General Optical Council

Response to the Education Strategic Review (ESR) Consultation on draft Education Standards for providers and Learning Outcomes for students

August 2019

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Executive Summary

The purpose of the Education Strategic Review (ESR) is to recommend how the system of education and training for optical professionals should evolve to ensure that newly qualified registrants continue to be equipped to carry out the roles they will be expected to perform in the future. Since the review's launch in 2017, the GOC has consulted extensively to understand the key changes, risks and opportunities facing the sector, including the changing needs of patients, the evolving roles of optical professionals and the variations in delivery of healthcare across all four nations of the UK.

Timeline

The review started with a call for evidence and a summary report was published in June 2017[1]. We commissioned research into patterns and trends in healthcare professional education in the UK and internationally (November 2017)[2], and carried out research exploring the perceptions of newly qualified practitioners and employers in relation to current education and training requirements (June 2018)[3]. Following this, we consulted on the concepts and principles that should inform the education and training model and published an independent summary report (April 2018)[4].

We then proceeded to develop draft education standards for providers and learning outcomes for students and in November 2018 we launched a public consultation[5], which closed on 25 February 2019. We received 539 responses and were encouraged by the level of engagement across the sector from individuals as well as organisations. The report of that consultation[6] is published alongside this response.

Response to the latest consultation

There was support for more flexibility for providers to allow for innovation and earlier clinical experience but there was widespread concern regarding the appropriateness of the standards and learning outcomes. Feedback regarding the concept of a single point of accountability for the academic and practical elements of the route to registration was mixed and an additional issue arose relating to the current minimum level of the dispensing qualification.

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[1] Education Strategic Review Summary of responses to a call for evidence (2017): https://www.optical.org/filemanager/root/site_assets/education/education_strategic_review/supplementary_reading/goc_education_strategy_review_-_call_for_evidence_summary.final_64303.pdf

[2] Education Patterns and Trends research (2017): https://www.optical.org/filemanager/root/site_assets/education/education_strategic_review/supplementary_reading/educational_patterns_and_trends_-_november_2017_fin.pdf

[3] Perceptions of UK Optical Education (2018): https://www.optical.org/filemanager/root/site_assets/education/education_strategic_review/supplementary_reading/perceptions_of_uk_optical_education_-_june_2018.pdf

[4] Analysis of responses to the GOC's Education Strategic Review concepts and principles consultation (2018): https://www.optical.org/filemanager/root/site_assets/education/education_strategic_review/supplementary_reading/final_esr_concepts_and_principles_consulation_analysis_-_may_2018_15710.pdf

[5] Consultation on Draft Education Standards and Learning Outcomes (2018): https://consultation.optical.org/standards-and-cet/education-strategic-review/

[6] Analysis of responses to the public consultation on Education Standards and Learning Outcomes (2019): https://www.optical.org/filemanager/root/site_assets/publications/consultations/pasr/esr_consultation_report_-_final.pdf

In considering the feedback and making decisions, the GOC considered that some aspects of the proposal had been misunderstood. For instance, one key stakeholder has interpreted the issue of a “single point of accountability” as meaning one single provider to run all optical education and they were relieved to hear that partnerships between different providers to deliver a single route to registration would be possible as long as there is a lead partner accountable for the whole route. The issue of the level of the Dispensing Optician qualification also became a touch-point despite the fact that there was no proposal to change the existing approach that has been in place since this was clarified in 2011 when the relevant GOC quality assurance handbook was updated.

But even beyond these issues it was clear that there were genuine and well-meaning concerns and that it would be difficult to make progress on the issue of the educational standards and learning outcomes unless two things happened. First, it was necessary to really understand the underlying concerns of different stakeholders, so that they could be addressed as far as possible in planning for the implementation of change. Second, re-visiting the educational standards and learning outcomes should be considered a joint endeavour with separate but parallel processes for Optometrists and Dispensing Opticians to ensure that both professions are given the dedicated attention they deserve.

It was also recognised that re-visiting the detail of the proposals when questions had been raised about the overarching principles would be difficult to achieve, without some steer from Council on whether they continued to support the big building blocks of the new system. We therefore sought Council’s view on the following areas, that there should be:

1. A model in which any ‘programme of study’ which leads to registration is led by one accountable provider, who is permitted to work in partnership with other organisations and determine the amount of integration within the programme;
2. A standardised assessment framework which maintains comparable outcomes between providers but supports innovation and agility underpinned by rigorous quality and assurance controls;
3. Increased clinical content of undergraduate education and training to support early exposure to patient groups;
4. Increased emphasis on professionalism and clinical leadership; and
5. Support for newly qualified professionals, exploring CPD that includes requirements around mentoring and peer reflection.

Council confirmed that they continued to support these steers in their meeting of 15 May 2019, clarifying the first steer as being about a single accountable provider, thus allowing for different degrees and means of integration; the second steer as a standardised assessment framework; the third and fourth steers were amalgamated into an over-riding recommendation regarding content going forward; and the fifth steer confirmed Council’s view that more support is needed for newly qualified professionals, including the development of stronger mentoring arrangements. Council also agreed that further consultation on the learning outcomes was needed and indicated that we should be planning a phased implementation.

They asked that further work be undertaken with relevant stakeholders to address any remaining questions, explore the opportunities provided by these changes and to ensure that we fully understood the risks and issues as presented during the consultation. A series of seminars were run during May and June, bringing together a wide range of stakeholder bodies (listed in annex six), and a summary of those discussions is published within this response.

Having previously consulted on the public safety benefit of student registration and listening to the feedback that student registration is most important when students are out on placements, we intend to revisit this topic at a later date.

Following this engagement, in July, Council decided to approve five proposals based on May's steers, with a request that new task and finish groups be established to co-develop the education standards and learning outcomes. They also asked for implementation plans to be drawn up, paying regard to the issues raised during the consultation and with a view to mitigating them and supporting any transition as far as possible in order to make decisions on a high-level implementation plan in November 2019.

We would like to thank all contributors to the consultation and subsequent discussions and look forward to continued dialogue as we move into the planning and implementation phase.

Summary of responses

Proposal one: One accountable provider

There was significant debate regarding this proposal, with some providers believing that 'one accountable provider' would not improve regulation of the system. However other stakeholders (including other regulators) supported this approach. Those in support stated that it would be more in line with other healthcare professional pathways and regulation, would improve student experience and would not prohibit different models of education and training.

Some optometry providers were concerned about the need to arrange and oversee contractual arrangements should they decide to sub-contract as well as the logistical barriers to organising quality assurance of placements if they chose to manage this in-house. They were also concerned about the potential for large employers to be able to exercise undue leverage over academic provision. Others raised concerns about having increased accountability for student outcomes beyond the academic outcomes. Some providers also questioned how those who do not wish to go into practice will progress.

Our response: we know that this change will have substantial implications for many of our current education providers, but there are already examples of courses that have managed to overcome at least some of the difficulties envisaged.

The fact that many optometry students take longer than expected to pass the scheme for registration, with a small percentage never doing so, tells us that there is some disconnect between the academic and vocational learning that is not working for students. We believe that these issues will be exacerbated by the need for

greater clinical exposure earlier in a student's programme of learning. We also believe that a single point of accountability will support creativity in the design of integrated programmes of study and enable the GOC to more effectively regulate the sector.

In so far as employers' influence on courses is concerned, we take the view that responsible employers have a shared interest in education and training providing graduates who are safe practitioners. Many already work closely with education and training providers and we welcome this. However, our standards for education providers and learning outcomes, and our quality assurance activity, will ensure that courses remain fit for purpose and ultimately protect the public. We also have business regulation powers which could be used, as appropriate.

We therefore intend to pursue a single point of accountability, but with a phased implementation to enable our current providers to plan for the change and to transition from one system to another. We are also keen to speak to providers about ways in which we can support that work, going forward.

Proposal two: Standardised assessment framework
This issue also prompted significant debate with most education providers wanting to retain the current system, which for most students involves a programme of academic study and a separate final assessment administered by the College of Optometrists or the Association of British Dispensing Opticians. It was argued by some that without a national theoretical and/or practical examination, the competence of new registrants could not be guaranteed and that this would pose a risk to the public.

Others noted that we are already an outlier from other healthcare regulators, many of whom let providers decide how they test for a safe beginner (i.e. to the same standard), enabling providers to innovate and apply their pedagogical knowledge to determine appropriate assessment methods. These arrangements are not to be confused with other regulators' approaches to testing non-UK trained individuals' skills and knowledge which differ across regulators.

It was recognised by most that in practice either a national theoretical and/or practical exam model or a standardised assessment framework model could be workable. The flexibility, cost-effectiveness and proportionality offered by this approach was recognised, provided that the comparability of outcomes and quality assurance was robust and consistent.

Our response: we do not accept the argument that a standardised assessment framework would undermine standards and pose additional risk to patients. We know that other regulators already adopt this approach, including professions that have equivalent or greater levels of inherent clinical risk. We note that some stakeholders saw the well-developed mentoring arrangements in the NHS as an important counter-point to not having a single national examination for other health care professions.

We agree that the effectiveness of a standardised assessment framework is dependent on the development of appropriate outcomes and a robust quality assurance process.

We intend to work with the professions on the development of the learning outcomes and new task and finish groups for optometry and ophthalmic dispensing are being established now to take that work forward. We will also begin to develop a quality assurance framework, drawing on the experience of other healthcare and education regulators and oversight bodies such as the QAA, the Office for Students and the Institute for Apprenticeships.

Proposals three and four: greater clinical, professionalism, clinical leadership and management content
There was broad consensus about the need for greater clinical content. The issues were primarily related to the practicality of delivery, with concerns about the availability and cost of clinical placements foremost in providers' minds.

It was explained that clinical experience could take a variety of forms. They could deconstruct the experience by using innovation and technology. Some providers explained that they already do this, using surrogate patients and simulation, for example. Others wanted a decision to be made by the GOC on the direction of ESR so that they could start to implement more of this now.

Some optometry providers were encouraged by the possibility that the degree becomes a vocational clinical degree which would open up avenues for additional funding for placements, although there was concern about the impact on the length of courses.

The concept of clinical leadership was broadly supported but it became clear that the term meant different things to different people and we were advised to be very clear going forward about precisely what was intended. There was also broad agreement with regard to the importance of professionalism among healthcare professionals and the need for that to be reflected in course content.

Our response: we welcome the support for professionalism and for additional clinical content. As well as feeding this into the development of learning outcomes, we will work with stakeholders to explore a range of alternative delivery models to ensure the quality and supply of relevant clinical experience. We understand that the length of courses might need to change if a qualification seeks to obtain clinical degree status and as part of our implementation planning, we will explore options for additional support from relevant funding bodies.

During the discussions with stakeholders, we have explained that by clinical leadership we mean a focus on the improvement of patient care, which involves safe, efficient, effective and person-centred care, optimising leadership potential across healthcare professions to deliver excellence and improved patient outcomes. We will seek the views of our two task and finish groups to establish a definition as we develop the outcomes.

Proposal five: more support and CPD for the newly qualified professionals
There was consensus that more support, including mentoring, for newly qualified professionals would be beneficial to build confidence, promote career pathways and address attrition. However, most stakeholders felt that the GOC should consider its role carefully in encouraging or mandating this and preferred the GOC to offer support through guidance or courses, rather than administering a scheme ourselves.

Our response: we welcome the support for the proposal to provide improved support for newly-qualified professionals.

We agree that this continuing support is important and propose to take this forward through our parallel review of Continuing Education and Training (CET). Under that programme we have a Transition to Practice project which will explore a range of different options for future consultation.

Next steps
Alongside work to re-visit the learning outcomes we intend to produce a high-level ESR Implementation Plan with short, mid and long-term actions for Council's review in November.

We look forward to working closely with the sector to co-create solutions and welcome the ongoing dialogue to make sure the system of education and training is fit for professionals of the future.

Summary of the findings from the ESR consultation on the draft education standards and learning outcomes

Development of draft education standards and learning outcomes
We developed draft education standards for providers and learning outcomes for students, considering the findings of the previous consultation and the significant input we received subsequently from our Expert Advisory Group[7], CET Reference Group[8], Education Committee[9], Standards Committee[10], Companies Committee[11], Registration Committee[12], Education Visitor Panel[13] and a range of other external stakeholders.

We explored how to incorporate the key concepts and principles in practice, acknowledging that whilst many agreed with the principles, we expected there to be significant areas of disagreement in the sector around key topics.

Key objectives of the draft education standards and learning outcomes were to:

- Be less prescriptive and more outcomes focused in setting our education standards for providers;
- Ensure flexibility to accommodate future changes in scopes of practice, and be less prescriptive and more outcome focused in setting learning outcomes for students;
- Improve the student journey through the whole route to registration and ensure clear accountability of those responsible for delivering it; and
- Promote a culture of reflective practice and clinical leadership within the sector.

Council approved a public consultation on the draft education standards and learning outcomes. This was open from 12 November 2018 – 25 February 2019.

Alongside the consultation questions, we also published an impact assessment framework to help respondents understand what we were seeking to achieve, draw out some of the key questions still to be answered and seek specific views on issues, risks and impacts.

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[7] Gareth Hadley, David Parkins, Clare Minchington, Selina Ullah, Hilary Tompsett, Alicia Thompson, Nicholas Rumney, Dharmesh Patel, Gill Robinson, Janet Pooley, Barbara Ryan.
[8] Nik Sheen, Scott Mackie, Nigel Best, Paula Baines, Imran Jawaid, Gordon Carson, John Tickner, Paula Stevens, Alex Webster, Ian Beasley, Barbara Mason, Kathy Morrison.
[9] Mike Galvin, Hilary Tompsett, Alan Kershaw, Kath Start, Andrew Logan, Christine Dickinson, Mary Wright, Neil Retaillic, Geraldine McBride, Alicia Thompson, Imran Jawaid.
[10] Glenn Tomison, Linda Millington, Deborah Bowman, Emma Connelly, Joy Myint, Nigel Best, Paula Baines, Marcus Weaver, Deirdre McAree, Cecilia Fenerty
[11] Sinead Burns, Deirdre McAree, Wayne Lewis, Richard Edwards, Mitesh Patel, Gordon Ilett.
[12] Rosie Glazebrook, Alison Sansome, David Watkins, Lynn Emslie, Louise Gow, Catherine Viner, Peter Black, Anthony Harvey, Philip Bird.
[13] Christine Harm, Graeme Stevenson, Julie Hughes, Kevin Gutsell, Maryna Hura, Paula Baines, Markham May, Barry Mitchell, Carl Stychin, Jane Andrews, Mark Bissell, Sally Powell, Vincent McKay, David Whitaker, Richard Allen, Navneet Gupta, Julie-Anne Little, John Siderov, Nicola Szostek, Brendan Barrett, Gurpreet Kaur Bhogal-Bhamra, Paul Baines, Nicholas Wilson-Holt.

In May 2019, the outcomes from the ESR consultation on the Education Standards for Providers and Learning Outcomes for Students were presented to Council by QA Research. We received 539 responses and Council were encouraged by the level of engagement across the sector. Generally, there was support for more flexibility for providers to allow for innovation and earlier clinical experience. However, Council acknowledged that there was further development required in ensuring that respondents understood the case for change, and that the education standards and learning outcomes reflected their feedback.

The following key themes emerged:

- **Prescriptive vs Principled Regulation**
  The need to balance prescriptive vs principled regulation was a key discussion point. A very prescriptive model does not allow for changing scopes of practice but a balance of both allows flexibility whilst maintaining consistency in outcomes.

- **Case for Change**
  The case for change highlights the need to ensure that the workforce of tomorrow is adequately equipped to deliver services of the future. Some respondents did not fully understand or did not agree with the case for change or the evidence base. Some felt that changing our current standards would be enough to meet the demands of the future.

- **Funding**
  Some respondents believed that the funding implications would need to be better understood and addressed to progress some of the changes. There were also concerns regarding the challenges involved with increasing external placements, in terms of cost, scale and management.

- **Timescales**
  There was a strong view that the draft learning outcomes were not fit for purpose. As most respondents wanted to see more detail, there was concern regarding the timescale to finalise the learning outcomes and its impact on the wider implementation timescales.

- **Patient Safety**
  There was apprehension over the quality and quantity of supervision and supervisor availability and mixed views regarding student registration and whether it is in the public interest or not.

After reviewing the consultation findings, Council gave the following five proposals for the Executive to explore, through stakeholder workshops and further evidence gathering.

The proposals were that:

1. Any ‘programme of study’ which leads to registration should be led by one accountable provider, who is permitted to work in partnership with other organisations and determine the amount of integration within the programme. This means that multiple organisations could be responsible for their

'programme of study' or route to registration – but in any route to registration one sole provider would retain accountability for the student outcome which ensures the student is equipped to join the GOC fully qualified register.

2. A standardised assessment framework, which maintains comparable outcomes between providers but supports innovation and agility underpinned by rigorous quality and assurance controls, should be introduced.
3. Increasing clinical content of undergraduate education and training to support early exposure to patient groups should be incorporated.
4. There should be increasing emphasis on professionalism and clinical leadership.
5. We should explore further how to improve support for newly qualified professionals, including the use of mentoring and peer reflection to encourage continuing professional development.

The outcomes of the stakeholder workshops and our statutory committees that took place between May and July are included within the body of this report. During the workshops, attendees were given the opportunity to explore each proposal in turn against the case for change and identify potential solutions to achieving the proposals in practice. We also used feedback from the consultations to inform this report.

Case for change (summary)

The case for change in the education and training of optical professionals is influenced by the following factors:

- **External drivers** influencing the roles of optometrists and dispensing opticians
- **The need for education and training to be sufficiently agile** to prepare students for future roles
- **Risk-based regulation** whereby the regulator enables innovation within a changing landscape whilst crucially maintaining public safety.

External drivers
Drivers for change in the education and training of optical professionals include ensuring that registrants respond to the changing needs of patients. More than ever we are feeling the impact of an ageing population and the increasing prevalence of certain long-term conditions and comorbidities and therefore require a patient-centric approach. The optical sector has changed, the shift is due to developments in technology, clinical leadership expectations and end to end case management. Registrants need to be equipped to respond to changes in the delivery of healthcare across the four UK nations, which is influenced by service delivery pressures, contracts, commissioning, tariffs and outcome measures.

Through our engagement, we feel these drivers are **broadly recognised and understood** by most of our stakeholders. There appears to be genuine excitement regarding the possibility of optical professionals delivering more enhanced clinical care and a desire to support other healthcare professionals and work as part of a multi-disciplinary team.

The need for education and training to be sufficiently agile
The workforce of tomorrow must be adequately equipped to deliver the level of services that will be required in the future. Our extensive consultation feedback revealed there is room for improvement in preparedness for practice, for example in communication, clinical leadership and clinical skills, and that supervision and support is variable. The feedback also supported the need for our standards of practice to inform our education requirements so that students are familiar with the standards that will be expected from them in practice from the start of their education.

To ensure the workforce is equipped to deliver against these expectations, the clinical content of initial education and training needs to be considered alongside specialist qualifications; in particular which areas should be included in undergraduate study as compulsory for a safe beginner, and those that should remain as specialist qualifications.

Some education providers and employers feel that current ‘national exams’ are not agile and prevent education from developing to keep pace with current practice. Some also feel that Objective Structured Clinical Examinations (OSCEs) are a less appropriate way to test for attainment and were interested in different models.

Through our engagement, we feel the need for education and training provision to respond to the changes in practice in a more fundamental way is **less well recognised.**

Many education providers felt that the current system was capable of being tweaked, while we believe that this would simply replace one set of rigidly applied criteria with another. The pace of change is such that we believe there needs to be much greater scope for flexibility in the way and speed with which providers can respond to changing needs of the workforce.

Flexibility is made more important by the fact that there is currently no clear sector-wide view on how the role of the professions will develop. Although we are keen to support this work, it is not our primary purpose; we therefore hope the sector will take the lead in looking at this more closely as we continue to develop our learning outcomes.

Risk based regulation
As a regulator, the GOC needs to have ‘due regard to the desirability of promoting economic growth’ and should enable innovation within a changing landscape whilst crucially maintaining public safety. Through extensive consultation we have heard that we are currently restricting innovation and variety by being too prescriptive.

The Concepts and Principles consultation[14] feedback called for an outcomes focused set of education standards for providers that would be less prescriptive and thereby enable greater agility and innovation for education providers. The same feedback was heard regarding moving from competencies to broader learning

[14] https://www.optical.org/filemanager/root/site_assets/education/education_strategic_review/supplementary_reading/final_esr_concepts_and_principles_consulation_analysis_-_may_2018_15710.pdf

outcomes, to address perceived deficiencies in the current framework and to afford education providers more flexibility over how they deliver their programmes.

The proviso is that the risks of greater variability in, or a lowering of, standards is managed through effective quality management and quality assurance. The GOC will need to develop a risk based, evidence-led and proportionate approach to its approval and quality assurance of optical programmes in order to ensure that its standards are met.

The GOC also feels that individual progress throughout the routes to registration is not clear, to the extent that we are not yet able to make comparisons between the pass rates of academic and qualifying exams, which also suggests that education, training and practice are not sufficiently aligned.

Through our engagement, we feel the GOC's responsibility to take a proportionate and risk-based approach to regulation is **not always understood** by key stakeholders, some of whom have requested more guidance and detail than we believe is necessary. We recognise however that the shift from competencies to outcomes is a big step and we will consider the need for some additional detail as part of our work to re-visit the outcomes.

The following table provides an indication of how the proposals address the case for change:

Does the proposal, in principle, address issues identified in the case for change?

Proposal	Respond to external drivers	Education and training to be sufficiently agile	Risk-based regulation
1. There should be one accountable provider for a route to registration	Yes, a single provider will provide a focal point for discussions about the changing needs of the workforce, and enable the education programme to be adapted more quickly.	Yes, a single provider will be more agile and responsive to change through having greater control of the full route to registration.	Yes, this will avoid issues falling between the gap of two providers delivering two sets of outcomes, with benefits for students and ultimately the quality of care they are able to provide.
2. There should be a standardised assessment framework	Yes, this will allow providers to tailor provision to meet local or national needs, but maintaining the same baseline.	Yes, this enables education providers to use their expertise to develop different approaches to assessment, as appropriate to their chosen method(s) of delivery and context, while still meeting GOC requirements.	Yes, along with the development of a new Quality Assurance (QA) framework this will support a move away from a very prescriptive approach to a more proportionate and risk-based approach.
3 & 4. There should be more clinical, professional, clinical leadership and managerial content	Yes, this is directly linked to external drivers.	Yes, this will ensure that the education and training of new recruits prepares them for the future we can anticipate.	Changing the content does not in itself lead to a different regulatory approach for education, but the two are totally compatible, as illustrated in the regulation of other clinical professions. In addition, developing professional skills is likely to positively impact on the professions and may reduce proven fitness to practise cases.
5. There should be more support and CPD for newly qualified practitioners	Yes, this responds to the increasing clinical content of certain roles and to research on current practice, such as referrals.	Although this falls outside of the under-graduate programme, it is a recognition of the importance of on-going education and training and the importance of that too responding to change.	This is difficult to assess until specific proposals are developed, but there are means of doing this in a risk based and proportionate way.

Analysis

The following section considers each Council proposal in turn, setting out the benefits, risks and impacts, potential solutions, and our overall conclusion.

Proposal 1: One accountable provider

A model in which any 'programme of study' which leads to registration is led by one accountable provider, who is permitted to work in partnership with other organisations and determine the amount of integration within the programme.

This means that the entire route to registration (programme of study) is led by one accountable provider, who is responsible for a student's end to end education and training resulting in the graduate joining the fully qualified register. There can be many different routes to registration each led by an accountable provider. There can also be formal partnerships to deliver a route to registration as long as one organisation maintains ultimate responsibility and accountability for the whole route and all student outcomes.

Current approach
Currently, for most models of undergraduate education and training, there is a split system whereby academic teaching and practical assessment is provided by two separate organisations with responsibility for the students' education and training outcomes being fragmented. However, some optometry programmes already offer an integrated route to registration. Optometry courses do not have a standardised approach at present. Ophthalmic dispensing courses are modelled in a more integrated way with theoretical and practical elements throughout the course. As a regulator, we currently hold each individual provider to account which means that the majority of providers do not take responsibility for the entire student journey. This can cause friction between providers where one provider is dissatisfied with another part of the route to registration over which they have no responsibility.

Proposal 1: Benefits

Easier to regulate and better outcomes
One accountable provider for each programme of study leading to registration is easier to regulate as it ensures that the accountable provider takes responsibility for output and journey (such as supervision support). Quality assuring the entire route to registration with one provider could lead to improved quality assurance and the provider taking more ownership to improve outcomes.

At present it is hard to identify where problems arise under the current divided model – the proposed alternative approach would make it easier to identify problems and quality assure. We have also heard that many stakeholders believe the process to be a bit 'clunky' and that it does not support different models of assessment.

This system could help to address issues such as a high variability of placements and support, including the quality and quantity of supervision.

For employers, the accountability was felt as important to support their investment in the students.

Student support
This model would provide consistency and simplicity for students, as they could be clearer about how they progress through to the fully qualified register and prevent ‘gaps’ in the route to registration where students fall between two providers with neither taking ownership of the student’s learning and welfare – including for Equality, Diversity and Inclusion (EDI) matters. Optometry students reported that they are treated as an employee in the Scheme for Registration pre-registration year rather than a student, which contributes to a sense of discontinuity. Providers may be able to give students more support during their education and training as they will have accountability for this stage of the route to registration. Providers may also be better placed to increase variety in placements by rotating students through different service environments.

Career framework
This may provide an opportunity for students to choose their focus when deciding where to study, for example, a clinical specialism or generalist approach which could widen participation.

Scale of the change
This model may not require significant change for some providers, except in contractual agreements. For example, there are already some models in place where an optometry student returns to university from their pre-registration placement and then sits university exams before their degree is awarded. We recognise however, that for some providers, this will require them to adapt very different business models and this is explored below where we discuss the risks and impacts associated with moving to a single accountable provider.

Flexibility and innovation
There was recognition that the standard of teaching in different areas will always be slightly different, but the regulator should focus on the outcomes. Flexibility in the programme delivery would not be restricted and could increase competition. The single accountable provider would not limit the possibility of registrable apprenticeships. Providers could potentially gain more freedom to change their syllabi without having to seek approval from an examining body. This could, therefore, encourage providers to be more innovative and introduce changes more rapidly and suit different models of education and training in future.

Public safety
The improved regulation will positively contribute to public safety and will ensure that providers take responsibility for the student outcomes at the end of their route to registration. The additional flexibility could widen participation by allowing different education and training models to apply for GOC approval.

Proposal 1: Risks and impacts

Implementation

For many stakeholders, but excluding most providers, there was recognition that the current model could not continue. Many agreed that the direction of travel was right but were concerned with the short, mid and long-term actions required to implement this proposal. For example, multiple contractual relationships could be complex and expensive to finalise.

Potentially difficult to regulate

Conversely, some providers believed that having one accountable provider would be less easy to regulate and that the current approach for the optometry route to registration, (i.e. separately regulating the College of Optometrists' Scheme for Registration) is effective, although improvement is required in reducing the variability of placements and introducing standardised supervision. Providers also felt that this two-stage process reduces pressure in the current model to pass more students.

However, the two-stage process may be one of the factors that causes the gap in accountability and ownership and without one accountable provider this makes regulation much more complicated. It was suggested that this could be mitigated by clear quality assurance mechanisms from the GOC and robust quality management mechanisms by the providers.

Power and influence of large employers

Changes to the pre-registration year model could lead to resistance from employers who perceive it as a valuable workforce pipeline. As 80 per cent of placements for the Scheme for Registration are currently provided by four large multiples, there would need to be appropriate engagement and partnership working with companies to form successful placement arrangements. There was concern from universities that to form these relationships would involve transferring significant power to the corporates to dictate what is studied, how it is studied, and how it will work. There is a risk that organisations breaking the partnership would jeopardize the programme. It was suggested that strict governance and contracts would be needed to mitigate this, and support from the GOC.

There was some concern about the influence of companies to impact on the nature of education delivered, especially if the company was the “lead” provider for apprenticeships. Consolidating too much power in commercial organisations could pose a risk to patients as the academic elements of the route to registration may suffer. In this respect, optometry was viewed as different to other healthcare professions because of the commercial angle. Balancing patient needs with other considerations was viewed as a challenge.

Funding

Funding the new model and the quality assurance of the entire route to registration was perceived by many as likely to have an adverse cost impact for providers, and ultimately the students. Some stakeholders also thought students may not have access to the wide variety of placements they currently have. If NHS funding is made available, this could support a more integrated teaching model for optometry as well as improved hospital placements for students.

Different regulatory models
It was suggested that a comparison of different regulatory models such as dentistry, chiropody, pharmacy and psychology be included in the evidence base.

Proposal 1: Additional comments

Placements
In practice, the quality assurance of clinical teaching, particularly in placements, was deemed by many stakeholders to be difficult to achieve, as was ensuring consistency across the sector.

Some providers were concerned about the proposed change, citing placement funding, availability and supervision as barriers to being accountable for the whole route to registration. The GOC explained that they could continue to work in partnership with other organisations who could administer placements on their behalf.

Some providers hoped having one accountable provider could increase scope for hospital input/involvement, with the opportunity to build stronger relationships, although there was recognition that hospital placements are expensive and hard to organise. Partners would need to have formally agreed standards to ensure similar levels of student experience and would also need support, training and QA monitoring from the main provider, which is much easier to provide in an on-site university clinic (although this is expensive). There was also particular concern about working with commercial providers because of their retail focus, which reinforced the need for contractual agreements underpinned by formal standards.

Quality assuring placements over a large geographical spread was felt as difficult and there were concerns about the adequacy of governance in primary care.

There was recognition that opening up the nature of clinical placements would create opportunities for innovative thinking around incremental skills development for students. This would support the early identification of skills gaps and implementation of support to address problems earlier and more proactively. During placements in businesses, however, it would be important to be clear about what was expected of students and to ensure that they received appropriate clinical experience.

Proposal 1: Committee advice

Companies Committee
The Committee said that some providers already take responsibility for quality assuring placements and supervisors, which is a really positive experience and supported through integrated programmes. They said it is important to note that there may be tension between providers and practices, especially as short periods of training are not attractive from a commercial perspective.

Education Committee
The Committee said that there are gaps in accountability across the routes to registration which need to be addressed, particularly between the academic and clinical experience elements in which the quality and quantity of supervision and

placements remain a problem. There should be a more robust feedback loop to improve standards of education and training and ensure accountability is clear.

As the profession changes, there will be more divergence of practice across the UK, and this should be taken into consideration when deciding how prescriptive the GOC should be.

Standards Committee
The Committee strongly supported this proposal. They said that this is a tried and tested model and implementing this would bring us in line with many other professions and be the right thing to do. Strong relationships with students, providers and practices would be important in ensuring the new system worked effectively.

They also said that whilst this is already an issue, securing placements might become more difficult in future as students' aspirations have changed and many graduates become locums, which does not encourage businesses to invest in their development without getting a medium-term return.

In order to improve supervision, the sector would require strong feedback loops for students to give feedback about placements and for providers to act on it.

Registration Committee
Overall, the Committee supported the purpose of ESR and recognised the case for change. The Committee said that there was a need to manage the education related risks in the current system, for example, potentially failing to meet future needs as a result of changes in optical professional roles, patient needs and expectations, regulating across a four-country landscape or failing to adapt and change at the required pace.

It was noted that current registrable optometry provision does not often widen participation and is focused on top tier academic students, which may not always prepare them to deal with real patients in the real world.

The Committee's view was that it is possible to be innovative and embrace new ways of educating practitioners such as blended learning, shorter block release, greater flexibility of coursework submission, a greater focus on the world of work, and apprenticeships for both dispensing opticians and optometrists, within the current system, although the Committee recognised that clear responsibility for a particular programme would strengthen regulation and help to avoid gaps and weaknesses in the provision.

The Committee advised that regulation would need to be robust to maintain public protection. It may also be necessary to ensure providers are effectively incentivised to maintain, revise and collaborate in ensuring sufficient provision of certain training, and there might be funding implications if additional training needs are identified.

Proactive awareness raising, promotion and advertising would be required to inform potential students and current practitioners of the benefits. As part of this it would be necessary to consider how qualifications appeared on the GOC register.

Proposal 1: Solutions/Options

Implementation

This concept was supported by many stakeholders, with the exception of most education providers (see risks). In general, it was felt that this model would not be a huge step from what is already in place for some MOptom courses and some dispensing courses, and many of the stakeholders agreed that this was an appropriate step forward to strengthen the GOC's approach to regulation and ensure clear accountability. It was also felt to be a good way to address some of the concerns about students who gain their academic qualification and then fail their Scheme for Registration exams altogether or take longer than expected to pass.

Providers highlighted that if we did go down this route, there would need to be a reasonable implementation time in order to set up contracts with partnership organisations. It was also suggested that the GOC could provide support to existing providers while they take the necessary steps to becoming an accountable provider during the transition process.

Funding

Securing funding was also a key issue which could be addressed if NHS funding was made available. Stakeholders identified the need for a shared understanding about how we should use the available funding to achieve the intended outcomes of the ESR.

Regulation

Other providers welcomed the possibility of being able to change the structure of their courses to be more vocational and to oversee their own placements, many saying that they have well established courses in other disciplines which run in a similar fashion.

It was also suggested that a single organisation could provide quality assurance to education and training providers on behalf of the GOC.

Student support

Many reported that simply being clear about the route to registration on their website and in their prospectus could be a way to clarify the journey for students.

Placements

The GOC are looking to improve assurance around supervision and placements. We recognise that this will be a challenge for all providers, no matter the route to registration model. Ensuring external placements are satisfactorily quality assured was a significant concern for education providers. Some providers deal with this issue by having an on-site clinic. Establishing partnerships with external placement providers was viewed by some as an important way to retain responsibility and manage the provision of clinical experience.

Stakeholders also noted that there are ways of quality assuring placements without increasing the burden on providers to visit practices, such as asking students to submit pieces of work online that require them to include photographs or a short video to demonstrate the use of compulsory equipment or describe its function.

Supervisors could be enlisted on a free CET accredited programme to ensure they understand their responsibilities as supervisors.

Contractual arrangements with the universities could ensure supervisors were subject to satisfactory quality assurance controls. The idea of memorandums of understanding or partnership agreements with those contributing to part of a university programme was also raised.

Partnerships between education providers and businesses
It was suggested that while many education providers are confident about their relationships with the industry, there was room to ensure that providers build stronger relationships with businesses/practices. It was also suggested that the GOC would need to ensure that its business standards were met.

Technology
Additional ways of enabling the 'one accountable provider' model to be implemented effectively were put forward, including separating out the clinical and commercial aspects of optical practice and deploying the use of technology more effectively.

Proposal 1: Response

We know that this change will have substantial implications for many of our current education providers, but there are already examples of courses that have managed to overcome at least some of the difficulties envisaged. The fact that many optometry students take longer than expected to pass the scheme for registration, with a small percentage never doing so, tells us that there is some disconnect between the academic and vocational learning that is not working for students.

We believe that these issues will be exacerbated by the need for greater clinical exposure earlier in a student's programme of learning. We also believe that a single point of accountability will support creativity in the design of integrated programmes of study and enable the GOC to more effectively regulate the sector.

In so far as employers' influence on courses is concerned, we take the view that responsible employers have a shared interest in education and training providing graduates who are safe practitioners. Many already work closely with education and training providers and we welcome this. However, our standards for education providers and student learning outcomes, and our quality assurance activity, will ensure that courses remain fit for purpose and ultimately protect the public. We also have business regulation powers which could be used, as appropriate.

We therefore intend to pursue a single point of accountability, but with a phased implementation to enable our current providers to plan for the change and to transition from one system to another. We are also keen to speak to providers about ways in which we can support that work, going forward.

Proposal 2: Standardised assessment framework

A standardised assessment framework which maintains comparable outcomes between providers, but supports innovation and agility underpinned by rigorous quality and assurance controls.

The proposal is that there should be a standardised assessment framework for the assessment of the competence of students before being eligible to enter the fully qualified register. The framework should apply to both academic and practical assessments, explaining the skills, knowledge and behaviour an individual will need to demonstrate to enter the fully qualified register as a safe beginner.

The assessment(s) themselves can be designed by different organisations. However, they must test for the same standard, which is set centrally. This is different to the concept of a final national examination, i.e. a final UK-wide exam for each registrant type (set centrally though potentially administered by different organisations).

In May 2019, it was recognised by Council that either option could work, but the standardised assessment approach was preferred because it appeared to address a significant number of the issues presented in the case for change.

Current approach
For most current routes to registration in ophthalmic dispensing and optometry, an education provider runs the academic (knowledge based) assessments and a separate awarding body runs the final practical assessments. For optometry the core competencies are split into stage 1 and 2 which are assessed at different points by the different organisations. The main administrator for practical assessments for optometry is the College of Optometrists (COO), and for ophthalmic dispensing it is the Association of British Dispensing Opticians (ABDO) Exams.

Proposal 2: Benefits

The use of a standardised assessment framework was seen as having the following benefits:

It would enable providers to more easily respond to changing demands and regional differences
A standardised framework gives an assurance that people will reach the same level, but gives room for flexibility to decide which elements to assess, when and how to ensure that the individual reaches the baseline for a ‘safe beginner’.

Many stakeholders felt that this approach would support innovation and agility by enabling providers to run assessments to suit their particular needs, and that it would encourage providers to develop their courses and content to meet external demands rather than ‘teaching to the OSCE’. This would also present opportunities for providers to widen participation by choosing a robust assessment methodology to complement their teaching methodology, including apprenticeships.

This model would enable programmes to offer core topics plus optional/specialist modules at undergraduate level, which could make optometry more attractive by helping to create clearer career pathway(s) for students, and could also help lower attrition. A standardised framework would also enable providers to accommodate regional variations and divergence in practice that is required to meet local needs. For example, health inequalities in one part of the country might be different in another part and so we need to produce professionals that meet these needs. This could reduce the additional training required to qualify for certain, localised contracts/commissioning, whilst ensuring that the standardised baseline is met.

Proportionate
When considering the wider health sector, this could be considered a more proportionate response to the level of clinical risk inherent within the professions and potentially a way to future proof programmes by not being as prescriptive as currently.

Regulation
The current approach combines a standardised assessment framework (for the academic qualification) and national assessments (for the practical elements). A national exam, which would incorporate both the academic and practical standards required for safe beginners, would be very expensive for the GOC (and its registrants) to run. A standardised assessment framework would be less expensive than a national exam for the whole sector, although it is likely the administration costs could increase for providers (see risks).

This model could also be less onerous to administer and address the disconnect in pass rate calculation methodology across the routes to registration, whilst also creating opportunities for cross-regulatory working in aspects of healthcare education that are common to all health care professions.

Sector collaboration and empowerment
It is important to empower universities to decide how to assess, given that they are the experts and will choose an assessment methodology appropriate to their delivery mode and context.

Some providers were satisfied with partnering with a second provider to administer the assessment. This could remain in place under this model on the condition that the assessment tests for the safe beginner and that there was a single accountable provider.

Public safety
This maintains the baseline standard as being that of a safe beginner, while widening participation by allowing more flexibility in assessment methodology to complement the teaching mode(s).

Proposal 2: Risks and impacts

Funding
For providers, this could cost more to administer because they may choose a more appropriate/effective assessment methodology that is more expensive. If this were

the case, they would require significant implementation time in order to secure funding to facilitate this approach.

Erosion of standards without a national exam
In the Concepts and Principles consultation there was support for a national registration exam as part of the route to registration which many respondents viewed as a continuation of the current assessments provided by the College of Optometry and ABDO Exams. There was a concern that without a national exam, the pressure that providers are under both financially and academically would lead to standards being watered down.

There was concern raised by some optometry providers that bringing quality assurance in-house might not lead to a standardised outcome and instead could lead to greater variability of standards. It was suggested by some that they were not sufficiently independent to assess their students, which is a concern due to the nature of the current stage one competencies assessments.

There was concern that if providers were perceived to give students an 'easier' experience/assessment, this could act as a differencing factor between the providers and, if the assessments were not effective, this could drive down standards.

Definition of a 'safe beginner'
There was concern about how to define a safe beginner if there is no one organisation who is strategically leading work across the UK to define future roles and there is challenge in how to do so in such a way that is not prescriptive and allows for changes to roles in future.

University regulations
Some universities commented that they were bound by their own regulations which are not designed to deliver professional competence. Issues around regulation and academic pressures will intensify with requirements from the Teaching Excellence and Student Outcomes Framework (TEF)[15] and the Augar review [16]into post-18 education.

Regulation
There was concern that the GOC does not have the capacity or capability to quality assure educational provision to ensure that assessments are undertaken in line with the standardised assessment framework.

Proposal 2: Committee advice

Companies Committee
The Committee supported the concept of being flexible about how students achieve the outcomes but emphasised that consistency in the end point needs to be maintained. They noted that the clinical doctorate in psychology is a good benchmark for this model as there is no standardised exam, expressing the view that

[15] https://www.gov.uk/government/collections/teaching-excellence-framework
[16] https://www.gov.uk/government/publications/post-18-review-of-education-and-funding-independent-panel-report

such an approach is arguably more appropriate for the level of clinical risk within the optical professions. The Committee also noted that if large parts of the roles are to be undertaken by technology in future, the professions will need to grow their skills base in order to be able to deliver a wider range of services and justify businesses' ongoing investment in these roles.

Education Committee
The Committee said that there is strong disagreement in the sector that the draft learning outcomes are fit for purpose and further work would need to be done to define what a safe beginner looks like in order for a standardised assessment to be workable.

Members said that funding remained a concern and, without clinical degree status, it is felt unlikely that any further funding would be available for undergraduate courses. They also noted that it is likely that the Augar review could reduce student fees and, therefore, providers will have to become more innovative in delivering quality education against reduced budgets.

Standards Committee
The Committee said that this model would enable more agility to deconstruct assessment methodology and give providers more flexibility. Although there were concerns regarding supervisor resources and availability, these concerns already existed under the current model. There was concern that colleges running ophthalmic dispensing courses are resistant to running assessments, and that there would need to be a cultural shift for them to engage with the proposed approach.

The Committee flagged that the contact lens courses felt too rushed and the supervisor ends up being responsible for the individual's learning without being aware of what is needed to pass the exam, which is a clear reason why education and assessment need to be linked.

Registration Committee
The Committee said that a standardised assessment framework is commonly used across professions allied to medicine. This would ensure agreed outcomes and competencies are met across all courses but allow innovative practice to develop and flourish. Other professions already have this approach, such as radiographers.

The Committee expressed the view that an objective outcome-based assessment would be important in ensuring standards are consistently met. They welcomed the proposed focus on an outcome to be achieved (and measuring that consistently) in order to establish whether a minimum standard had been met, while providing a degree of flexibility around the 'how'.

The concept of safe beginners was welcomed by the Committee, particularly with respect to the recognition of the need for a high level of 'interpersonal skills' and strong communication skills. They noted that in medicine it is acknowledged that what matters it is not how long it takes someone to demonstrate competence but simply whether they can or cannot and expressed the view that prescribing how many unsafe episodes can take place before a safe one is recorded, or of only having a specified number of attempts at an exam is outdated.

The Committee pointed out the need to manage the transition to a new system carefully to avoid discriminating against students that have had delays caused by maternity, illness, or simply failed their exams.

The Committee suggested that there needs to be an agreed standard of ‘safe beginner’, together with a definition of ‘specialist’, with set criteria/parameters. Working with the Institute for Apprenticeships and other providers of professional qualifications could help to inform this process.

The Committee also pointed out that outcome-based competencies could enable students to practice specific competencies, such as refraction, in a timelier manner as they gain the theoretical knowledge and practical ability. Linked to this, the Committee noted that in medicine there is a move towards so-called “Entrustable Professional Activities” and felt this could easily be implemented in optics and optometry.

Proposal 2: Solutions/options

Agile ‘safe beginner’ definition

In order to successfully implement a standardised assessment framework, the GOC would need to define what a safe beginner looks like and have significant input from the wider sector in doing so. There was a desire from employers to work with providers to set out what the future roles might look like over the next 10 years. This included agreeing the definition of safe beginner. There was a view that the definitions of a safe beginner for optometry and ophthalmic dispensing needed to be kept separate as they do very different roles and the cross-over is limited. There was the suggestion too that we could establish working groups to explore this and clarify further in developing the learning outcomes.

These working groups would provide opportunities to more clearly identify the areas of current postgraduate training that should be achieved at undergraduate level in order to be a safe beginner, and those areas which should remain as part of a postgraduate curriculum.

Partnership working

It could be beneficial to undertake more research on different QA models and consider, for example, whether education providers could assess one another. This could provide other benefits in terms of sharing learning among healthcare professional educators who deliver multi-professional learning and assessment.

Increased support

Some stakeholders saw the well-developed mentoring arrangements in the NHS as an important counter-point to not having a single national examination for other health care professions, which could be further explored as part of ESR.

Standardised assessment framework

In order to be able to respond to the changes within the professions, the assessment framework would need to continuously evolve. As with other health profession frameworks, which are already available and published, there would need to be systematic reviews to ensure it is fit for purpose, including remaining patient-centred.

Regulation
The GOC's quality assurance methods would need to be robust to guarantee consistency and standards, including strong oversight of assessment administration and moderation. The GOC would also need to ensure that education providers understand the professional, as well as academic, standards that are required. It was suggested that guidance could be produced to explain this more clearly. When designing guidance, the sector's readiness to move from prescriptive regulation to principled regulation should be considered.

Other healthcare regulators (none of whom have a common practical examination for undergraduate education) shared their approaches to quality assurance which could be adapted and incorporated into the GOC model. We could explore adopting the methodology of other healthcare regulators for the practical assessments, including those used by the Health and Care Professions Council (HCPC) and the Nursing and Midwifery Council (NMC) in which the regulator sets the learning outcomes to clearly identify the minimum threshold, and the national practice assessment document is co-created and agreed by the sector, with assessments administered by the approved education providers. Such a structure could enable the universities to respond more easily to changes within their own regulations.

It was suggested that it will be important to work closely with the Institute for Apprenticeships to ensure alignment of approaches where possible.

Funding
It was suggested that the sector needs to understand the funding flows within the optical sector and that the GOC could support the exploration of new funding streams. At the same time, the GOC could begin to bring the sector together to re-shape existing funding so that it better supports a new model of education training and delivery.

Technology
There was a suggestion that using virtual patients could help to assess standards more consistently and might also create opportunities for postgraduate education and the regulation of specialisms.

Implementation
Stakeholders commented that implementation of the new system would depend on whether the model is phased or implemented as a 'big bang', but could take up to five years, with a need for education providers to be consulted. It would also be necessary to implement a systematic approach to developing and reviewing the definition of 'safe beginner' over time so that universities were able to plan for the implementation of any changes. More generally, stakeholders would welcome a more detailed breakdown of the work that will be involved in implementing the new system, including more detail about how we will develop the new learning outcomes, our approach to quality assurance and the standards evaluation framework.

Proposal 2: Response

We do not accept the argument that a standardised assessment framework would undermine standards and pose additional risk to patients. We know that other regulators already adopt this approach, including professions that have equivalent or greater levels of inherent clinical risk. We note that some stakeholders saw the well-developed mentoring arrangements in the NHS as an important counter-point to not having a single national examination for other health care professions.

We agree that the effectiveness of a standardised assessment framework is dependent on the development of appropriate outcomes and a robust quality assurance process.

We intend to work with the professions on the development of the learning outcomes and new task and finish groups for optometry and ophthalmic dispensing are being established now to take that work forward. We will also begin to develop a quality assurance framework, drawing on the experience of other healthcare and education regulators and oversight bodies such as the QAA, the Office for Students and the Institute for Apprenticeships.

Proposals 3 and 4: Education and Training content

Proposal 3: Increasing clinical content of undergraduate education and training to support early exposure to patient groups

Proposal 4: Increasing emphasis on professionalism and clinical leadership

This section explores the related issues of increasing the clinical content of undergraduate education and training, and increasing the emphasis on professionalism and clinical leadership, which involves taking responsibility for the holistic care of patients including referrals, diagnosis and management.

Increasing the clinical content within the undergraduate curriculum, for example more content on disease pathology or pharmacology, would help prepare graduates for more clinically focussed roles in the future. Earlier exposure to patients, either physically or via technology, would support the development of students' core professional skills, such as communication, and provide experience of patients with specific conditions and of different environments.

Proposals 3 and 4: Benefits

There was unanimously strong support for these two proposals across all stakeholder groups; many agreed that a greater emphasis on leadership and agility will help develop the eyecare practitioners of the future.

More skills and knowledge
It was agreed that communication with patients is extremely important and that learning how to communicate with patients should be embedded from the start of and throughout students' education and training.

Clinical experience
Early clinical experience was considered to help professionalism and leadership as interaction with patients and other practitioners should foster empathy, enhance communication skills and collegiate working.

It was noted that many students have part-time jobs working in an optical practice and feedback from providers, employers and students indicates that they find it extremely beneficial as patients react differently in different environments. There was also feedback that shadowing optical professionals has some benefit (especially if part of a structured programme) and hospital placements are extremely useful.

Increased clinical roles and funding
It was suggested that more clinical content could increase the possibility of the qualification becoming a clinical qualification and receiving additional funding from the Department of Health and Social Care/Health and Social Care Boards

Content and implementation
There was also feedback that it would be beneficial to include more training on clinical plans, care plans and case management. With clear direction from the GOC, providers would be able to start to implement (or plan to implement) this now.

Patient safety
Another benefit of early clinical experience that was highlighted was that it would allow early exposure to reflective practice and would allow students' clinical weaknesses to be identified (and remedied) at an early stage.

Clinical leadership
There were various interpretations of the term 'clinical leadership', although it was widely agreed that increased content covering clinical information, professionalism and clinical leadership would benefit the public. which suggests that there would be value in us clarifying what we mean by this term. We intend to define clinical leadership more formally, with key elements of the concept including holistic care, risk management and taking responsibility.

Proposals 3 and 4: Risks

Placements
Providers raised two concerns about placements: the first was about the range of placements available to cover different patient groups and conditions; and the second was about the oversight and quality assurance of placements. They cautioned that these concerns already exist under the current system, which reinforced the need to avoid being overly prescriptive or set unachievable requirements.

The feedback suggested that there is a risk that some education providers would be unable to provide much more clinical experience in university/college clinics. In particular, concern was expressed that dispensing colleges might lack the optometrists to provide the number of eye examinations necessary to make a clinic viable. Providers also noted that it might be difficult to increase the number of placements if the same patients are being called upon in any particular geography.

Patient safety
There was feedback that there is a risk of compromising patient safety during clinical placements without close support from the universities, underpinned by formal agreements/contracts between them and placement providers.

Content trade off
Some providers expressed a concern that the university curriculum is already very full, with little spare time for extra clinical experience, and that if course length did not increase there is a risk that other subjects, such dispensing, might be squeezed, to the detriment of students.

Deskilling
The risk of deskilling was highlighted if the level of clinical content is designed to enable all students to deliver enhanced services straightaway and this is not required in practice immediately.

Funding
It was viewed that placements would be resource intensive, with some requiring payment. For example, it was stated that hospital placements could cost between £200-£600 per week.

Clinical experience
It was felt that clinical experience would need careful control to ensure quality and breadth of experience, not just patient numbers. This may need an upper limit on the number of patient episodes.

There was also feedback that the quality of experience might not be of a high standard if clinical exposure mainly involved observing in practice. In this case the reflective learning model could be used to ensure that learning was optimum. Additionally, the timing of clinical experience was a topic of concern as it was felt that exposing students too early could result in new starters feeling extra pressure to acquire specific clinical skills.

Proposals 3 and 4: Committee advice

Companies Committee
The Committee said that the ESR would potentially require businesses to implement and absorb substantial change and so would require phased implementation. The Committee also made the point that implementation would be supported by greater clinical understanding of optometrist roles as they are not technicians.

The Committee supported the need for earlier exposure to patients, saying that this would help to increase confidence and competence, as well as identifying career pathways and therefore, helping to manage attrition.

They highlighted some areas around General Data Protection Regulations (GDPR) which would need to be considered, especially if students are not employed, and suggested that a standardised non-disclosure agreement could be used to make sure that patient data is protected.

The Committee suggested that there is potential to reduce the pressure on businesses in providing placements by encouraging the use of technology, such as virtual reality or simulation, to provide some of the patient experience.

There was also feedback that businesses would require providers to ensure that there is clear structure for placements so that expectations are transparent throughout a student's education and training. They added that if more students are gaining their experience in high street practice, the funding arrangements would need to be clear and optometrists might have to take a more formal education role than their current supervisory role.

Registration Committee
The Committee were strongly supportive of these proposals and said that there would be significant benefit in increasing the clinical content of undergraduate education and training. They felt that this would lead to students, employers and patients having increased confidence in the abilities of newly qualified professionals to handle an appropriate range of situations and environments, including the use of technology.

The Committee was of the view that there would be clear benefit in preparing the professions to become more clinically focussed. With an increasingly older

population and increased clinical demand across the demographic spectrum, clinical leadership and skills were required to take the professions forward and meet patient needs. They recognised that this might increase the length and cost of programmes, although it was important to note that most optometry students already currently undertake four to five years of education and training.

It was felt that students would potentially be very interested in a professional qualification which prepares them to gain greater clinical expertise and deliver services that will meet future needs, and that changes to duration or fees should be acceptable if the course offers students a clinical qualification that leads to a rewarding career. They noted that a professional clinical qualification would be in line with other professions allied to medicine and content could potentially be delivered jointly if integration were to increase.

The Committee felt that it was very important for students to be able to learn and practice patient-related skills in a supported environment, and that placement providers would need to meet set standards and ensure students received appropriate support, including effective supervision. They also highlighted the fact that there are many innovative providers of medical, dental and pharmacy education who we could learn from.

They advised that the availability of placements would need to be monitored by the sector, although they felt that there is potential for providers to enter into contracts with NHS England to enable them to offer in-situ clinical experience and avoid a shortfall.

The Committee advised that there were risks relating to the costs involved in implementing the new system and the availability of funding and these would need to be considered thoroughly.

The Committee suggested that, given that universities already work to learning outcomes, mapping existing courses to new learning outcomes would not be difficult and would usefully identify shortcomings in existing provision.

Education Committee
The Committee stated that clinical content needed to be considered alongside specialist qualifications with a view to considering which areas should be included in undergraduate study and are required for a safe beginner, and which should remain part of specialist qualifications.

They also expressed the view that student registration seemed to be most in the public interest only once students started their clinical placements.

Standards Committee
It was recognised that significant numbers of students work part-time in practice already but, as many practices do not have a relationship with education providers already, there might be challenges if earlier practice-based assessment is to be implemented. The benefits of distance learning dispensing optics programmes were commented on, with the Committee noting that they enabled students to demonstrate that they can apply their knowledge at a much earlier stage.

It was felt that many students and practices would find it beneficial to have clear guidance on what a student will be expected to do during their placements, especially if they are undertaking placements at an earlier stage in the course. This could be produced by providers rather than the GOC in order to enable them to design their courses in line with their own pedagogical ethos. Such an approach would also enable providers and practices to align their expectations, which might encourage more partnership working and the sustainability of the placements.

Proposals 3 and 4: Solutions/options

Clear definitions

In order for providers to make progress in implementation, it will be important for the GOC to give clear definitions of terms and set clear expectations about what it requires.

Pedagogical approach

There are many different viewpoints regarding the best pedagogical approach and providers need to be allowed flexibility about to run their courses, provided that they meet GOC standards and students achieve the learning outcomes.

Structure for placements

There was a strong view that placements need to be meaningful and that this could be achieved through establishing an incremental learning pathway. For example, this pathway could involve students practicing basic skills on each other, learning elements of professionalism, learning elements of the thought process behind decision making, learning how to communicate that to patients, and then practicing on patients in controlled and less controlled settings.

As part of this incremental learning pathway, non-clinical interactive activities that are performed by staff in other roles, for example triaging by the practice receptionist, could be suitable for students with little clinical experience.

There is a need to review the role of supervisors and consider whether supervisors would be expected to have a role as educators.

In addition, providers might wish to consider timetabling changes which could enable students to have a more substantial part-time job to gain more experience. A current example of this is block learning within the ophthalmic dispensing model. Another suggestion was that if course duration does not increase, providers could consider other models such as extending the academic year so that students undertake clinical experience on vacations. However, this might have funding implications and providers thought it might be against student wishes, recognising that students also want the ‘university experience’.

A further suggestion was that a system of rotations could be introduced whereby students engage in a variety of placements. However, sufficient planning and risk analysis of placements would need to be conducted to assess suitability.

There was recognition too that regional and national needs might be different and that these should be considered when supplying placements.

Variety and exposure
There was recognition that there will need to be an opportunity for students to be exposed to different patient groups and this is likely to encourage placements in specialist clinics, the use of surrogate patients, and multiple placements in different environments. There was also feedback that there is a wealth of underused resources to be tapped into in designing placements, including local organisations and charities.

It was suggested that education could be enhanced by including more diverse work experience, such as going to see a contact lens manufacturer or spending a day in a different multi-professional setting. This would support overall professional development.

Train to the appropriate level
Through the planned work to develop revised learning outcomes, there is an opportunity to explore the definition of a safe beginner to ensure that students gain contain the right level of knowledge and skills. There is also a need to explore how the system of Continuing Education and Training (CET) can encourage re-skilling and upskilling to counteract any deskilling that might occur owing to regional and practice differences.

General Data Protection Regulations (GDPR)
It is important that providers, employers and individual registrants comply with GDPR and other legislation. Awareness of, and compliance with, relevant legislation needs to remain in the education standards, business standards and individual standards of practice.

Technology
Ancillary skills can be achieved through simulation. The introduction of Visual Reality (VR) and Augmented Reality (AR) could help to facilitate this method of learning.

Proposals 3 and 4: Response

We welcome support for professionalism and for additional clinical content. As well as feeding this into the development of learning outcomes, we will work with stakeholders to explore a range of alternative delivery models to ensure the quality and supply of relevant clinical experience. We understand that the length of courses might need to change if a qualification seeks to obtain clinical degree status and as part of our implementation planning, we will explore options for additional support from relevant funding bodies.

During the discussions with stakeholders, we have explained that by clinical leadership we mean a focus on the improvement of patient care, which involves safe, efficient, effective and person-centred care, optimising leadership potential across healthcare professions to deliver excellence and improved patient outcomes. We will seek the views of our two task and finish groups to establish a definition as we develop the outcomes.

Proposal 5: Newly qualified support and Continuing Professional Development (CPD)

Support for newly qualified professionals, exploring CPD that includes requirements around mentoring and peer reflection

This proposal relates to support for newly qualified professionals (who are on the fully qualified register). This support could include mentoring and we recognise that there are many different types of mentoring schemes which will need to be explored.

Proposal 5: Benefits

Current schemes
Evidence of mentoring within the optical sector and in the wider healthcare environment provided numerous examples of good practice. Within the optical sector, it was suggested that some elements are already in place. For example, at least two commercial organisations already run programmes for newly qualified registrants.

Increased support
The proposal of better support for newly qualified professionals was welcomed by all stakeholders, especially to tackle attrition. Some felt that the additional support could help newly qualified professionals to understand further career avenues. It was also suggested that mentoring could help avoid over-referrals, strengthen feedback loops, develop inter-professional relationships and provide emotional support.

Professional diversity
Some stakeholders felt that as part of CPD, mentoring schemes can help to support a diverse workforce, although it was suggested that this support should be voluntary and not enforced by the GOC. Some stakeholders suggested that a range of mentors with different areas of expertise could be helpful.

Reflective practice
Another key benefit cited by stakeholders already using mentoring is that it provides more opportunity for individuals to reflect on their practice. This was felt to be a very important area, which requires more focus.

Proposal 5: Risks and impacts

Cost
The cost of facilitating mentoring schemes was perceived to be a key barrier to mandatory implementation. There is a risk that smaller companies might not be able to afford mentoring as easily as larger companies. Also, there are differences in funding for supervisors across the four nations which would need to be considered.

Availability, quality and consistency
Various issues relating to the quality assurance of mentoring programmes were raised in the workshops. The potential for variation in the mentoring experience was raised leading to questions regarding who should provide quality assurance. Some

attendees felt that introducing mentoring should be a low priority and was not the GOC's role; instead it should be employer-led with support and encouragement from the GOC.

A lack of regional and local support networks for newly qualified practitioners was cited as a risk and it was clear that there is significant variation in the quality and quantity of support networks already in place. For example, some supervisors perform a dual role which includes mentoring and some pre-registration supervisors agree to support former trainees after qualification.

It was suggested that access to support networks can vary between individuals and when, for example, people leave university their pastoral care can fragment. There was also the suggestion that it might be difficult for people to find time to engage in support networks in environments with a more commercial emphasis and that many individuals who need more support do not access it.

Confidentiality
Other risks raised included data protection and confidentiality issues associated within the mentor/mentee relationship.

Proposal 5: Committee advice

Companies Committee
There was agreement with increased support for newly qualified professionals and it was highlighted that a cultural shift is needed to encourage experienced registrants to support less experienced colleagues. There was consensus that this should be administered by each organisation as it wished and that it would be helpful if this activity could form part of a registrant's CPD. There was consensus that the GOC should not regulate post-qualified support but could produce supporting guidance to help prompt the culture change.

Registration Committee
There was positive support for more newly qualified practitioner support, with the view being expressed that peer reflection has been effective, is inexpensive and supports practitioners to continue to learn and build on their experience irrespective of the environment in which they work. It was also felt that mandatory mentoring and supervision would require greater resources under the proposed new system and that a mentoring scheme would require monitoring to ensure quality and consistency.

The Committee believed that improved newly qualified practitioner support was an achievable aim, although appropriate planning, evidence-gathering and resources would be required.

Education Committee
The Committee supported this proposal, agreeing that more newly qualified practitioner support is important and necessary for the profession to, amongst other benefits, address unnecessary referrals and retention. It noted that a cultural change would be required to improve supervision and encourage continuous learning after joining the fully qualified registration.

Standards Committee
The Committee supported improved newly qualified practitioner support, especially if it would encourage practitioners to be professionals and help to retain newly qualified registrants. It was agreed that the GOC's role should be to create guidance and support, but not to make mentoring mandatory, and that clear definitions would be important to distinguish between mentor and supervisor. In Northern Ireland, the Echo system (a feedback system between optometrists and ophthalmologists) has worked well and could be considered in carrying our further research.

We should also bear in mind that peer mentoring was thought to be more common when a registrant worked in one practice rather than multiple practices.

It was also suggested that dispensing opticians might not all have the same access to IT systems on the shop floor so a mentoring model for DOs would need to consider practicalities.

Proposal 5: Solutions/options

Mentoring scheme
The majority of stakeholders thought that the GOC should not run or administer a mentoring scheme. However, there was strong support for the GOC to promote good practice and involvement with mentoring as part of CPD. We could examine a range of mentoring schemes and models, which would then enable us to promote good practice.

It was felt that it would be important to differentiate between the roles of mentor and supervisor and consider how the Continuing Education and Training (CET)/CPD scheme could support both roles. The first step could be to define roles and determine the training required to support mandatory mentor/supervisor registration if this was felt to be necessary or to introduce mandatory qualifications or training as part of CPD, which might be more effective and efficient.

Participation in mentoring could be encouraged by allowing it to count towards CET achievement and the GOC could also encourage the creation of mentoring courses by CET providers and undergraduate education providers. Participation in voluntary mentoring for newly qualified professionals could also be encouraged, by potentially waiving CET requirements for practitioners' first two years on the register if they could show that they were participating in a suitable mentoring scheme.

There were mixed views on who the mentors should be. It was suggested that clinicians near retirement are not the best people to perform this role and that the suitability of mentors should be checked. Some stakeholders thought that mentors should come from outside the professions, albeit with an understanding of the issues that might arise.

There was also the suggestion that we should consider how standards or guidance on leadership could promote professional engagement with mentoring (and supervision) as part of our review of the Standards of Practice for Optometrists and Dispensing Opticians, which will commence in 2020.

Research
There was a desire from the sector to obtain more information about the issues faced by newly qualified GOC registrants, such as whether unnecessary pressure is applied to achieve commercial targets. It was suggested that the GOC should look at how mentoring is used in other professions and feed this learning into the planned future work.

Confidentiality
In order to address the issue of confidentiality, or the possibility that some mentors might not be able to meet all the support needs of their mentees, there was the suggestion that alternative modes of mentoring and support might be useful, such as virtual or anonymous mentoring.

Alternative support mechanisms

A number of alternative support mechanisms were identified that might potentially offer similar benefits. They included:

Guidance for newly qualified professionals
It was suggested that this could include a range of supporting information and tools to assist newly qualified registrants. This could be considered further as part of the Transition to Practice work stream under the CET Review Programme.

Targeted CET
There is the potential to have targeted CET requirements for newly qualified registrants that focus on key problem areas or those requiring further support, such as decision making or confidence building. This could be considered as part of the Transition to Practice project under the CET Review Programme.

Sharing knowledge responsibly
The role of social media applications and websites was perceived to be understated, with people seeking support from networking sites such as Facebook and LinkedIn. Helplines were viewed as a sustainable solution and their use in other professions was highlighted.

Proposal 5: Response

We welcome support for the proposal to provide improved support for newly-qualified professionals.

We agree that this continuing support is important and propose to take this forward through our parallel review of Continuing Education and Training (CET). Under that programme we have a Transition to Practice project which will explore a range of different options for future consultation.

Education Strategic Review: next steps

We are very grateful to all the stakeholders that fed into the consultation on the proposed new standards for education providers and learning outcomes for students and the subsequent discussions and engagement. We recognise that there are strong views on all sides of this debate and the decisions taken by Council have been made following careful consideration of all the feedback and with the need to ensure patient safety being front of mind.

The Education Strategic Review will help to shape our response to the changes in health and social care that are occurring and will strengthen our ability to demonstrate the value of optometrists and dispensing opticians in promoting eye health and preventing avoidable sight loss. To achieve this, we will continue to engage in dialogue and work in partnership with devolved administrations, universities, colleges, commercial and charitable service providers, professional bodies, commissioners, independent practices, registrants, patients and students. Alongside work to re-visit the learning outcomes, we intend to produce a high-level ESR implementation plan with short, mid and long-term actions for Council's review in November.

We look forward to working closely with stakeholders to co-create solutions and welcome the ongoing dialogue to make sure the system of education and training prepares students and existing practitioners for the roles of the future.

Appendix 1: ESR overview infographic

GOC's Education Strategic Review (ESR) project

General Optical Council

Purpose

To review and make recommendations on how the system of optical education and training should evolve so that registrants are equipped to carry out the roles they will be expected to perform in the future

Scope

Main focus

- Preparedness for practice for changing registrant roles across the UK in response to external drivers – technology, multi-disciplinary working, demographics, chronic conditions
- Route to registration leading to competent and safe beginners
- Accountability for competent and safe practitioner outcomes
- Safe and effective supervision
- Regulation: Risk-based quality assurance standards and framework

Secondary focus

- Increased clinical experience
- Routes to specialist practice
- Vocational qualifications and career frameworks
- Funding and benchmarking

Inform

- CET policy & process
- Overseas quality assurance
- Student registration

Feedback

Education and training:

- students need earlier, more varied and regular patient experience;
- registrants need to be able to make more clinical decisions confidently and safely;
- registrants will need to be equipped to deliver new, different and innovative services;
- the quality and quantity of supervision during training is insufficient.

GOC should:

- focus on evaluating the outcomes of education and training rather than inputs; and
- ensure its approach to approving and quality assuring education and training is consistent, fair and proportionate.

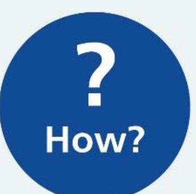
We want:

Education:

- that adapts with changes in technology and consumer behaviour
- that includes professionalism and enhanced clinical experience for students
- with a multi-disciplinary ethos

Regulation:

- Outcomes-based standards for education providers
- Proportionate risk-based quality assurance framework



We will do this through:

- Asking stakeholders what they think and listening to their views
- Making evidence-based decisions and considering impact
- Giving clear and fair timelines for education providers

Outputs

New Education Standards for education providers

New Learning Outcomes for students

Risk-based GOC quality assurance framework

Have a question?
Contact
education@optical.org

Appendix 2: Key risks related to the ESR

Risk	Action required
Public safety There is a risk to public safety if eye care services do not deliver the patient-centred care which is required.	The ESR is intended to identify areas which the sector needs to consider in order for it to make sure the sector is equipped for the roles of the future.
Irrelevance There is a risk that the current system of optical education and training ceases to be fit for purpose due to the changing needs of patients, changing roles of optical professionals and wider changes in the delivery of healthcare across the four UK nations.	The purpose of ESR is to review and make recommendations on how the system of optical education and training should evolve so that registrants are equipped to carry out the roles they will be expected to perform in the future.
Sector leadership A clear risk to the profession, which was raised in numerous stakeholder workshops, is the lack of sector leadership in setting out a case for, and overseeing the development of, what those roles will look like in future. This work requires not just the collaboration of numerous parties within the optical sector, but also work with wider stakeholders such as government, ophthalmology, orthoptics, hospitals, education providers, other regulators and commissioners.	As a regulator, we are not the appropriate organisation to lead on certain areas. However, our concern relates to the risk of a lack of optical services which would have an impact on public safety and, therefore, we recommend that until a time whereby a group of organisations will take this leadership role, we will take a pragmatic role in bringing key stakeholders together.
Funding There is a risk regarding the resources required to implement some of the proposed changes and how any changes will impact funding structures.	We must understand the current funding flows within the sector as well as potential additional funding streams. We must work with the sector to encourage and support others to take this forward.
Timescales There is a risk that the sector moves too slowly to react to the changing demands, or too fast to enable education providers to implement changes safely and appropriately.	We must enable phasing, where possible, and clearly state the direction of travel so that the sector can prepare for their development.
Perceptions There is a risk that key stakeholders' views or perceptions contradict the evidence related to optical education and training.	We are committed to ensuring that any recommendations for change are based on sound evidence, benchmarking and feedback, and that we make decisions in the interests of the public.

Risk	Action required
Co-creation, collaboration and consensus There is a risk that despite stakeholder engagement, some parties refuse to co-create or collaborate with others.	We want to bring the sector together in co-creating solutions and will try to seek consensus where possible. We recognise that wide-scale change can be seen as disruptive and will try to engage as much as possible with all parties. Ultimately, the GOC will make regulatory decisions in the best interest of public safety.
Project creep There is a risk of dependency on key contextual and sector-wide developments that are outside of the GOC's regulatory remit and, therefore, outside of the scope of ESR.	We have a clear project scope and, whilst being aware of the context in which we regulate, we must always maintain the role of a regulator. We should encourage the sector to lead on areas outside of our remit.

Appendix 3: Key supporting evidence

May 2019	**ESR education standards and learning outcomes consultation analysis** and **infographic** Analysis of 539 responses to the GOC's ESR consultation on the draft Education Standards for providers and Learning Outcomes for students which ran from November 2018 to February 2019.
February 2019	External report: on behalf of the Secretary of State for Health and Social Care **Topol review:** Preparing the healthcare workforce to deliver the digital future.
June 2018	**Perceptions of UK optical education and appendices** Research into the views and perceptions of newly qualified optical practitioners and optical employers across the UK.
May 2018	**https://www.optical.org/en/news_publications/news_item.cfm/goc-chair-calls-for-sector-wide-action-on-clinical-experience-for-optical-students** GOC Chair, Gareth Hadley, issues a call for sector-wide action to help achieve enhanced clinical experience for student optometrists and DOs.
April 2018	**Concepts and principles consultation - high level findings** High level findings statement from the ESR concepts and principles consultation. The consultation ran from December 2017 to March 2018.
April 2018	**ESR concepts and principles consultation analysis & annex of responses** Analysis of responses to the GOC's ESR concepts and principles consultation which ran from December 2017 to March 2018.
March 2018	**ESR consultation Q&A** ESR concepts and principles consultation question and answer factsheet.
February 2018	**System leaders roundtable statement** Summary of roundtable event with sectoral and health service system leaders, about the potential future direction of eye health and vision services in the UK.
December 2017	**ESR concepts and principles consultation** An exploratory consultation which sets out a series of concepts and principles we are exploring as part of our ESR. The consultation closed on Friday 16 March 2018.
November 2017	**Educational patterns and trends** Research commissioned into educational patterns and trends in optical and other health professional education and regulation.

September 2017	**Professional boundaries in the optical sector** Discussion paper exploring the changing roles of optical professionals in the UK, to inform the ESR.
June 2017	**Summary of response to call for evidence and annex of responses** Independent summary of responses to our initial ESR Call for Evidence, along with an annex of all responses where consent was given for publication.
November 2016	External information: **Ophthalmic Common Clinical Competency Framework** **The Ophthalmic Common Clinical Competency Framework** (OCCCF) provides standards and guidance for the knowledge and skills required for non-medical eye healthcare professionals to deliver patient care in a multi-disciplinary team setting. The Framework has been developed into a curriculum in 2019, with corresponding workplace based assessments and resources, covering four clinical areas; acute and emergency eye care, cataract assessment, glaucoma and medical retina**.**
March 2016	External report: by Optical Confederation **Foresight Report**

Appendix 4: Education and training registration criteria for healthcare professional bodies

The following table shows the professional registration criteria/qualification for UK health regulators.
Please note that registrable qualifications are all clinical vocational qualifications.

Healthcare profession - (*Number of education providers) – **Regulator** – Registered figures	**Registration criteria**
Medical practitioners (32*) **GMC – General Medical Council** 2019 registered figures Total doctors: 300,922 Doctors in training: 60,612 Doctors on GP register: 70,137 Doctors on specialist register: 95,983	Medical Degree – from an approved school. Provisional registration granted during first year of the foundation training. Full registration is awarded after completing year one.
Nursing and Midwifery (72*) **NMC – Nursing and Midwifery Council** 2019 registered figures Total registrants: 698,237 Midwife: 36,916 Nurse: 653,544 Nurse and midwife: 7,288 Nursing associate: 489	Bachelors' Degree leading to registration if accredited by the NMC.
Dentists (17*) **GDC – General Dental Council** 2019 registered figures Total registrants: 112232 Orthodontic Therapist: 644 Dentist: 41067 Dental Therapist: 3379 Dental Technician: 5938 Dental Nurse: 59014 Dental Hygienist: 7335 Clinical Dental Technician: 368 (Note: One registrant may have more than one registration)	BDS qualifications leading to registration if accredited by the GDC.
Pharmacists (31*) **GPhC – General Pharmaceutical Council** 2019 registered figures Total number of UK pharmacists: 79,675 Pharmacists: 56288 Pharmacy technicians: 23387	MPharm – GPhC accredited – must meet several post MPharm requirements prior to registration. Exceptions include integrated programmes from Bradford, Nottingham and East Anglia.

Healthcare profession - (*Number of education providers) – **Regulator** – Registered figures	**Registration criteria**
The Allied Health Professions (AHP) Podiatrists - AHP (13*) Radiographer – AHP (25*) Speech Language and Therapy – AHP (19*) Physiotherapy - AHP (45*) Orthoptist – AHP (3*) **HCPC – The Health and Care Professions Council** 2018-19 registered figures: Chiropodists and podiatrists: 12,833 Speech and language therapists: 16,595 Radiographers: 34,470 Physiotherapists: 55,695 Orthoptists: 1,496	Bachelors' Degree – leading to registration if accredited by the HCPC.
Paramedics - AHP (40*) **HCPC** 2018-19 registered paramedics: 27,686	Foundation Degree, Diploma of Higher Education (DipHE) or Bachelors leading to registration if accredited by the HCPC.
Occupational Therapy – AHP (38*) **HCPC** 2018-19 registered occupational therapists: 39,925	Bachelors/Degree Apprenticeship Standard leading to registration if accredited by the HCPC.

Appendix 5: Stakeholder workshops, seminars

The following organisations attended the external stakeholder workshops held in May and June.

ABDO Exams (2 representatives)	Professor and former head of Department of Social Work at Kingston University
Anglia Ruskin University	LOCSU
AOP	Member of the public
ASDA	Moorfields
Aston University	Optical Consumer Complaints Service
Association of Independent Opticians	Optical Express
BBR Optometry	Optometry Schools Council
BIOS	Plymouth University
Boots Opticians	QAA
Bradford College	Students (City University, Ulster)
British Contact Lens Association/British Universities Committee of Contact Lens Educators	Specsavers
Cardiff University (2 representatives)	Teesside University
City University	The Brain Tumour Charity
College of Optometrists	Ulster University (2 representatives)
FODO (2 representatives)	University of Hertfordshire (2 representatives)
GDC	University of Manchester (2 representatives)
Glasgow Caledonian	University of the West of England
GMC	Vision Express
GPHC	Visualise Training and Consultancy – CET Trainer
Highlands and Islands University (3 representatives)	