery to be at ICP level, alternatively, it is at Primary Care Network (PCN) level where differential delivery would benefit the needs of very local populations • Enabling Requirements – What is required to enable each Programme to deliver? This includes workforce, technology, estate or service configuration. There are also requirements of culture or finance and commissioning to allow the system to work together differently • Benefits and Costs – Where available, the key benefits of the initiative at system level are summarised
Service Vision	The 'Bridge to the Future' was generated at a further virtual steering group meeting. It summarises the current challenges for the ENT and hearing system in the ICS now (Priorities for Change), what the ambition is and the outline steps to get there. Progress with the 'Bridge to the Future' and the partnering vision can be returned to with stakeholders as the work develops to review progress.

Prevention

Education noise exposure

HPV vaccinations

Early referral and intervention

Treatment & Condition Management

Communicating with hearing loss

Accessibility to Hearing Services

Demand and Capacity

Whole System Approach

Joint working / equitable service

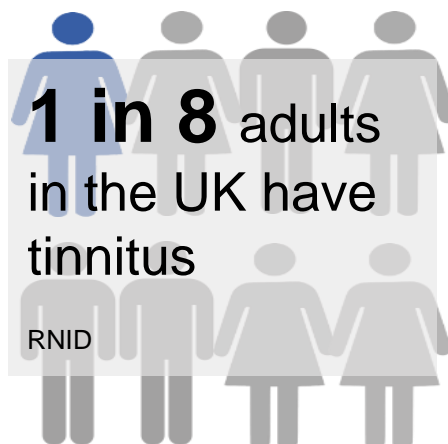
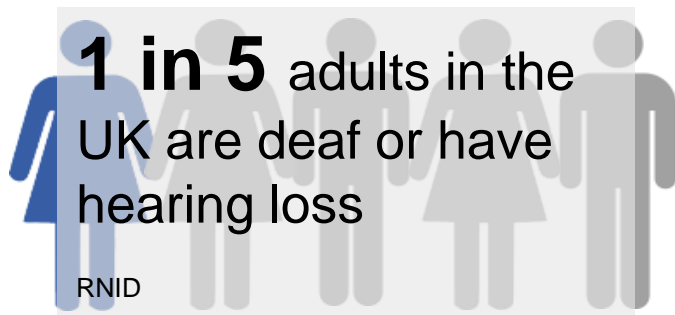
Workforce training

Speech and Language Therapy (SLT) Service Model

Community and Self-Care

Community Service Offer/ Social Care

Living well with hearing loss



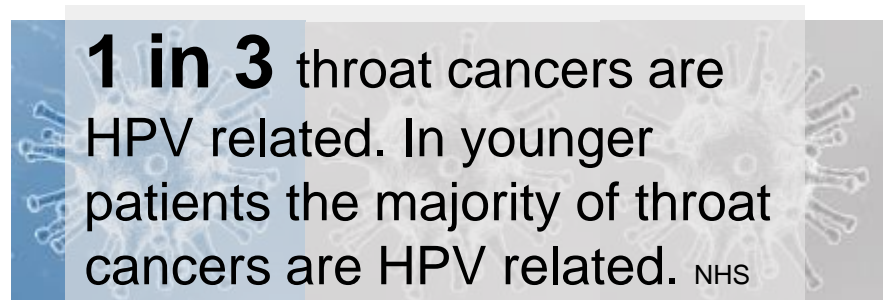
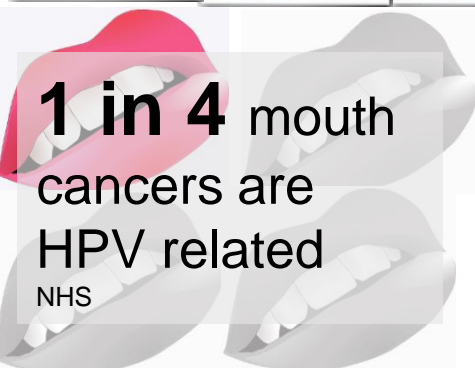
UK's 12 million people with **permanent hearing loss**, by 2035 there will be approximately 14.2 million.

RNID



2018 survey showed that overwhelming majority of young people (95%) felt that it was important to get vaccinated against HPV.

PHE Vaccination Update



Only **40%** of people that need hearing aids wear them RNID

Adults who have hearing aids fitted are offered a follow-up appointment with the audiology service 6 to 12 weeks after their hearing aids are fitted. NICE

When my hearing aid broke my name was called out when it was my turn to be seen, I had to smile, the situation is so comical! NUH patient



250,000 clear face masks are to be delivered to frontline NHS and social care workers to support better care for people who use lip-reading and facial expressions to communicate.

Department Health and Social Care

Around 40% (exact estimates vary) of adults with a learning disability experience moderate to severe hearing loss. <https://www.learningdisabilities.org.uk/learning-disabilities/a-to-z/h/hearing-loss>

£1 spent on an ECLO, a return of £10.57 to the health economy is realised

“When I visited Ropewalk house I asked why they didn’t have clear facemasks, I was told they were not COVID compliant which isn’t true”.

Patient comment

Having Advanced Audiology Practitioners in GP surgeries across Nottinghamshire could decrease referrals into ENT & Otology by 50% NUH

60–70% of children with Down’s syndrome have a conductive hearing loss (when sound can’t pass properly to the inner ear) caused by glue ear.

National Deaf Children’s Society

The COVID-19 Pandemic and activity restrictions have generated a **large backlog** of around **3,000 patients** that need to be seen in Otology NUH

42% of people
aged over 50 have
hearing loss Healthwatch

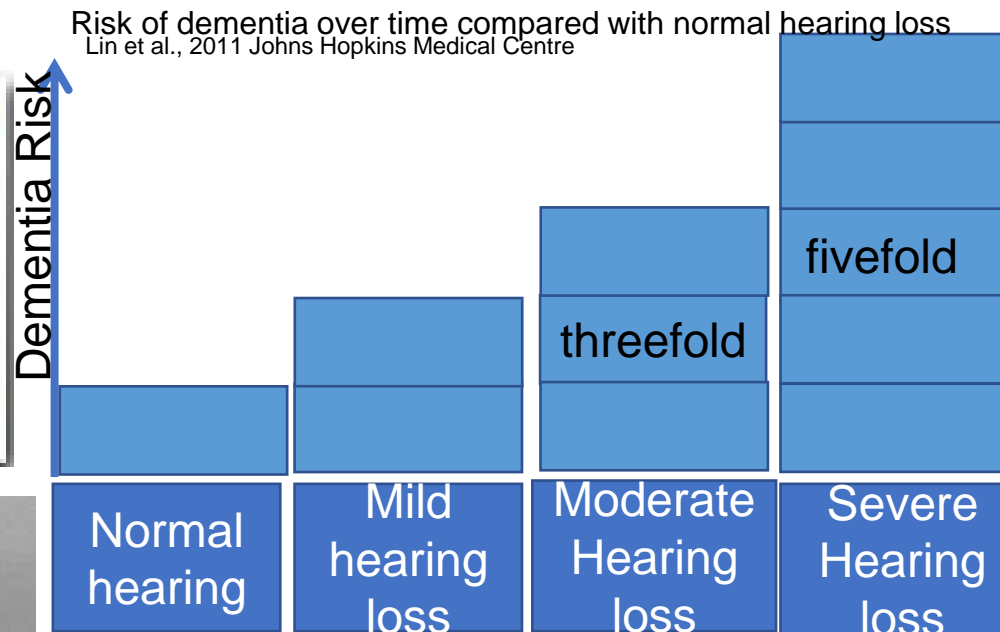
71% of people
aged over 70 have
hearing loss Healthwatch

Hearing loss
is the highest
potentially
modifiable
risk for
dementia. 8%
Lancet

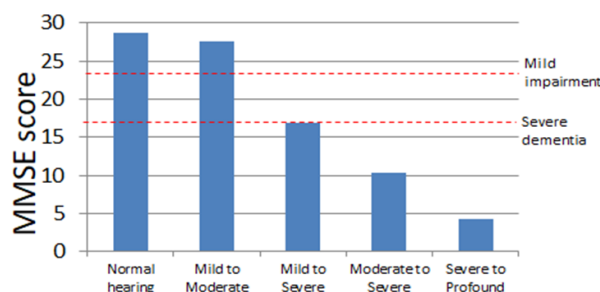
Hearing Loss is
the number one
cause of Years
Lost to Disability
in those over 70
in Western
Europe (Davis 2016)

Hearing loss is
associated with
greater use of
medical and
social services
European Spend to Save
Report

Older people with
hearing loss are two
and half times more
likely to experience
depression than those
without hearing loss
(Mathews 2013) and are
also at increased risk
of major depression
(Davis 2011)



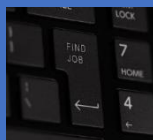
Impact of audibility on MMSE



Hearing level

Jorgensen LE, Palmer CV, Pratt S, Erickson KI, Moncrieff D. The Effect of Decreased Audibility on MMSE Performance: A Measure Commonly Used for Diagnosing Dementia. *J Am Acad Audiol*. 2016 Apr;27(4):311-23. doi: 10.3766/jaaa.15006.

In older age
people with
hearing loss are
at greater risk of
social isolation
and reduced
mental well-being
(Shield 2006)



Those with hearing loss have higher rates
of unemployment and underemployment
(Kochkin 2015)

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

- Prevention (with emphasis on education, including noise exposure and a strong focus on early intervention and referrals through improved primary care access to audiologists);
- Treatment and condition management (considering accessible information standards and equitable access to services across the ICS, whilst making effective use of capacity through appropriate referrals, especially two-week-waits (2WW), through integrated working between primary and secondary care);
- Whole system approach (Well interfaced systems so providers know their patients to provide timely personalised patient care, including cross-site collaboration between secondary care providers and training and support for primary care teams to work closer to specialist professionals, including speech and language therapists across settings);
- Community and Self-Care (ensuring the organisation and delivery of services is consistent through a multi-agency approach that includes 3rd sector organisations and charities supported through local authorities enabling education and training for the population and service users for improved self-care and living-well with hearing loss).

Prevention

Severe-to-profound hearing loss is defined as having an audiometric pure-tone average greater than 70 dB hearing level (HL), which means that without amplification, access to communication under normal conditions is extremely limited. Challenges exist for entry to management of severe to profound hearing loss, or hearing loss in general, into pathways of care, with no real access to screening for hearing loss for adults

Despite the high prevalence of hearing loss and many options for amplification, only 10 to 20 percent of those with hearing loss have ever used hearing aids, and 20 to 29 percent of patients who have used hearing aids at some point stop using them. (*UK NSC, Screening for Hearing Loss in Older Adults, 2014*). Furthermore, school entry screening for the ICS has stopped, which can miss children with hearing loss, but also identifying those children with episodic glue ear gets missed.

Some people with normal hearing may also have something called hidden hearing loss. This can make people struggle to listen to background noise, having had a normal hearing test. There are a few reasons that may cause this including damage to the outer hair cells in the ear, which do not show up on a hearing test as damaged but present themselves as distortion or sensitivity to loud noise. Another reason may link to an auditory processing delay, where your brain can essentially hear it, but takes a longer time to make sense of it. These can be checked via specialised auditory tests, such as an otoacoustics emission test, which is usually performed in new born or infants as a screening test for hearing, but can also be used in patients with diabetes mellitus to detect hearing impairments.

Although the law requires the work environment to provide appropriate protection for noisy machinery and equipment, this is not the case for loud social environments such as concerts and nightclubs. In these environments, staff and musicians may be wearing protective aids, but for others it is the individual's risk to mitigate and by making people more aware of these risks, some loss of hearing can be prevented.

It is important the ICS population understand risks that cause hearing loss, which can happen over time or sometimes as a sudden hearing loss, in one ear, which can be linked to earwax or infection, a perforated eardrum or Meniere's disease. Both ears, may be impacted as trauma to both ears from a very loud noise, or other cause, such as a reaction to some medication. Whilst, it may not be conceivable to impart this level of understanding to the population, awareness amongst healthcare professionals (HCP) can help identify with those at most risk. This can enable improved hearing support, with earlier intervention through signposting to have appropriate discussions and tests with the GP or audiologist. New models of care for hearing services in primary care can help support earlier intervention and improved more accurate referrals. It can prevent the often long time before a problem is identified as hearing loss.

Although cancers are not in scope for this review, there remains risks that are preventable for throat and mouth cancers, which are mainly caused through smoking, chewing tobacco and drinking alcohol. Each of these also presents numerous other risks, such as liver failure, respiratory disease or even other cancers. The Human Papilloma Virus (HPV) vaccinations are known to help prevent cancers, especially cervical cancers. It is thought that HPV infections can be transmitted via oral sex and are associated with mouth (1 in 4) and throat (1 in 3) cancers. A vaccination programme was initially started for girls at the age of 12-13 years, but this has now been extended to boys too.



Treatment and Condition Management

During COVID there have been considerable challenges for many people, but for those with hearing loss or that are deaf, communication has been very even harder with face coverings in public places now a lawful requirement. Communicating with hearing loss was something the government tried to support by making available nearly 250,000 face clear masks, however, access to these government approved masks was not as widely adopted keeping those challenges afloat during COVID19. Is there more that can be done to help improve communication for those that are deaf or profoundly deaf at this time?

A service level agreement is in place across the county funded by Health and Social Care (HSC) in the County Council with Nottinghamshire sign language interpreting service contracted through the Nottinghamshire Deaf Society (NDS). This agreement allows interpreters to be booked and support home visits to help interpret for those that are deaf with appointments such as with occupational therapists. These are not being accessed by all that can benefit and so there is probably more that can be done to raise awareness for those that have hearing loss and becoming deaf at a later stage to access some of these services. In the absence of a register for the deaf, those individuals perhaps not in the system need to be identified so they can be supported in the use of such services.

There are challenges with primary care referrals for management of hearing loss, including pathways of care for adults, RNID report an average delay of 10 year to receiving the first referral to secondary care. With the reported delays in referring patients with hearing loss to secondary care, there are opportunities to improve care, through earlier intervention and improved triaging, such as audiologist in primary care model.

A NICE quality statement on earwax removal, states *“adults with earwax that is contributing to hearing loss or other symptoms, or preventing examinations or ear canal impressions being taken, have earwax removed in primary or community care services.”* These services are insufficient for the demand and many patients still seek dewaxing in secondary care, despite recent attempts to move dewaxing to primary care. For local practice there is no registration required and so some risks come with services provided privately.

Services are available for children and adults with learning disabilities, with routine checks performed through school visits for children liaising with paediatricians and school nursing teams. For adults with learning disabilities that have hearing loss or are deaf, services are available but rely on referrals to ENT, but with no easy route to identify this cohort, some of these patients will no doubt be missed and there is room to improve this inequality.

There are no routine screening tests performed in special schools for those with learning disabilities or autism, and this is an area the NHS Long Term Plan (LTP) made a commitment to improve access to this cohort, working to improve access to dental, eye sight and hearing services.

For adults, a gap remains for those with learning disabilities, where usually other health needs tend to be prioritised over their hearing, and often this vulnerable group face communication challenges as a result of a sensory hearing issue, which is overlooked.

Demand and capacity in the ICS is currently a challenge, particularly with two week wait (2WW) referrals that are inappropriate as many of them are not cancer and this is an area where better triaging can improve this and may be able to prevent some of these inappropriate referrals. By adopting new approaches in primary care, such as audiologist in primary care, earlier intervention and identification of hearing problems can improve overall care outcomes for those developing hearing loss. Follow up outpatients appointments (OPA) are usually only made where needed, or sometimes open appointments may be given, but some patients in other areas across ENT may still be booked routinely, perhaps when not needed at times. This presents another opportunity to align to the LTP in targeting a reduction in overall OPAs by one third, which may not be as straight forward in ENT, but should be considered.



Whole System Approach

The whole system approach is about collaboration and integrated multi-agency approach to service provision across all settings and moving away from silo working. Through joint working this can provide a more equitable service meeting some of the objectives around prevention and early intervention, with improvement in local provision. With integrated working between QMC and SFH ENT already in place, consultants and speech and language therapists work collaboratively to provide consistent approaches to patient care working for both electives and emergency work, with visiting consultants from QMC working at SFH for both head and neck and non-head and neck cases.

Some of the working models are proving beneficial for patients, such as the one-stop shop approach, being trialled at QMC helping to reduce time in clinic through efficient ways of working with more timely interventions, avoiding general anaesthetic (GA) and also for head and neck, carrying out biopsies in the clinic where appropriate to do so.

A balance clinic is also run by an otologist where patients are assessed by an audiologist supported by a nurse carrying out a balance test to help diagnose, allowing for improved management of the patient helping to reduce follow up and treatment required also.

In terms of workforce training, this is recognised as important. Education and training can help move some of the services into the community to help provide seamless care. This includes upskilling of GPs, nurse practitioners and other HCPs in the community to help promote dewaxing locally. Education can be delivered via some of the existing platforms, to build additional knowledge base in the community supported by consultants. This can further support earlier intervention and specialist support to help with some of the inappropriate referrals.

Speech and language therapy SLT in ENT at QMC is a very skilled small team. Generally, SLT work quite differently to the audiology model and consists of a number of different services from across the region, divided into paediatric and adult services, with a host of services covered by therapists under the Notts Healthcare Trust which creates a number of challenges with the variety of teams placed in different services with little bringing their working styles together. The SLT team in ENT, however, are under NUH. Within the ENT service, there is the opportunity for SLT to focus on prevention and early intervention making sure patients have an assessment early rather than being passed to secondary care where this is not necessary. This further helps in preventing inappropriate referrals, with earlier diagnosis for persistent husky voice, which can be a sign of head and neck cancer. As only a few of these turn out to be cancer, it still provides the opportunity to provide early intervention for those that are not cancer and better triage these and see if these can be streamlined. Some of these that have persistent voice problems or swallowing problems could really benefit from understanding how they may make lifestyle dietary and voice-use swallowing changes, which will speed up recovery.



Community and Self-Care

When we think about the additional needs of our service users in the community setting, these include support with appointments or home visits, this is largely delivered by the Adult Deaf and Visually Impaired Service (ADVIS), who help with interpreters to assist in appointments or home visits and so on. There are two distinctly different user groups to consider and care providers need to think about the culture and language when considering each of these groups. In one of the groups the majority of people would be those that are hard of hearing and likely to use English as their first language, with good access to information. Then the smaller group amongst service users are those that are profoundly deaf and perhaps use British Sign Language (BSL) and need a whole different approach to support and service provision. In classifying these, you would have:

- Deaf without speech
- Deaf with speech
- Hard of hearing

Part of the social care provision includes reablement support through Technical Officers who are branched under the rehabilitation teams. The Technical Officers help to conduct an assessment of need for the environmental equipment required to help the individual become more independent. They also help to signpost to other agencies, such as charitable organisations or provide support in other ways, working flexibly to some extent beyond their remit to support the service users.

Their main aim is to provide the right equipment, but not assist with independent living. This is a slightly different model to the Rehab Officers for the Visually Impaired (ROVI) that play a similar role from the sensory teams in supporting the visually impaired, as the ROVI does a lot more to directly support independent living, including teaching on use of equipment and home assistance.

The community social care deaf services that provide care and support for both adults and children, work closely with the service users and other agencies, such as Fire and Rescue, ensuring visual alarms are installed and changed periodically, but the ADVIS team also work closely with the Nottinghamshire Deaf Society, who manage some of the interpreter needs of the service users. This shows a good example of collaboration between care providers and 3rd sector charitable organisations, as this collaboration helps to personalise care for the service users.

With 3rd sector organisations, support is often provided during times between appointments or where there may be waiting times longer than desired and these are the times loneliness and isolation can often set in, so this support helps with the 'Living Well' aspect of the indirect needs of service users. For those people that develop a loss of hearing, they are more likely to suffer from depression, which comes into play with the feeling of isolation. Worst still, you are more likely to develop dementia if you have loss of hearing. For elderly people, there is two and a half times more risk of developing feelings of social isolation and reduced mental well-being as a result of depression. It is evidenced that social isolation significantly increased a person's risk of premature death from all causes and was associated with 50% increased risk of dementia (Alzheimer's Disease and Healthy Ageing). So it is imperative that people that develop loss of hearing, have access to emotional and psychological support to prevent them falling into this spiral of social isolation, impacting their physical health and so putting a much increased burden on health and social care services.

Finally, people that develop loss of hearing are likely to have higher rates of unemployment. Through proper and timely support and care for loss of hearing, this can greatly improve an individual's whole outlook and support living-well

6. Proposed future care system

Home

Planned/Scheduled

Urgent – 24 hours

Emergency/Crisis – 4 hours

Prevention – Education noise exposure, HPV vaccinations, Early referral and intervention

- Supporting child and family to enhance communication and develop language early
- Consistent awareness of prevention across all industries
- Education to support good ear hygiene
- Increasing awareness of hearing for new parents (if no screening in school)
- Education in schools e.g. teachers
- Population and families limited awareness of the impact on isolation, risk of dementia
- Target approach e.g. joint working with memory clinics and dementia CNS – 12/52 programme to highlight what may happen and health problems – need to incorporate hearing
- National and international awareness campaigns and opportunities for self-screening
- Explore use of technology e.g. emerging sound sensor tests when calibrated
- Education – NHS App/PKB to support education of patient and families

Sustainable by:

- **Supporting identification of hearing loss for earlier intervention and treatment**

Treatment & Condition Management – Communicating with hearing loss, Accessibility to Hearing Services, Demand and Capacity

- Speech to text apps
- Deaf awareness for health side as well – deaf awareness as part of mandatory training. Reliant on text and speech function – enabling this within video consultation etc.
- Smart TV technology to communicate rather than purchasing device
- 12/52 follow up to support education and continued use of hearing aid – technology solution to facilitate this – telephone, video of F2F – helps triage. Video helps re-instruct on hearing aid use
- Flexible workforce to deliver this – assistant audiologist or apprentice model
- Potential to do group work e.g. fittings or follow up.
- Lip reading has moved to group partnership working with deaf society. Hearing management classes – some delivered online as open access and scale can be increased (challenge of funding) – helps with isolation by group delivery
- Additional support e.g. You Tube etc. Hear Society - hear to help – videos and practical advice – how can be incorporated into NHS App. Games and music apps
- Deafness awareness training and practical care of hearing aids offered to HCP across health and care and into care homes – mandatory training – not well subscribed to
- Direct phone numbers to key departments which don't use automated/voice activated or menu systems. These are not deaf friendly and are hard to use when using Type Talk/Relay UK

Sustainable by:

- **Promotes self-care and awareness for prevention but also enables people to live more independently, reduces care packages**

Whole System Approach – Joint working / equitable service, Workforce training, SLT Service Model

- Partnership working to coordinate care and support education delivery for people with hearing impairment e.g. across health and education – funding consideration
- Examples of SLT working with teachers for the deaf – joint training online for parents – tricky as funding/payment for venues
- Opportunity to teach everyone in one place – virtual
- Sharing of information and interfaces to share information and visibility – added impact across health and education
- Common understanding of education needs and accessibility to information
- For Children there is CHSWG (Children's Hearing Services Working Group) which is concerned with the whole pathway including education. – could there be an adults equivalent for hearing services? Should include patient reps to be effective

Sustainable by:

- **Promotes self-care and awareness for prevention but also enables people to live more independently, reduces care packages**

Community & Self-Care – Community Service Offer / Social Care, Living well with hearing loss

- Early awareness and education to support self-management
- Building independence and resilience – facilitate confidence and independence
- Access to mental health very limited – e.g. IAPT should be considered in MH commissioning and include access to BSL
- Thresholds for referral to deaf CAHMS and Deaf Team for psychologist support – required GP or ED referral – enquiry or self-referral service?
- ECLO equivalent would strengthen the link to 3rd sector and social care

Sustainable by:

- **Improved access to psychological support aiding living well with hearing loss**

Prevention

- Sudden onset hearing loss within 30 days – should be seen within 24 hours – education of those responding e.g. 111 to make referral to ENT clinic/ED - If treated within time frame greater opportunity to recover hearing loss. If more than 30 days, then referral urgently to be seen within 2 weeks
- Awareness of patients/public to seek advice when experience sudden hearing loss to take action in a timely way

Sustainable by:

- **Provides quick response enables earlier intervention and support**

Treatment & Condition Management

- Education GPs/111/ED staff that urgent ENT appointment is required following treatment with steroids for sudden onset hearing loss
- BSL Video Relay Interpreting service to relevant urgent departments – there is currently service provided by the BSL Health Access service – this is funded during the pandemic by Sign Health with some NHSI support but once ended will reduce access to deaf BSL users. Consider funding for universal CCG and hospital access for Video remote/relay interpreting – this is not currently part of SLIS service that NDS provides to the CCG. Note that there is a NHSE funded BSL 111 service but can't be used to make calls to specific services. There is not currently a 999 equivalent but we understand that might be part of the national commissioning when 111 is recommissioned

Sustainable by:

- **Provides quick response enables earlier intervention and support s**

Whole System Approach

- Information sharing with GPs/HCPs regarding hearing loss and its treatment
- Resolve Accessible Information Standards (AIS) problems to resolve communication barriers

Sustainable by:

- **Timely intervention**
- **Meeting Accessible Information Standards for patients with hearing loss**

Community & Self-Care

- Early awareness and education to support self-management
- BSL MH crisis service – equivalent to calling IAPT service

Sustainable by:

- **Promotes self-care and awareness for prevention but also enables people to live more independently, reduces care packages**
- **Early access to psychological support aiding living well with hearing loss**

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

6. Proposed future care system

Neighbourhood

Planned/Scheduled

Urgent – 24 hours

Emergency/Crisis – 4 hours

Prevention – Education noise exposure, HPV vaccinations, Early referral and intervention

- Early referral to SLT for voice disorders to provide advice and information, including education strategies – currently complex navigation across multiple services
- Promotion of hearing tests and education linked to dementia risk to support overcoming social stigma of hearing aids – consistency across NHS and private sector
- Timely referral for cochlear implants where appropriate following hearing test
- Targeting hearing tests for people with LD - outreach service e.g. day centres at NUH and complex needs service SFHT
- NHT IDD (LD service) service – SC referrals from this team
- Education of workforce – early intervention, hearing loss, speech problems – mandatory training

Sustainable by:

- Improves patient care and experience through timely intervention and referrals

Treatment & Condition Management – Communicating with hearing loss, Accessibility to Hearing Services, Demand and Capacity

- F2F offer to complement virtual delivery for people where technology not accessible or where there are communications difficulties and for those with voice disorders
- Supports groups both F2F and online e.g. socials for deaf teenagers

Sustainable by:

- Improved adherence to Accessible Information Standards

Whole System Approach – Joint working / equitable service, Workforce training, SLT Service Model

- Collaborative working – between 3rd sector and NHS audiology to signpost to appropriate support
- Consideration of gaps in services that 3rd sector can support e.g. hearing aid repair service if access to spares
- Workforce considerations across hearing therapist, audiology technicians and audiologist – defining roles to coordinate expertise and navigation

Sustainable by:

- Improved local support and access to hearing aid support

Community & Self-Care – Community Service Offer / Social Care, Living well with hearing loss

- Adoption of the Wrexham Audiology Model
- Timely referral to SLT for vocal hygiene and voice care advice - reduces distress and anxiety
- Consistency between NHS & private hearing Care – streamline access to hearing aids
- Maintenance of hearing aids accessible in community settings – link to 3rd sector support – including trouble shooting and advice
- Education of HCP and access to evidence based / guidelines that are easy to follow – supports increase in referrals as 35-40% not done
- Communication of hearing assessments undertaken in dementia clinics in acute care to support access to hearing aid asap e.g. discharge letter
- Access to ear wax service as inconsistent access and issue of health inequalities as predominant access via private providers
- Isolation to provide peer support, develop resilience skills and self-advocacy – education and information is key
- Enhance community offer with core hours of service and OOH provision to release pressure on ED
- Education – to support provision of information and signposting to support

Sustainable by:

- Early intervention in primary care, releases GP time and prevents missed diagnosis and also prevents inappropriate referrals

Community & Self-Care

- Defined pathway and education for sudden hearing loss (sudden sensorineural) - time critical intervention – also important for facial nerve palsy–GP provision of steroid in community and navigation to ENT clinic
- OOH service

Sustainable by:

- Improves early intervention for timely urgent care
- Allows urgent access to prevent deterioration and/or anxiety from delay in restoring hearing aid

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

6. Proposed future care system

Acute or MH Hospital

Planned/Scheduled

Urgent – 24 hours

Emergency/Crisis – 4 hours

Prevention – Education noise exposure, HPV vaccinations, Early referral and intervention

- Earlier detection and intervention through education to recognise symptoms and know how to act
- Working with HCOP teams to address comorbidity e.g. ototoxic medication liaising to undertake the memory tests alongside cognitive assessments
- Earlier diagnosis of hearing loss can provide intervention and access to hearing aids earlier to improve the extent at which hearing is improved – loss cannot be prevented or slowed down – glue ear is a little different.
- Support to GP education – ongoing review to prevent increase in referrals

Sustainable by:

- Earlier intervention and equity of access and care

Treatment & Condition Management – Communicating with hearing loss, Accessibility to Hearing Services, Demand and Capacity

- Deaf awareness and link to accessible communications standard (2017) to ask patients about their communication needs and that these are recorded – use of technology to support communication as most will not need interpreters
- Consistent access to loop systems across the board in the ICS, with education and training so people don't have to declare their needs – technology needs to be exploited
- Effective screening of 2WW referrals– numbers are going up, but many are not cancers
- Otology patients often don't need surgery, but job plans need to have theatre time built in for both Consultants and Trainees to maintain skills
- Triage of Non- 2WW referrals by SLT to signpost to right pathway – small numbers will be cancers
- Sign language seen as first language in secondary care to support availability for VSL users

Sustainable by:

- Improved adherence to Accessible Information Standards
- Effective use of theatre time

Whole System Approach – Joint working / equitable service, Workforce training, SLT Service Model

- System integration and navigation to support referrals to SLT and triage to the right setting
- ENT diagnostic model – both RDC and diagnostic hubs (for non-cancers) – consistent approach across system to align roles and support recruitment
- Visibility of diagnostic results to support navigation to the right place first time
- Wax management needs to be consistently approached across the ICS
- Communication needs to improve to keep patients informed of delays (e.g. during pandemic) and systems need to be robust to avoid patients having to chase for updates (*patient feedback, re. needing removal of polyps and not having any further communication for six months following consultant appointment – patient had to take three months sick leave with only steroids prescribed by the GP*).

Sustainable by:

- Appropriate referrals for 2WW pathways
- Informative communication and support during waiting times.

Prevention

- Defined pathway for sudden hearing loss (sudden sensorineural) - time critical intervention – also important for facial nerve palsy– steroid in community and navigation to ENT clinic
- Timely navigation of referrals to treat in a timely manner and prevent more complex treatment later e.g. nasal injury/ fracture nasal bones)
- Education and referral for hearing assessment when increased risk of hearing loss e.g. Meningitis

Sustainable by:

- Provides quick response enables earlier intervention and support to avoid more invasive intervention

Treatment & Condition Management

- Follow up appointments within 24 hours for review – in rare circumstances
- Resolve AIS problems to resolve communication barriers

Sustainable by:

- Improved adherence to Accessible Information Standards

Whole System Approach

- Joint working across the two trusts – resources to support this – ENT, anaesthetics, ITU

Sustainable by:

- Supports improved local access

Treatment & Condition Management

- Direct referral and pathway from GP to ENT
- Surgical triage unit as a direct point of referral for GPs to by-pass ED
- On-call ENT

Sustainable by:

- Allows emergency support to be made swiftly, prevents delayed response

Treatment & Condition Management

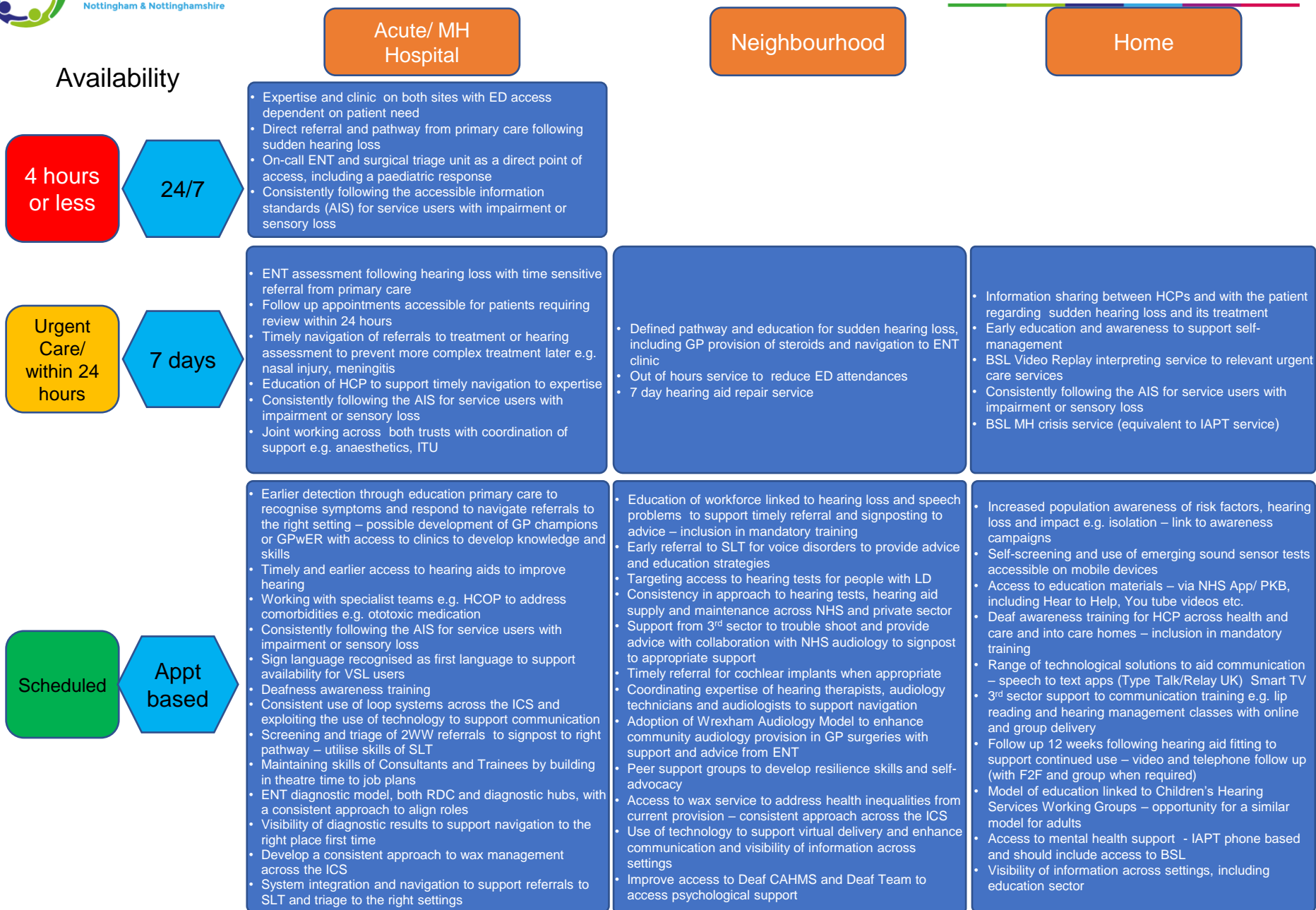
- Paediatric emergency response – with turnaround of hearing aids within 48 hours
- Clinics on both sites to provide emergency response e.g. major trauma
- Expertise accessible in clinic or ED dependent on patient need
- SDEC – ED/ENT clinics e.g. for epistaxis (nose bleeds) with access to advice/treatment (dissolvable or non-dissolvable nasal pack) navigating to follow up in the community
- Resolve AIS problems to resolve communication barriers

Sustainable by:

- Allows emergency support to be made swiftly, prevents delayed response and need for more invasive intervention

6. Proposed future care system

Level of Care



**Education and
training to support
prevention and early
intervention**

**High
Priority**

In the UK, more than 40% of people over 50 years old have hearing loss, rising to more than 70% of people over the age of 70. 1 in 6 of the UK adult population is affected by hearing loss. 8 million of these are aged 60 and over. 6.7 million could benefit from hearing aids but only about 2 million people use them. About 900,000 people are severely or profoundly deaf. With these startling figures, it is imperative that the general population are aware of the signs of early hearing loss, but also those that are affected and perhaps are not detected or using hearing aids receive the appropriate education and raised awareness of how to improve their quality of life.

There are significant risks for those living with unaided hearing loss, including a five-fold increased risk of cognitive impairment or dementia and depression, due to loneliness and feeling of isolation. Evidence suggests these risks may be reduced with hearing aids. The RNID report evident suggesting that people wait an average of 10 years before seeking help for their hearing loss and that when they do. GPs fail to refer 30-45% to NHS audiology services.

The ICS population need to be made aware of the risks and early signs of hearing loss and what support is available to prevent the risk of hearing loss and support for those that are living with unaided hearing loss. Common signs to look out for, such as speech and other sounds being muffled, difficulty in hearing high pitched sounds, difficulty in understanding speech over the phone. There are more innovative tools to help with self-screening, such as interactive audiometers played on tablets with earbud headphones. By educating the population with raised awareness of risks, including diabetes, unprotected exposure to loud environments, and so on, and understanding the simple signs to look out for, together with improved care of ears, e.g. dewaxing, this can promote the prevention agenda for hearing across the ICS. Simple education and awareness can reach the population through various means, including leaflets in many languages, use of social media platforms such as the increasing use of the NHS App supported by the Patient Knows Best (PKB) platform.

To help develop education and awareness across the ICS population, we need to align to existing Public Health education programmes, but ensure specific tailored strategies are in place for preventing and supporting hearing loss. By educating the workforce to recognise signs of hearing loss, or identify those with hearing loss that are not supported, a simple introductory script in mandatory training can help with raising the awareness and improved navigation to have their hearing professionally reviewed. It is also important to educate the appropriate professionals about the risks of ototoxicity for those patients on chemotherapy or cystic fibrosis medication, that require close monitoring to protect their hearing.

Simple media campaigning to highlight risks, such as recreational noise, risks of self-wax removal or unregulated dewaxing services that may be exposing individuals to risk perforated eardrums. General advice about wax management should be made available as should information and education for those wearing hearing aids to ensure they are used most effectively to maximise the opportunity to fully support independent living.

The LTP pledges *to invest to ensure that children with learning disabilities have their needs met by eyesight, hearing and dental services, are included in reviews as part of general screening services and are supported by easily accessible, ongoing care. For people with the most complex needs, we will continue to improve access to care in the community, so that more people can live in or near to their own homes and families.* By making use of sensory health passports the sensory needs of those with learning disabilities or autism can be better supported.

With the high prevalence of hearing loss in the older population, care homes should be supported to allow direct referrals, but also include basic education of carers to promote self-management.

Impact & Benefit

- Earlier interventions to prevent or reduce rate and impact of loss of hearing
- Reduced demand on acute services through early detection and management of hearing loss
- Healthier population, improved self-care and self-management with reduced demand on services

Alignment – For education and training to support prevention the consistency should be aligned at an ICS level, with delivery also aligned to an ICS level.

Primary care audiology service

High Priority

There is a significant backlog of patients (over 8000) that need to be seen in Audiology and Otology at Nottingham University Hospitals, NHS Trust (NUH) resulting from the COVID 19 pandemic and with further increasing demand this presents substantial issues. A North Wales Community Audiology model was piloted in August 2016, and now rolled out across Wales, having won awards for developing and sustaining a flexible workforce. The community audiology model provides better access and treatments for patients, with reduced referrals to secondary care, (which would help address the increasing demand) and was achieved through sustainable investment in primary care services across Wales, including access to an Advanced Audiology Practitioner. With this North Wales model already piloted and now running as a successful scheme, there is a great opportunity to deploy a similar service, and NUH are in advanced stages of rolling this out with agreement to work within 5 GP surgeries across the ICS footprint, with a review to extending this further following the review of this strategy by ICS Board. Running this service across Nottinghamshire is expected to achieve a reduction in referrals into ENT and Otology by 50%. The **Appendix** shows a summary paper, which articulates the details of this proposal, which has support from CCG. This proposal recommends the support to expedite the rollout of this service, as a quick win for patients, staff and sustainability for the ICS. This proposal supports the development of advanced audiology practitioners, that would maintain continuous learning links ENT.

To further enhance the primary care offer, there is an opportunity to consider development of GPs with an extended role (GPwER) where there is an interest to be more involved in this area or consider the concept of GP Champions, perhaps representing each ICP, initially, then each PCN. This role would be expected to maintain links with acute ENT clinics for training and support from consultants of more advanced ENT conditions that may be managed in the primary care or community setting, but also allowing improved triaging of cases (see next proposal for improving 2WW pathways). An important aspect of such a role would be to maintain annual (or periodic) training to ensure there is enough expertise in each PCN to maintain the general awareness and understanding with those GPs not performing the ENT extended or champion role practice – the focus would be to have a strong point of reference represented for ENT and Hearing services in the PCNs.

Impact & Benefit

- Care closer to home
- Release GP and consultant time and streamline referrals into both ENT and Audiology
- Qualitative benefits for patients
- Supports an easier way to address concerns raised about an individual's hearing – addressing their own health needs
- Acts as triage service more appropriately in a more timely fashion
- Helps prepare service users for journey, e.g. fitting for hearing aid
- Throughput should improve through raising awareness
- Improved efficiency of pathways, e.g. patients have part-diagnostics completed, can facilitate one-stop-shop for tertiary appointments
- Leads into improved wax management for patients

Alignment – For consistency an audiology service in primary care, alignment should be at ICS level with delivery aligned at ICP level.

Enabling new ways of working to simplify referral pathways between primary and secondary care

High Priority

In both acute ENT departments of NUH and Sherwood Forest Hospitals, Foundation Trust (SFH), there are significant challenges with increasing and inappropriate 2WW referrals. A big impact is where patients come into the wrong service causing duplication of the work, but also preventing timely assessment and treatment of the appropriate 2WWs. To help with this pathways need to be better regulated in order to minimise these inappropriate referrals and supported with triage of non-2WW referrals, supported by SLT to signpost to the right service, can greatly improve this situation (small numbers will be cancers) – see next proposal. This is also an area that can be immensely improved through delivery of the above proposal, making use of Advanced Audiology Practitioners and GPwERs/ GP Champions.

Attendance for outpatient appointments (OPA), can also be minimised taking the opportunity to make use of recently established video and telephone call approaches, with F2F where essential. To help with the navigation across the system (health and social care) the presence of primary care audiologists would prove effective, although there is also scope to consider an alternative role such as the Eye Clinic Liaison Officer (ECLO) that plays a pivotal role in eye health services, a role in which every £1 invested yielded a return of £10.58. Such a role may prove more useful in integrating wider services including social care sensory teams with audiology hearing services, with the service users having a trusted single point of contact supporting the provision of seamless care.

Impact & Benefit

- Removing as many barriers early should allow earlier care and intervention which would have a knock on cost benefit further down the line
- Patients feel they need a GP appointment which is barrier that can be removed with direct access into audiology whether in community or secondary care

Alignment – Simplifying referral pathways should be aligned at and ICS level for consistency, but delivery should be at an ICP level



Equitable service access to expertise and urgent care through **multi-agency joined up approach to more consistent and personalised care**

**Medium
Priority**

A multi-agency approach to providing robust and consistent access across the ICS is needed, where HCPs and Social Care colleagues are fully support the patients and service users, eradicating duplication or avoidable multiple appointments for patients with different agencies or providers in the system. This requires a thorough understanding of what services exist and where they can be accessed for the appropriate patient care. A change of culture of the workforce is required to develop effective care that can be patient centred as opposed to organisation or profession focused. It is imperative that all service providers recognise and work to deliver care that meets the AIS to improve the patient and user experience across all organisations, whether the patient is attending a hearing related appointment or not. This is even more important for access to urgent or emergency care, where hearing loops, or other communication support aids may not currently be in place and needs to be considered as an equality requirement., perhaps in a similar way a wheelchair user would expect appropriate access to all areas.

A good example of where collaborative flexible working has shown benefits, has been developed by the ENT SLT service at NUH (which is quite specialised) The team liaise with community SLT when required to advise about prevention, husky voice management to assess whether early intervention can improve before patients are sent to secondary care (due to its links with cancer and therefore urgency) and reflux management. The team support diagnostics being trained to carry out endoscopies and therefore are able to change the diagnostics around 40% of their patients go on to need voice therapy, with the remaining given advice – mostly reflux management and with COVID19, most of this work has been outreach to prevent unnecessarily bringing patients in the hospital setting – again a model that has working quite well.

Impact & Benefit

- Release GP time
- Earlier intervention locally preventing referrals

Alignment – The multi-agency approach for consistent and personalised care would need to be aligned to an ICS level for consistency, but delivered at an ICP level.

Access to **psychological and MH support** aligned to physical ENT/ hearing needs including **3rd sector access**

**Low
Priority**

Many deaf or profoundly deaf individuals are likely to suffer from challenges to all 3 areas of their overall health and wellbeing, including physical health, mental health and social wellbeing, feeling isolated and helpless. This is also the case for a head and neck patient with cancer and their families often must cope with the stresses induced by physical demanding treatments for the illness and the permanent health impairment and disability, fatigue and pain that can result. These effects contribute to emotional distress and mental health problems among cancer patients, and together can lead to substantial social problems, such as the inability to work and reduced income with other impacts on social well-being.

Failure to recognise and meet emotional/ psychological needs is likely to result in significant personal and financial costs to individuals and the system so warrants a plan to address better. The benefits of a robust psychological support service to cancer sufferers are well evidenced & documented but this has not yet transferred to itself to commissioning intentions. The East Midlands Cancer Alliance (EMCA) have made recommendations, to implement a 'EMCA psychosocial care model that will help meet the psychosocial needs of people affected by cancer across the East Midlands region. This model encompasses the whole cancer pathway; from diagnosis, through treatment to living with cancer and beyond and during end of life.'

It is vital that 3rd sector voluntary services and charities are accessible to all patients and therefore HCPs should play an active part in understanding which charities can support a patient's needs. This is particularly important once the treatment and care from health and social care colleagues has ended, as quite often the support needs for the patient will continue. Furthermore, charities can often play a vital role in supporting patients through crisis, for example if newly diagnosed sudden hearing loss and not yet on a care pathway, patients may obtain help to understand their options or get emotional support to help them cope with the news of having developed hearing loss.

Impact & Benefit

- Improved equity of access to psychological support and quality of care
- Patient experience vastly improved reducing deterioration of mental health

Alignment – In order to ensure consistent access to psychological support, this would need to aligned to an ICS level for both consistency and for delivery.

Virtual ward to support early discharge of stable head and neck patients

**Low
Priority**

Although the concept of virtual ward extends beyond the scope of children and adults with hearing loss, it is deemed important to consider for some of the head and neck patients (even though pilots have focused on respiratory patients). Some of the head and neck and ENT patients would be considered suitable to consider for early discharge home and management in the community. This presents an opportunity to release capacity whilst patients are well enough to be managed at home.

Specific patients would need to be identified for this to be successful.

Impact & Benefit

- Virtual ward promotes bridge between primary care/ secondary care and social care
- Opportunity to manage earlier discharges and reduce LoS possibly by 1 or 2 days, providing benefits for both the patients and service providers releasing valuable capacity

Alignment – Having access to a virtual ward would benefit people from across the ICS and so for consistency this should be aligned to an ICS level, but delivery should be at an ICP level.

Enabling Communication as a Fundamental of Care

**High
Priority**

This proposal was developed to highlight a fundamental problem where confused elderly patients need to be recognised and cared for when they have sensory needs rather than assigning confusion to a cognitive issue. Adults with a learning disability may have hearing loss, but often treated as having reduced communication or behavioural issues as part of their learning disability rather than a part of their hearing condition. Such an individual may be screened for memory assessment without considering the reduced ability of the patient to communicate without the use of a hearing aid or device. For our elderly population in care, it is very important that care home staff and nurses are upskilled to recognise this happens and that a hearing test is arranged very early on in any assessment for a possible cognitive issue. Staff need to understand the importance of managing hearing loss early and maintaining that in whatever care situation the patient may be in. Staff should be trained to understand the easy maintenance of hearing aids and devices to avoid calling audiology teams out for these issues. It is rarely the patients that reject such support, particularly with hearing aids, but rather that the staff do not understand their sensory needs or if the patient shows any resistance the staff tend to go with it, rather than being more adamant about patients needing hearing aids. The risk is that these patients can end up being cared for as patients with a cognitive impairment, which can lead to making assumptions about their ability to consent, which may be wrong. If a patient forgot their hearing aid in hospital on discharge, staff need to realise it should not be treated as a property item, but that it impacts a fundamental of care for that patient.

By embedding the required shift in culture in practice and training, we can raise the awareness that the sensory needs of certain individuals with hearing loss or deafness, are a fundamental element of care that should not be overlooked, especially when they have an added vulnerability such as frailty or a learning disability. Using sensory health passports clearly identifying needs – often inpatients that lose hearing aids have limited ability to communicate, leading to possible confusion and unnecessarily extends LoS.

The mental health support for older adults with hearing loss as a very vulnerable group, needs focus, particularly as the evidence suggests they will end up in more extensive and resource intensive areas of care. This largely stems from older people experiencing isolation due to their hearing loss and so impacting their mental health. Hence, it is important to consider transformation of the integration of hearing services and services related to the management of cognitive impairment and dementia. This is also an area emphasised in the LTP as an area where the NHS has pledged to grow its investment faster over five years to 2023/24 to support improved MH care of the elderly. Quality standards for this cohort are defined in *What Works: Hearing Loss and Healthy Ageing*. Through these cultural changes and education, there is an opportunity to really improve care for the elderly and improve focus on dementia when they have a sensory hearing condition.

Impact & Benefit

- Improved outcomes and quality of life and aligns to MH agenda for older people
- Reduced LoS avoiding loss of hearing aids
- Improved quality of care for other conditions
- Allows screening of adults to slow down dementia – reduces social isolation remaining engaged

Alignment – To address unmet need a universal approach is required across the ICS and so alignment for consistency and for delivery should be managed at an ICS level.

7. Transformation Proposal – Summary

Transformation Proposals	Priority (High/ Med/ Low)	Alignment (ICS/ ICP/ PCN)		Workforce	Technology	Estate/ Configuration	Culture	Finance/ Commissioning	Benefits (*Less than £20,000 per QALY is cost effective)
		Consistency	Delivery						
Education and training to support prevention and early intervention : <ul style="list-style-type: none"> Raising awareness of population of risk factors leading to hearing loss, including self-screening Education of workforce to support early navigation to ENT/ hearing expertise, including mandatory deaf awareness training Education and support for service users to improve self-care and management 	High	ICS	ICS	<ul style="list-style-type: none"> PH led education strategy Big role for 3rd sector in both training and prevention – partnership working Resource for awareness raising – perhaps include in mandatory training (for noise related hearing loss) 	<ul style="list-style-type: none"> Access to education materials – via NHS App/ PKB, including Hear to Help, C2Hear videos, YouTube videos etc. 		<ul style="list-style-type: none"> Common approach needs to establish a platform of how to deliver the overall objectives Acceptance that hearing health is important for society 	<ul style="list-style-type: none"> Support for charitable organisations – looking to identify where a need may be fulfilled can perhaps be funded through system commissioning routes 	<ul style="list-style-type: none"> Earlier interventions to prevent or reduce rate and impact of loss of hearing Reduced demand on acute services through early detection and management of hearing loss Healthier population, improved self-care and self-management with reduced demand on services
Primary care audiology service : <ul style="list-style-type: none"> Improve early local access and treatments for patients with hearing issues Develop advanced audiology practitioner roles Develop GP champions with access to clinics to develop knowledge and training 	High	ICS	ICP	<ul style="list-style-type: none"> Care home residents referred to audiologists – home visits- address gaps across system AP required for Primary care role, role needs to be split between Primary care and Tertiary/Secondary to maintain professional support Workforce requirements for additional functions such as dewaxing – need to consider the level of input required and whether this would be cost effective for advanced practitioner roles – Charities can help build on support by looking at functions such as dewaxing – as another method of service delivery 	<ul style="list-style-type: none"> Use of technology to support virtual delivery and enhance communication and visibility of information across settings Equipment required for Primary care roles Primary care audiologists require access to SystmOne etc Use online hearing screening for patients to identify need for appointments 	<ul style="list-style-type: none"> Space in Primary care required, no need for specialist rooms – likely to be a GP Practice amongst a PCN or GP hub covering several surgeries 	<ul style="list-style-type: none"> Need to consider moving dewaxing into the community – mobile audiology – can be built into the advanced audiologist roles Need to exploit 3rd sector support to help remove any barriers to accessing support Need to be ready for any increased activity through earlier identification and awareness raising – but would also reduce the extent of intervention needed down the line Would be worth comparing prevalence of ICS to how Wales has improved with PC audiology service Need to move away from GP being the starting point for patient pathway into Audiology 	<ul style="list-style-type: none"> New primary care audiology services commissioned Dewaxing funding perhaps following the patient (cf. micro-suction) – potential to commission charities to cover Development of funding pathway to allow one Primary care audiology service led by NUH to feed into both NUH and SFH 	<ul style="list-style-type: none"> Care closer to home Release GP and consultant time and streamline referrals into both ENT and Audiology Qualitative benefits for patients Supports an easier way to address concerns raised about an individual's hearing – addressing their own health needs Acts as triage service more appropriately in a more timely fashion Helps prepare service users for journey, e.g. fitting for hearing aid Throughput should improve through raising awareness Improved efficiency of pathways, e.g. patients come with part of diagnostics completed, can facilitate one-stop-shop for tertiary appointments Leads into improved wax management for patients
Enabling new ways of working to simplify referral pathways between primary and secondary care: <ul style="list-style-type: none"> Screening and triage of 2WW referrals to signpost to right pathway Support referrals to SLT and triage to right setting, including primary care referrals to tertiary cochlea implant services Appropriate follow up making use of video and telephone, with F2F when required Hearing therapists and audiologists supporting navigation across services and settings 	High	ICS	ICP	<ul style="list-style-type: none"> Need a robust plan to ensure a contact point exists in PC to create the liaison between PC and SC – main thing is have a point of contact Is there a benefit from considering a hearing equivalent to the ECHO role for eye health GP education to increase awareness SLT to triage husky voice – only available at NUH capacity to extend to SFH Hearing therapist – need roles to be developed to link with 3rd sector and navigation – MSc to deliver role 	<ul style="list-style-type: none"> Shared data systems providing visibility of diagnostic results to support navigation to the right place first time E referral forms review to support navigation of referral 	<ul style="list-style-type: none"> ENT diagnostic model, both RDC and diagnostic hubs, with a consistent approach to align roles 	<ul style="list-style-type: none"> GPs need to have a F2F review before making referrals strong emphasis on this to address issues with large number of inappropriate referrals Develop a specific education programme (virtual) on at least an annual basis Perhaps responsibility for PCNs as a mandatory requirement to ensure education programme is delivered for its practices Important also for 2nd care to consider how an education programme would be delivered to PC for multiple PCNs and multiple specialties – needs to be pitched right to ensure the reach is made Cultural change to embed and value roles in system 	<ul style="list-style-type: none"> Commissioning and funding for capacity and education 	<ul style="list-style-type: none"> Removing as many barriers early should allow earlier care and intervention which would have a knock on cost benefit further down the line Patients feel they need a GP appointment which is barrier that can be removed with direct access into audiology whether in community or secondary care
Equitable service access to expertise and urgent care through multi-agency joined up approach to more consistent and personalised care : <ul style="list-style-type: none"> Consistently following the accessible information standards (AIS) for service users with impairment or sensory loss (including in ED) Targeting access to hearing tests for people with LD Improved integration between health and social care teams Access to 7 day support for hearing aid repair 	Med	ICS	ICP	<ul style="list-style-type: none"> Does there need to be role focus solely on delivering services to meet AIS? Join up people from each part of the pathway to work on delivering all parts of what needs to be delivered to make AIS work – perhaps as this steering group has been setup? – Governance considerations Education into key areas e.g. ED Champions and campaigns for hearing loss Capacity to provide 7 day and targeted hearing tests 	<ul style="list-style-type: none"> Consistent use, availability and maintenance of loop systems across the ICS and exploiting the use of technology to support communication BSL/lip reading etc e.g. phone systems for live chat and PC access for texting – choice from start and open to everyone Screening iPads 		<ul style="list-style-type: none"> Agree conditions to be managed in primary care Access for deaf people – piece of work started on this – needs to be more than a piece of work looking at this, it needs to deliver solutions for equitable access across all services – require top-down approach As a principle all organisation would need to play a part in delivering AIS Cultural change for 7 day access to repairs 	<ul style="list-style-type: none"> Funding for technology Commissioning for workforce 	<ul style="list-style-type: none"> Release GP time Earlier intervention locally preventing referrals



7. ENT and Hearing Services Transformation Proposal

Transformation Proposals	Priority (High/ Med/ Low)	Alignment (ICS/ ICP/ PCN)		Workforce	Technology	Estate/ Configuration	Culture	Finance/ Commissioning	Benefits (*Less than £20,000 per QALY is cost effective)
		Consistency	Delivery						
<p>Access to psychological and MH support aligned to physical ENT/ hearing needs including 3rd sector access:</p> <ul style="list-style-type: none"> Improve access to Deaf CAMHS and Deaf Team to access psychological support, also improved support required for older people including integration of cognitive impairment Improve psychological support for tinnitus and cancer patients, especially around disfigurement Develop British Sign Language IAPT access including crisis MH Increase awareness of 3rd sector services e.g. lip reading and hearing management classes 	Low	ICS	ICS	<ul style="list-style-type: none"> Paeds have to meet a specific threshold for Deaf CAMHS – the right support level needed for all levels of hearing loss as access to psychological support may still be needed – needs to be considered within support for audiologist from psychological services Psychological support for cancer patients – does not currently meet peer review MH capacity Tinnitus peer review – struggle with access impacting on progressing with treatment Education of staff in MH services of relevance for hearing loss to avoid circling services – referral pathway enabling access Family health practitioners and paediatricians awareness of signposting to MH support as often signposted to audiologists Education and working with 3rd sector Social prescriber broad understanding of services available – not just 	<ul style="list-style-type: none"> Visibility of information and access to coordinate care BSL technology virtually consistently available Technology e.g. mobile phones for lip reading 		<ul style="list-style-type: none"> Understanding of MH needs in physical health settings (not just ENT) when access is challenging Broadly services exist, with some provision with BSL access through a 3rd party (Sign Health) – text phone support lines are not accessible – especially for service users where BSL is a first language Currently audiologists support until paeds reach the required threshold but will not always have the skills to meet the support needs MH and hearing services working together and awareness of impact of hearing loss – resolved perceived barriers of hearing loss to access services 	<ul style="list-style-type: none"> Commissioning / funding for access to MH services 	<ul style="list-style-type: none"> Improved equity of access to psychological support and quality of care Patient experience vastly improved reducing deterioration of mental health
<p>Virtual ward to support early discharge of stable head and neck patients:</p> <ul style="list-style-type: none"> Discharged home with regular contact with team to assess daily health needs. Virtual ward rounds bringing team together to escalate care as required and signpost. Stable at point of discharge. ENT – head and neck patients and acute infections and post op patients – possible reduce by 1-2 days 	Low	ICS	ICP	<ul style="list-style-type: none"> Community nursing teams - based on patients suitable for District nursing teams capacity 	<ul style="list-style-type: none"> Virtual technology for patient and team Visibility of information across services to support decision making 		<ul style="list-style-type: none"> Cultural change to overcome anxiety regarding sooner discharge and overcome perceptions of trying to save money 	<ul style="list-style-type: none"> Commissioning / funding for capacity 	<ul style="list-style-type: none"> Virtual ward promotes bridge between primary care/ secondary care and social care Opportunity to manage earlier discharges and reduce LoS possibly by 1 or 2 days, providing benefits for both the patients and service providers releasing valuable capacity
<p>Enabling Communication as a Fundamental of Care:</p> <ul style="list-style-type: none"> Identify delivery of care Identification – unmanaged hearing loss and ageing well with hearing loss e.g. hearing aids in care homes, recognition of sensory needs Picking up unmanaged hearing loss and knock on effects – impacts on receiving care for other conditions Leads work from screen in memory assessment clinics – cognitive assessments) Hearing screens on iPads signposting to further investigation Admitted in hospital - confusion linked to hearing loss or condition – training of staff to differentiate Work in care home sensory health passport Screening of adults to slow down dementia – social isolation stay engaged - role for social prescriber Care of hearing aids – care homes, ward and lost at point need them most – highlights to patients and professionals – LoS impact seen as confusion linked to cognitive issue 	High	ICS	ICS	<ul style="list-style-type: none"> Audiologists to deliver screening – scope and to support education delivery – screening can be done by an HCA Educating the wider workforce – training package including care homes Caring for hearing aids/cochlear implants – workforce to support Social prescribers involved in screening of adults for potential signs of dementia Champion for hearing e.g. communication friendly Mental health for older person - consider capacity to support people with hearing loss (clinical psychologist in cochlear implant service - ? extend access to other with hearing loss) 	<ul style="list-style-type: none"> Virtual – screening via iPad offer Education delivery – training package Broader screen of adults – options to deliver remotely – tablet or phone/headphones Use screening to signpost to audiologists 		<ul style="list-style-type: none"> Looking after sensory health – roles and responsibilities Culture change to support communication friendly – increasing use of hearing aids and acceptance in the same way as glasses/dental checks – break culture of seeing hearing aids as 'getting older' 	<ul style="list-style-type: none"> Commissioning and funding for capacity and education 	<ul style="list-style-type: none"> Aligns to MH agenda for older people Improved outcomes and quality of life Reduced LOS avoiding loss of hearing aids Improved quality of care for other conditions Allows screening of adults to slow down dementia – reduces social isolation remaining engaged

Workforce	<p>Enhancing the future health and social care for ENT and hearing services, requires the following main considerations for workforce:</p> <ul style="list-style-type: none"> • Expedite plans to develop a Primary Care Audiology service through Advanced Audiology Practitioners • Strong involvement from Public Health consultants to lead the prevention agenda, promoting education strategies alongside existing programmes of education, but made specific for hearing loss • Use of social prescriber roles to help identify those with unmanaged hearing loss • Maximise resource utilisation through greater engagement with HCPs (make every contact count) offering structured education and appropriate training to help support the communication needs of those with hearing loss to effectively navigate people across the pathways
Technology	<p>The main areas in which technology can effect transformation for ENT and hearing include:</p> <ul style="list-style-type: none"> • Digital interfaces and information sharing between organisation should be a clear part of our ambitions going forward. • Consistent use, availability and maintenance of loop systems across the ICS • App development/ promotion for self-care and signposting locally (e.g. Patient Knows Best). Waiting rooms in various health and social care settings to use screens with rolling information on health and social care advice/ support services available – promote wellness and resilience for self-care and management of hearing loss • Use of virtual screening via tablets to enable signposting to audiologists • Make BSL technology virtually available consistently • Innovation to provide improved communication for those with hearing loss, e.g. smart phones enabled to support lip reading • Shared systems to allow diagnostic results to support navigation
Estate	<ul style="list-style-type: none"> • ENT diagnostics access in RDC and diagnostic hub models • Space in primary care (GP surgery) for Advanced Audiology Practitioner to support community audiology model
Culture	<ul style="list-style-type: none"> • To drive a culture change we need shared and integrated use of workforce across organisations to enable the sharing of resources as there are limited staff groups and expertise, with the introduction of multi-agency approaches this should improve education across the workforce • Joint working to help people in a different way – liaison between professionals to support person-centred care • Partnerships between 3rd sector and organisations to ensure they understand the pathways better and how to refer/ signpost, but supporting the 3rd sector to support the patients • Cultural change to support prevention – self-care and self-management • Workforce to address prevention – everyone's responsibility

From...

To...

'Bridge to the Future'

	Phase 1 1 st year	Phase 2 2-3 years	Phase 3 5 years +	
Prevention	<ul style="list-style-type: none"> PH devised strategies – GP Toolkit shared across ICS – led by ENT and Hearing to prioritise for raising awareness Internal/ external strategies public awareness – incl. within mandatory training targeting training for specific groups – raising awareness for HCOP, Housing, self-care and self-management Awareness to avoid recreational noise, etc. List all appropriate services on a Live DoS Plan for ICS-wide sensory health passport Develop plans to enable direct access to hearing service from care homes Wax management advice developed for NHS App – describing right intervention 	<ul style="list-style-type: none"> Consistent use of GP toolkit Continuous education and training with ENT and Hearing service providers to provide a whole care approach Embedded delivery of awareness and self-care within specific groups needing more support, HCOP, etc rolled out across ICS Live DoS accessible to support quick referrals/ navigation first time Routine referrals accepted from care home as appropriate Trusted and controlled general wax management advice more available on media platforms 	<ul style="list-style-type: none"> Rolling programmes for ENT and hearing education aligned to PH training and education strategies Education and awareness levels self-renewed in other groups, such as care homes Active use of Live DoS to determine capacity and navigation of referrals Improved self-care and management of minor conditions, such as wax management 	<ul style="list-style-type: none"> Consistent and equitable prevention through wide-spread public awareness and education of risks causing hearing loss/ ENT health conditions Improved triaging to effectively identify and treat/ hearing conditions early Improved equity of access for all, including older adults and children with learning disabilities
Treatment & Condition Management	<ul style="list-style-type: none"> Commissioning discussion for provision of increased capacity for psychological support – also increased knowledge of hearing/ balance issues to ensure patients are not bounced back to services for psychological issues Funding agreement to commence primary care advanced audiology service Identify which inappropriate 2WW referrals may be able to be managed by remote/ virtual communications from ENT – criteria can be quickly relayed to allow a quick win to reduce some of these 2WW 	<ul style="list-style-type: none"> More direct access to psychological support available Advanced audiologists working from primary care practices Routine use of remote/ virtual discussions between PC and ENT to quickly establish urgency of referrals 	<ul style="list-style-type: none"> Easy referral and access to psychological support where required across the ICS Routine access to advanced audiologist practitioner available locally across ICS Appropriate referrals for 2WW through integrated process 	<ul style="list-style-type: none"> Early access to mental health support for all cohorts with ENT/ Hearing conditions Advanced audiologist practitioners in both acute and primary care settings supporting patients across the ICS, early and appropriately Improved capacity management through screening and triage in primary care Making use of virtual wards to support effective discharges of stable patients
Whole System Approach	<ul style="list-style-type: none"> Agree platforms and principles for access across the system to ensure there are no issues with accessibility standards – e.g. records showing what comms interventions may be required Plans around systems interfacing to enable structured approach to sharing of records across settings and organisations – governance needs agreeing 	<ul style="list-style-type: none"> Robust platforms in place to assure deaf and profoundly deaf that all health service points cater for accessibility needs Patient records more readily available between providers 	<ul style="list-style-type: none"> Fully integrated accessible services eSCR accessible by all appropriate care providers 	<ul style="list-style-type: none"> Seamless personalised care through multi-agency working Service provision with alignment to accessible information standards (AIS) Improved interfaces between organisations to allow sharing of records
Community and Self-Care	<ul style="list-style-type: none"> Explore funding models and opportunities to integrate routine services with existing services through 3rd sector (e.g. dewaxing) Improve engagement with 3rd sector for open working to make the care more personalised Develop plans to better integrate health and social care teams – consider a link or liaison type role (similar to ECLIO) Focus on commissioning plans being discussed nationally for dewaxing services that may lead the way forward. Microsuction/ irrigation – both techniques to be explored – consider improved regulation – RNID currently steering this 	<ul style="list-style-type: none"> Close liaison between health and sensory teams to ensure required overlap is in place for patients' needs – integrated approach to deliver care – consider joint development of a link role 3rd Sector working alongside health and social care to ensure routine support is accessible – trial funding models to allow provision of routine interventions Roll out of improved dewaxing access in community Develop guidance for safe and regulated dewaxing services 	<ul style="list-style-type: none"> Embedded link-role providing seamless contact and support between health and social care teams with easier pathway navigation for patients Improved community service offer for ENT and hearing support, including access to dewaxing and charitable, 3rd sector support 	<ul style="list-style-type: none"> Hearing therapist supporting care between sensory and hearing teams 3rd Sector supporting routine treatments in community setting e.g. dewaxing Improved community support for 7 day support for hearing aids including repairs



Conclusions

The review of ENT and Hearing services as part of the development of a Clinical and Community Services Strategy for Nottingham and Nottinghamshire ICS has been undertaken using a co-design model where patients, carers, key stakeholders and voluntary sector groups such as the Nottinghamshire Deaf Society and Hear Together, have collaboratively worked together to shape a vision for the future care system. The work has progressed well working remotely and holding virtual meetings. Patient engagement has helped to understand where patient experience has been strong or can be improved. The four key themes for improvement identified are:

- Prevention (with emphasis on education, including noise exposure and a strong focus on early intervention and referrals through improved primary care access to audiologists);
- Treatment and condition management (considering accessible information standards and equitable access to services across the ICS, whilst making effective use of capacity through appropriate referrals, especially 2WW, through integrated working between primary and secondary care);
- Whole system approach (Well interfaced systems so providers know their patients to provide timely personalised patient care, including cross-site collaboration between secondary care providers and training and support for primary care teams to work closer to specialist professionals, including speech and language therapists across settings);
- Community and Self-Care (ensuring the organisation and delivery of services is consistent through a multi-agency approach that includes 3rd sector organisations and charities supported through local authorities enabling education and training for the population and service users for improved self-care and living-well with hearing loss).

The review describes a future care system in optimal care settings and with care provided at different levels of urgency and envisages 4 high priority, 2 medium priority and one lower priority programmes to transform care:

- **High** – Education and training to support prevention and early intervention
- **High** – Primary care audiology service
- **High** – Enabling new ways of working to simplify referral pathways between primary and secondary care
- **Med** – Equitable service access to expertise and urgent care through multi-agency joined up approach to more consistent and personalised care
- **Low** – Access to psychological and MH support aligned to physical ENT/ hearing needs including 3rd sector access
- **Low** – Virtual ward to support early discharge of stable head and neck patients
- **High** – Addressing unmet need

To achieve these there are a range of enabling requirements for the ICS across workforce, technology, estate, culture and financial systems. Collectively these initiatives can help transform and provide long term health improvement and sustainability in the area of ENT and Hearing services in the Nottingham and Nottinghamshire ICS.

Next Steps

This strategy sets the future direction of development for ENT and hearing care in the ICS and it is proposed it will shape future work of the ICS in a number of ways:

- The identified priorities and programmes should be used to inform commissioning ICS, ICP and PCN activity
- The enabling activities require development and inclusion in the relevant ICS workstreams to inform their work programmes
- The impact on estate and configuration changes require inclusion in a programme of pre-consultation business case development alongside the service changes recommended from other reviews, although the impact for ENT and Hearing care is less specific in relation to community hub space
- The aggregate impact of the collective suite of service reviews should be used to shape focus of future service provision in acute/ primary care and community settings in the ICS



11. List of Common Abbreviations

1*, 2* Care	Primary, Secondary Care	EMAS	East Midlands Ambulance Service	NNU	Neonatal Unit
2WW	Two-week-wait	EMCA	East Midlands Cancer Alliance	Notts.	Nottinghamshire
A&E	Accident and Emergency	EMRAD	East Midlands Ambulance Radiography	NRC	National Rehabilitation Centre
A&G	Advice and Guidance	ENCH	Enhanced Health in Care Homes	NRCP	National Register of Certified Professionals
ACE	Adverse Childhood Experience	ENT	Ear, Nose and Throat	NRT	Nicotine Replacement Therapy
ACP	Advanced Care Practitioner	EOl	End of Life	NSC	National Screening Committee
ADHD	Attention Deficit Hyperactivity Disorder	eSCR	Electronic Shared Care Record	NUH	Nottingham University Hospitals
ADVIS	Adult Deaf and Visual Impairment Service	ESD	Early Supportive Discharge	O ₂	Oxygen
AF	Atrial Fibrillation	ESDT	Early Supportive Discharge Teams	OCCEF	Ophthalmic Common Clinical Competency Framework
AI	Artificial Intelligence	F2F	Face to Face	OCT	Optical Coherence Tomography
AID	Accessible Information Standards	FeNO	Frasntonal Exhaled Nitric Oxide	OOH	Out of Hours
AK	Actinic Keratosis	FT	Foundation Trust	OPA	Outpatient Appointment
AMD	Age-related Macular Degeneration	FTE	Full Time Equivalent	OPM	Office of Public Management
ANP	Advanced Nurse Practitioner	FU	Follow Up	OTC	Over-the-Counter
App	Application	GA	General Anaesthetic	PCN	Primary Care Network
APPG	All Party Parliamentary Group	GBD	Global Burden of Disease	PCP	Personalised Care Plan
ARTP	Association for Respiratory Technology and Physiology	GOC	General Optical Council	PCR	Patient Care Record
ASC	Autism Spectrum Conditions	GOS	General Ophthalmic Service	PD	Personality Disorder
AT	Assistive Technology	GP	General Practitioner	PH	Public Health
ATAIN	Avoiding Term Admission Into Neonatal units	GPCC	General Practice Repository for Clinical Care	PHE	Public Health England
BAD	British Association of Dermatology	GPwER	General Practitioner with an Extended Role	PHM	Population Health Management
BAME	Black, Asian and Minority Ethnic	GRASP-COPD	Guidance on Risk Assessment on Stroke Prevention for COPD	PHO	Public Health Organisations
BB	Better Births	H&SC	Health and Social Care	PID	Project Initiation Document
BCC	Basal Cell Carcinoma	HCP	Healthcare Professional	PKB	Patient Knows Best
BEH	Behavioural and Emotional Health	HES	Hospital Episode Statistics	PN	Practitioner Nurse
BF	Breast Feeding	HES	Hospital Eye Service	PR	Pulmonary Rehabilitation
BFI	Baby Friendly Initiative	HL	Hearing Level	PSNC	Pharmaceutical Services Negotiating Committee
BLF	British Lung Foundation	HNA	Holistic needs assessment	PWER	Pharmacist with Extended Role (in skin health)
BMI	Body Mass Index	HPV	Human Papilloma Virus	QALY	Quality Adjusted Life Years
BMJ	British Medical Journal	HV	Health Visitor	QIPP	Quality, Innovation, Productivity and Prevention
BP	Blood Pressure	IAPT	Improving Access to Psychological Therapies	QMC	Queen's Medical Centre
BSG	British Society of Geriatrics	ICP	Integrated Care Partnership	RCM	The Royal College of Emergency Medicine
BSL	British Sign Language	ICS	Integrated Care System	RCN	Royal College of Nursing
BTS	British Thoracic Society	ICT	Information and Communication Technology	RCOG	Royal College of Obstetricians and Gynaecologists
CAMHS	Child and Adolescent Mental Health Service	IT	Information Technology	RCOphth	Royal College of Ophthalmology
CAS	Clinical Assessment Service	IUC	Integrated Urgent Care	RDC	Rapid Diagnostic Centre
CBT	Cognitive Behaviour Therapy	IUT	In-Utero Transfer	RNIB	Royal National Institute for the Blind
CCG	Clinical Commissioning Group	KMH	Kings Mill Hospital	RNID	Royal National Institute for the Deaf
CCSS	Clinical and Community Services Strategy	LD	Learning Disability	ROI	Return on Investment
CES	Cranial Electrotherapy Stimulation	LMNS	Local Maternity and Neonatal System	RoSPA	Royal Society for the Prevention of Accidents
CFS	Clinical Frailty Scale	LNU	Local Neonatal Unit	ROVI	Rehabilitation Officer for Visually Impaired
CGA	Clinical Geriatric Assessment	LOC	Local Optical Council	RTT	Request To Treatment
CoC T&F	Continuity of Care Task and Finish	LoS	Length of Stay	RTT	Radiotherapy
CoO	College of Optometrists	LTC	Long Term Conditions	SALT	Speech and Language Therapy
COPD	Chronic Obstructive Pulmonary Disease	LTOT	Long Term Oxygen Therapy	SoToD	Smoking at Time of Delivery
COVID19	Corona Virus Disease 2019	LTP	Long Term Plan	SBLCB	Saving Babies Lives Care Bundle
CPR	Cardio-Pulmonary Resuscitation	LTV	Long Term Ventilation	SC	Social Care
CQUIN	Commissioning for Quality and Innovation	LV	Low Vision	SCC	Squamous Cell Carcinoma
CUES	COVID Urgent Eye-care System	MBCT	Mindfulness Based Cognitive Therapy	SEND	Special Educational Needs and Disabilities
CVD	Cardio Vascular Disease	MDT	Multi-Disciplinary Team	SFH	Sherwood Forest Hospitals
CVI	Certification of Vision Impairment	MECC	Make Every Contact Count	SIGN	Scottish Intercollegiate Guidelines Network
CYP	Children and Young People	MgSO ₄	Magnesium Sulphate	SLT	Speech and Language Therapy
CYPF	Children, Young People and Families	MH	Mental Healthcare	SPA	Single Point of Access
DASV	Domestic Abuse and Sexual Violence	MHCLG	Ministry of Housing, Communities and Local Government	STP	Sustainability and Transformation Partnership
dB	Decibell	Mid Notts.	Mansfield & Ashfield, Newark & Sherwood	TC	Treatment Centre
DNA	Did Not Attend	MMR	Measles, Mumps, Rubella	TIA	Trans-Ischaemic Attack
DoS	Directory of Service	NCGPA	Nottingham City General Practice Alliance	TTO	To Take Out
ECG	Electrocardiogram	NCH	Nottingham City Hospital	TYA	Teenage and Young Adults
ECLO	Eye Clinic Liaison Officer	NGO	Non-Government Organisations	UC	Urgent Care
ECT	Electroconvulsive Therapy	NHFT	Nottinghamshire Healthcare Foundation Trust	UCC	Urgent Care Centre
eCVI	Electronic Certification of Vision Impairment	NHS	National Health Service	UEC	Urgent and Emergency Care
ED	Emergency Department	NHSE	National Health Service England	UECDI	Urgent and Emergency Care Digital Integration
EFI	Electronic Frailty Index	NHSI	National Health Service Improvement	UTC	Urgent Treatment Centre
ELBG	Ear Lobe Blood Gas	NICE	National Institute for Health and Care Excellence	VCSE	Voluntary, community and social enterprises
EM ODN	East Midlands Operational Delivery Network	NICU	Neonatal Intensive Care Unit	VI	Visual Impairment
		NIDA	National Institute of Drug Abuse	WHO	World Health Organisation

Data Sources

British Medical Journal
PubMed.gov
Local Data from NUH, SFH, Social Care, CCGs, GPRCC, eHealthscope
Royal National Institute for the Deaf (RNID)
Action on Hearing Loss
NHS England
NHS Health and Social Care Boards
NHS Long Term Plan
Office of National Statistics
Patient Engagement – Ear, Nose and Throat and Audiology Engagement Report, Greater Notts. CCG
Public Health England
World Health Organisation
Centres for Disease Control and Prevention

ENT & Audiology at NUH – Community Audiology Provision (V6)

Introduction

ENT and Audiology at NUH provides a comprehensive range of ENT and Audiovestibular support services to the population of Nottinghamshire, undertaking over 120,000 appointments (OPAs) and over 10,000 operative treatments per year. ENT is split into 4 subspecialties, effectively providing separate services for Ear (Otology), Nose (Rhinology) and Throat (Laryngology) problems and a specialised Paediatric service.

The focus of this paper will be upon the Audiology Service and the Otology Provision from ENT.

Background

Audiology at NUH is a large service, seeing around 80,000 OPAs per year, provided mainly in Ropewalk House in Nottingham City Centre, but also provides services within the ENT clinic at QMC, including providing on the day hearing tests for patients attending Otology clinics and support on the wards at QMC for patients with hearing issues. The service has held UKAS IQIPS accreditation since 2016. Audiology is a high performing service, hitting access targets consistently however, with potential increasing demand the service has significant issues:

- The estate at Ropewalk house is isolated, outdated and poorly maintained, and areas of the building regularly need to be closed if there is inclement weather due to leaks. These issues also present a difficulties when running a clinic that remains 'COVID' safe and Audiology's demographic is at high risk*
- Significant issues with the ICT infrastructure and phone lines, resulting in long waits, dropped & lost calls and the inability to transfer calls between RWH and QMC.*
- The Audiology Band 5 Workforce, who provide general 'day to day' capacity, tends to be highly fluid and mobile and is rarely at full capacity*
- The COVID-19 Pandemic and activity restrictions have generated a large backlog of around 5000 patients that need to be seen in Audiology*

Otology at QMC undertakes roughly 15,000 OPAs per year provided in the EENT building's EENT Clinic. The service is provided by 4.5 WTE consultants (6 individual consultants). ENT as a whole has significant issues with performance (the specialty has not achieved the RTT target since August 2019). ENT consistently over delivers on planned activity. The main drivers of this in Otology are:

- Significant shortfall in OPA capacity - multiple demand and capacity exercises using the NHSi Core Model have shown that Otology is very short of OPA capacity, with the last round flagging a 74 new OPA/week shortfall*
- The estate within EENT outpatient is maxed out, without growing into evenings/weekends, which is not supported by the consultant body and would require renegotiation of the PFI contract, as the hours of access are set.*
- We are unable to recruit new consultant surgeons as there is no available theatre capacity across the trust and, the D&C work suggests Otology is in balance with operative capacity.*
- The COVID-19 Pandemic and activity restrictions have generated a large backlog of around 3000 patients that need to be seen in Otology*

The services deliver an average of £1.5-£2M loss per year, driven by PFI costs, premium pay and low tariff.

- *Otology and Audiology work closely together and, as part of the COVID response, have implemented a number of changes to practice with the aim of streamlining pathways and reducing demand on otology clinics;*
- *Patients with unilateral or bilateral non-pulsatile tinnitus are directed to audiology services without ENT appointment through vetting*
- *Patients with suspected hearing loss in one ear are seen in audiology directly without an ENT appointment through vetting*
- *Patients with dizziness are assessed by phone following completion of an online questionnaire and are then directed to the most appropriate service e.g. Epley clinic for BPPV*
- *Expansion of audiology booking for MRI scan will further reduce pressure on otology clinics.*

Overall, this will reduce the demand on Otology clinics, but will not overall reduce the demand on the Audiology/Otology system.

Community Audiology – North Wales Model

In August 2016, Betsi Cadwaladr Hospital and NHS Wales began a Community Audiology pilot to manage patients over the age of 16 with straightforward hearing issues (simple hearing loss, tinnitus, balance, BPPV, dewax etc.) in 31 GP surgeries. The patients who were identified as appropriate for the pilot were diverted from a GP appointment and were seen by an Advanced Audiology Practitioner (Band 7), who saw and assessed the patient and either managed the condition, or referred on as appropriate. At the end of the pilot:

- *An average of 66% of patients with ear issues were seen by the Audiologist, with some practices managing 90%*
- *Of that 66%:*
 - *44% were managed solely by the audiologist (35% at First OPA),*
 - *6% were referred on to the GP,*
 - *30% were referred onto Audiology secondary care services ,*
 - *20% were referred onto an ENT surgeon*
 - *64% of patients had accessed service without GP appointment.*
- *The service expanded to 5.5 wte to include 36 GP practices using a cluster approach (based in one surgery but seeing patients from 3 surgeries)*

The pilot was such a success, it was rolled out across Wales, the minimum age was reduced to 8, and has received awards recognition for innovation. Since national roll out, it has achieved the following:

- *High level of positive feedback from GPs and patients*
- *The project won the 'Developing a flexible and sustainable workforce' award at the NHS Wales awards 2018 and was a finalist in the Advancing Healthcare Awards in 2019.*
- *The service is now in 15% of GP surgeries in Wales and this is increasing with time.*

This model is a long term sustainable change to the patient pathway supporting better working between Primary and Secondary Care. The model ties in with the aims of the ICS.

Rolling this model out across Nottinghamshire could result in an overall decrease in referrals into ENT and Otology of 50% (48 per week for ENT, 56 per Week for Audiology, though the reduction in ENT referrals should have a halo effect in reducing internal referrals to Audiology). The ENT and Audiology departments at NUH have been in discussion with the local CCG group, led by Hugh Porter and this approach is supported by the CCGs. Nottinghamshire could also be the first region in England to undertake this model. This model helps support the NICE Guidance that suggests wax management should reside within Primary Care.

Analysing these numbers suggests that to manage this workload, the programme would require:

- *The following staffing*
 - *2 WTE band 7 Audiologists,*
 - *1 WTE band 5 nurse (unless Audiologists are qualified to perform microsuction),*
 - *1.5 WTE band 3 administrator and*

At a total cost of £180k PA (with B5 nurse) or £145k PA + £1,000 for 2 microsuction courses.

- *2 sets of Audiology equipment, (An Audiometer, Tympanometer, Portable microsuction, video frenzels/vHIT and laptop) at a cost of roughly £45k.*

Audiology already has a footprint at 15 GP locations across the county.

The model requires NUH and the CCG to come to an agreement on how this service will be managed, with three potential models:

- *The service is run completely by NUH, with all activity under NUH*
- *The service is provided on an SLA basis by NUH, with the activity being held by the CCG and NUH reimbursed by the CCG for the staffing and equipment*
- *The service is provided by the CCGs with professional support provided to the team by NUH.*

Solutions to ENT/Audiology Issues

It is clear that to bring Otology and Audiology into balance, a new and fairly radical process must be put into place:

- *Managing through WLI is unreliable, expensive and not supported by the consultant body*
- *Without a solution to the shortfall in theatre time, appointing new consultants is not feasible and, whilst theatre capacity is an issue in the other sub specs of ENT, D&C work has not shown this in Otology – if any additional theatre time were secured, it would have much greater benefit if it were allocated elsewhere in ENT.*
- *Without a significant improvement or expansion to the estate at QMC or RWH, additional capacity will be difficult to bring online on an NUH site.*

The community option above offer a potential to radically change the pathway for patients and to bring significant benefit to patients, and both offer a similar model and something along these lines probably represents the only real way the specialty can move forward on delivering this activity.