Benchmark statement:
Health care programmes

Phase 1
Orthoptics
Subject benchmark statements: Health care programmes

Subject benchmark statements provide a means of describing the nature and characteristics of programmes of study and training in health care. They also represent general expectations about standards for the award of qualifications at a given level and articulate the attributes and capabilities that those possessing such qualifications should be able to demonstrate.

Subject benchmark statements are used for a variety of purposes. Primarily, they are an important external source of reference when new programmes are being designed and developed. They provide general guidance for articulating the learning outcomes associated with the programme but are not a specification of a detailed curriculum. Benchmark statements provide for variety and flexibility in the design of programmes and encourage innovation within an agreed overall conceptual framework.

Subject benchmark statements also provide support in the pursuit of internal quality assurance. They enable the learning outcomes specified for a particular programme to be reviewed and evaluated against agreed general expectations about standards.

Finally, subject benchmark statements are one of a number of external sources of information that are drawn upon for the purposes of academic review* and for making judgements about threshold standards being met. Reviewers do not use subject benchmark statements as a crude checklist for these purposes however. Rather, they are used in conjunction with the relevant programme specifications, the associated documentation of the relevant professional and statutory regulatory bodies, the institution’s own self evaluation documentation, together with primary data in order to enable reviewers to come to a rounded judgement based on a broad range of evidence.

The benchmarking of standards in health care subjects is undertaken by groups of appropriate specialists drawn from higher education institutions, service providers and the professional and statutory regulatory bodies. The statements represent the first attempt to make explicit in published form the general academic characteristics and standards of awards in these subjects in the UK. In due course, the statements will be revised to reflect developments in the subjects and the experiences of institutions, academic review and others that are working with it.

* academic review in this context refers to the Agency’s arrangements for external assurance of quality and standards. Further information regarding these may be found in the Handbook for academic review, which can be found on the Agency’s web site.

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Foreword

This benchmark statement describes the nature and standards of programmes of study in orthoptics, that leads to awards made by higher education institutions in the United Kingdom (UK) in the subject.

It has been developed in collaboration with a number of other health care professions and these are listed below. Although initial work was undertaken in subject specific groups, the analysis of these early drafts identified a number of features which all the subject groups shared. It was, therefore, agreed by each of the specialist benchmark groups that their respective statements could be cast using a common structure. As work progressed it became increasingly apparent that there was considerable overlap within the details of the subject-specific statements and a common health professions framework was emerging. This emerging framework is, accordingly, displayed in each of the subject statements in order to illustrate on the one hand, the shared context upon which the education and training of health care professionals rests and, on the other, the uniquely profession-specific context within which programmes are organised. It is important to emphasise that benchmark statements are not cast in tablets of stone and will need to be revisited in the light of experience and further developments in health care. Moreover, we are confident that the emerging framework has the potential to embrace other health related professions such as social work, dentistry, medicine and other therapies. It is anticipated that further work in a second phase of the project could lead to an overarching health professions framework.

The initial section of this statement sets out the health professions framework under three main headings:

A  Expectations of the health professional in providing patient/client services;

B  The application of practice in securing, maintaining or improving health and well-being;

C  The knowledge, understanding and skills that underpin the education and training of health care professionals.

The main section of this statement, in addition to describing the nature and extent of programmes leading to awards in orthoptics, describes the profession-specific expectations and requirements under the same three categories.

The key feature in this statement, as in the associated statements, is the explicit articulation of the academic and practitioner standards associated with the award in orthoptics. This duality reflects the significance of the academic award as the route to registration for professional practice and formal recognition by the professional and statutory regulatory bodies. The threshold standards set out the expectations of health professionals entering their first post immediately on qualification.

The section on standards accords with the relevant level descriptor for awards in the qualifications frameworks published by the Quality Assurance Agency for Higher Education.

The section on teaching, learning and assessment draws attention to the central role of practice in the design of learning opportunities for students and the importance of ensuring that professional competence developed through practice is adequately assessed and rewarded. It also notes how essential it is that the integration of theory and practice is a planned process within the overall arrangements made for teaching and learning.

The statement acknowledges the need to put the prospective client/patient at the centre of the student’s learning experience and to promote within that experience the importance of team-working and cross-professional collaboration and communication. Implicit in the statement are the opportunities that exist for shared learning across professional boundaries, particularly in the latter stages of training when inter-professional matters can be addressed most productively. It is essential that the opportunities that exist for shared learning in practice are optimised, as well as best use being made of similar opportunities that prevail more obviously in classroom-based activities.

This statement and the associated statements will therefore allow higher education institutions, in partnership with service providers (where appropriate), to make informed curriculum choices about the construction of shared learning experiences. In this context, shared learning is seen as one of a number of means of promoting improved collaborative practice and addressing a range of issues which span professional accountability and professional relationships.

Finally, the statement does not set a national curriculum for programmes leading to awards in orthoptics. It acknowledges that the requirements of the professional and statutory regulatory bodies need to be incorporated into the design of programmes. It seeks to encourage higher education institutions and service providers to work collaboratively in the design and delivery of their curricula. Its essential feature is the specification of threshold standards, incorporating academic and practitioner elements, against which higher education institutions are expected, as a minimum, to set their standards for the award.

1 Dietetics, Health Visiting, Midwifery, Nursing, Occupational Therapy, Orthoptics, Physiotherapy, Podiatry (Chiropody), Prosthetics and Orthoptics, Radiography, and Speech & Language Therapy.
An emerging health professions framework

The subject specific statements for orthoptics have been set within the emerging health professions framework outlined below. As indicated in the foreword, this framework developed as a result of the benchmarking work undertaken collaboratively by 11 different health professional groups. Further evolution of the framework is anticipated through a second phase of the project which will address its goodness of fit with a range of other health and social care professions benchmark statements.

A Expectations of the health professional in providing patient/client services

This section articulates the expectations of a registered professional within health and social care services. It describes what is regarded as a minimum range of expectations of a professional that will provide safe and competent practice for patients/clients in a variety of health and social care contexts.

A1 Professional autonomy and accountability

The award holder should be able to:

- maintain the standards and requirements of professional and statutory regulatory bodies;
- adhere to relevant codes of conduct;
- understand the legal and ethical responsibilities of professional practice;
- maintain the principles and practice of patient/client confidentiality;
- practise in accordance with current legislation applicable to health care professionals;
- exercise a professional duty of care to patients/clients/carers;
- recognise the obligation to maintain fitness for practice and the need for continuing professional development;
- contribute to the development and dissemination of evidence-based practice within professional contexts;
- uphold the principles and practice of clinical governance.

A2 Professional relationships

The award holder should be able to:

- participate effectively in inter-professional and multi-agency approaches to health and social care where appropriate;
- recognise professional scope of practice and make referrals where appropriate;
- work, where appropriate, with other health and social care professionals and support staff and patients/clients/carers to maximise health outcomes;
- maintain relationships with patients/clients/carers that are culturally sensitive and respect their rights and special needs.

A3 Personal and professional skills

The award holder should be able to:

- demonstrate the ability to deliver quality patient/client-centred care;
- practise in an anti-discriminatory, anti-oppressive manner;
- draw upon appropriate knowledge and skills in order to make professional judgements, recognising the limits of his/her practice;
- communicate effectively with patients/clients/carers and other relevant parties when providing care;
- assist other health care professionals, support staff and patients/clients/carers in maximising health outcomes;
- prioritise workload and manage time effectively;
- engage in self-directed learning that promotes professional development;
- practise with an appropriate degree of self-protection;
- contribute to the well-being and safety of all people in the work place.
A4 Profession and employer context

The award holder should be able to:

- show an understanding of his/her role within health and social care services;
- demonstrate an understanding of government policies for the provision of health and social care;
- take responsibility for his/her own professional development;
- recognise the value of research and other scholarly activity in relation to the development of the profession and of patient/client care.

B The application of practice in securing, maintaining or improving health and well-being

All health care professionals draw from the knowledge and understanding associated with their particular profession. This knowledge and understanding is acquired from theory and practice. It forms the basis for making professional decisions and judgements about the deployment in practice of a range of appropriate skills and behaviours, with the aim of meeting the health and social care needs both of individual clients/patients and of groups, communities and populations. These decisions and judgements are made in the context of considerable variation in the presentation, the setting and in the characteristics of the client/patient health and social care needs. They often take place against a backdrop of uncertainty and change in the structures and mechanisms of health and social care delivery.

Sound professional practice is essentially a process of problem solving. It is characterised by four major phases:

- the identification and analytical assessment of health and social care needs;
- the formulation of plans and strategies for meeting health and social care needs;
- the performance of appropriate, prioritised health promoting/health educating/caring/diagnostic/therapeutic activities;
- the critical evaluation of the impact of, or response to, these activities.

B1 Identification and assessment of health and social care needs

The award holder should be able to:

- gather relevant information from a wide range of sources including electronic data;
- adopt systematic approaches to analysing and evaluating the information collected;
- communicate effectively with the client/patient, (and his/her relatives/carers), group/community/population, about their health and social care needs;
- use a range of assessment techniques appropriate to the situation and make provisional identification of relevant determinants of health and physical, psychological, social and cultural needs/problems;
- recognise the place and contribution of his/her assessment within the total health care profile/package, through effective communication with other members of the health and social care team.

B2 Formulation of plans and strategies for meeting health and social care needs

The award holder should be able to:

- work with the client/patient, (and his/her relatives/carers), group/community/population, to consider the range of activities that are appropriate/feasible/acceptable, including the possibility of referral to other members of the health and social care team and agencies;
- plan care within the context of holistic health management and the contributions of others;
- use reasoning and problem solving skills to make judgements/decisions in prioritising actions;
- formulate specific management plans for meeting needs/problems, setting these within a timescale and taking account of finite resources;
- record professional judgements and decisions taken;
- synthesise theory and practice.
**B3 Practice**

The award holder should be able to:

- conduct appropriate activities skilfully and in accordance with best/evidence-based practice;
- contribute to the promotion of social inclusion;
- monitor and review the ongoing effectiveness of the planned activity;
- involve client/patient/members of group/community/population appropriately in ongoing effectiveness of plan;
- maintain records appropriately;
- educate others to enable them to influence the health behaviour of individuals and groups;
- motivate individuals or groups in order to improve awareness, learning and behaviour that contribute to healthy living;
- recognise opportunities to influence health and social policy and practices.

**B4 Evaluation**

The award holder should be able to:

- measure and evaluate critically the outcomes of professional activities;
- reflect on and review practice;
- participate in audit and other quality assurance procedures;
- contribute to risk management activities.

**C Knowledge, understanding and skills that underpin the education and training of health care professionals**

The education and training of health care professionals draws from a range of well-established scientific disciplines that provide the underpinning knowledge and understanding for sound practice. Each health care profession will draw from these disciplines differently and to varying extents to meet the requirements of their specialty. It is this contextualisation of knowledge, understanding and skills that is characteristic of the learning in specific health care programmes. Consequently, in this introductory section, the attributes and capabilities expected of the student are expressed at a generalised level.

**C1 Knowledge and understanding**

The award holder should be able to demonstrate:

- understanding of the key concepts of the disciplines that underpin the education and training of all health care professionals, and detailed knowledge of some of these. The latter would include a broad understanding of:
  - the structure and function of the human body, together with a knowledge of dysfunction and pathology;
  - health and social care philosophy and policy, and its translation into ethical and evidenced based practice;
  - the relevance of the social and psychological sciences to health and healthcare;
  - the role of health care practitioners in the promotion of health and health education;
  - the legislation and professional and statutory codes of conduct that affect health and social care practice.
C2 Skills

Information gathering
The award holder should be able to demonstrate:

- an ability to gather and evaluate evidence and information from a wide range of sources;
- an ability to use methods of enquiry to collect and interpret data in order to provide information that would inform or benefit practice.

Problem solving
The award holder should be able to demonstrate:

- logical and systematic thinking;
- an ability to draw reasoned conclusions and sustainable judgements.

Communication
The award holder should be able to demonstrate:

- effective skills in communicating information, advice, instruction and professional opinion to colleagues, patients, clients, their relatives and carers; and, when necessary, to groups of colleagues or clients.

Numeracy
The award holder should be able to demonstrate:

- ability in understanding, manipulating, interpreting and presenting numerical data.

Information technology
The award holder should be able to demonstrate:

- an ability to engage with technology, particularly the effective and efficient use of information and communication technology.
**Benchmark statement for orthoptics**

**Introduction**

Orthoptics is the study of the visual system and includes its development, binocular interaction and ocular motility, with an understanding of the neuro-anatomy and physiology, which underpins this.

The practice of orthoptics requires attention to detail and technical proficiency in investigative techniques used to assess visual function in a wide spectrum of patients. The orthoptist must possess the necessary technical and interpersonal skills required to effectively investigate and treat ocular conditions that occur in babies, children, adults and patients with physical and intellectual handicap.

The orthoptist has a unique role in the detection, diagnosis and management of strabismus, amblyopia and ocular motility defects. In addition the orthoptist uses the knowledge of the visual system and its abnormalities to formulate strategies to assess and manage other ocular defects. This may include the effects of diseases such as diabetes, multiple sclerosis and other neurological conditions, in which orthoptic abnormalities may be the first physical indication of such a disease. The orthoptist provides a vital role in the therapy of binocular vision and utilises varying therapeutic methods to maximise functional ability and minimise ocular discomfort in situations where, for example, high demands are put on the visual system, such as reading and visual display unit use.

The orthoptist may also be involved in screening for visual defects in children.

Orthoptists work in a range of settings that include hospitals, community health care, nurseries, schools and private practice. The majority of orthoptists are employed in the National Health Service (NHS). Orthoptics is one of the smaller professions allied to medicine with approximately 1,500 state registered orthoptists in the United Kingdom (UK).

Degree programmes in orthoptics aim to develop innovative, skilled and reflective practitioners with a sound scientific approach to professional development and a holistic appreciation of practice. In order to fulfil this aim the graduate will need to achieve the following objectives:

- to understand the principles governing binocular vision, its investigation and the significance of its presence or absence;
- to understand the principles governing ocular motility and its relevance to patient management;
- to understand the principles governing visual function and the development of vision;
- to recognise the functional and perceptual difficulties that may arise as a result of defective visual function;
- to utilise and implement procedures which can be used diagnostically and therapeutically to address anomalies of visual function.

Orthoptics is one of the Professions Allied to Medicine (PAM) defined by the Whitley Council and one of the Professions Supplementary to Medicine (PSM) as established by the PSM Act 1960. The Orthoptists Board of the statutory regulatory body regulates orthoptic education and training. Qualified orthoptists are eligible to join the British Orthoptic Society (BOS), which acts as the professional body and trade union for orthoptists.

The education of orthoptics takes place within higher education institutions and courses are offered at honours degree and postgraduate levels. All courses include a mandatory practice component. Opportunities to study orthoptics are currently available in only two institutions in the UK.
Nature and extent of orthoptics

Orthoptists should be able to operate as independent practitioners as well as members of health care teams. Orthoptists are able to act as first-contact practitioners and recognise the need for referral to other health professionals. A challenging aspect of orthoptics is the broad scope of practice in terms of patient and client groups, health care delivery settings and intervention for problems of impairment, activity and participation.

Orthoptists provide a teaching and advisory role to the public and many patient and client groups.

The breadth and scope of orthoptics practice encompasses the following:

- the age-span of human development from neonate to old age;
- the ability to diagnose and recognise the association between specific defects of binocular vision, ocular motility and visual function to other general and neurological conditions. The early referral of such patients to the appropriate specialised unit will result in the expeditious implementation of the appropriate therapy;
- working with individuals who present with complex and challenging problems resulting from multi-pathology illness;
- health-promotion and early identification of problems in the form of screening;
- knowledge of the management and treatment of ocular problems associated with abnormal development such as retinopathy of prematurity, amblyopia and strabismus;
- the therapeutic management and treatment of ocular problems associated with recovering conditions such as head injury and stroke;
- treating ocular complaints caused by deteriorating conditions such as multiple sclerosis;
- the management of individuals with ongoing conditions such as diabetes, thyroid problems;
- a broad range of settings including the acute and primary care settings, private sector, schools and nurseries;
- an understanding of the health care issues associated with diverse cultures within society.

Orthoptics is a developing profession that operates within a changing and evolving environment. The profession of orthoptics has undertaken pioneering work in constructing written clinical and occupational standards for a wide range of specialist areas. These standards, which make direct reference to evidence at different levels, are embedded in practice and the curricula of undergraduate programmes.

Recruitment policies and strategies for orthoptics degree programmes should include the principles of wider participation and should also take account of the needs and ethnic diversities of individual communities.

The undergraduate programmes of study offered by the higher education sector must actively address the changes in health care provision and, as a consequence, the change in the role of the orthoptist on a national and international level. The philosophy of partnership in learning should be inherent in any degree programme. Learning should be facilitated by the setting of challenging but realistic objectives/learning outcomes, in both the theoretical and clinical aspects of the degree programme. Core curricula, as laid down by the Orthoptists Board at the Council for the Professions Supplementary to Medicine (CPSM), will form the basis of the syllabuses.

On completion of the degree programme, graduates must be able to exhibit competence in all aspects of orthoptic practice. Graduates must be flexible in approach to practice and be capable of recognising and developing the professional role within a changing health service.

The course must be designed in such a way that the students are capable of undertaking research. They should be facilitated in developing a research ethic to contribute to the research portfolio in order to enhance the scientific base of the profession, improve patient care and optimise professional autonomy. A variety of teaching and learning strategies should be employed.

The learning outcomes of all undergraduate orthoptic degree programmes must reflect the above and, at different levels of the course, must clearly indicate the progressive and more demanding nature of the graduate’s cognitive abilities, decision making skills and clinical expertise.
A Expectations of an orthoptist in providing patient/client services

A1 Professional autonomy and accountability of the orthoptist
The award holder should be able to:

- understand the legal responsibilities and ethical considerations of professional orthoptic practice;
- conform to the Rules of Professional Conduct;
- appreciate the significance of professional self-regulation;
- acknowledge the boundaries of professional competence;
- be committed to continuing professional development as recommended by the professional body.

A2 Professional relationships
The award holder should be able to:

- participate effectively in multi-professional approaches to health care delivery liaising with ophthalmologists, optometrists and other professionals;
- assist other health care professionals in professional practice such as educating health visitors and nurses about visual screening;
- acknowledge cross-professional boundaries and employ appropriate referral procedures;
- initiate and maintain effective interactions with relevant external agencies including other health care professionals;
- deploy and manage support staff effectively and efficiently.

A3 Personal and professional skills
The award holder should be able to:

- make professional judgements confidently;
- be able to carry out appropriate conservative orthoptic treatment such as occlusion therapy, orthoptic therapy or prism treatment;
- recognise the need for surgical intervention and liaise with ophthalmologist regarding this course of action;
- recognise the need for optical treatment such as the prescription of glasses;
- reflect on professional practice and engage in appropriate self-directed learning;
- demonstrate a high level of communication skills;
- observe patient confidentiality;
- operate with a suitable degree of self-protection.

A4 Profession and employer context
The award holder should be able to:

- demonstrate an understanding of orthoptics in the UK and of the current developments in the health and social care sectors;
- understand the scope of orthoptics;
- be aware of contemporary health and safety legislation and integrate into orthoptic practice;
- play an active role in health education and health promotion programmes such as visual screening;
- recognise the wide-reaching value of research and scholarly activity within the health care and professional context and the impact this will have on the development of the orthoptic profession.
B The application of orthoptist practice in securing, maintaining or improving health and well-being

B1 Identification and assessment of health needs

The award-holder should be able to:

- identify the social, political, economic and technological factors that impact on the practice of orthoptics such as the need for screening and the patients groups who require screening for visual problems;
- gather and record information from a wide range of sources, for example, patient history, ophthalmic reports and observation of patient;
- recognise the importance of additional information from referring practitioner and/or guardian;
- carry out an appropriate orthoptic investigation, using suitable methods for age and intellectual ability of patient, eg clinical examination by subjective and objective means;
- effectively gather information by objective means when assessing very young or uncooperative individuals;
- systematically analyse and evaluate the information before initiating the most appropriate orthoptic treatment;
- make judgements from the verbal, behavioural and clinical presentation of patient;
- liaise with and recognise importance of other health care professionals with regard to patient care.

B2 Formulation of plans and strategies for meeting health needs

The award-holder should be able to:

- evaluate each clinical situation and the range of available and appropriate interventions that may be required in a timely fashion, such as the implementation of occlusion therapy within the visual development period;
- use knowledge and communication skills to impart to the patient/client details about their condition, prognosis, and treatment plan whilst considering their intellectual needs;
- devise a care plan specific to the patient's/client's ocular condition in liaison with the ophthalmic team, reflecting practical application of the current theories into the ocular condition;
- identify and assess physical, psychological and cultural needs/events, for example considering educational needs as well as visual needs of a child of school age undergoing occlusion therapy;
- motivate the patient/client undergoing treatment whilst considering their social and cultural needs;
- motivate guardian or carer on importance of care in the case of young children and ensure understanding and compliance of guardian;
- recognise the need to change the care plan in response to the patient/client need, such as development of other medical conditions or impact on school work or occupation;
- review the care plan regularly and evaluate the need for modification, alternative treatment, referral to another professional or discontinuation of the treatment;
- communicate with the patient and guardian at each visit with regard to the effectiveness of the care plan and any modification required;
- provide information on the range of eye services available to the patient/client;
- maintain written records at each visit of the effectiveness of the treatment and any modification.

B3 Practice

The award-holder should be able to:

- record patient and technical data, professional judgements and actions;
- identify and assess physical, psychological and cultural needs/events or, for example, consider educational needs as well as visual needs of a school aged child undergoing occlusion therapy;
- follow an agreed protocol if appropriate;
- conduct appropriate orthoptic care in accordance with best/evidence-based practice;
• contribute to the promotion of social inclusion;
• involve patients appropriately in ongoing effectiveness plan;
• maintain records appropriately;
• educate others in the promotion of visual health such as the training of health visitors in the practice of visual screening.

B4 Evaluation
The award holder should be able to:
• monitor and evaluate the effects of orthoptic treatment and interventions;
• undertake an audit, interpret the outcome and relate this to the practice of orthoptics;
• use research from the relevant disciplines as an evaluation skill in day to day work for the advancement of professional knowledge and practice;
• evaluate orthoptic practice continually;
• reflect on experience and demonstrate reflection in action;
• apply the knowledge in a way that does not endanger the health or safety of an individual or group;
• approach their work with an ability to use research and evaluation of findings to support evidence-based practice in orthoptics.

C Knowledge, understanding and skills that underpin the education and training of orthoptists
Orthoptic education draws upon a wide range of academic disciplines and these are detailed in the sections below. Although the following sections do not correspond exactly with the health professions framework nevertheless they articulate and contextualise section C.

C1 Knowledge and understanding - scientific basis of orthoptics
The award holder should be able to demonstrate knowledge and understanding of:
• ocular alignment and binocular single vision;
• the principles of uniocular and binocular perception;
• the attaining and maintaining of binocular functions;
• the development of these sensory functions;
• the role of refractive error and its effect on ocular alignment;
• binocular vision and its disruption;
• ocular motility systems and their control;
• adaptive mechanisms that occur in order to compensate for symptoms produced;
• orthoptic and ophthalmological equipment used during the investigative process;
• tests required to aid in differential diagnosis.

Biological sciences
The award holder will be able to demonstrate knowledge and understanding of:
• human anatomy and physiology, emphasising the dynamic relationships of human structure and function and focusing on the central nervous systems, brain and ocular structures;
• human growth and development across the lifespan;
• other medical conditions and their association with the eye including paediatric, endocrine, autoimmune, oncological and neurological disease;
• the role and appropriate selection of pharmacological agents and how they may be utilised in orthoptic practice;
• ophthalmic disease and neuro-ophthalmology;
• the factors influencing individual variations in human ability and development.

The award holder will be able to demonstrate extensive knowledge and understanding of:
• the detailed anatomy and physiology which enables the development of visual sense, visual performance and visual perception;
• neuroanatomy and the subsequent effects of disruption of neural pathways;
• the development of anatomical substrates and their relevance to the development of binocular single vision;
• the effects of orthoptic and ophthalmological intervention on visual development.

Physical sciences
The award holder will be able to demonstrate knowledge and understanding of:
• the specific principles and theories from physics, optics and refraction;
• the means by which the refraction and optics can influence vision and binocular vision;
• the principles and application of measurement techniques used to assess binocular vision and other ocular conditions.

Behavioural sciences
The award holder will be able to demonstrate knowledge and understanding of:
• psychological and social factors that influence an individual in health and illness;
• how psychology and sociology can inform an understanding of health, illness and health care in the context of orthoptics and the incorporation of this knowledge into orthoptic practices;
• human behaviour and sensitivity to the psychosocial aspects of strabismus;
• the need for motivation and compliance aided by the patient/orthoptist relationship;
• informed consent and health education issues;
• learning theories. The process of learning is important for both the patient and the practitioner. These theories underpin continuing professional development, enabling orthoptists to be effective lifelong learners. This knowledge also equips the orthoptist to become an effective teacher in a wide range of contexts, eg health education and the education of students;
• team working and leadership skills;
• an understanding of research methods including the need for research within the clinical setting. The application of research in evidence-based practice, audit and reflective practice. To critically appraise research undertaken in the field of ocular motility disorders and how these affect current practice.

Service/organisational issues
The award holder will be able to demonstrate knowledge and understanding of:
• the changing and diverse context within which orthoptics is delivered;
• the implications of different organisational settings and patterns of working;
• quality assurance frameworks encompassing, for example, clinical governance, clinical guidelines, and professional standards;
• issues of resource management, cost effectiveness, marketing, and promotion of the profession;
• the factors influencing the management of themselves and others;
• safety at work practices;
• the planning of service delivery and its associated workforce;
• the management and structure within the NHS.
Social and political
The award holder will be able to demonstrate knowledge and understanding of:
- the impact of health and social care policies on professional practice;
- factors contributing to social differences, the problems of inequalities and the needs of minority groups.

Ethical and moral dimensions
The award holder will be able to demonstrate knowledge and understanding of:
- the ethical, legal and professional issues that inform and shape orthoptic practice;
- professional, statutory and regulatory codes of practice;
- professional code of conduct, values and beliefs.

C2 Skills
The award holder will be able to demonstrate:
- the ability to identify pathological changes and related clinical features of conditions commonly encountered by orthoptists;
- the use of investigative techniques to identify ocular defects within a specific population to form a diagnosis and devise an appropriate course of action;
- knowledge of the indication for referral to the appropriate alternative health professional or agency;
- the changes that may result from orthoptic treatment including physiological, behavioural and functional changes;
- the clinical application of evidence-based practice;
- the clinical application of research methodologies;
- the ability to use problem solving and clinical reasoning in orthoptic practice;
- information gained and its use to design and implement a management plan which is appropriate for the individual patient;
- the evaluation of results which indicate a change in diagnosis or treatment and plan how to implement these changes in management;
- the limitations of treatments available which may be carried out by the orthoptist and the need for treatment by other professionals, such as the ophthalmologist, in order to alleviate patient symptoms and maximise patient comfort;
- the skills necessary to analyse data and to understand the role this may have in orthoptic practice;
- the knowledge required to carry out an audit of clinical practice;
- the knowledge necessary to apply the appropriate methodology to address a specific question;
- the application of the theories of communication;
- an ability to communicate information and advise, both in verbal and written form;
- effective interaction with patients, peers, managers, carers and other health care professionals and how this may be modified to address potential barriers, eg age, physical and mental impairment;
- the practical use of equipment available for assessment of patients;
- the practical use of information technology, which may be used in the assessment of patients or for record keeping.
Teaching, learning and assessment

Decisions about the strategies and methods for teaching, learning and assessment are for institutions to determine, but should complement the learning outcomes associated with health profession programmes. It is not for benchmark statements to promulgate any one, or combination of, approaches over others. However, this benchmark statement promotes an integrative approach to the application of theory and practice. It underlines the significance attached to the design of learning opportunities that facilitate the acquisition of professional capabilities and to assessment regimes that ensure these are being both delivered and rewarded to an appropriate standard. Fundamental to the basis upon which students are prepared for their professional career, is the provision of programmes of academic study and practice-based learning which lay the foundation for career-long professional development and lifelong learning to support best professional practice and the maintenance of professional standards.

Teaching and learning in orthoptics

The degree programmes reflect the varying opinions regarding the efficacy of teaching, learning and assessment strategies and therefore should employ a wide range of teaching methods. Clinical practice is essential to studying orthoptics and this can take place within the university on peers and on patients. To widen clinical experience a variety of clinical placements should be utilised and placement sites should meet the mandatory requirements set out by the CPSM. Project work is essential in order to develop an understanding of all possible research paradigms, analysis and statistics.

Assessment

Formative and summative assessments should be used throughout orthoptic programmes but the assessment of fitness to practice must include a practical examination at the end of the programme.
Academic and practitioner standards

The standard expected of the threshold graduate is outlined below. Threshold is taken to mean that standard of achievement demonstrated at the end of the educational experience, at the point of graduation. The applied nature of orthoptics means that students must demonstrate capability in both the academic and the practical experience at the threshold level. Achievement of this standard will meet the statutory requirements as set by the regulatory body for state registration.

A Working as a professional in orthoptics

The award holder should be able to:

- recognise the potential and limitations of orthoptics as a practice-based discipline within the legal and ethical boundaries laid out by the regulatory body’s Statement of Conduct;
- integrate his/her understanding of ethical issues and statement of conduct with his/her own orthoptic interventions in specific situations;
- demonstrate his/her capacity to update continuously his/her knowledge and practice in response to changing circumstances and knowledge of neuroanatomy, neurophysiology and visual development;
- exercise substantial autonomy in most of the professional activities associated with orthoptics: these will cover processes such as assessment, planning, execution and evaluation of safe orthoptic intervention;
- guide and direct the work of others and be responsible for the proper use of resources;
- work effectively as a reflective practitioner in exercising judgements based on awareness of key issues on orthoptics;
- as a reflective practitioner, accept responsibility in a peer relationship and with some guidance, for determining and achieving personal and group outcomes;
- demonstrate appropriate knowledge of the workplace within the orthoptic practice context;
- demonstrate an understanding of hospital and community based orthoptic practice with a well developed critical understanding of the role and theoretical foundation of orthoptic treatment;
- recognise the importance of undertaking research and academic activity and be able to make a contribution to the evolving knowledge base of professional orthoptics.

B Application of practice

The award holder should be able to:

- select and use appropriate orthoptic assessment techniques within his/her own practice accurately;
- evaluate social, cultural, financial and personal factors together with orthoptic, ophthalmological and medical information to reach a justified and reasoned response to an orthoptic problem;
- devise an orthoptic intervention for a range of patients, and in accord with established orthoptic standards;
- demonstrate a capacity to advise, with a high level of autonomy and communication skills, individuals or their carers about management options which will be clinically effective;
- effect a change in visual stimuli resulting in a clinically defined outcome, which can be recorded and monitored in a manner appropriate to safe orthoptic practice;
- evaluate critically new concepts, arguments and evidence from a range of current theories and research from relevant disciplines and use these to analyse problems in orthoptic practice;
- show creativity in situations, often undertaking with senior colleagues or in peer groups, where evaluations are based on limited information and data;
- communicate effectively with peers and senior colleagues, including those who have particular expertise in the area;
- show awareness of limitations and a capacity to draw on advice to improve personal performance and interactions with others.
C  Subject knowledge and understanding
The award holder should be able to:

- show systematic and integrated understanding of the key areas as specified in C;
- draw evidence from a range of sources specified in C to solve problems and plan strategies for orthoptic intervention;
- draw on his/her knowledge of investigative methods to critically evaluate published materials in orthoptics and ophthalmology and related fields;
- communicate information, ideas, problems and solutions on orthoptic and visual abnormalities in a variety of formats appropriate to specialist and non specialist groups and individuals;
- exercise judgement based on awareness of key issues in orthoptics and show responsibility for achieving personal and group outcomes;
- show confidence in using technology to analyse clinical outcomes and investigative work in order to deliver evidence-based practice.
Appendix 1

Orthoptics benchmark group membership

Ms Rosie Auld City Hospital NHS Trust
Mrs Lynn Baker Manchester Royal Eye Hospital
Mrs Cheryl Davies University Hospital of Wales
Ms Helen Davis Royal Hallamshire Hospital, Sheffield
Mrs Nadia Northway Glasgow Caledonian University
Ms Gail Stephenson (facilitator) University of Liverpool
Ms Chris Timms British Orthoptics Society
Ms Joy White Sussex Eye Hospital
## Appendix 2

### Benchmark steering group membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Mrs Margaret Andrews</td>
<td>North East Wales Institute of Higher Education</td>
</tr>
<tr>
<td>Mr David Ashcroft</td>
<td>Society of Chiropodists &amp; Podiatrists</td>
</tr>
<tr>
<td>Mrs Linda Auty</td>
<td>Leeds Metropolitan University</td>
</tr>
<tr>
<td>Miss Lesley Barrowman</td>
<td>National Board for Nursing, Midwifery &amp; Health Visiting for Northern Ireland</td>
</tr>
<tr>
<td>Mrs Valerie Beale</td>
<td>Somerset Health Authority</td>
</tr>
<tr>
<td>Ms Mary Boyle</td>
<td>National Board for Nursing, Midwifery &amp; Health Visiting for Scotland</td>
</tr>
<tr>
<td>Mrs Ann Clarke</td>
<td>Bedford Hospital NHS Trust</td>
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<tr>
<td>Ms Helen Davis</td>
<td>Royal Hallamshire Hospital, Sheffield</td>
</tr>
<tr>
<td>Professor Anne de Looy</td>
<td>Queen Margaret University College, Edinburgh</td>
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<tr>
<td>Miss Faye Doris</td>
<td>University of Plymouth</td>
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<tr>
<td>Mr Martin Duckworth</td>
<td>College of St Mark &amp; St John, Plymouth</td>
</tr>
<tr>
<td>Mr Brian Ellis</td>
<td>Queen Margaret University College, Edinburgh</td>
</tr>
<tr>
<td>Miss Anne Fagan (deceased)</td>
<td>Hospital of St John &amp; St Elizabeth, London</td>
</tr>
<tr>
<td>Mrs Janice Gosby</td>
<td>UK Central Council for Nursing, Midwifery &amp; Health Visiting</td>
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<tr>
<td>Ms Valerie Hall</td>
<td>University of Brighton</td>
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<tr>
<td>Mrs Julia Henderson</td>
<td>University of Hertfordshire</td>
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<tr>
<td>Ms Anne Hopkins</td>
<td>University of Wales Swansea</td>
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<tr>
<td>Mr Stephen Hutchins</td>
<td>University of Salford</td>
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<tr>
<td>Mr Tom Langlands</td>
<td>English National Board for Nursing, Midwifery and Health Visiting</td>
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<tr>
<td>Ms June Leishman</td>
<td>University of Abertay, Dundee</td>
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<tr>
<td>Professor Jeffrey Lucas</td>
<td>University of Bradford</td>
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<tr>
<td>Professor Dame</td>
<td>University of Southampton</td>
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<tr>
<td>Jill Macleod-Clark (co-chair)</td>
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<tr>
<td>Ms Diane Marks-Maran</td>
<td>Thames Valley University</td>
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<tr>
<td>Mrs Susan Montague</td>
<td>University of Hertfordshire</td>
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<tr>
<td>Mrs Christine Mullen</td>
<td>South Manchester University Hospital NHS Trust</td>
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<tr>
<td>Mr Luke O’Byrne</td>
<td>East Berkshire NHS Trust</td>
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<tr>
<td>Mrs Audrey Paterson</td>
<td>Canterbury Christ Church University College</td>
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<tr>
<td>Ms Robyn Phillips</td>
<td>Welsh National Board for Nursing, Midwifery &amp; Health Visiting</td>
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<tr>
<td>Professor Mike Pittilo (co-chair)</td>
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<tr>
<td>Ms Lorna Povey</td>
<td>Kingston University &amp; St George’s Medical Hospital</td>
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<tr>
<td>Mrs Jarina Rashid-Porter</td>
<td>Wolverhampton Health Care NHS Trust</td>
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<td>Mr Gwilym Roberts</td>
<td>Coventry Healthcare NHS Trust</td>
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<tr>
<td>Ms Jenny Routledge</td>
<td>College of Occupational Therapists</td>
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<tr>
<td>Mr Ian Rutherford</td>
<td>University of East Anglia</td>
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<tr>
<td>Mrs Sandra Sexton</td>
<td>University of Nottingham</td>
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<tr>
<td>Ms Gail Stephenson</td>
<td>University of Strathclyde</td>
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<tr>
<td>Professor Averil Stewart</td>
<td>Queen Margaret University College, Edinburgh</td>
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<tr>
<td>Professor Mary Watkins</td>
<td>University of Plymouth</td>
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