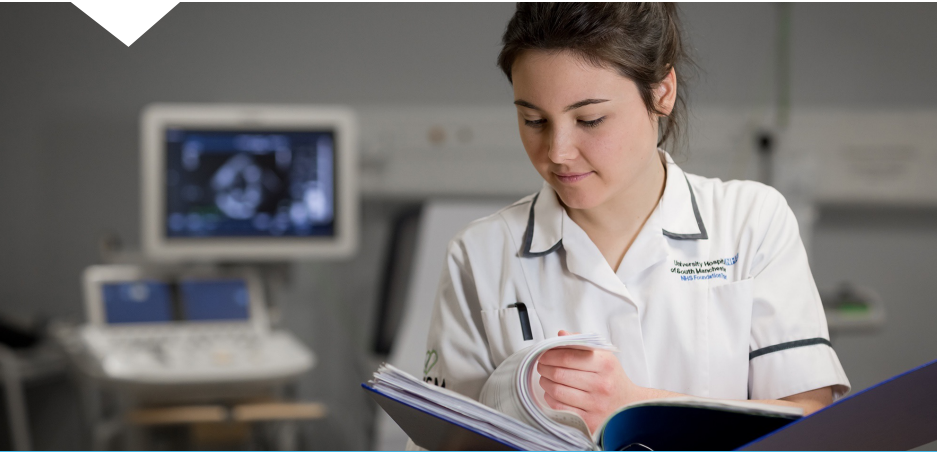
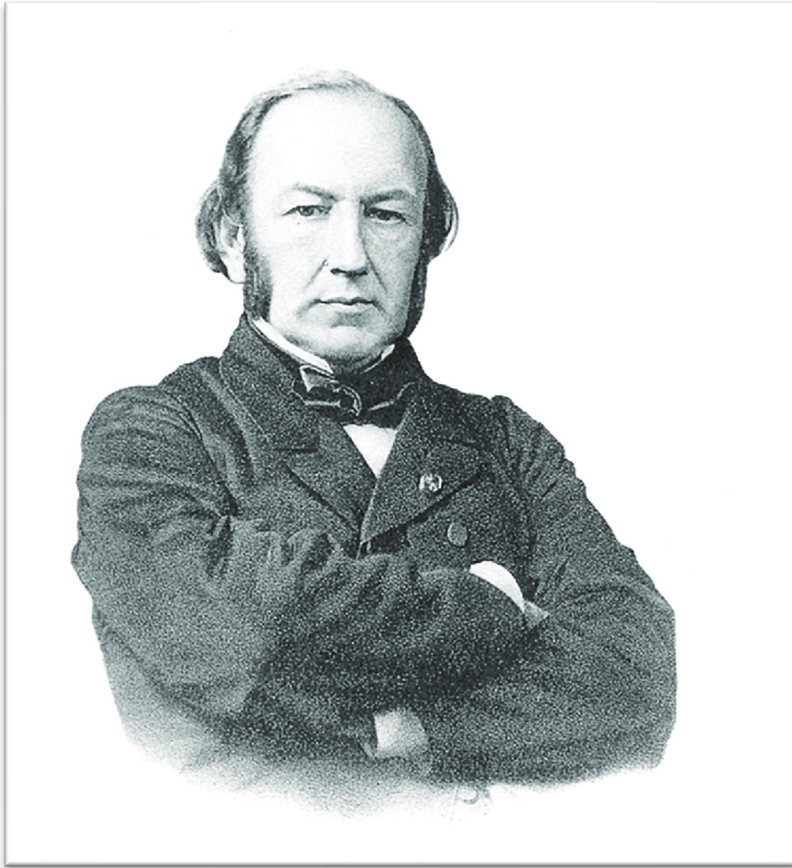


# Using apprenticeships to develop our Healthcare Science Workforce



**Graham Wilson, Training Programme Director Undergraduate and Apprenticeships**



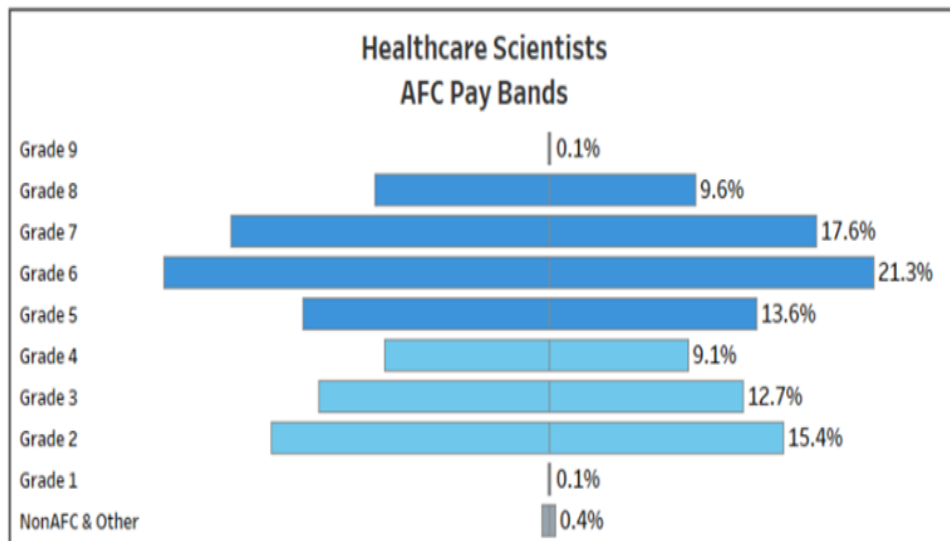
## Claude Bernard

(12th July 1813 – 10th February 1878)

French physiologist who helped establish the principles of experimentation in the life sciences. His *Introduction to the Study of Experimental Medicine* (1865) is a scientific classic.

# Current position

Richards Report shows we need to increase number of support workers. The tables below show our current skill mix, including support worker roles and how we need to increase this, and upskill people in the higher bands as well.

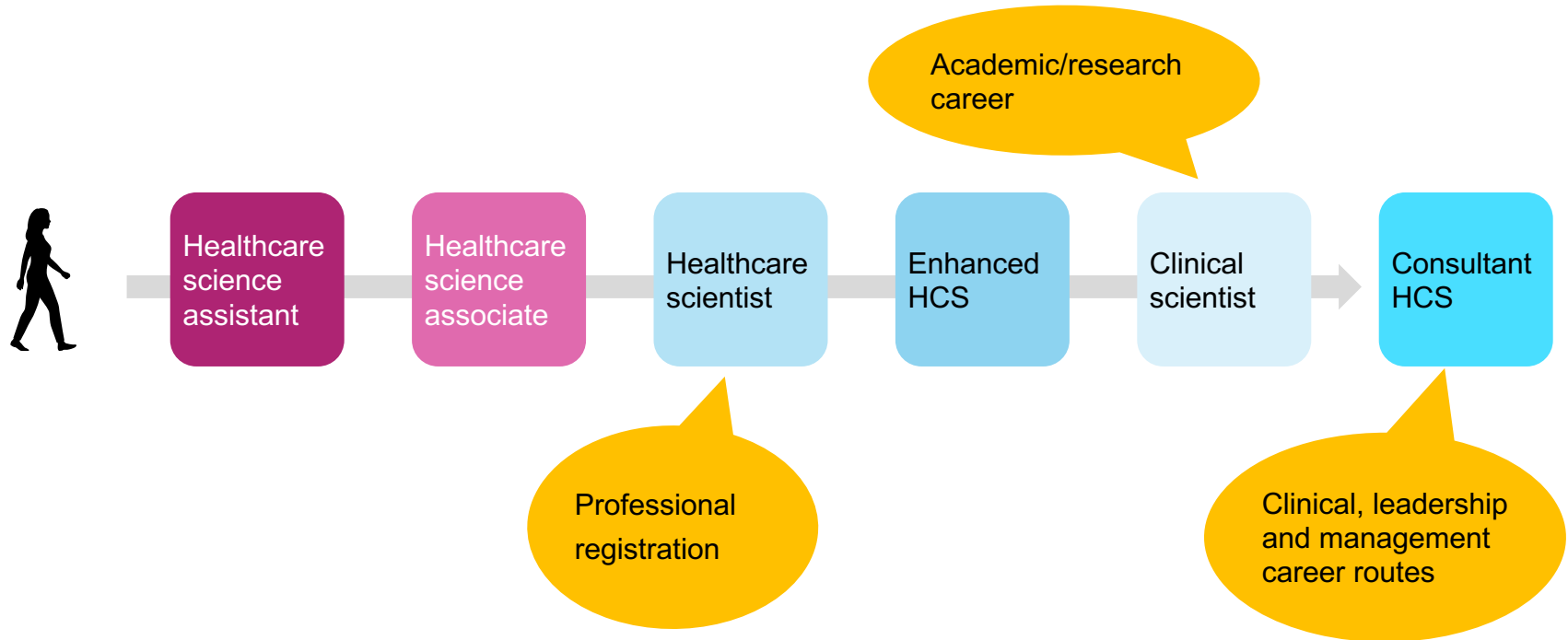


Non AFC & Other	Grade 1 - 4	Grade 5 - 9
1.1%	38.7%	50.1%

# Workforce transformation and healthcare science

- The NSHCS works closely with employer Trailblazer Groups, the Institute for Technical Education and Apprenticeships and Talent for Care to ensure Healthcare Scientists are included in the development of apprenticeship standards.
- In 2021 the NSHCS worked with employers to pilot a new Cardiorespiratory apprenticeship to meet recommendations in the Richards Report to develop support worker roles to increase diagnostic capacity.
- This project has been extended and now includes a Sleep pathway to meet increasing demand for diagnostic testing in sleep physiology.
- HCS apprenticeships at levels 2 and 4 have a mandatory Diploma award. These awards are developed by healthcare scientists.
- Each Diploma has over 100 units across a wide range of healthcare science specialities. This format encourages the development of new roles as seen with the cardiorespiratory project.
- The level 4 maps to the HCS degree apprenticeships to enable progression.

# Healthcare scientist career pathway using apprenticeships



# HCS standards available to develop the HCS workforce

## Standards available

- Level 2 – Healthcare Science Assistant
- Level 4 – Healthcare Science Associate
- Level 5 – Healthcare Assistant
- Level 6 – Healthcare Science Practitioner
- Level 6 – Biomedical Scientist
- Level 6 (7) – Enhanced Practitioner
- Level 7 – Clinical Science

## Statutory registration

- Level 6 – Biomedical Scientist
- Level 6 – Enhanced Practitioner
- Level 7 – Clinical Science

## Voluntary registration

- Level 2 – Healthcare Science Assistant
- Level 4 – Healthcare Science Associate
- Level 5 – Healthcare Assistant
- Level 6 – Healthcare Science Practitioner
- Level 6 – Enhanced Practitioner
- Level 7 – Clinical Science

# HCS standards delivered

## Standards successfully delivered

- Level 2 – Healthcare Science Assistant
- Level 4 – Healthcare Science Associate
- Level 6 – Healthcare Science Practitioner (non-integrated)
- Level 6 – Clinical Trials Specialist
- Level 7 – Bioinformatics
- Level 3 – Clinical Coders (delivered 2020 – 2022)

## EPA delivery from October 2018 to 2022

### Completed - 348

- Level 2 – Healthcare Science Assistant - 210
- Level 4 – Healthcare Science Associate - 105
- Level 6 – Healthcare Science Practitioner - 17
- Level 3 – Clinical Coders - 12
- Level 6 – Clinical Trials Specialist - 1
- Level 7 – Bioinformatics Specialist - 3

**The NSHCS End Point Assessment (EPA) service is Ofqual approved**

# Other apprenticeships to develop the HCS workforce and staff

Research for healthcare scientists to develop research skills:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/research-scientist-v1-0>

Laboratory based standard:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/laboratory-technician-v1-2>

Advanced clinical practice:

[https://www.instituteforapprenticeships.org/apprenticeship-standards/advanced-clinical-practitioner-\(integrated-degree\)-v1-0](https://www.instituteforapprenticeships.org/apprenticeship-standards/advanced-clinical-practitioner-(integrated-degree)-v1-0)

Clinical trials specialist:

[https://www.instituteforapprenticeships.org/apprenticeship-standards/clinical-trials-specialist-\(degree\)-v1-0](https://www.instituteforapprenticeships.org/apprenticeship-standards/clinical-trials-specialist-(degree)-v1-0)



# Developing trainers and leaders

Apprenticeship	Level
Senior Leader Degree	7
Team Leader/Supervisor	3
Operations/Departmental Manager	5
Chartered Manager Degree	6
Learning and Development Practitioner Practical development of training	3
Learning and Skills Teacher (good for delivering apprenticeship programme)	5
Learning Mentor	3

# Why use apprenticeships?

- Recruitment and retention
- Workforce strategy – long term planning
- Training investment
- Apprentice contribution to the service?
- Finance – Funding can be paid at apprentice wage
- Apprentices are permanent so can integrate better into the team
- Other roles and responsibilities within the team
- A qualified apprentice is trained not only to the clinical standards but also in all local procedures and protocols – ready to roll!

# What do apprentices say?

"I've met many great people in my few months of being here, and am looking forward to meeting people from the all other teams within clinical engineering too"

"I have become a much better person already and I feel proud to be a part of such a great program"

"Everyone is always willing to answer any questions you have and support you in your personal and professional development"

"The work place is even better than I expected, I'm really enjoying it. Everyone is happy to help and I have learnt so much already, from how to work machinery in the mechanical workshop to helping out with some of the servicing down on the Linac"

"I have been welcomed in to the team and the training is exceptional, with every member of staff always willing to help with any questions I have"

"Before starting the apprenticeship I was worried that I would struggle or wouldn't be able to keep up with the work. - but these worries quickly went away as soon as I started my apprenticeship and working in the medical physics engineering teams, the training and support provided by the team and managers has been great, building up my confidence massively"

"It was daunting going into my first placement as I have never worked in this type of environment before. But after a few days of getting to know some of the engineers I shadowed I felt much more comfortable. They were very supportive and allowed me to do a lot of hands on repairs."

"Although I have only been here a few months I have already learnt knowledge and skills that I will use for the rest of my life and I am very excited for what the future holds"

"It never fails to surprise me how patient everyone has been with me and I owe them a lot of thanks for this and how they have welcomed me into the team over the past few months"

# Forward thinking...

- Collaborative working to support training
- Regional delivery of assistant and associate apprenticeships
- Level 5 apprenticeship/Foundation degrees
- New degrees
- Career pathways, T Qualifications

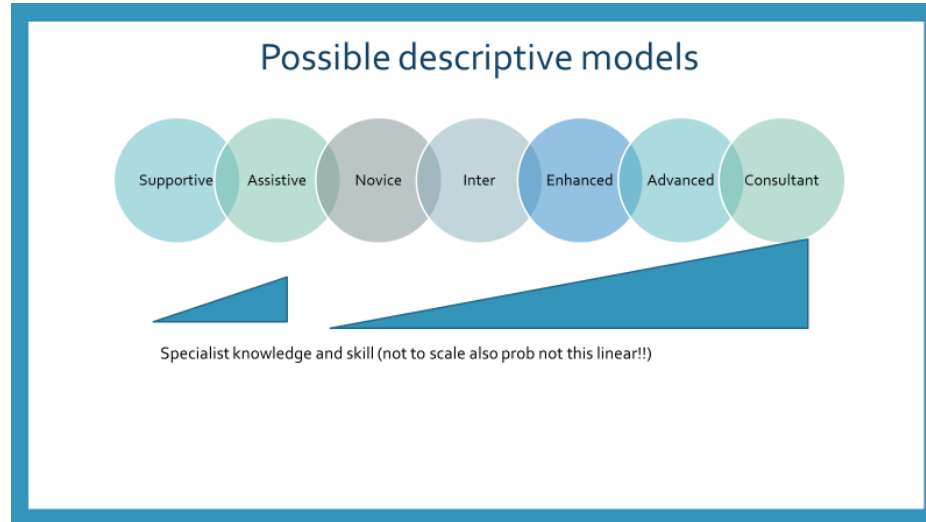
# Useful information

- <https://www.hee.nhs.uk/our-work/technology-enhanced-learning>
- <https://www.hee.nhs.uk/news-blogs-events/news/hee-publishes-new-strategy-support-healthcare-educators>

# Enhanced Clinical Practitioner (ECP) Apprenticeship

# Enhanced Practice – Health Education England

- In 2019 Professor Alison Leary completed a piece of work with HEE to define a workforce model for Enhanced Level of Clinical Practice
- The Trailblazer used this work to inform them in their emergent thinking



# What is an Enhanced Practitioner?

Alison Leary 2022. Enhanced Practice: Principles

- Level of practice delivered by experienced registered professionals (first level statutory registration or a managed voluntary registration)
- They undertake complex work and manage day to day risk, including risks on behalf of, or with patients
- Enhanced practice occurs in multiple settings and can have many different job titles and roles
- The ECP can be used to develop post registration staff to operate at an increased level of knowledge and expertise
- The ECP can be a retention tool enabling staff to see career progression with benefits to service, patients and staff (increased autonomy, responsibility and pay)
- However, ECP is not just transitional, but provides important roles to benefit service and patients
- <https://haso.skillsforhealth.org.uk/news/new-enhanced-clinical-practitioner-apprenticeship-guide/>



# Enhanced Practitioner apprenticeship

- The ECP academic level is 6, as there is no mandated qualification employers can use level 7 education within the apprenticeship
- The ECP apprenticeship is designed to co-exist with current traditional education academic and professional programmes
- The ECP apprenticeship is multidisciplinary
- The ECP has a funding band of £7,000, with a typical duration of 18 months
- Apprentices must complete a portfolio of evidence and Quality improvement proposal report as the EPA
- Apprentices must meet all of the knowledge, skills and behaviours, this allows employers to work with training providers to deliver all or part of their apprentices training
- Education providers need to design and deliver training to develop the knowledge, skills and behaviours (KSBs) of the occupational standard
- <https://www.instituteforapprenticeships.org/apprenticeship-standards/enhanced-clinical-practitioner-v1-0>

# A typical example of a healthcare professional undertaking the ECP apprenticeship

## Role

They will be post qualification/registration working in a clinical setting. This setting doesn't have to be directly patient facing. For example, enhanced practice can be found in laboratories and clinical engineering.

They will have completed their preceptorship and beginning to operate at an increased level of complexity that required the development of greater complex knowledge and experience.

They will be registered with either one of the statutory healthcare regulators, Social Work England or with one of the following accredited voluntary registers: Academy for Healthcare Science, Register of Clinical Technologists or Registration Council for Clinical Physiologists.

## Level of practice

They will be moving into a new or an enhanced role that requires them to typically (but limited to):

- Critically evaluate and analyse complex clinical problems using expertise and knowledge
- Consult with others to devise and evaluate complex care plans related to their field of expertise
- Continuously update their knowledge and clinical practice and provide support, mentoring and supervision of others
- Recognise and work within the boundaries of their practice, knowing when and who to refer patients to

## Qualifications

They could complete qualifications as part of the apprenticeship that might include (but not limited to):

- Post qualification certificates
- Post qualification diplomas
- Professional development courses
- Degree level qualifications
- Masters level qualifications

## Agenda for Change

They will typically be newly promoted or working towards AfC band 6 or 7.

This is not absolute as some professional groups are paid at different bands.

## Enhanced Practice

- Uses reflection in action to function in unpredictable environment
- Manages risk but defers major decision making
- Uses freedom to act within own scope of practice
- Found in different settings and across professions
- Has a specific body of knowledge
- Uses complex clinical decision making but confers with others for overall plan
- Often manage a caseload, sometimes providing interventions as part of a dedicated clinical pathway
- Post registration qualification/CPD and occasionally Masters qualification
- Evaluates and creates
- Will work within national and local protocols where these exist
- Proficient

## Advanced Practice

- Uses reflection in action extensively in unpredictable environment
- Manages risk
- Uses freedom to act and provides professional leadership and supervision in situations that are complex and unpredictable
- Found in different settings and across professions
- Has a highly developed specific body of knowledge
- Uses a high level of complex clinical decision making, including complete management of episodes of care
- Manages defined episodes of clinical care independently from beginning to end
- Masters level
- Evaluates and creates
- Will shape the design and delivery of local protocols where these exist
- Expert

# Learning from other areas

**Critical Care Outreach** - Keele University and University of Greenwich will begin delivery of the Enhanced Clinical Practitioner Apprenticeship with Critical Care outreach specific content in 2023. The programmes will be aligned to the Critical Care Outreach Practitioner National Competencies and Professional Development Framework (CCO competence framework).

**GPN / Primary Care** – currently scoping, employer demand highlights a requirements for level 6 and 7 modular learning, to include long term conditions, independent prescribing, frailty etc.

**Mental Health** – NE and Y multi-professional use, 3x20 credit modules. 20 credit leadership mandatory then 2 optional modules for example: Clinical risk management in mental health and learning disability, Frailty, Cognitive behavioural therapy etc.

# Summary of enhanced practice

- Enhanced practice is a level of practice delivered by experienced registered professionals (first level statutory registration or accredited registration).
- They undertake complex work and manage day to day risk, including risks on behalf of, or with patients.
- Enhanced practice occurs in multiple settings and can have many different job titles and roles.
- Although they work across different settings or spheres of practice, they will often have a skillset and depth of knowledge related to their individual specific sphere of practice.
- They occupy a space before advanced practice.
- Can be a precursor to advanced practice, or it can be a workplace destination.

# Useful information

- <https://www.hee.nhs.uk/our-work/technology-enhanced-learning>
- <https://www.hee.nhs.uk/news-blogs-events/news/hee-publishes-new-strategy-support-healthcare-educators>