

Modernising Scientific Careers:

Northern Ireland Education Working Group:

Health Care Scientist: Physiological Sciences Division

Health Care Science Practitioner

The physiological sciences division of health care scientists principally focuses upon the clinical disciplines described as clinical physiologists.

The four principal disciplines within this grouping are :

- Cardiology
- Respiratory Physiology
- Neurophysiology
- Audiology

Clinical Physiology degree programmes have been in place for about ten years. The University of Ulster being the first institution in the UK to offer a degree based pathway for these professions. However these professions as with many in the Healthcare Scientist grouping have not been statutorily regulated or registered. Clinical physiology graduates are entered on to a provisional register under the auspices of the Registration Council for Clinical Physiology (RCCP). Transfer of registration to the Health Professions Council has been sought for many years but has not been realised.

The programmes in England have been based upon trusts funded by SHAs employing trainees and releasing them to Higher Education institutions for the academic components of training. They have all been 4 year programmes incorporating in the order of 2 years of clinical placement training. These have been highly subsidised programmes and an estimation of £160,000 per student has been made which would include salaries, student fees, accommodation travel .

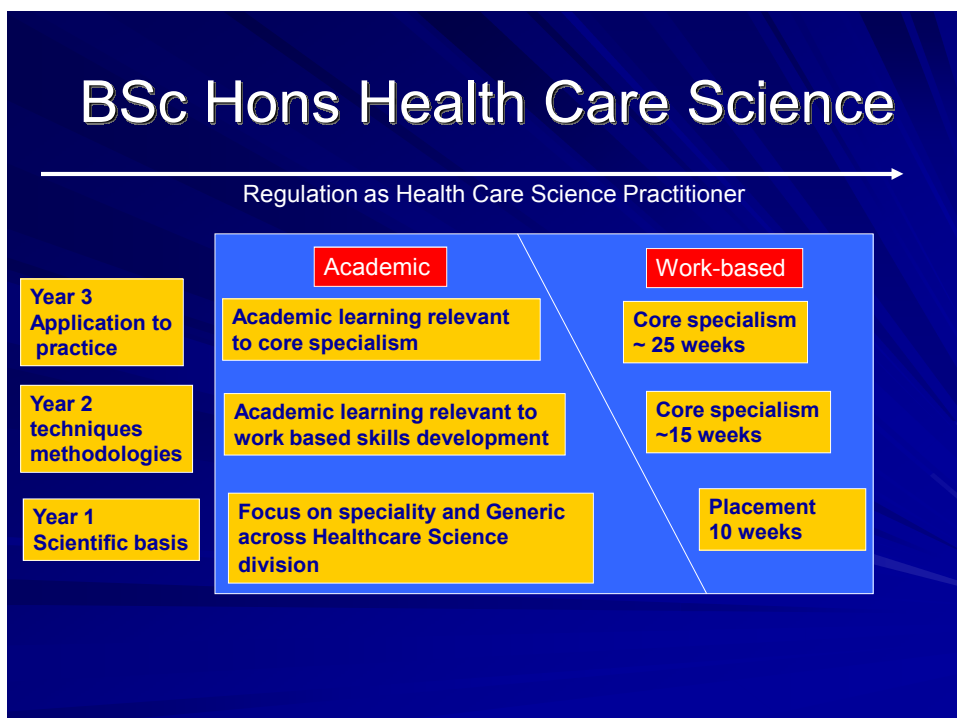
The model adopted in Northern Ireland for the BSc Clinical Physiology programme has been a full time UCAS entry programme, with standard costs as in student fees being borne by the students. Supportive funding has been provided by the DHPSSNI for the students' full year in placement. This has been a cost effective model which has successfully matched the workforce requirements for Northern Ireland. However there have been problems in maintaining the smaller professional number disciplines such as audiology and neurophysiology, where the smaller numbers on these degree programmes have made them less viable. Presently Audiology is not being offered as a degree programme in NI and further recruitment to Neurophysiology has also ceased.

Particular strain has been placed upon clinical departments in NI offering training in Cardiology and Respiratory Physiology principally because of the extensive 2 years of clinical placement stipulated by the professional bodies under the auspices of the RCCP. This has been in distinct contrast to the majority of other health professional training programmes which are principally based upon 3 years with approximately 1 year of intercalated clinical placement.

Modernising Scientific Careers

The emergence of the modernising scientific careers process has provided the opportunity for these professions to be involved in training programmes that will incorporate statutory registration and regulated exit qualifications. This registration is envisaged at two levels identified as Healthcare Science Practitioner and Healthcare Scientist, with local regulation for Health Care Science Associates. The principal focus has been upon the curricular development for the Healthcare Science Practitioner grade and draft curricula are now published for the physiological science division and electronic clinical practice portfolios are in development.

Proposed BSc Hons Health Care Science degree structure: Health Care Scientist Practitioner



Equivalence of Learning and Learning Outcomes

The published draft curricula are rather prescriptive in terms of ordering and in modular content. However in the documentation that has emerged from the MSC process the principle of equivalence in acquired learning and experience is repeatedly emphasised. It therefore should be possible to design programmes with the required learning outcomes firmly met that vary from the detailed structure and modular ordering within the curricula that are more purpose designed for the Northern Ireland regional requirements.

Modifications to present design of Clinical Physiology within BSc Health Care Science

The present provision of Clinical Physiology in NI for cardiology and respiratory physiology is based upon a four year programme with 90 weeks of clinical placement organised in intercalated blocks during years 1, 2 and 4 and as a full year of placement year 3. Removal of the placement year 3 and

re-packaging the placement and academic requirements into the existing course structure should not prove problematic.

Statutory Registration and Regulation

It is recognised that in England additional student numbers have been allocated by HEFCE to the Physiological Science division for the new degree programme at the Health Care Science Practitioner level i.e. BSc Hons Health Care Science. It is the intention to commence recruiting to this programme in September 2010. However before validating such a new programme and considering recruitment a clear process needs to be in place whereby such students could be certain that their degree will lead to a statutorily registered and regulated qualification. At present the necessary clarity concerning the position of such UK based registration and regulation is not present.

Support for Training in Clinical Practice

The recognition of the need for funding support and dedicated time for the education and training activity of the work based trainers is recognised throughout the MSC documentation. Presently clinical training in cardiology and respiratory physiology in NI is on a purely good will basis, and in the present climate of financial constraints this places considerable strain upon clinical departments. A careful balancing of freed and funded time for training with maintenance of close working relationships between clinical centres and educational institutions is and will be essential.

Professional groupings with small staff numbers

As identified above new recruitment to neurophysiology and audiology programmes is not presently available in NI. This has largely arisen because of the difficulty of maintaining the financial viability of programmes with small numbers. Both neurophysiology and audiology provide essential diagnostic services and historically it has always proved difficult to recruit to such professions from outside of NI, emphasising the need to 'grow our own'.

The programme structure of the BSc Health Care Science should be adaptable for other physiological science disciplines, but for an HEI to run such a programme, specific central funding support based upon workforce requirements will be required to support:

- Academic teaching
- Academic administration
- Student support
- Clinical training/education

A proposed model is to utilise the free standing programme for the cardiology/respiratory physiology which will incorporate a generic pathway in the first year that would facilitate an option to change programme e.g. into a neurophysiology route after the first semester. This would be dependent upon workforce planning indicating need for a number of places in such specialties to be regularly funded. For students to embark upon such a pathway where they may be reducing their scope for employment in these smaller number specialities, the linking of these places to availability of posts on graduation would need to be carefully considered. Transfer to these places could be organised in a competitive manner within the existing course structures.

