DÁIL ÉIREANN

AN COMHCHOISTE UM SHLÁINTE

JOINT COMMITTEE ON HEALTH

Dé Céadaoin, 13 Iúil 2022

Wednesday, 13 July 2022

Tháinig an Comhchoiste le chéile ag 9.30 a.m.

The Joint Committee met at 9.30 a.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Colm Burke,	Martin Conway,
David Cullinane,	Seán Kyne.
Gino Kenny,	
Róisín Shortall.	

Teachta / Deputy Seán Crowe sa Chathaoir / in the Chair.

Business of Joint Committee

Chairman: Apologies have been received from Senator Black and Deputy Durkan. I have one piece of housekeeping before I introduce the witnesses. Draft copies of the minutes of the meetings of 31 May 2022, 14 June 2022, 28 June 2022, 30 June 2022 and 6 July 2022 have been circulated to members. Are these agreed? Agreed.

Integrated Eye Care: Discussion

Chairman: The committee is meeting with witnesses to discuss integrated eye care. I welcome: Professor David Keegan, who is a consultant ophthalmic surgeon at the Mater Misericordiae University Hospital and clinical transformation lead with the north east regional integrated eye care services, NERIECS; Ms Sharon Ryan, chief operating officer at Children's Health Ireland, CHI; Mr. Aaron Mullaniff, head of services at the National Council for the Blind of Ireland, NCBI; and Dr. Duncan Rogers, clinical lead at community healthcare organisation, CHO, 9 in Dublin 2.

All members and witnesses are reminded of the long-standing parliamentary practice that they should not criticise or make charges against any person or entity by name or in such a way as to make him, her or it identifiable or otherwise engage in speech that might be regarded as damaging to the good name of the person or entity. Therefore, if statements are potentially defamatory in respect of an identifiable person or entity, they will be directed to discontinue their remarks. It is imperative that they comply with any such directions.

I call on Professor Keegan to make his opening remarks.

Professor David Keegan: I thank the Cathaoirleach and members of the committee for the opportunity to present the work of the NERIECS teams. As members are no doubt acutely aware, the delivery of eye care services in Ireland has been challenging for many years and now stands as the longest waiting list in the country with nearly 45,000 patients awaiting on outpatient appointments. Within the NERIECS network, there are in excess of 18,000 patients awaiting their first outpatient appointments, with 6,000 of these on the Mater waiting list and a further 6,000 to 10,000 on community waiting lists. The demographic demand for eye care is set to increase exponentially in the coming years, with an estimated doubling of the number of patients requiring eye care in the next 30 years. This situation has been further compounded following the global pandemic, with a latent demand for services now starting to manifest in the six-month to 12-month category of waiting lists.

Of concern to the ophthalmology clinical community is the growing support for patients to access care for routine cataract care outside our jurisdiction, such as in North Ireland, while other ophthalmic patients wait an unacceptable length of time, outside of clinically acceptable intervals, and are being harmed with resultant irreversible sight loss for conditions such as glaucoma and age related macular degeneration. The vision for better eye care in Ireland has been clearly articulated in the primary care eye services review and the HSE national model of eye care.

Sláintecare advocates for the development of a more integrated health service, centred on a comprehensive community-based care model and provides the framework within which our health services will develop over the coming decade. While these documents outline the what,

they do not support the how and the when of this initiative. This has been the work that the NERIECS team has been road mapping, making sense of and implementing for the past 12 months. We have extensively collaborated with all stakeholders to understand how to fully integrate and deliver eye care locally, to quality standards with optimal outcomes for patients. We have also worked to understand how current hospital-centric services need to be redesigned and integrated with community and primary care, how to support this with information and data, and how current funding models and mechanisms need to change.

The current service provision model is unsustainable and will require transformational change to deliver the required paradigm shift in care delivery models. To achieve this ambition, which incremental change will not deliver, we accept that we must transform our eye care delivery across the region. We are committed that the pace and scale of this transformation must deliver sustainable change. The north-east region comprises north Dublin, Meath, Louth, Cavan, Monaghan, Westmeath and Longford, with a combined estimated population of 1.2 million to care for. Demographic modelling shows a significant projected increase in the population of those over 65 years of age in this area. Eye care is delivered by six healthcare organisations in the region, namely: Ireland East Hospital Group via the Mater; RCSI Hospitals Group, Children's Health Ireland at Temple Street; CHO 1; CHO 8; and CHO 9. These are six distinct legal entities delivering care that is anchored in the Mater and at Temple Street from where the clinical governance is provided. These areas are soon to be restructured into regional health authorities and we await that with interest.

The challenge was how best we delivered care for all patients in this region to reduce and eliminate our wait list, which at the beginning of Covid numbered 9,000 for the Mater alone and approximately 15,000 for the entire region. There were also approximately 2,500 patients on a wait list for cataract surgery at this time. Through collaboration between CHO 9 and the Mater hospital, a hub and spoke model for service integration was tested and has to date delivered substantive improvements to waiting lists, with a near 85% reduction in the adult long-waits through our Ashgrove House initiative. My colleague, Dr. Rogers, will talk about the similar reduction in the paediatric amblyopia via the initiative between Temple Street and Grangegorman, which has nearly totally reduced in spite of the pandemic.

The model of eye care we are implementing across the NERIECS region holds to a hub-and-spoke concept of three-level integration that is based on: geography; the level of care required, be it primary, secondary or tertiary; and a specific care pathway that patients need focusing first on the largest volume care pathways, such as cataract, glaucoma, paediatric amblyopia and age related macular degeneration. In the absence of a formal legislative framework, we accepted that governance and co-ordination of six organisations, while maintaining clear clinical and corporate governance in this structure, would be challenging, and it has proved so. We set out to innovate to solve this problem in the interests of our staff and patients through the adoption of lean principles and a management system for process improvement and implementation of our strategy. This is novel to the Irish healthcare system. We are happy to lead from the front to test the reality of delivering system-level specialty integration.

The methodology provides a mechanism to eliminate waste in system and deliver managed, co-ordinated structural change, while keeping what is of value to our patients and staff to the fore. In June 2021, 12 months ago, the eye care teams in the region enabled and empowered more than 100 staff and our patients to participate in a system-level enterprise value stream analysis, EVSA. This week-long event empowered staff to clearly understand the current state and reality of eye care delivery in this region and to collectively agree on a vision and roadmap

to improve and redesign eye care in the next five years. It also afforded them a sound methodology to deliver on this.

The gap as to how we would deliver on accountability, clinical governance and ownership for the transformation was proposed through our facilitators in IBM Simpler, Mr. Richard Carr and Mr. Dave Jones-Lofting, through the design concept of a virtual accountable care organisation, VACO. This structure has been deployed in healthcare in the US since 2014, and more recently in the UK, but this will be the first deployment of this structure in Ireland. The VACO provides a mechanism to co-ordinate the function of the six healthcare organisations. It is responsible for devising and deploying the strategy to improve eye care. The VACO co-ordinating group comprises stakeholders from all the sub-specialties working in eye care in the region such as medics, nurses, optometrists, orthoptists, GPs, finance officers and information technology teams. There is also broader representation across the six healthcare organisations.

That value stream analysis also looked specifically at the four high-volume care pathways - cataract, glaucoma, paediatric amblyopia and age-related macular generation - to develop best practice pathways, including, specifically, a shift to community-based care, where appropriate, and templates for rationalisation of standardised referral, enhanced triage and more accurate demographic data capture. Crucially, the VACO also puts targeted design teams in place to support all its activity. These are our foundations.

All participants in the community integration team, information technology team, training, education research and innovation team and finance team are taking this on as part of other normal roles in the HSE, save for a core team of three; giving extra to this project in which they believe. These staff and teams are the bedrock of this co-ordinated effort. We held 11 planning events over the 12-month period since that initial value stream analysis and we have now created the infrastructure and processes where we can deploy integrated care across the region. We still need to finalise the financial pathways, but discussions have been positive with the chief finance officer of the HSE, and it is interested in this model that we are developing. The chief finance officer has given us a clear set of rules that need to be respected as we seek to deploy this in providing a roadmap.

Our goal would be a core regional account for funds that can be deployed to the area of need to best serve the patients and improve efficiency based on the principle of our purpose pyramid, which is to reduce the burden of blindness and vision impairment while improving quality of life for those affected. The IT team is looking specifically at how we introduce an integrated electronic patient record along with harmonised patient administration systems so we can reduce the need for patients to travel between the different sites, with an expert opinion given more efficiently and patients just needing to travel to clinics and-or diagnostic hubs close to their home. This feeds directly to the principles of Sláintecare and will be advanced with regional health authorities' centralised scheduling with a clear clinical governance line.

We have achieved a significant amount through the goodwill and willingness of all those working in eye care across the region in all different disciplines coming together to tackle the problem in eye care delivery. To date, the transformation has already delivered significant outcomes including a decrease in both adult and paediatric waiting lists across the region; a reduction in surgical waiting lists of 21% for more than 12 months; standardised regional referral for both cataract and glaucoma; right-first-time referral improved from 20% to 95%; improved patient and staff satisfaction with cataract pathway experience; and conversion rate to surgery for patients referred for cataract now at 95% - improved from where it was previously at 75%.

We are patient-focused, and our purpose pyramid sets the reduction of vision impairment and blindness and access to support services as the core driving goal of this group. The improved access to care, reduction of wait lists and transformation efforts are all to support this goal. We have identified our funding gap for the next three years and we are confident that, if supported, we have the mechanism, structures and, most importantly, the buy-in of all involved in eye care delivery to eliminate our wait lists in the north east in three years. This is a bold ambition as we look to reduce the wait list for outpatients from approximately 14,000 currently to zero, and the cataract wait list, which has grown to 3,000, also to zero. This data is all validated by Mr. Gerry Kelleher and the data team in the HSE. This is greatly aided by the recent approval of funding for staffing for the new eye cataract theatre at the Mater hospital, which, based on projections, will eliminate its surgical wait list in three years based on current levels. We should be able to assist with cataract wait lists in other parts of the country from that date.

The issues we still need to tackle are finalising the funding stream and pathway, which is very close, and integrating the information technology systems in order that we can create a web of interconnectivity between the six healthcare organisations. This will give us visibility on patients' records across the system thus reducing their need to travel. We also feel strongly that the VACO provides a model for eye care delivery in other parts of the country that may not have that co-ordinated effort in place just yet. The VACO will also provide a model for the improved community care delivery of other medical specialties such as an ear, nose and throat, ENT, dermatology and neurology.

I encourage members to read our submitted slide presentation and look in particular at our strategy deployment tool, the level zero X matrix, which has all our aims and metrics summarised on one page. Our ask of them today is to support the virtual accountable care organisation as a governance structure to manage care across different organisations in our health service, and support the initial funding gap for staffing, equipment and transformation costs, which will be at €3.9 million for 2023, €3 million for 2024 and €2.72 million for 2025, with just index-linked costs required thereafter. In return, under the principle of accessibility through innovation, we will provide the delivery of accessible, integrated, equitable and optimal eye care across our entire community while eliminating resource waste within our system. We commit to return to the committee with all the data it requires in 12 months to demonstrate our progress. I am happy to take any questions. I thank members for letting me present today on behalf of the broader NERIECS team.

Chairman: I thank Professor Keegan. We will move straight into questions. Senator Conway will kick off.

Senator Martin Conway: I thank Professor Keegan and his colleagues for being here today. I know they are very busy people. The presentation was extremely interesting. One thing I identified from what Professor Keegan said is that this model is based on one he has seen in operation in the United States and, more recently, the UK. Can he talk us through how successful it has been, particularly in the UK, because that is more recent? How successful has that model been? How similar to Professor Keegan's model is it? Is there any tweaking needed? Are there any differences? Is it an exact replica of the exact model that is in operation in the UK?

Professor David Keegan: I thank the Senator very much for his question. After this question, I would like to invite my colleagues who have also prepared a few words to speak. The VACO was initially proposed through the health insurance networks in the US in approximately 2014 for how they would reduce costs across that, but it provided a framework for an integrated

care model. The King's Fund, which is the health think-tank in the UK, sort of latched on to this as a potential model. It is looking at this in the same timeline we are to deploy it across the region. Therefore, we are sort of running at the same timescale with respect to this. Much like we are seeking to do here, the UK has adapted that original US model to create that integrated care.

The model is based on those principles of shift left, collaboration and virtual clinics so that we can access patients' data without repeating tests. That was really the driving force in the US where patients were being internally referred in the system, tests were being repeated and patients were having multiple visits. Therefore, that eliminates that piece. In the UK, which is on the similar Covid-19 restoration and transformation journey we are, as part of our EVSA, we made a really good presentation for Ms Melanie Hingorani, who is the transformation lead in the UK. It is on the same journey as us. It is looking at the VACO system already and seeking to deploy it. As regards results from that the UK, however, its timelines are the same as ours.

Senator Martin Conway: There is no concrete data from the UK yet as such.

Professor David Keegan: No, there is no concrete data.

Senator Martin Conway: Could Professor Keegan talk us through what was involved in building his team? Professor Keegan seems to have got agreement from a significant number of stakeholders. That cannot have been easy. We know how difficult it is bringing stakeholders together. How long has he been working on this initiative?

Professor David Keegan: Looking back, as part of the initial work, Ms Michelle Ford, with whom Dr. Rogers works in CHO 9, and I tried to explore how we could work a long waiting list initiative. The National Treatment Purchase Fund, NTPF, had originally worked on surgical waiting lists and then switched its attention to outpatient waiting lists, where we saw our greatest need. We collaborated with the NTPF and CHO 9 to create a new model clinic for long waiters. We had just started to deploy that prior to the Covid crisis hitting and the structure was such that we were able to keep it going. That is how we were able to reduce the number of long waiters by 80% and reduce the total wait list by 3,000 over that period. That gave us a model to refer to in discussions with our colleagues. I pay tribute to a number of people in this regard. I had discussions with my colleague, Ms Ryan, chief of operations at Temple Street hospital, about how we would integrate paediatric care, which is the key need in the CHOs. I spoke to Mr. Mullaniff of the NCBI about how we integrate the patient organisations, specifically the rehabilitation aspect, which was a gap in previous models. Professor Patrick Broe, the clinical director of the RCSI Hospitals Group, showed early interest in this. We also engaged with Mr. Des O'Flynn, who was originally in CHO 9 and then in CHO 8, and Ms Josephine Collins in CHO 1. We had a model to put in front of them.

When it comes to the broader coalition of IT experts and health pricing officers, when one can stand up in a room and offer a purpose pyramid that is patient-focused and patient-centred, it was remarkable, encouraging and enlightening to see how people will move with us and give of their time to these design events. They want to see this work. We are looking for support centrally in order to keep the momentum with the team. It is about personal relationships, conversations and meetings. The EVSA events are quite energising. We had the event in Ratoath GAA club last year and everybody enjoyed it and knew we were doing good work. The monthly VACO meetings are keeping that momentum going for us.

Senator Martin Conway: The area of rehabilitation is something in which I have an interest. Unfortunately, there are people diagnosed with sight loss for whom it is a permanent

diagnosis in the sense that there is nothing Professor Keegan and his people can do to restore their sight. What benefits will this model have for people diagnosed with sight loss in terms of effective rehabilitation that will allow them to live as independent a life as possible? What difference will the model make to the rehabilitation process compared with what exists at the moment in other areas?

Professor David Keegan: I will pass that question to my colleague, Mr. Mullaniff of the NCBI, who is best placed to answer it.

Mr. Aaron Mullaniff: We have seen at first hand what happens when there is a delay of onward referral to vision rehabilitation. The NCBI is cutely aware that vision rehabilitation can benefit 90% of all patients. Approximately 95% of people we work with have some useful or residual vision and our teams of low vision therapists support them to maximise that vision. Indeed, vision rehabilitation can also support people with congenital blindness and patients who present with complete blindness.

It is important that I take the opportunity to highlight the impact of a delay in referral. Where one does not see rapid onward referral, one sees challenges around the physical factors, with patients experiencing difficulties and struggling with the activities of daily living and household chores, right down to reading, watching television and the basics of even making a cup of tea. From a cognitive perspective, we see huge levels of isolation, loneliness and even depression. It is important that we also recognise the social aspect. Right now, one in four people of working age with a vision impairment is participating in the labour force. That does not necessarily mean they are employed. We see the impact of delays in that people are leaving their jobs as opposed to remaining in them. We have a dedicated employment, training and academia team that works with patients to support them. There is also an impact on engagement with family, friends and the wider community.

Senator Martin Conway: Is it Mr. Mullaniff's view that if this initiative is funded and put on a statutory footing, it will improve the follow-up situation for people after they receive a diagnosis and improve their prospects in terms of employment?

Mr. Aaron Mullaniff: Absolutely. I can already see that the NERIECS initiative and how it is being championed is resulting in greater integration and improved referral pathways to the post-acute setting, which is where the work of the NCBI is focused. It is already coming to fruition and we have seen that at first hand through our relationship with CHI at Temple Street and the Mater.

Senator Martin Conway: I am conscious of time. I have two further questions. Will Professor Keegan outline the next steps and the timeline he envisages if this model is to be up and running? What are the incremental steps that must be taken from here to take it forward?

Professor David Keegan: We have identified two barriers and key breakthroughs that need to be dealt with in the context of IT and integration. The universal health identifier is a key enabler of all we are talking about here. We need integrated, unified IT systems that speak to each other, including patient administration systems, patient management systems and electronic patient records. We have the team built in around this that will deliver the co-ordinated care. The investment we are looking for is to bring all the community- and hospital-based regional sites up to an equal standard with respect to equipment and staffing, as laid out in the primary eye care services review document. Once we have that up and running, with the IT links, we can start to move our patients from the higher-acuity Mater and Temple Street sites out to the

community sites.

Dr. Rogers and Ms Ryan may talk a little more about the reduction in acute paediatric care this model can achieve. We want to move the patients out to the sites when the care pathways are laid out to allow it to be done safely. We have two more care pathway EVSAs to run. We have the cataract theatres to get up and running in the next three months. That will start to move our cataract wait list down. Then we will have the community sites deployed in seeing the patients who are local to their unit. There will be virtual clinic rooms, whereby patients who have local diagnostics can be assessed by an expert without having to travel to see that expert. That will all happen before the end of the year.

Senator Martin Conway: How does Professor Keegan see this model being integrated with the regional health areas that will be set up in the next 12 to 18 months under Sláintecare?

Professor David Keegan: The whole model was established against the backdrop of what was already agreed at the HSE level in respect of the model of care, the primary eye care services review and Sláintecare. The establishment of regional health areas is a modification and iteration of Sláintecare. We hold to those principles and we will integrate into the regions.

Senator Martin Conway: Professor Keegan indicated that his engagements with the HSE have been positive. How positive were they?

Professor David Keegan: We have talked about IT. Key to that is how the finances flow through the system. We are dealing with six different legal entities and chief financial officers in healthcare organisations will be quite protective of their budgets. We needed absolute transparency in funding flows and co-ordinated efforts. Our finance team is co-led by Ms Anne Kennedy from CHO 8 and Ms Caroline Pigott, former chief financial officer of Sláintecare and now working on the NERIECS team. That is absolutely crucial because it means the RCSI Hospitals Group, all the CHOs and CHI have visibility. We have agreed a core account and we have agreed with the chief financial officer of the HSE that he will look at how funding can come from a central HSE budget into that account and that the VACO will have responsibility for distributing those funds throughout the NERIECS region in line with our purpose pyramid for waiting list reduction.

Senator Martin Conway: What suggestions does Professor Keegan have for future-proofing to ensure there will not be a cost burden into the future? I hope he will get the €8 million-plus he needs over the three-year period to get this model up and running. How will he future-proof it such that it will, in essence, become cost neutral and even cost-efficient?

Professor David Keegan: That is absolutely critical. We cannot be coming back with incremental costs that are going up every single year. We realise that. The whole point of doing a transformation exercise, rather than throwing more money at a growing problem the cost of which will exponentially rise, is to enable the deployment of lean principles to reduce waste within our system. This is in line with the concepts of Sláintecare, the regional health areas and moving services into the communities in order to lower the cost of care delivery. Also built into this is the training, education, research and innovation team of Dr. Una Cunningham, Dr. Colm O'Brien and Dr. Paul Moriarty. They are committed to training from within our group. We recruit at a low base and train the expertise within our group. That is across lean transformation as well as nursing, technicians, optometry and orthoptics, with everyone working to the top of their licence, where they are legally permissible in the State, in the delivery of eye care. We are very fortunate that we have high-quality eye care professionals in Ireland, but we are not using

them efficiently and effectively enough for the care of the population of this country. We should not have these wait lists. I want to bring Dr. Rogers in on paediatrics.

Dr. Duncan Rogers: I was the first consultant medical ophthalmologist appointed in Ireland. Integration was built into my role. I am based split-site between the community and hospitals. That is my background. One could look at me as an example of what we are trying to achieve more broadly. There was an upfront staffing cost in employing me. I was put into a situation where one of my primary tasks was to remove a consistent waiting list of about 3,000 patients in the children's health community service. I achieved that within six weeks of being in post. To this day - two years later - we still do not have a waiting list. That allowed us space to rejig our capacity in such a way that we now take patients and decompress Temple Street. We saw approximately 600 patients from Temple Street in the past six months. That was done using our existing facilities and staff, and changing how much they could do on their own and working more collaboratively with Temple Street. There was an initial upfront cost but costs are no longer increasing. We are still seeing appropriate capacity while decompressing a system. That has been done by using lean methodology and working in collaborative ways, not just with Temple Street but with the broader community. I hope to see that mirrored in the north-east region project.

Ms Sharon Ryan: I am the operations lead for CHI at Temple Street. CHI thanks the committee for inviting us to participate in this discussion on an exciting and innovative new development for healthcare. Paediatric ophthalmology is a high-volume service in terms of activity with just under 23,000 outpatient and 690 surgical cases undertaken per year across CHI.

CHI wholly supports NERIECS and the work of the accountable care organisation. The principles of integrated care delivery that traverse regions and system-care settings are aligned with Sláintecare, the national paediatric model of care and CHI's mission. The VACO is a means of delivering integrated care between community and acute services as part of Sláintecare implementation and addressing the greatest operational challenge, which is timely access to treatment. Access is a challenge to this paediatric specialty. There are currently more than 2,000 outpatients and 574 inpatients and day cases on the waiting list for treatment. Delivering care through a network as close to home as possible is truly child-centred and ensures the most appropriate use of resources at the right level of care within the system. Progression towards an integrated healthcare system for children and adolescents is a strategic objective for CHI and the development of the VACO is timely in this regard.

While the integrated eye care network is commencing in the north-east region, it is envisaged that this network will serve the eye-care needs of all the paediatric population of Dublin. Future requirements and enablers to support this development are being accounted for in this design phase. Clinicians have estimated that up to 60% of patients attending acute paediatric eye care services are clinically suited to care at community level. Clinical governance is paramount to this and the acute setting can support clinical oversight in delivering integrated care. Examples of community initiatives in recent years include 1,250 outpatient appointments delivered by CHI at Temple Street and City West and 600 patients cared for in collaboration with CHO 9.

Senator Martin Conway: That is the most comprehensive answer to a question I have heard in a long time.

Ms Sharon Ryan: I am sorry.

Chairman: No problem at all. Deputy Cullinane is next.

Deputy David Cullinane: I thank our guests for the comprehensive opening statements and information they have given us. This is a very good session. I commend Senator Conway on pushing us to hold this session and invite our guests to appear as witnesses. What struck me about the statements is that they point out challenges but are full of solutions. The latter is important for us because it makes our job easier.

I will focus on integration. Before I do, I have a question for Mr. Mullaniff about eye clinic liaison officers, ECLOs. Who employs them? Are they employed through the NCBI or are they directly employed by the HSE?

Mr. Aaron Mullaniff: It is a combination of both. We were fortunate enough to receive a one-off payment from the acute hospitals' division. We have just developed a new ECLO service in Cork, which is the first such service outside the greater Dublin area.

Deputy David Cullinane: Is NCBI a section 39 organisation?

Mr. Aaron Mullaniff: Yes.

Deputy David Cullinane: I have noticed on the NCBI website recently that there seems to be a high staff turnover in the context some positions, such as, for example, community resource workers. One of the issues that comes up all the time with section 39 workers - we see it in children disability network teams - is that there are HSE employees and section 39 workers doing exactly the same work and part of the same team but on different levels of pay, which can make it more difficult for those organisations to sustain staff levels. Is that a difficulty the NCBI has?

Mr. Aaron Mullaniff: It is something that HR is actively looking at. It is a challenge that is widely shared across section 39 organisations. The HSE has better terms and conditions and is much more attractive to work for. We have experienced a little bit of attrition but we are doing quite a good job from a retention perspective.

Deputy David Cullinane: How important are the ECLOs?

Mr. Aaron Mullaniff: They are extremely important. The ECLO role is quite distinct from the community resource worker role. ECLOs are embedded within the acute environment as part of this integration. The community resource workers are based in communities where they are best positioned to provide the right support at the right time and in the right place. To be clear, there has been no turnover from an eye clinic liaison perspective. Our intention is to grow the ECLO services as part of this initiative to seven of the major acute eye-clinic settings across the country.

Deputy David Cullinane: Best wishes to all the staff at NCBI in the work they do. I have met Mr. Mullaniff a few times, and I know great work is being done.

The waiting list figures that Professor Keegan provided in his written submission are actually different to the figures I have. I am not sure if I got the full information from the HSE, but I cannot see how the figures could be so dramatically out as much as they are. The figure Professor Keegan provided was 44,083 on the ophthalmology waiting list for the end of March. The figure I have for the end of May is 21,798.

Professor David Keegan: We work closely with the business intelligence unit, in particular

Mr. Gerry Kelleher, from which we source our data. I will look into why there is a discrepancy in the figures.

Deputy David Cullinane: I got my figure from a reply to a parliamentary question yesterday. I will send Professor Keegan that response to see if we are getting the full information. Whatever about the actual figure, what is problematic for me is the length of time that people are waiting. Of those 21,798 people, 10,543 have been waiting for more than 12 months. Typically, what would be the common complications patients on that waiting list have?

Professor David Keegan: It depends on what they have been referred with. One of our concerns is that patients with cataracts, which is the biggest cohort of patients, are needlessly living with vision impairment while waiting for appointments to be assessed and then for procedures that will reverse the problem. It is a straightforward procedure that is delivered quickly in great units throughout the country.

The other area of concern picked up by Dr. Edward Dervan and the team in the glaucoma EVSA is the delayed presentations of glaucoma into our services. For those who are not aware, glaucoma is a condition that can reduce and diminish sight loss in a silent manner and patients do not present until late in the condition. It is one of the areas we have identified through NERIECS. By employing the community teams, empowering the ophthalmologist to do that initial assessment and having a standardised optometric referral form, we will increase the speed at which we see the right patients, at the right time.

The other group we are concerned about is those with age-related macular degeneration, AMD. These patients can suffer irreversible sight loss if they have the wet type of macular degeneration, with 65% having irreversible sight loss within three months of diagnosis. Rapid access to care is needed. We will greatly enhance that access through our AMD pathway, but we should have a standardised referral and local diagnostics.

Dr. Rogers can talk about the risks in delaying paediatric amblyopia-----

Deputy David Cullinane: My time is limited. I will ask one more question and give the remainder of my time to Professor Keegan to answer it. It is very important in the context of healthcare reform, Sláintecare and the establishment of regional health areas. We are getting a briefing today from the Department on the establishment of regional health areas. Professor Keegan's presentation was very interesting and timely. He said that the Sláintecare document clearly sets out what needs to be done but that the how and when are not so clear. He also spoke about challenges with regard to integrating care from a hospital-centric service and redesigning and integrating good community and primary care, which is what regional health areas are meant to do at a more global level. Professor Keegan then referred to the difficulty with having six distinct legal entities delivering care and the absence of a legislative framework. Part of the problem we might have is that these regional health areas will not be underpinned by legislation. They will not be a legal entity as it will continue to be the HSE board but that is a different debate. Will Professor Keegan outline the model of integrated care NERIECS has worked on, how it is working and how we can practically achieve the objective of moving from the current hospital-centric service to one that is much better integrated not only on the hospital side but also in community and primary care?

Professor David Keegan: I thank Deputy Cullinane. We can set up the model and the structure. We have to respect the legal entities. We have put in place a system of strategic oversight, which is the VACO. The next step will be to generate service level agreements and

memorandums of understanding to create an internal network between the legal entities to operate in that structure. The initial part is dependent on the goodwill, buy-in and interest of all the stakeholders in the region. We have set up the VACO. The next step is to create the legal structure through service level agreements and memorandums of understanding. There is a service level agreement guidance document that the finance and legal teams will work through to create them. Data governance must also be considered as must agreements on data sharing and data protection. These will all be looked at by our specialty teams.

We expect and hope that when it moves to the regional health authorities and away from the CHO system, we can blend in this model because we will have demonstrated effectiveness and will be able to show this route to it. Of course, the danger and risk is that people will stand up and say we cannot do it at this stage. We have moved slowly by trying to demonstrate some successes, such as those of Dr. Rogers, CHI and Ashgrove House. We want to integrate properly by doing this. We are in this incremental phase in the context of delivering true integration. I hope this answers the question. I am happy to take further questions.

Mr. Aaron Mullaniff: We have a service level agreement and a memorandum of understanding between the Grangegorman CHO service and Temple Street hospital. This has been in place for five years. We have quarterly governance meetings. It is representative of what is happening. It will be spread throughout the network as good practice.

With regard to what happens to patients on the extended waiting list, children with amblyopia, which is poor vision in one eye, have no symptoms. They are born with it and they have no idea they have it. There is a very narrow window in which it can be treated. By the time the children are eight years of age, there is nothing that can be done about it and they will have poor vision in their eyes forever. A wait of one year is significant.

Deputy David Cullinane: This is important for us when we look at the health service in general and wider integration, which we will discuss in more detail with the HSE later. The witnesses referred to integrating IT systems. This is very important for sharing patient data. What have been the challenges with the systems speaking to each other, given that six distinct organisations with their own systems are involved here? We see it in responses to parliamentary questions whereby data is sometimes not captured or is not collated centrally Different systems do different things. How difficult was this and how much work is being done to try to better integrate it?

Professor David Keegan: Unfortunately, it is not in the past. The question is how difficult it is at present. It is fair to start with examples of very good data and IT infrastructure and integration. The national integrated medical imaging system, a radiology system in operation throughout the country, is an example. A patient with a head injury in Galway can have the images looked at by the team in Beaumont on the same day that injury is sustained. We have examples of good integration but they are pockmarked and by direction largely.

We also noted through this, and the cyberattack highlighted it, that the infrastructure throughout the community health organisations is fragile and needs to be supported. The infrastructure in the HSE hospitals was exposed through the cyberattack. This was less so in the voluntary hospitals because they had put extra measures in place. We have multiple speeds of travel with respect to IT throughout the system. Our work has highlighted this. We were not fully aware of all this beforehand. We had a sense of it. It has really exposed that the different rates of travel on IT governance and infrastructure are a potential risk to its deployment.

The universal health identifier is crucial. The preference would be for a national decision on an IT platform for all health records. Then patients would not need to move. We have seen this effectively work in units and health organisations in the US and, more recently, the UK. We would like to see this system in place. In the interim we will keep working as much as we can. We have an issue at present in one of our sites. We have a service level agreement with Ashgrove House. We have to create a new cable link between there and the Mater. Ideally this should be all cloud-based with a web of integration. It is not just between spoke and hub as the spokes must also talk to each other.

Deputy Róisín Shortall: I thank the witnesses for the presentation. I would like several issues clarified. I had similar figures to Deputy Cullinane. I wonder where that disparity is between 44,000 and 20,000. Perhaps it has something to do with waiting lists for first appointments. I am very glad to see in the figures I have that no adult is waiting for treatment in CHO 9, which is my local area. This is a very good record. Only a very small number of children are waiting. Great progress has been made. I am curious to know why the same level of progress has not been made in CHO 1 and CHO 8, which are also part of the project. Why might this be the case?

Mr. Aaron Mullaniff: I thank the Deputy for the question. I can certainly speak to the children portion of this. The primary eye care review set up what an integrated eye care service team should look like in the community. CHO 9, under Michelle Ford, its general manager, certainly engaged with it at a very early stage. Before I came into my role, it had a site, staff employed and a service that was up and running. I walked into that, which allowed me to make the difference I have managed. I could not have done it without that support. CHO 8 and CHO 1 have funding for positions but no one has filled them. An orthoptist is a role that someone goes through a four year degree to do. It looks particularly at eye movements and assessment of vision in children. We do not produce them in Ireland. The only way we can access them are people who are Irish and went to the UK or UK students who are willing to come here. There is a problem at this level in paediatrics. There is the willingness and the jobs ready to be filled in CHO 8 and CHO 1 but they are not filled and this is the delay in paediatrics.

Deputy Róisín Shortall: Have the roles been approved?

Mr. Aaron Mullaniff: They have been approved. There are job orders and they have been advertised previously but not filled.

Deputy Róisín Shortall: What is Ashgrove House?

Professor David Keegan: Ashgrove House is a facility under the governance of CHO 9. In the service level agreement with the Mater hospital, we were able to create a Mater-based clinic at Ashgrove House. It is a community facility just off the Navan Road in Dublin. Other CHO 9 activity is done there. We have taken some space and we have been able to use it. We sought to look at it as a model for the use of CHO space in other regions throughout the country. It comes back to the issue of IT connectivity, which is crucial. Getting this fixed will allow it to ramp up. This project has identified the correct model but we need it to run at full speed to have the true impact we think it can have.

I want to revert to the Deputy's previous question. There are very good committed staff in place in CHO 1 and CHO 8. As Dr. Rogers said, the initial pilot programme that he and colleagues from CHO 6 and CHO 7 came in under, which was sponsored and supported by the national clinical programme and the clinical lead, sought to start off, demonstrate and prove

the model. Now they have done that, there is a catch-up piece for the other CHOs as their staff come on board. One of the metrics we look at in our tracker is those unfilled posts, to make sure that we keep pressure on ourselves and on the local units to fill those posts when they are approved.

Deputy Róisín Shortall: I take it that what is happening in Ashgrove House is a development relating to the Mater public hospital?

Professor David Keegan: That is correct.

Deputy Róisín Shortall: The general conversation here today raises a whole lot of questions about why it is that we do not have integration. Much of this seems to involve the obvious things to do. We have to ask why that did not happen in the past. Is it an issue about there being just too many organisations? It probably makes the case strongly for the kind of integration to which the Sláintecare report refers. That is just a passing comment. Why were those particular three CHOs brought together in this project?

Professor David Keegan: Because this was the region covered. We had a problem at the Mater in the context of the greater north-east region. We had relationships and communication. We demonstrated effectiveness through the initiatives that we just outlined in the region. Historically, the patients from that region were referred to the Mater, which was the last point of call on the clinical pathway, depending on whether they needed surgery or expert care. We sought to do that region. We said that if we tackled a quarter of the country first and demonstrated the pathways, we would then have a model that could be demonstrated to other parts of the country or other specialties beyond that. This is quite novel. The VACO model, which arises out of the EVSA, is new to me. I totally agree. When we look at this, the question is why we did not do integrated care previously. We have done it partly historically, but to deliver the sort of change that we need in order to see the patients we have on our waiting lists now, and particularly looking at the demographic boom that is coming down the tracks, we needed to do something different. It was really ramping up the integration, which was there at some level, but we wanted to have a standard practice that is systematic, co-ordinated and governed by agreement.

Deputy Róisín Shortall: Is the governance structure being future-proofed to enable it to come into line with the regional health authorities, RHAs? My concern is that there is a new governance structure being established around this project and that it will have to change then when the RHAs come into place.

Professor David Keegan: Much like in my earlier answer, we looked to see that we could slide this across as a governance structure. We accept that it is for others to decide to accept or reject this. We are coming with a solution to deliver integrated eye care to reduce wait lists. What we hope-----

Deputy Róisín Shortall: I am sorry. I appreciate what Professor Keegan is doing, but he knows that the six RHA areas have been decided for the past few years. I am just asking if he is future-proofing his project in order that it can align with the new RHA areas?

Professor David Keegan: Dr. Rogers might speak to that, but the short answer is "Yes".

Deputy Róisín Shortall: I am not undermining the work the witnesses are doing - it is fantastic to see the progress on waiting lists - but I am looking at the waiting lists across the other CHOs. For example, in CHO 6 and CHO 7, there are no adults on waiting lists. Do the

witnesses know what the latter are doing? Is it something similar to what the witnesses are doing or are they taking a different approach?

Dr. Duncan Rogers: In CHO 6, they are currently only running a paediatric community service. There is no adult service and that is the reason there is no waiting list.

Deputy Róisín Shortall: That is one way of dealing with it.

Dr. Duncan Rogers: Yes, in CHO 7, there are two people in post and an adult service has just been started there. They are beginning to decant patient. They are doing a great job, but it is absolutely aligned to the integrated eye care review and parallels what we will be doing in CHO 9 and across the north-east region.

Deputy Róisín Shortall: My final question relates to CHO 9. Up to quite recently, there was a private clinic in Fairview that was involved in tackling the waiting lists. Has that clinic got any role currently? What led the witnesses to change to a different kind of model?

Professor David Keegan: No, through a number of different ways, that clinic has supported and delivered eye care in our region. It is close to the Mater and patients for surgery come in to see us from there. The clinic is obviously a key stakeholder. It is a big optometric and medical eye specialist practice in the region. There are obviously other funding mechanisms within the HSE that support that, in particular for medical card holders and other patients. What we were looking to do was to have a whole-population solution not just based on whether people have medical cards or are insured or not insured, because we realise there is a gap between those patients who do not have a medical card and are not insured and need to be covered by the public health system. There were some gaps within that. We see that also in paediatric service delivery as well. In age bands there are barriers to full access to care. This model was looking at breaking all of those open and ensuring that there would be equitable access to care right across the spectrum. We still work with the unit at Medical Optics in Fairview as part of this process, but we do feel we need to grab a bit of ownership and solutions to the entire problem and keep it within the HSE and then just use judiciously any external providers when it is absolutely necessary.

Deputy Róisín Shortall: Okay. Are there other external providers, apart from Medical Optics?

Professor David Keegan: Not in our region. I am involved as the clinical lead in the retina screening service and there are occasions through that service delivery where we will involve private providers along the way to tackle blips or waiting lists to make sure that we still hit the quality assurance standards, but not with respect to the care that we are talking about this morning.

Deputy Róisín Shortall: But it is a factor in it then. I am sorry, but I thought Professor Keegan was talking about the entirety of optical care-----

Professor David Keegan: Yes.

Deputy Róisín Shortall: -----and that the six organisations he referenced were involved in that, but there are then private providers as well.

Professor David Keegan: Yes, they are used to a certain level. That is a historic use that has built up over time. We must remember that it is also an optometric practice in our locality

that will refer patients in, like any patients will be referred to us. It is another source of referral in that regard.

Deputy Róisín Shortall: But is there a separate funding arrangement between it and the HSE.

Professor David Keegan: That is a historic funding arrangement relating to the community ophthalmic services scheme, COSS, and community ophthalmic medical treatment scheme, COSMTS, that was set up many years ago in around that.

Deputy Róisín Shortall: Professor Keegan makes a very strong case for streamlining right across the health service.

Professor David Keegan: Absolutely.

Deputy Róisín Shortall: I thank him very much.

Deputy Gino Kenny: I welcome all the witnesses. I have a number of brief questions as I am time-limited. I have to speak in the Chamber. Has a calculation been done on the number of people availing of the cross-border directive? That has slightly changed in the past 18 months because of Brexit. Do the doctors have a number at hand of people availing of this directive?

Professor David Keegan: This is one area that does concern us, because we do not have full visibility of the patients that are being referred directly out of the State to avail of the cross-border directive. They are coming from all parts of the country. Prior to the EVSAs, we had made an assumption that the travel of patients from the NERIECS region, that we talk about today, was very low, but it comes from one of my colleagues, Seán Paul Teeling, who engaged with the voice of the customer - with the referrers - we came to realise that large numbers of patients, up to 20 a week from one optometric practice are being referred to Belfast for surgery. This presents a problem for us in that we cannot fully demand a model based on how much capacity we actually need. We are basing it on our current wait list and demographic growth, but we may need to bring more capacity in as we get a better idea of what the full demand is. We have engaged with the optometrists and GPs in the region through this process. There has been really broad engagement and agreement that this is the right thing to do. In fairness to the referrers acting on the patients' best interests, they feel they cannot switch that system off until this is fully up and running.

We are excited to be getting our new theatres so we can demonstrate that tripling of the capacity for cataract surgeries through the Mater so they will not need to do it. However, I do need to point out that there is often a misconception that treatment abroad in Belfast involves patients going to an NHS unit to be treated up there, as they are going to a private facility in Belfast. We actually have the bizarre situation whereby, in another role, I do surgeries in the Mater Private Hospital and I am asked to operate on patients from the NHS service in Belfast who come south to Dublin for their surgeries. There is an odd situation on the island whereby patients in the Republic are going to Belfast for surgery and patients from Belfast are coming to Dublin for surgery. Through NERIECS, we are hoping to provide enough capacity through this model to address demand in the region. The modelling in the slide I showed, carried out by Gerry Kelleher and Alison Dingle, shows that we would hit that point in about three to four years' time. We would then have extra capacity to deal with the other parts of the country, if they have not addressed it by then.

Deputy Gino Kenny: Would it be common for people to come from the North to the South?

Professor David Keegan: I cannot speak for other private hospitals. I have not looked for that information. I do not know what happens across other disciplines. In areas like cardiothoracics and orthopaedics, there are a lot of referrals from the North. More recently, we have been asked to manage vitreoretinal cases, that is, diabetic patients with haemorrhages, macular oedema or retinal detachments that have been referred to us. We have also dealt with cataracts.

We have to look at our capacity. A lot of work is not being taken on due to issues with capacity. The manner in which the HSE is deploying private hospitals to try to help with the public waiting lists is also an issue. That is due to end shortly. The priority will be on helping in that regard. The number is sizeable enough. I do not have the exact figures for the Deputy on the number of patients who come to the Mater Private Hospital through that route, but I can get them for him. The pathway exists back the other way.

Deputy Gino Kenny: A lady came to my office a number of weeks ago in respect of this very issue. I do not deal with it very much in terms of constituency work, but she showed me a letter she received from the HSE which stated how long she would wait for cataract surgery. It is a routine operation. I could not believe what she showed me. The letter stated that she would be waiting up to five years for a routine appointment to see a specialist. I am no medical expert, but it was obvious that the woman's eyes would seriously deteriorate well before the four or five year wait was over. I advised her that she could not wait that long and had to consider alternatives. It is incredible that somebody would have to wait so long for a routine appointment to address the deterioration of her eyes.

Professor David Keegan: I could not agree more with the Deputy that that should not happen. It is the driving force behind this initiative. That is why we have pulled together 200 stakeholders in the region to address it. I do not want answer with glib words. In this day and age, nobody should wait five years for an appointment to see a specialist. That is why our target is that in the first year nobody in the region will be waiting more than 12 months. We can only control what is in our realm at the moment. A weight of 12 months is not good enough. We welcome the Sláintecare goal of reducing that to less than three months in three years' time. Our target is on demand service delivery and we want to be judged at that level.

While the vision impairment of blindness in cataracts is reversible with surgery, we cannot escape the fact that an individual has to live unnecessarily in a first world country with a vision impairment or blindness as a result of that. Our purpose is to reduce the burden of vision impairment and blindness. With respect to cataracts, the sooner somebody sees a specialist and gets cataract surgery, the sooner we will have achieved the goal we have laid down for ourselves.

I do not know whether the Deputy got a chance to read the presentation. Timely access to care, a reduction in waiting lists, treating the right patient in the right place at the right time, transformation and education are all supports to ensure that we reduce the burden of vision impairment blindness such as in the case of the woman who came to speak to the Deputy. It is shocking, but that is what drives this group.

Deputy Gino Kenny: If somebody comes to my office or that of another Deputy, what would Professor Keegan say to him or her in a situation where it will take five years to get a routine appointment? What would he advise in that situation?

Professor David Keegan: I would triage again. One aspect we are considering is the quality of letter that is sent to patients. That is not to bounce things back to a GP or optometrist.

What we have heard loud and clear from our work with the cataract team, led by Mr. Tim Fulcher and Dr. Lisa McAnena, is that when they worked with standardised referrals, GPs wanted optometrists front and centre and engaged on this, with support from GP services. That would ensure more accurate referrals coming so that the referral coming in can be risk stratified. That is not the full answer. With that information, we triage urgent patients. A patient may have comorbidities, diabetes or other issues or may have good vision in one eye. Some cases should be expedited. In this day and age, nobody should be waiting five years. I can only talk to our region, and the target is to reduce the time involved to less than 12 months by the end of the year for everybody. Within three years, the target is a zero to three-month waiting list as an absolute.

Unfortunately, patients are accessing care through emergency services. We have a disproportionate number of patients accessing the eye emergency department in the Mater hospital, the eye and ear hospital in Cork or elsewhere for care that should be delivered through an outpatient setting.

I would advise the lady to whom the Deputy referred to go back to the optometrist or GP, and for a fresh letter to be sent to state the urgency of her case and request it is triaged appropriately. I am more than happy to discuss the case with him directly. Obviously, we cannot take all cases in, but sometimes it is an index shocking case such as that that drives change. That should not be necessary, but we will react to that and provide an answer.

Deputy Gino Kenny: I thank Professor Keegan.

Deputy Colm Burke: I thank the witnesses for the presentation. I am on the board of the South Infirmary Victoria University Hospital. We have completed a new outpatient ophthalmology unit and two theatres are due to be finished by 1 October. My concern is that there is still a huge waiting list. A new unit ophthalmology unit has been built in Ballincollig which will employ 32 people. The problem is that it has not been fully equipped, something which will probably take another six months. A great deal of progress is being made. The issue is tying all of the units around the country together. My understanding from the presentation is that does not appear to be occurring. What kind of sharing of information is going on between the different units around the country?

Professor David Keegan: That is a very good question. I will ask Dr. Rogers to answer.

Dr. Duncan Rogers: I can speak to the consultant medical ophthalmology community, because it is a small one. There are two posts in Cork and Kerry and another three in Galway. We have a shared WhatsApp group and semi-regular meetings where we discuss what we are doing with our services because, as the Deputy said, they are starting to begin. We are trying to make sure that what we are doing in our individual services is aligned across all services. For example, the most recent discussion was about what we are doing regarding study leave for our teams. We have made sure that is unified across Dublin. We also discussed it with our colleagues in Cork and Kerry. It is a small example, but it is about beginning the conversation to make sure that, in particular with the new services and integrated eye care teams, that we try to make sure that, as much as possible, we have a mirror of practice across the country nationally rather than within the Dublin area or individual CHOs.

Deputy Colm Burke: Is there ongoing consultation between all of the units across the country or is it only between certain units?

Dr. Duncan Rogers: It is only between certain units which have consultant medical oph-

thalmology services.

Deputy Colm Burke: There are 19 maternity units in the country. There seems to be much more co-operation between them. Some units cannot do certain procedures and, therefore, there is a mechanism for referring patients. Do we need to do something similar with ophthalmology and develop far more co-operation? In each area of medicine, there is sub-specialisation. Is that the way to deal with this issue?

Professor David Keegan: There are existing pathways and co-operation between services. Specialist care is delivered in some units, such as ocular oncology in the Royal Victoria Eye and Ear Hospital. Detachment, rare eye disease and inherited retinal degeneration care services are in the Mater, for example. There are those existing referral pathways, but we are talking about integrated care where things would happen more automatically.

I am glad the Deputy raised the example of Cork and the South Infirmary Victoria University Hospital and the move to Ballincollig, because it is an area I look at with great interest. The Irish College of Ophthalmologists ran a specialist symposium on integrating care and on the learnings from what is happening in CHO 6, CHO 7 and CHO 2 and in CHO 9, CHO 8 and CHO 1 with ourselves. We had four presentations, so there is shared learning. Mr. Eamon O'Connell, who is the lead in South Infirmary Victoria University Hospital, came to me after that to discuss it because the roadblock they run into is IT finance, service level agreements and how to get that working. If one needs equipment in Ballincollig but the funding sits in South Infirmary Victoria University Hospital, how does one convince the finance officer in that hospital or the south-west group to free up €80,000 to buy a key piece of equipment? That is the level we are delving into and we believe we need to create that transparent governance structure.

I acknowledge Deputy Shortall's comments about future-proofing that. It is our expectation, wish and hope that it slides across into the regional health authority model as well and that we will have demonstrated form. Then it is demonstrable across the country.

Deputy Colm Burke: The funding for Ballincollig is from the HSE, not the South Infirmary Victoria University Hospital. The building has been completed, but we need funding for the equipment and to get it up and running. Also, obviously additional staff are required as well.

With regard to fast-tracking the waiting lists that exist at present and a co-ordinated approach, and Professor Keegan says that is being done in his area, can we work with other areas to make sure there is the same level of response and delivery within a set timeframe?

Professor David Keegan: Absolutely. I will pass over to Ms Ryan to talk specifically about paediatrics and integration because the CHI is living that with the new children's hospital being built. The learning will come. We strongly feel we have to demonstrate form, not to bring a load of people on board with words and vision. They are nice words, we have had nice feedback here and we know our strategy looks nice on a page, but we want clear evidence that there are reductions in waiting lists and reductions in vision impairment and blindness through this method. It has not been used in this country previously, so it is when it is clear and it looks sustainable.

There are data on slides Nos. 6 and 7 showing the impact of a NTPF initiative that reduced the waiting list for outpatients but that has raised the waiting list for cataract surgeries because there is no balance between the two. We have had NTPF waiting lists for cataract surgery in the past where we have markedly reduced and halved the wait list in some situations. Then the

funding tap turns off and it just climbs back up again.

What is key to this transformation is sustainability. We are also committed to reducing the unit cost for eye care delivery across the board. When we have demonstrated something tangible, it is only then we go to somebody with integrity, our colleagues and the rest of the country and tell them that this is the way to go.

Deputy Colm Burke: Has the IT system NERIECS wishes to use been identified at this stage?

Professor David Keegan: What we have done with the IT team is identify the specification so there are absolute levels. If we opt specifically for one system, we make ourselves non-competitive in that respect. We are going to decide the system. We are due to have a presentation from the IT lead from the Ireland East Hospital Group in two weeks on the VACO, to work hand in glove with the group so we are not building clashing systems.

Deputy Colm Burke: Is there not a problem in Ireland in that we have 1,200 to 1,400 different systems between all the private hospitals, public hospitals and everything else? Denmark started back in 1996 and it is down to 12 or 14 systems and it is working down towards five systems. It has a huge saving as a result. Do we need to make sure now that we co-ordinate not only with IT but with the other sections of our hospital care system?

Professor David Keegan: Totally. If I leave one message today, aside from the resource request, it is for an integrated, co-ordinated, agreed IT platform for this country. This would just build on top of that. It is not only ophthalmology but all specialties would build on top of it.

Deputy Colm Burke: We have done it in maternity services. Four units have a fully integrated IT system. I am not sure whether it has been expanded into the other areas yet.

Professor David Keegan: Yes, it is with Cerner Ireland. If that is working, I do not know why we do not deploy it across. Ms Ryan is dealing with this through CHI. The IT system is an active area she is looking at and how to bring the children's hospitals together.

Deputy Colm Burke: I wish to deal with another issue, which is the treatment abroad. I am hearing quite a lot of complaints. The main complaint I have heard is that if I refer people to Belfast, I will get €50 for every patient referred. I am not sure if Professor Keegan is aware of that.

Professor David Keegan: Who says that?

Deputy Colm Burke: It has come back to me by someone who was there who said, "If you can refer people up to us, we will give you €50 for every patient you refer".

Professor David Keegan: I will not comment on that.

Deputy Colm Burke: That is my understanding of what is being said.

Chairman: Is it an urban rumour?

Professor David Keegan: I am not aware of that.

Deputy Colm Burke: This came from someone who physically attended the facility, where it is advised that if somebody refers anyone else there, the facility will give €50 for every patient referred.

Professor David Keegan: Is this from a referring facility or an ophthalmology facility?

Deputy Colm Burke: It is from the actual facility in Northern Ireland.

Professor David Keegan: A HSE hospital.

Deputy Colm Burke: No, the facility in Northern Ireland.

Professor David Keegan: In Belfast.

Deputy Colm Burke: Yes.

Professor David Keegan: I am not aware of that.

Deputy Colm Burke: Anyway, that is the position.

Chairman: That is the rumoured position.

Deputy Colm Burke: No, this came from someone-----

Chairman: Maybe the committee could follow that up.

Senator Martin Conway: It is a matter for the Garda.

Deputy Colm Burke: It is not because it happened in Northern Ireland. It is somebody who physically attended the facility and I got it from that person.

The issue I wish to raise is where procedures are carried out in Northern Ireland and the person encounters complications when he or she returns here. How is that dealt with? Has it arisen and is it arising now?

Professor David Keegan: The numbers are low. I do not want to be reactionary or sensationalist in commenting on that, but it is a fact that if one does enough surgeries there will be complications no matter how safe or routine the surgery is. Where do they get managed in that context and is there a managed agreement? There is no managed agreement because there is no specific unit that is ready to take the complications, so the patients are referred to the nearest emergency unit or the nearest emergency unit deemed to the centre that is up there. Then the care is taken up by the emergency services of the HSE through the units in this country.

Again, it is another reason that I have a problem with the entire process. We should be facilitated to look after the patients who are referred to us. We operate on them in our facilities. If we cannot do them in our facilities, we do them in an agreement in other facilities and there is a referral back arrangement in place. It is clear and transparent, and the patients know what they are getting out of it. However, this *ad hoc* arrangement of referrals with emergencies does not sit well with me and it is not to the principles of the programme we are trying to advance here today. One of the driving forces at the start of this was that we would deliver care to Irish patients in the Irish jurisdiction and we look after people here. I also have to respect Deputy Kenny's comment about his patients, and we have to work harder to do that. I hope today's engagement shows the committee and the broader public that there is a group of people involved in eye care who are absolutely committed to doing that.

Senator Martin Conway: The engagement today has been very useful. I propose that the committee write to the Minister, endorsing this model and requesting that it be part of the budgetary process. Deputy Burke referred to what is happening in Cork and the collaboration,

communications and so forth. I wish to develop that a little further. Obviously the witnesses have been developing this for the last two or three years and it is well known within the eye care world, as it were. Have they been approached by those in other areas of the country to glean lessons from what they are doing? Are other areas of the country looking at developing a similar model?

Professor David Keegan: We have been approached by our colleagues in Galway and in Cork, and they are already well advanced with a programme from the Royal Victoria Eye and Ear Hospital to CHO 6 and CHO 7 with that. Through the national clinical programme we are sharing lessons from those because slightly different approaches are being adopted. We are probably going for a more entire system change and transformation than the other centres. It is a lot for people to take on board. I think I can speak for the whole team when I say that we have grappled with the challenge put in front of us. We talked to the VACO and, particularly before the first EVSA, to Anne-Marie Keown and Mark Jeffery, who were part of the key team. There have been many moments when we wondered if this is too big a thing to take on. We have been fortunate with our transformation office to be able, with some facilitation, to take it on. The other parts of the country are interested in what we are doing. They will wait and see. There is some agitation about getting going with something similar straight away. Again, I would urge caution. We have to demonstrate true form first in order to be able to promote this for others to take up with integrity.

Senator Martin Conway: Deputy Shortall touched on the area of governance. Clearly, Professor Keegan's team will be judged on its success in reducing the waiting lists. In light of the history of waiting lists in this country, the target of seeing all patients in the region in a period of zero to three month is extremely ambitious. What review mechanisms are built into the plan in respect of the next three to five years?

Professor David Keegan: We have set up a nine-point tracker by means of which we will be held accountable. If we look at the X matrix there, we have listed out a number of metrics that we be held to account on. These relate to referrals, reduction in the total number of patients on our wait list and no outpatients waiting more than 12 months. Some patients are currently some waiting more than 36 months. Also included is reducing the cataract waiting time and reducing the mean cataract waiting time, not just the longest waiters. We are also introducing a mechanism whereby a percentage of patients will receive on-demand care. That will be through our through our eye emergency services and rapid access clinics. This model is working well. The percentage of patients receiving on-demand care will increase significantly over the period.

On training, the number of staff is being looked at. We talk about training and bringing in the number of staff participating in lean transformation events and making sure that we have no unfilled posts. Dr. Rogers just alluded to that as being one the issues in the region. One of the issues in the Mater hospital is when we have funding for a post, we have to fill the post and show the form before we go back asking for money again. We have a finance team that is absolutely determined to keep us on the right track with respect to business cases. This will be the first time clinicians will have had direct access to a full finance team, including coding officers and a health pricing office, in order to have accurate business cases produced that can be accountable after the event. We talk about whether we will do this. There have already been demonstrations between the Grangegorman initiative and CHI at Temple Street around this. I know there are other initiatives planned.

Ms Sharon Ryan: We have had great success in terms of our collaboration with CHI. Some 600 patients have been transferred from CHI at Temple Street to Grangegorman in re-

cent months. We also undertook an initiative last year in Citywest that was a demonstration of patients who would otherwise have attended an acute setting successfully attending another setting. We saw 1,250 patients there. It is really the relationships and the collaboration we have build on that drives it. The patient is paramount. That is what motivates the group to achieve its goals.

Senator Martin Conway: It is remarkable how it has been done so successfully. In terms of physical infrastructure, such as theatres, bed capacity, etc., does the team feel it has enough capacity to deliver these targets?

Professor David Keegan: We have a certain amount of physical infrastructure available but we do not feel we have enough capacity. Coming out of Covid, staff across the whole health sector are struggling with the delivery of care, particularly in the context of distancing rules and restricted waiting times. Despite all of this, the level of clinical need continues to rise. There is a lot of space throughout our system, especially in the community, and we want to make sure we are using that correctly in the first instance. This is all part of our elimination of waste. I am sorry to keep going back to it, but I highlight the model being operated in Ashgrove House and Grangegorman. There are facilities in Cavan, Monaghan, Dundalk, Drogheda, Navan and other locations across the region. Let us get the right equipment, the right staff into those units before we go back to those with the big cheque book looking for capital in respect of this. We are going to try to do this without that, but it may then become apparent that there is a specific unit that needs to come in around this. We would hope to be part of and run alongside the primary care centres that are planned across the country and that there would be provision for eye rooms in those centres. The example is in paediatrics, where 60% of paediatric care in Temple Street can be safely managed in the community in a team like Dr. Roger's or those of his colleagues across the other CHOs. It is testimony to the creation of space wherever possible.

Senator Martin Conway: I have two final and more general questions. Has the Covid pandemic had much of an impact on eye care? Are there many people who are suffering blindness and vision impairment as a result of the pandemic and not receiving the treatment they should have in a timely fashion.

Professor David Keegan: Absolutely. Despite the fact that - and much like the rest of the world - initiatives were put in place and that we had a very good, co-ordinated initiative with our colleagues in the eye and ear hospital in Ireland East Hospital Group right at the beginning to create guidelines for referrals, we know there was a great deal of fear. The impact of Covid is on the public, the patients, the staff and the people supporting the healthcare services in this country and all have been affected-----

Senator Martin Conway: Does Professor Keegan have any data or specific figures on this?

Professor David Keegan: I am sorry that I do not have specific figures. I did not prepare figures relating to Covid for this meeting.

Senator Martin Conway: That is okay.

Professor David Keegan: There is a hump to be seen on slide No. 6. This it shows how the zero-to-three-months waiting lists have gone up significantly. There was a dip around Covid, so people were not getting referred and the hump represents the period after that. That is what scares us. We have reduced the number of long waiters for now, but if we do not have the capacity in the system through the initiatives we are talking about, then down the line those

patients in the zero-to-three-months category will become people who have been waiting 13, 15 or 18 months. Some of those could be patients in danger of permanent irreversible blindness because we do not have all the new referral piece up and running and that is what we are looking to try and tackle through all these initiatives.

Senator Martin Conway: In terms of ophthalmology, eye care and trying to eliminate preventable blindness, are there any policies that could be implemented by the Government that are obvious to Professor Keegan but that are not currently being implemented?

Professor David Keegan: We were here a number of years ago trying to advance the national strategic eye care review and a framework for a strategic eye care review. That was not adopted as policy at that point when the Government came in around that stage. We are bringing it in at regional level. We have a very good model-of-care document, but we need to manage the referral piece. For those in the community looking to access care, that is what this does. Regarding Mr. Mullaniff's point earlier about access to early rehabilitative measures through the ECLOs is another key piece. It would be good if the Government, the committee and policymakers could see that this is a template to ensure that the right to early access care is embedded in policy and that the staff working in the system have the support - and the right to that support - to allow them to deliver that care in a timely fashion. There is a great deal of stress and concern among my medical colleagues, the nurses, the administrators, the technicians and all the other the staff across the service. We know we are not getting to everybody quickly enough. There is a commitment in the plan for that . After that, we have rehabilitative care. Audit and research are embedded in this in order to allow us to continually learn. This will be quality assured, but we want to have an internal quality improvement process as well. Our goal is to have constant improvement.

Senator Martin Conway: That is great. I thank the Chair and the witnesses.

Deputy Róisín Shortall: I have a few additional questions. On the issue of the figures, could the breakdown of that €44,000 mentioned be provided?

Professor David Keegan: We will give the Deputy the breakdown-----

Deputy Róisín Shortall: It would be great to get more detail because, obviously, there is more involved than is shown by the figures we have received.

Is Professor Keegan of the view that this model can be replicated in other parts of the country? Is there much interest from his colleagues throughout the country in doing something like this?

Professor David Keegan: Yes. That is sort of similar to Deputy Burke's query. There is interest. We had a college meeting and a special session on this, and there has been much interest among our colleagues afterwards. It ranges from, "Why cannot we do this now and can we just get on board?" to "We will wait and see how you get on." Some might be a bit cooler about it. It is a lot of work to create a coalition of the willing, because there is nothing statutory and people are very much giving up their own regular time.

Again, I am sorry to keep going back to that point. We feel very strongly about this. We have to show we can do to it. We are talking, and we welcome the committee listening to us today. We hope for its support. We have to deliver what is being watched – what we are doing. We are only too happy to share the learnings through webinars and presentations. There have been mistakes along the way and challenges we did not predict. I am sure there will be a few

others, particularly when we get into the meat of service level agreements and legal matters. As Dr. Rogers pointed out, the service level agreement between CHO 9 and Temple Street works. The agreement between the Mater and CHO 9 also works. There is a service level agreement between Mater and CHO 1 in respect of the new provision service. There is also an agreement involving the Mater and the RCSI Hospital Group. There is already a network in place off which we can work. We are not creating anything new. There are nuances to each area, and we have to respect that. We are hoping, through demonstration of flexibility, we can do it. It is absolutely deployable across the country.

Deputy Róisín Shortall: Obviously, a key part of Dr. Rogers's role as clinical director relates to integration and bringing the various players together. Was there an additional cost in this regard or was the post already in existence? Did the post come with responsibility for integration?

Dr. Duncan Rogers: The post is a new one, but it is funded by the HSE. I am employed by the Mater, which is paid by the HSE for me. My clinical governance runs through the structure of the Mater, so I am beholden to the CEO, the clinical director of the surgical directorate, and Professor Keegan, as my head of service. However, my line management is through the HSE, namely, my general manager, Michelle Ford, and the head of primary care services. The funding was from the HSE. To my knowledge, are the other medical ophthalmology consultant posts throughout the country.

Professor David Keegan: I wish to come in and clarify that. It is important to do so. That is how the first post that Dr. Rogers was employed under was done. The contract was routed through the eye and ear hospital or the Mater. The most recent post, which is just in front of the consultant appointments committee, is between Cavan and the Mater. That contract is being held in CHO 1. It is a very similar work arrangement. That is what I meant earlier about service level agreements respecting the different needs and wishes of those areas. It is showing a bit of flexibility. They are held both ways. I apologise for interrupting.

Deputy Róisín Shortall: On costs, one of the things for the RHAs is ensuring population-based funding allocations. Under the existing arrangement, how do the populations of CHO 1, CHO 8 and CHO 9 fare funding-wise for eye services compared with similar populations throughout the rest of the country? There is this perennial problem of postcode lotteries tying into funding. Is it a case that those three CHOs, compared with others throughout the country, have additional funding?

Professor David Keegan: To the best of my knowledge, they do not get additional funding in comparison with the other CHOs. The caveat is the extra funding was provided under that pilot programme we referred to earlier, to start up the model through that. Extra funding went to CHOs 9, CHO 6 and CHO 7. Since then, extra funding has gone to CHO 4 in respect of delivery for the south. As far as I am aware, no extra funding has yet gone to CHO 1 or CHO 8 in respect of this. Unfortunately, we do not have the finance team and Michelle Ford with us today, so that is as clear of an answer as I can give the Deputy.

Dr. Duncan Rogers: The funding that was given to start this up was offered to all the CHOs. It was just taken up differently at that point.

Deputy Róisín Shortall: The asks that our guests set out for us seem quite modest, given that the project is covering three areas. What contact have they had with either the HSE or the Department of Health in the context of a commitment on that funding?

Professor David Keegan: We have had much contact and made a few submissions. They are sitting on our business case and funding request at the moment. I understand – I could be wrong – but it was relayed verbally to me that it is with the Department of Health for ratification. Within that, part of the funding has come through to Ireland East Hospital Group for the theatres. If the Deputy sees a business class that includes it, we have already secured the funding for staffing in the new theatres and we can get on with that work.

On the funding for NERIECS regional staff and equipment, we have just put in for one year's worth of equipment. We think that will be enough in the medium term and it is still to be signed off. The third part of that equation is the transformation costs. It is to build up our own transformation team to make sure we are not delivering waste, such as through a Lean Six Sigma black belt, and to wean ourselves off our external consultants, who we are indebted to. The IBM Simpler team sort of gave us the idea and facilitated. However, everybody who has been involved, in particular at senior level, has grown on this journey and is learning a lot. We are quite confident we learn from within. Those are the three aspects, namely, the theatres, the regional plan staffing and equipment and, finally, the transformation costs. There is one typo in the slides, but that is corrected in the statement.

Deputy Róisín Shortall: I just wish to clarify what role the committee might play in terms of urging the Department to accede to that request.

Professor David Keegan: I am encouraged to see the ask is modest. I thank the Deputy.

Chairman: Is €9.5 million modest? That is the ask over a number of years.

Deputy Róisín Shortall: Yes, over three years.

Professor David Keegan: Yes, it is over three years. It is more upfront because of the equipment costs and then that sort of dips off as we come off the transformation costs, so it is actually coming down. The finance team does not want to project much beyond that because one of the issues we have is if we are very successful and, say, quadruple the number of cataract treatment, there are consumable costs in there. We do not want to come back and feel like we were misleading anybody. If our level of activity goes up, so will the costs. What we would like to be held to account about, is perhaps not the overall cost, but the per unit cost. If we come back and the ask is more than that, the fair questions back to us would be how much activity we had done, how many more patients have been seen, how many more surgeries have been done and how much more sight has been managed, rescued or saved. We will absolutely be held account on that regard.

Deputy Colm Burke: Coming back to what I said earlier regarding the Ballincollig centre, I just got a message saying that there was a reply to me from the Minister yesterday that just arrived this morning. It indicates that the funding will be provided for the equipment and that the unit should be fully operational by the end of the year. That is on paper at this stage, so I am just hoping that is what will happen.

On cataract operations and theatres that are used exclusively for cataract operations, in a full day of, say, from 8 a.m. until 5 p.m., what kind of numbers can be put through? I know it will vary from consultant to consultant. I am just asking generally. What can numbers can be put through in a full day? Obviously, there would be have to be a full theatre staff and a full back-up support staff as well.

Professor David Keegan: Adjacency is important. Sligo has provided a very good model

for this. Units in some private hospitals in other countries also provide good models. If you have adjacency and are fully stuffed, you should be getting up to around 16 or 20 cataract cases per day. The realities of delivering care, particularly at this point in time, are different. I have done initiatives recently on patients who have been waiting longer on the waitlist, and that level of volume is not delivered at this point in time. The cases have progressed, the cataracts are slightly more difficult and there are comorbidities and other issues. Therefore, it is not quite at that level. However, that is the ambition to get up to. We will start off in the Mater theatres at about 12 a day and going to 16 a day, which is one every half an hour. Remember, we have to mind our staff. For this to be sustainable, we cannot burn out the teams. It is a balancing act. Conservatively, the figure is 16. With the team and engagement we have, I would be optimistic that the figure will increase.

Deputy Colm Burke: What about inpatient as opposed to day care procedures for cataracts? What are the numbers for inpatient care?

Professor David Keegan: The figure for inpatient care is a fraction less than 1%. We do a lot with general anaesthetic. At the Mater, five inpatient day beds are allocated to our specialty because we are part of a general hospital, yet we still would deliver 54,000 outpatient and emergency visits, 10,000 injections and 3,500 surgeries. The vast majority are day cases, so the day case unit with the new theatres gives us a real opportunity. That is being replicated in other units around the country. We do pretty much all of our work on a day-case basis, aside from emergencies, such as those involving intraocular foreign bodies, ruptures or medically unstable patients. By unstable patients, I am referring to brittle diabetic patients or people with other comorbidities.

Deputy Colm Burke: Regarding the use of facilities, we are talking about putting in two new theatres in South Infirmary Victoria University Hospital. Obviously, the important thing is to ensure that they are used effectively. In other words, that they are used all the time. That applies across the respect of country. Is there a process for dealing with waiting lists? I understand fully that there are staff pressures. Could day cases be done on Saturdays? Is that feasible? I also understand that you must care for the teams because there is no point in wearing people out completely. You lose staff as a result of doing so.

Professor David Keegan: The short answer is "Yes". The Deputy gave the long answer. You have to mind your team. If there is anything that has been very stark, and Ms Ryan, Dr. Rogers and Mr. Mullaniff will speak to this, it is particularly the case in front-facing healthcare. I am not here as an apologist. It is just the reality on the ground. We could do Saturdays, and have done in the past. I would say every eye unit in the country has had Saturday waiting list initiatives. There is a lot of excitement and enthusiasm around them because you bring down your waiting lists. Patients who have been waiting for surgery for ages are happy because they get the surgery done. It is a very satisfying procedure to do. I am very lucky that I get to do it. My colleagues feel the same, but to do that in a sustainable way, you must do it differently. We have an acute nursing shortage in our hospitals and ophthalmology is not immune to this. We need to look at it in the context of the cost of living, recruitment, where our hospitals are located and how we make sure the terms and conditions are right for our teams so that they can deliver that care. It comes back to sustainability. If we can do that, we have a sustainable model. I agree with the Deputy. When we have facilities, we should ensure they are running for longer but we should not stretch our staff until we get the staffing.

Deputy Colm Burke: You are talking about ophthalmology nurses, junior doctors, registrars and consultants. Starting with consultants, what kind of targets should we set as regards

planning for the future? Do we need to increase the numbers? What are the kind of numbers we are looking for? Another question I have to ask is whether we have enough people in training in this area and whether we need to do a lot more to encourage more people into training in this area.

Professor David Keegan: Dr. Rogers is looking at that capacity piece around staffing, so I will leave that question to him.

Dr. Duncan Rogers: This is a slightly measured response. As we rejig capacity and the lean process, we will be able to see more patients with similar amounts of staff. The Mater hospital has 7.4 whole-time equivalent consultant posts. There are more than seven consultants but across the board, we have that. We see 32,000 outpatient attendances per year. The next closest person is the surgical director, who sees 55% fewer than that. We have a significant mismatch between what we are seeing and what would be the rational and safe figure in terms of keeping our staff from burning out. Across the board and as long as we get sufficient space and do the lean processing, we could be looking at an increase of about 20% in staffing at consultant, non-consultant hospital doctor and allied health professional. If we want to get to a perfect state where we can train staff safely and they enjoy their jobs and are not burning out and there is sustainability, there is a large amount we can do with lean processing and being careful about how we use our space but at some point, there will be a need for an increase in uplift in staff. We are not ready to ask for that now because we do not have the sensible data to present to this committee.

Deputy Colm Burke: Regarding the numbers in training - the people starting off as junior doctors and going on to become registrars or senior registrars - do we have enough people coming up along the line? There will be consultants and other staff who will retire. Are we doing enough planning in this area?

Professor David Keegan: We are. The work of the college has been really progressive in this regard. Irish ophthalmic training has improved exponentially over the past ten to 15 years. Planning for the needs of the future started for medical ophthalmology posts like that of Dr. Rogers, who trained in the UK, seven years ago if not before that, so we are looking to do that and to have a blended model with a combination of medical ophthalmologists and surgical ophthalmologists with a target statement - please excuse those lean terms - of about 50-50. We have a lot of doctors in our system. We will still rely on those consultant approvals being signed off. It comes back to setting up the system, working with a finance team that will help you create the business case properly, putting metrics around each post, submitting it to the HSE and having it approved and having accountability. We feel strongly about accountability around what we do. In paediatric care, and I have to represent our colleagues here, particularly Stephen Farrell and Sarah Shanley, about paediatric shortfall about which Ms. Ryan may have a view ahead of moving into the children's hospital.

Ms Sharon Ryan: From a clinical perspective, paediatrics is a niche specialty. Ophthalmology is also very niche. We have undertaken workforce analysis and will continue to analyse and identify what we need ahead of the move to the national children's hospital. We will do the same for nursing and health and social care professionals.

Deputy Colm Burke: Is there a shortfall of ophthalmologists for child healthcare?

Ms Sharon Ryan: There is.

Deputy Colm Burke: What percentage would we need to increase it by? Would it be 50%? What kind of numbers are we talking about? I am not tying Ms Ryan to it. I am just looking for a rough number.

Dr. Duncan Rogers: I would say it is about 20%. For example, three posts in Galway that are being advertised have a proportion of paediatric work. Those interviews are going forward in the next month or so. We are unlikely to be able to fill them all.

Senator Martin Conway: Do a lot of ophthalmologists who train here then go abroad?

Professor David Keegan: We would encourage our trainees to go abroad for fellowship training and specialist training. The vast majority now come back.

Senator Martin Conway: Good.

Professor David Keegan: I went abroad in 1997. A consultant was appointed the following year and was the first new appointment in Dublin in ten years. That vista has changed dramatically so we are in a better place than we were in 1997. There is no doubt about that. We do not have a lot of involuntarily exiled ophthalmologists abroad. There are more posts but, again, you must look at the choices regarding these trainees. We have a very good training system here. They then go to the US, UK or Australia for further fellowship training so they are very well-trained. We must then look at what we are bringing them back into. It is a broader discussion than this morning's discussion. We need to look not just at the working environment but at whether they can advance initiatives such as those we are discussing here where we carry out really innovative care or innovations in a laboratory or research. There is a large package. We will often talk about what a consultant does. A consultant is a clinician, a teacher, an academic, an advocate and a manager. A consultant is all of those things. People want to do all of those things and there are various levels. Some of my colleagues accuse me of just being an administrator these days, but I prefer being a surgeon.

It is important that the right infrastructure is there to bring people back. Very often people are looking for clarity. One of our trainees is in Birmingham, which is a real centre of excellence for neuro-ophthalmology. It is niche but it is a vital need and we need more neuro-ophthalmologists. Already this trainees has ideas about what should come back in. Another colleague who is just back in a locum position trained in the National Hospital for Neurology and Neurosurgery in Queen's Square in London. We should encourage them to come back but we need to make sure that when they do, they come back into a position they want to go into and stay in because then they will deliver the care the public needs. We make sure that when they come back to Ireland, it is into a post they want to go into and want to stay in, because then they will deliver the care the public needs. One of my catchphrases for many years, if I am allowed, has been that our job is patient care followed by sustainability of the profession, which is future patient care, and everything else outside of that is a vested interested. That is sort of the principle we are trying to advocate in and around this particular plan and across the country. There are, therefore, many facets to it. It is not a simple fix. We will stumble along the way, but I would rather stumble with this team than any other. We regroup and we go again.

Chairman: Dr. Rogers stated that there is a gap in the context of having to get people to come over from Britain.

Dr. Duncan Rogers: An orthoptists is a particular type of specialist. We have some short-, medium- and long-term strategies we are trying to enact. The long-term strategy is to build,

potentially with Technological University Dublin, an orthoptic degree programme where that is pushed out to Ireland from the universities that already do it in the UK. We are also at three sites now where we have orthoptic trainees who are in UK training programmes and who are coming across for a degree of their clinical experience to Ireland so we can showcase what Ireland has to offer. That is in the short term.

I am the only English consultant ophthalmologist I know of in Ireland. It is probably a slight misrepresentation to the committee that one of the four people in front of it is a UK-trained ophthalmologist rather than an Irish one.

Chairman: That is an existing gap.

Dr. Duncan Rogers: It is a significant gap. When I talk to the clinical lead, Professor Billy Power, and Ms Siobhan Kelly, and to the general managers and heads of primary care services across CHOs 1 to 9, inclusive, it is one of the crucial problems we face, particularly in paediatrics and children's eye care services. I welcome anything this committee could push forward. We used to have bursaries to send Irish students to the UK to train and come back. I would welcome talking to anyone about anything that could be offered outside of this committee.

Chairman: That would be worth pursuing. We all accept that the current system is not working. It is refreshing that the witnesses have come in today, and to hear then talk about figures coming down.

The example was given of Johnny and his wife. We all know someone who fits into that category. Deputy Gino Kenny spoke about one of his constituents. I remember dealing with a man who was a carer. He would not have been as old as Johnny in the example given in the slide presentation, who was 77. The man with whom I dealt was caring for his wife. He could only see shadows. He ended up going for an appointment through what, I presume, was the triage system. This was not in Dr. Rogers' area I might add. The man was basically asked the question of how he got to the appointment. He said he got a bus and then had to walk from the bus stop to the clinic. That seemed to be it. He was told then to come back in 12 months. He was devastated after this. We spoke in terms of the pathways. He thought this would be a pathway for him to get treatment. He eventually got it but that period of losing his sight, particularly with the added pressure of being the carer, put huge pressure on that family. Again, that is just an example; there are others. I could probably give the example of younger people I know as well and the challenge of getting to see a consultant while slowly going blind.

Are there eye conditions whereby if a person is not seen within a particular timescale, there is no going back, and that person's eyesight is going to go? How rare are those conditions? It is a broad question, but I think it is relevant to the waiting list. We got clear figures from the witnesses. Deputy Cullinane has other figures. There is no doubt there are people around the country. It is out of desperation that people travel to the North or wherever else in order to try to get treatment. As has been said, it is ironic that people are coming in the opposite direction. Again, we do not hear of the busloads of people travelling. At least, I have not heard of them doing so. Hopefully, it did not happen that busloads were coming from the North during Covid-19. I suppose it is selling hope. The fact that a person cannot see, or sees shadows, transforms his or her life. It is a huge plus for people's lives that they can get this treatment. On that point, are there conditions on which the witnesses could refresh the committee's knowledge?

Professor David Keegan: In terms of irreversible sight loss, the answer is "Yes". We alluded to some of the conditions earlier, namely, glaucoma, age-related macular degeneration

and paediatric amblyopia. Those are three examples. The reason we picked those care pathways was not just because of irreversible sight loss - it is the volume of patients that present with those conditions.

Again, the data gaps we have in our society and in our health service create problems in the context of planning properly. Our colleagues who deal with glaucoma are anxious about not knowing the exact glaucoma demand that sits in the north-east region. We are going about that now. The story of Johnny is real. I am sad to say that is a real story of a missed opportunity. If we have learned anything over the past few years in our health service, it is that we should try to minimise missed opportunities. Unfortunately, eye care delivery sometimes gets pushed a little bit to the side. It is a little bit of a Cinderella specialty, but we cannot ignore it. If anybody in the room or on Zoom just stops and thinks for a minute what his or her life would be like with a vision impairment or blindness, it does not bear thinking about.

We have got to do our best. We are the professionals. We must go and deliver it and intercept. There are opportunities early in these disease pathways for glaucoma, paediatric amblyopia and age-related macular degeneration. That is what we mean by needless blindness or preventable blindness. Yes, there are a raft of conditions that are currently non-preventable. My specialty is inherited retinal degeneration and retinitis pigmentosa. Those treatments are coming on stream. We are here today to talk about those so, yes, there are lots of patients with those conditions. We need to get them into us. Dr. Rogers might wish to add something.

Dr. Duncan Rogers: To give the Chairman context, in the service at the Mater hospital, glaucoma is a single disease with which a person will have no symptoms until he or she is at the very end stages of it when he or she will suddenly be unable to see. At that point, there is no treatment. That is the second-largest group of patients we see in the Mater. It is not a small number; it is a huge number of patients.

Both glaucoma and age-related macular degeneration, as the name suggests, are linked with increasing age. As the Chairman will be well aware, within Ireland, we have a disproportionately large population that is moving from the over-65s. Over the last 20 years and in the next ten years, it is going to increase by 35%. Glaucoma is our second biggest group, and it is going to increase by 30%. It has already increased by 15%, but it will increase by 15% again in the next ten years. It is a huge number of patients. It is not a minority. It is a large number. Those waiting lists and the programme we are delivering here, or trying to in the north-east region, will save vision in a very meaningful way for a huge number of patients.

Chairman: How are they picked up? Are they picked up as a result of their attending clinics?

Dr. Duncan Rogers: At the moment, it is predominantly in optometric practices when people go in for appointments. I would counsel anyone to go in for their routine yearly or two-yearly test at the optometrist. The optometrist will have a look in at the back of the eye and do a field test. That is where we pick those things up. It is entirely asymptomatic - there are no symptoms at all. A person's vision might be fine to a certain point and then he or she might have no vision. If we look at the trajectory of somebody with glaucoma, he or she will not have symptoms until they get to about that certain point. Again, part of that reason the north-east region is bringing in optometric practice in a much more integrated manner is so we can pick up those patients. The work we have already done within the north-east region is to look at a unified referral pathway from the optometry practices into the hospital.

Senator Martin Conway: Do the witnesses have any figures regarding the proportion of the population who go for their two-yearly eye tests? Would it be 50%? Is it less than that?

Professor David Keegan: It is interesting. I was presented with some data in the UK around this. The NHS has a system of free eye tests and 7% of the people who are offered that examination in the UK go for it. That gives you an idea. We do not have the exact figures-----

Senator Martin Conway: If 93 do not in the UK, it is probably something similar here.

Professor David Keegan: Glaucoma is the second leading causes of blindness on the blind register that the NCBI holds. That is a significant group of service users who need to be looked after.

Mr. Aaron Mullaniff: I am presenting here today on behalf of a patient organisation and as a keen stakeholder. There has been a great deal of focus on the numbers, the contracts and the nuances in the structures in the region and the integration challenges around that. We need to bring this back to the real and the felt need, and what is happening on the ground. In the context of what often comes through our door before going through the hospital door, the fact that getting a diagnosis is often seen as success is a little strange. The reality is that one in three ophthalmology patients is found to be waiting in excess of 18 months at present. That does not mean they are just waiting 18 months; they can be waiting longer. I am speaking in general. That period can be really testing; it can be really tense. Given that sight is the sense that people fear losing most, it is not okay, from an organisational perspective, to sit here and be okay with that.

The NERIECS initiative is already showing early success. I want to again highlight the integration into the community, where we have embedded the ECLOs in the north east. Typically, patients have been obliged to wait three and a half years before they come through the door of the national sight loss agency. In some instances, that is now down to three and a half weeks. As Dr. Rogers indicated, what we tend to see most is macular degeneration. This condition is age-related. We have an ageing population. There is a boom expected. It is life-changing. Whether you are a parent of a new baby, whether you are a small child or whether you are an adult who has acquired sight loss in the course of your working life, sight loss impacts on all aspects of your life and all aspects of your family. From the NCBI perspective, we are here to galvanise people when it comes to the NERIECS initiative. We want to transform the way in which we deliver medical eye care across the acute and community settings. We are fully behind the VACO. In the context of the structures and governance that have been put forward - on which this team has worked so hard - we really are encouraging the State and, in particular, the committee to consider providing the necessary funding required to drive the implementation of the NERIECS model. It is the first model we have seen in a long time that we have been part of. It is showing early results. In the interests of our patients, we all need to do more collectively. There is a certain amount of responsibility, not just on this team but also on the committee.

Chairman: This question is probably bizarre. Professor Keegan mentioned that he set out to innovate and, ultimately, solve this problem in the interests of staff and patients through the adoption of lean principles. What did he mean by that?

Professor David Keegan: Lean principles are a methodology devised by the Toyota corporation to eliminate waste from doing things for production. Over the past few decades, this methodology has been applied successfully in healthcare settings. For example, Michael Dowling, a Limerick man who runs the largest hospital group in the US - it is based in New

York state and Long Island - adopted lean principles about ten or 12 years ago and reduced waste significantly and improved throughput and patient care. The hospitals in that group are down to a ten-minute wait for patients when they are in the actual setting and an on-demand service. You cannot directly compare with the US because it is a different healthcare system. I am just talking about adoptees of this. A colleague of mine in Milwaukee invited me to visit his laboratory. He is an adaptive optics expert. He knew I was interested in lean principles and introduced me to the head of the service there, who is a sceptic. They had been adopting this across a few units in the US and he reluctantly came to the party to institute lean management. He was totally converted and wrote a book. We have given that book, *Synchronicity*, out to the team. It is about eliminating waste. It improves the patients' outcome, they get in to see you quicker, they are not waiting there as long, they get out on time, the doctors and the staff get out on time, and that is something we are looking at doing.

There is a great deal of science and methodology behind this. That is what we are being coached on. We bring everybody with us. It is a collaborative effort. The nurses, doctors, administrators, porters, staff nurses and ward attendants come into a room and we go through our current state asking "How are we doing things" and we all agree we are here today because we are not doing things well or well enough. Then with some free thinking and some tools we identify what the ideal would be and ask ourselves what would be the best way to run our service in an ideal world. We have integrated healthcare, on-demand care and people waiting two weeks for cataract operations. That is the ideal state. In between, there is a future state that is attainable. We write up these what are called ideal principles.

I do not wish to sound too evangelical about it, but we write all these down. In that process, the team asks "What are we in control of?" We say there are 26 things that would be our route to an ideal state. Then we grab control of it because they say "What can we do now as a group?" When it comes to patients having a nicer experience when they come it, we state that we can do that now and that it is up to ourselves. So we tick that box. When it comes to integrated IT system that runs throughout the country, we will say that we cannot do anything about that because it is in the hands of others and that we have to lobby in respect of it. The box in that regard will remain empty. We go through everything in that way. It is remarkable how much of it is actually in our own hands. It is empowering for the teams, and they get on and start doing it. We have been through 11 of those events. People give up their time, rearrange their lives and come in to participate in them.

I came into this at a very basic level, having just read a book on lean principles. With the guidance we get from the experts or the transformation office in NERIECS, and with external facilitation, we are now at a wholly different level in our thinking. It is about empowering people. We talk as a group about our thinking and we bring that into other aspects of what we do. The core principle is to eliminate waste, go again, eliminate more waste and go again. That is patient-focused, and it never stops. That is the goal.

There have been a few breakthroughs. I refer to the purpose pyramid developed by the Royal National Lifeboat Institution, RNLI. In very simple terms, the purpose of the RNLI is to save lives at sea. It does so by having highly-trained staff available at short notice. Underpinning that is the funding and training to support it. In our case, the purpose is to reduce the burden of vision impairment and blindness and improve measures to supportive measures. It is supported. Our goal is not to reduce waiting lists. I will be absolutely honest. Our goal is not to have the right patient in the right place first time. That is not our primary goal; it is our secondary goal, because doing that helps us helps us to attain our primary goal of the reduction

of avoidable preventable blindness.

Chairman: Will Professor Keegan expand on the virtual diagnostics? He mentioned that it will be the end of the year before this happens. What exactly is involved? Will a patient go into a room and sit down in front of a machine and the consultant will be on the other end of the line or whatever?

Professor David Keegan: I am conscious that I am doing much of the talking. I would like to bring my colleagues in a little more.

Dr. Duncan Rogers: The virtual clinic involves two components. First, there is the information that needs to be reviewed. For most patients, that is a measurement of their current vision and some sort of imaging at the back of the eye. The nice thing about that is you can have sites set up to do that throughout the region - for example, Cavan, Navan, Drogheda - where it is local to the patient. Then in the Mater you have a room which has a computer set up, a webcam, a telephone or whatever communication method you wish to use. We will communicate by whatever means the patient chooses. This is because some elderly patients do not want to have Zoom calls. They would like a nice phone call with their provider. That is enabled with sufficient Internet bandwidth in order that you can access all the imaging easily. The consultant will come in to a 15-patient clinic to review all of their virtual images and then contact the patient via phone or if it is their preference they just get a letter in the post. It is very much driven by what the patient wants. It means that those 15 patients will have not come from Drogheda, Cavan or Navan to us. They will not have o get themselves there. They will not be sitting in the outpatient clinic of a tertiary centre waiting to see a consultant when they do not need to be.

Within that virtual setting, one can start to build layers in and train up the optometrist to the top of their licence in order that they can look at the stable cohort, but still with governance from a consultant. One can be a force multiplier of consultants. Very often, consultants are expensive people to have in a healthcare system. It is about using the allied healthcare professionals to the highest level. The virtual clinic really does that. In the Mater hospital, we have a designated space, we have the IT capability ready, we have the links ready to go and the shared spaces for imaging. We are just about to tip into it. We also have consultant colleagues who have committed to providing their time to these virtual clinics.

Chairman: Very impressive. Dr. Rogers touched on a point there, as raised by my colleague Deputy Burke. In the Deputy's area, the building is in place but the staff are not. In Dr. Rogers' experience, is this common across the system? It would appear to be common within the hospital systems that we have two MRI machines in one particular area and a delay in another area, because it is not working or so on.

Professor David Keegan: I will try to answer this one briefly. Yes it is common. On the co-ordinated effort, it is part of lean and what we call the "just do its", when one gets a group of people together the stuff is so obvious we wonder why we did not do it. Deputy Shortall alluded to this earlier when we spoke about integrated care. One of the early things we did was a gap analysis. We considered our four key bits of equipment: a colour camera; an optical coherence tomography, OCT machine; a biometry machine; and an visual fields machine. These are the four core bits of kit. We then considered the staff to run it. This is in the primary eye care review under the heading of staff and includes a consultant ophthalmologists, orthoptists, optometrists and nurses. Then, when we looked around the region, some were very well staffed but had no equipment. They were in a very basic room with only so much they could do. Then the patient was sent on somewhere else in the system for that. Likewise, other areas

had the bells and whistles equipment but only had a consultant in two days a week. The equipment was sitting fallow for the rest of the time. Mark Jeffrey and the office have done that gap analysis. The equipment ask in our budget submission is very targeted. For example, we need a particular piece of equipment in Beaumont Hospital. We do the cataract surgeries based out of Beaumont Hospital. We see some 300 patients per year who have to come to the Mater Hospital be seen in the clinic there, have tests done in the Mater and the surgery done in the Mater but then must go back to Beaumont Hospital for their follow-up. With the purchase of a machine the costs €70,000 those patients could get their tests in Beaumont Hospital and they would not have to come to the Mater hospital for anything other than their surgery and then go back. We are looking to recreate that across the hospitals in Beaumont, Blanchardstown, Cavan and hopefully Navan. We only need to lift up 7% to 10% in all of these areas. It is a cumulative effect. There is a gap. We have identified the gap. The request in our budget submission is that the gap be closed.

Chairman: Does Professor Keegan see that as one of the advantages or potential advantages of the RHAs? He indicate that he is waiting with interest for their view in respect of that matter, but will it enhance or detract from the proposals being put forward today? Are the witnesses concerned about that new structure? They seem to have people on board at the moment, and there appears to be quite a lot of interest in it. Do the witnesses believe that a new structure may look at this completely differently, or would detract from it? The advantage of having a system in place that is clearly working one would like to think that the new structure will look favourably on it. That is one of the worries I have about these multiple regional structures. With regard to questions about equipment in a particular area, who will make the final decision about who gets what? Will the decision be made by the regional structure? Shortly after this meeting, there will be another meeting at which the regional structure will be discussed. Do the witnesses have any concerns regarding the structures that are coming down the tracks very quickly?

Professor David Keegan: Let me be clear; we really welcome the regional health authority structure coming in. We believe the model will slip across and will be transferable. As part of that, we did go into a huge amount of detail. We included the responsible approval support information table on who we are responsible to, who we are accountable to, who we communicate with and who we inform. We are obviously accountable to the CEO of the Ireland East Hospital Group, and, ultimately, all the way up the chain to the head of the HSE and the Department of Health. We all have this accountability but we have different sorts of lines. We bring everyone on board but, ultimately, responsibility for this decision lies with others. We read the media, we read the comments from patients and from politicians in the media about the waiting lists, which is exactly the story Deputy Kenny outlined to us today. We are alive to that.

When I took over as head of department in the Mater hospital in 2018, the greatest stress was how do we tackle this. We cannot tackle this by conventional means. As Ms Ryan stated in respect of the paediatrics group, we must look at it differently. We are trying to present a solution. If it does not get adopted in the end I would like an explanation of what is better. We have said this in our backup. If an alternative comes up and is presented to achieve these goals, we will sidle the machine in behind that. We just ask that it is still true to the purpose pyramid of elimination of preventable blindness. We are trying to provide a solution rather than coming in here and just saying that we are sinking and that we need help. We are sinking, we are struggling and patients are struggling but we believe we have solution on which we have been working for 14 months.

Chairman: Again, time is not in our hands. The witnesses have given the figures for the numbers of people who will be looking for services and supports in Dublin in 30 years. Perhaps, on that note, we will end the session. Is there anything else that the members or witnesses would like to expand on? I appreciate the witnesses coming before us. This has been a very useful discussion.

Senator Martin Conway: Perhaps the witnesses will come back in to do a review on how successful they have been.

Chairman: Let us see how we get on with the asks. The group's work is very impressive.

Professor David Keegan: I thank the Chairman. We would be delighted to.

On behalf of the team, I thank the Chairman for giving us the opportunity to speak with the committee today. We acknowledge that it is a real privilege for us to have this amount of members' time. I also thank the broader NERIECS team who have been phenomenal to work with over the past 14 months.

Chairman: I thank the witnesses for the comprehensive discussion with the committee. We will adjourn and meet again in September.

The joint committee adjourned at 11.47 a.m. *sine die*.