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Health Education and
Improvement Wales (HEIW)

HEIW Education and Training Plan 2022/23



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HEIW EDUCATION AND TRAINING PLAN 2022/23

PURPOSE OF THE REPORT

This report presents the high-level overview of the HEIW education and training plan for 2022/23. The plan sets out the recommendation for our commissioning numbers for the education of the health professional workforce together with the medical workforce planning recommendations.

The development of the education and training plan is a statutory function of HEIW, given its role as the workforce and education body for NHS Wales. In developing the plan, HEIW considers the workforce plans from NHS Health Boards and Trusts, and the views and advice from other stakeholders. Ultimately it is HEIW's responsibility to produce a plan that is deliverable within the context of the education and training capacity available. This is the third year HEIW has developed the national education and training plan for the health workforce. It builds on the growth in student and training numbers as set out in previous plans and recommends that there is investment in education commissions that maintains or builds on the growth in previous years (Appendix one).

KEY ISSUES

The HEIW education and training plan continues the investment in education and training in Wales that has been increasing over past years. This is essential to support the implementation of the workforce strategy for health and social care, and to reflect the experience of the pandemic.

The plan:

- builds on the '*Workforce Strategy for Health and Social Care Wales (Oct 2020) and Health Education and Improvement Wales' Annual Plan 2021/22*
- maintains the growth in the training pipeline, with further increases in some areas
- is based on a consideration of workforce need and challenges and wider workforce intelligence including information from organisations' annual plans
- reflects on the experiences of graduate recruitment in 2020 and 2021
- considers the impact of Covid-19, the reset and recovery of services, training capacity both within the higher education institutions (HEIs) and the NHS, and changes to the provision of education following the Strategic Review of

Healthcare Professional Education. The latter will redesign the content, delivery and pattern of health professional education across Wales

- recognises the need to create quality learning and service environments to accommodate new ways of working, service developments and changes in professional regulation standards.

INTRODUCTION

Recommendations within the HEIW education and training plan 2022/23 are not based on a single year's workforce need but informed by:

- workforce needs and challenges identified through organisations' plan
- wider workforce intelligence
- capacity within the system to support training/student/trainees
- the needs of several workforce priority areas and national work programmes
- reflections on graduate recruitment in 2020 and 2021
- review of education standards by professional regulatory bodies.

This year's plan is based on several assumptions, designed to maintain the growth of students and trainees, especially considering the impact Covid-19 and the reset and recovery of services following the pandemic.

Recommendations within this plan include:

- increasing nursing commissions for adult, mental health and learning disability
- maintaining current commissioning numbers for paediatric nursing
- maintaining current commissioning numbers for midwifery
- maintaining current commissioning numbers for allied health professionals (AHPs) / healthcare scientists (HCS) except for a few smaller professions where increases are required
- maintaining current commissioning numbers for physician associates
- maintaining current levels of investment for support worker, advanced practice and postgraduate education
- an increase in medical trainees across a range of specialties
- maintaining the current minimum target of 160 for GP trainees
- maintaining the current commissioning level for pharmacy preregistration/foundation trainees
- maintaining the current commissioning for the dental workforce which has been particularly impacted by Covid-19.

HEIW has explained the changing strategic context for the development of this year's plan through a series of presentations to Chief Executives, Executive peer groups, Wales Partnership Forum and other internal mechanisms, including the Education Quality and Commissioning Committee. The plan has been developed and refined because of these discussions and has been signed off by the HEIW Executive Team. The plan was supported by NHS Wales Executive Board in July 2021 and approved by Welsh Government in December 2021.

The detail of the recommendations can be found at Appendices two and three. The costs of the plan are shown in Appendix four. More detail on the background to these recommendations can be found in Appendices five to ten.

HEALTH PROFESSIONAL EDUCATION RECOMMENDATIONS

The key proposal for health professional education is to **maintain the 2021/22 levels of education commissioning, which builds on three years of considerable growth** except for:

- increases in health professions where intakes are very small and small changes can have a major service impact, for example, healthcare science, clinical psychology and some of the smaller health professions
- increases in adult, mental health (MH) and learning disability (LD) nursing.

Nursing

Increased commissions over the past three years have led to record numbers of adult, MH and LD nursing being trained but there remains a gap between the numbers requested via the IMTPs and the numbers of students that will graduate and be available to work in Wales. Application rates across adult and mental health nursing have reached record highs in 2021/22 and 89% of nursing applicants to Welsh universities are Welsh domiciled. Blended learning and simulated learning opportunities will continue beyond 2021, meaning less pressure on the estate and therefore on maximum cohort size. Streamlining for nursing has demonstrated there is no shortage of posts and more nurse graduates will reduce the impact of the agency bill. The main issue relating to increasing commissioning numbers beyond 2021/22 levels surrounds the availability of placements and there has been a **commitment from Health Boards and Trusts, to work with HEIW and the universities to develop more placement capacity and innovative solutions for the additional student nurses and their employment upon graduation in 2025.**

This recommendation enables an additional 194 student nurses split across adult, MH and LD as outlined below:

	Commissioning at 2021/22 levels	Potential increase	Revised 2022/23 commissions
Adult field	1,540	111	1,651
MH field	410	73	483
LD field	77	10	87

The costs for increasing nurse commissions by a further 194 recurrently are:

FINANCIAL YEAR	2022.23 £m	2023.24 £m	2024.25 £m
CONTRACT	1.166	2.914	4.662
BURSARY	0.490	1.388	2.323
	1.656	4.302	6.985

Midwifery

Over the past four years, midwifery commissions have increased from 134 to the proposed 185, which represents a 38% increase in commissioning numbers. The additional numbers commissioned have now begun to graduate and a streamlining process to match graduates into posts in Wales has been introduced. Ensuring there are sufficient posts available at the right time to recruit the graduates has been a key ambition of the scheme. From 2022, two of the four midwifery courses, one in North Wales and one in the South will have two intakes and therefore from 2025 the NHS will have two outputs to assist with graduate recruitment. Due to the recent significant increases and the pressures on recruitment, **the recommendation is to maintain the 2021 commissioning level of 185.**

Allied Health Professions

Most allied health professions have seen increases in commissioning of between 18% and 43% over the last three years. This has been challenging but achievable growth. The main limiting factor to growth has been the availability of clinical placements where students can accumulate their learning outcomes. This pressure has been compounded by the effect of the pandemic on services. The recommendation is to maintain commissions at 2021/22 levels. As commissions are higher now than they were three years ago this means there will be record numbers of AHP's in training and places further pressures on the placement circuit. HEIW has appointed a Head of Placement Experience and Improvement to lead and work in partnership with Health Boards, NHS Trusts and universities to develop new and innovative placement opportunities. In addition, further discussions are needed with some of these professional areas to align workforce planning, the commissioning process and graduate recruitment. Maintaining the growth in the system in 2022/23 is still a challenging target but provides stability and opportunities for engagement to build for future growth and development.

	Increase in commissioning numbers between 19/20 & 21/22	WFP Numbers from last 3 IMTP cycles	Expected available graduates to Wales - next 3 years	Numbers available to Wales over next 3 years compared to request in IMTP	% Expected available graduates to Wales - next 3 years against WFP
Human Nutrition / Dietetics	43%	192	113	-79	59%
Occupational Therapy	35%	543	319	-224	59%
ODP	0%	169	96	-73	57%
Physiotherapy	18%	576	375	-201	65%
Podiatry	13%	61	56	-5	92%
Clinical Psychology Doctorate	19%	211	71	-140	34%
Speech & Language Therapy	11%	154	108	-46	70%
Diagnostic Radiography	25%	398	298	-100	75%
Therapeutic Radiography	30%	73	50	-23	68%

Physician Associates

This year saw the third cohort of physician associates graduate. The numbers in training have steadily increased, and as part of the bursary tie-in arrangements, physician associates graduating in 2021 have been recruited as part of the streamlining processes. HEIW has worked with organisations to identify suitable positions for the graduates, and this has led to an increase in the interest in employing physician associates across a wide range of medical specialties in secondary care and in a number of practices in primary care. HEIW are working collaboratively with Bangor University and Swansea University, the Health Boards and primary care leads to develop more placements for physician associates. Maintaining commissions at 54 is challenging in the current climate and therefore, until further innovative placement capacity is developed, **HEIW recommends maintaining the level of education provision at 54.**

Healthcare Support Workers

HEIW is now the Welsh Government's development partner for the Healthcare Apprenticeship Frameworks, a role previously held by Skills for Health. HEIW is committed to ensuring that Wales has a suite of apprenticeship frameworks that meet the needs of the healthcare support workers (HCSW) workforce. The development of this workforce also provides those with the aspiration to continue their career and progress on to formal training programmes to become registered healthcare professionals, thus delivering the 'Made in Wales' ethos and also enabling individuals to 'earn while they learn'.

There have been significant increases in healthcare support worker funding over recent years with the budget increasing from £500,000 in 2016 to £2.5m in 2021/22. Due to restrictions on staff study leave during 2020/21 the budget was not fully utilised. Therefore, utilising the full budget of £2.5m in 2021/22 is achievable but challenging and will result in the highest number of HCSWs being supported in

Wales. HEIW therefore recommends that funding levels are set at £2.5m for 2022/23 which maintains the growth in the system.

Post-registration Health Professional Education

The post-registration budget has grown significantly over the last five years from £500,000 in 2016 to £2m in 2021/22. In 2020/21 the budget was £1.5m and, due to Covid-19 and restrictions on staff study leave, this was not fully utilised. HEIW is further increasing its engagement and support of Health Boards and Trusts in 2021/22 to ensure this budget is fully utilised and that benefits and value from the investment is maximised. **The recommendation for 2022/23 is to maintain the budget at £2m.** This is a challenging but achievable target and will offer opportunities for more staff than ever before to undertake advanced practice and masters level modules.

It is recommended that the budget for the specialist community public health nursing (SCPHN) programmes remains at the 2021/22 levels.

In line with the Nursing and Midwifery Council (NMC) review of post-registration standards that build on ambitions for community and public health nursing in the UK, this will be a priority area in HEIW's phase two of the strategic review of health professional education. We will be engaging with stakeholders to prepare for the implementation of the new standards, recognising the need to create quality learning and service environments to accommodate new ways of working and up-skill our current workforce to meet new standards.

Pharmacy

In 2021 there will be significant changes to the initial education and training (IET) standards for pharmacists and pharmacy technicians. The requirement to up-skill the existing pharmacy workforce to the same level of skills has shaped the request from the service to increase investment in the pharmacy team. In recognition of this HEIW has:

- included 50 new post-reg foundation posts who will be up-skilled, primarily for primary care and community pharmacy
- continue 40 clinical pharmacy diploma posts for the hospital sector for 2022
- increased investment in foundation pharmacy technician training bursaries for level four Agored units from 20 to 30 and increased to 20 BTEC level four clinical skills
- increased number of independent prescribing courses for pharmacists to 200
- increased funds for advanced and extended practice for pharmacists
- included DIP/MSc pharmaceutical technical services and quality assurance to support the Transforming Access to Medicines (TRaMS) programme.

Dental

HEIW took over Dental Foundation Training (DFT) programme funding from Welsh Government in August 2020 and so this is the first time that the dental workforce has been included in this plan.

By way of background 74 places are funded annually for DFT, this includes the trainee salary, trainers grant and service costs to dental practices. The 2020/21 budget was the first year HEIW held the funding of the Dental Foundation Training (DFT) and Career Development Dentist posts.

In 2020, following discussions with Welsh Government, career progression roles (Career Development Dentists (CDD)) were created to retain young dentists in general dental practice in Wales. These have been renamed General Dental Service Core Trainees (GDSCT) for 2021.

For 2020-21 these places were allocated as follows:

- two funded places top-sliced and funding allocated by Welsh Government to Betsi Cadwaladr University Health Board (BCUHB) for two clinical fellows
- 62 Welsh Government funded DFT posts recruited
- five CDD posts recruited
- five posts remained vacant (Covid-19 impacted upon recruitment).

For 2021-22 these are allocated as follows:

- two funded places top-sliced and funding allocated by Welsh Government to BCUHB for two clinical fellows
- 65 WG funded DFT posts
- seven GDSCT (previously CDD) posts.

For 2022-23 and onwards we would request that the full allocation of funding for 74 places is allocated to HEIW to distribute to DFT and GDSCT to maintain the dental workforce in Wales. Due to the increased focus on the prevention agenda, there are recommendations to increase education commissioning for dental hygienists.

Medical Workforce Planning Recommendations

A number of specialties have been reviewed in detail based on a review of workforce intelligence and data submitted by Training Programme Directors, Heads of School Royal Colleges and Health Board IMTPs. This included:

- demographics of the current medical workforce in the specialty including data and trends over time
- predicted regional and national demand for the future workforce
- current supply routes for the workforce
- impact on quality of training programme if places were increased/decreased
- opportunities for changes to service delivery, for example, up-skilling other healthcare professionals
- recruitment and retention trends within the specialty.

This has informed the recommendations for increases in posts in a number of areas which can be seen within the table at Appendix three. The medical workforce planning recommendations have been developed in consideration of the wider

workforce requirements and the process for other healthcare professionals as it is increasingly important to understand how new roles and ways of working might support the delivery of service in areas traditionally considered the remit of the doctor.

General Practice

In early 2019, Welsh Government supported HEIW to increase its GP training input target from 136 to 160 with the option to recruit up to 200 if suitable applicants were available. GP training capacity has been increased significantly to support this expansion. This target window was provided in the knowledge that future variability both in numbers of applicants passing selection assessments, and also placement capacity between these limits would be likely to vary somewhat from year to year depending on training capacity, applicant numbers and numbers requiring extensions to training, which will inevitably increase as a consequence of both the increased intake and Covid-19 related factors.

In 2019, 187 Doctors were successful recruited to GP training in Wales. In 2020, this number increased to 200. HEIW is scoping methods to help understand current qualified GP workforce levels in Wales and to help develop ways to predict the future required workforce. These initiatives will help inform future refinements to the target window for recruitment to GP specialty training in Wales. **In the interim, the recommendation is that the current target of 160, with an option to over-recruit to 200 when feasible, is maintained.**

STAKEHOLDER FEEDBACK

The involvement of stakeholders in the development of the plan was important, and we welcome the feedback they have provided.

This emphasised the need to work in partnership to create and develop quality learning and service environments to accommodate new ways of working, service developments and changes in professional regulation standards.

FINANCE

The following detail sets out the total funding requirement for education commissioning and training for 2022/23 calculated as **£262.3m** increasing to **£287.4m** by 2024/25.

The total requirement for 2022/23 can be broken down into **£146m** for the wider health professional education, **£12m** for pharmacy training, **£60.5m** for medical training places, **£34.2m** for GP training and **£9.5m** for dental training.

	2022-23	2023-24	2024-25
	£m	£m	£m
Health Professional Commissioning	146.009	157.956	163.790
Pharmacy	12.041	14.110	14.117
Medical Training	60.503	62.939	64.191
GP Training	34.195	33.196	35.393
Dental Training	9.547	9.738	9.933
Total	262.295	277.939	287.424

The increase in requirement for 2022/23 over the 2021/22 planned spend is £32.2m. This is because of a range of factors that are described in more detail in the table below.

	Budget	E&T Plan		
	2021-22	2022-23	Increase	Notes
	£m	£m	£m	
Health Professional Commissioning	125.355	146.009	20.654	Impact of increased commissioning numbers
Pharmacy	11.412	12.041	0.629	Post-registration foundation programme
Medical Training	56.801	60.503	3.702	£3.1m additional workforce plus impact of pay award
GP Training	28.504	34.195	5.691	£2.5m relating to increasing numbers of extensions and protected pay. Further £3.1m due to increase in numbers in original model and inflation
Dental Training	8.028	9.547	1.519	Plan based on 74 trainees. The 21/22 budget based on allocation of 68 trainees
Total	230.100	262.295	32.195	

However, due to the cumulative effect of increasing numbers of students and trainees in the system the budget level for 2022/23 as identified in the 2021/22 plan was £251m. Therefore, the increase in the investment required above the level identified in last year's plan is £11.3m. This is due to the recommended increases set out in this paper and the reasons contained in the table above.

ADDRESSING DIVERSITY

HEIW is committed to encouraging and supporting diversity within the healthcare workforce and promoting the widening access agenda to ensure that those we train are representative of the communities they serve. The diversity of UK graduates regarding ethnicity and other protected characteristics continues to increase, which is to be welcomed and supported.

Between 2018 and 2020, HEIW undertook significant research, data analysis and engagement with key stakeholders, including students, service users, Health Boards, Trusts and universities. This was to ensure the future structuring of education across Wales and the content of health professional education and training would support diversity for all individuals with protected characteristics in line with equality law. As a result, HEIW's new health professional contracts, which commence in 2022, embed measures that promote the recruitment and ongoing support of students from black, Asian and minority ethnic (BAME) backgrounds. Current HEIW data offers assurance that our partner HEIs are recruiting from a wide range of ethnic groups.

However, to further support this HEIs will be required to implement a contextual admissions policy contained within the new contract, whereby programme entry tariffs will be lowered for students that hold a protected characteristic and are underrepresented in education. The new contracts will require our partner universities to provide specialist advice and support for students regarding diversity, inclusion and practising a religion; and also allow for the gathering of data and engagement with students which will allow for the identification of any potential variations in experience, perceptions, or attainment for different groups with protected characteristics.

The association between ethnicity and progression in postgraduate medical training has received particular attention in the UK over the last few years. There has been a focus on understanding and addressing the differential attainment gap which has been identified between graduates of international medical graduates (IMG), UK black and minority ethnic (BME) and UK white backgrounds. The former two groups are more likely to experience issues impacting their progression.

HEIW has established a programme of work to increase understanding of such differences and introduce a range of initiatives to address this. These include ensuring that our trainers are appropriately trained and skilled in understanding cultural diversity and unconscious bias to better support these individuals.

This work is essential as recruiting IMGs has been and continues to be an important part of ensuring the sustainability of the medical workforce in Wales. Despite plans to increase UK and Wales medical student numbers, it is likely that this reliance on IMGs will continue to be a crucial component of our workforce plans and so requires particular attention.

HEIW is also committed to fully understanding barriers and challenges faced by trainees with other protected characteristics, the impact this has on their training experience and where necessary to introduce measures to address any identified issues. This will ensure that diversity, equality and fairness are fundamental to all aspects of training in Wales.

RISKS

The plan is both challenging and achievable. Even where numbers are recommended to be maintained at 2021 levels it still results in record numbers of students in training in Wales, as the newly commissioned numbers are higher than the graduating cohorts. Therefore, there are more students in university and on placements in the NHS and wider health sector than ever before.

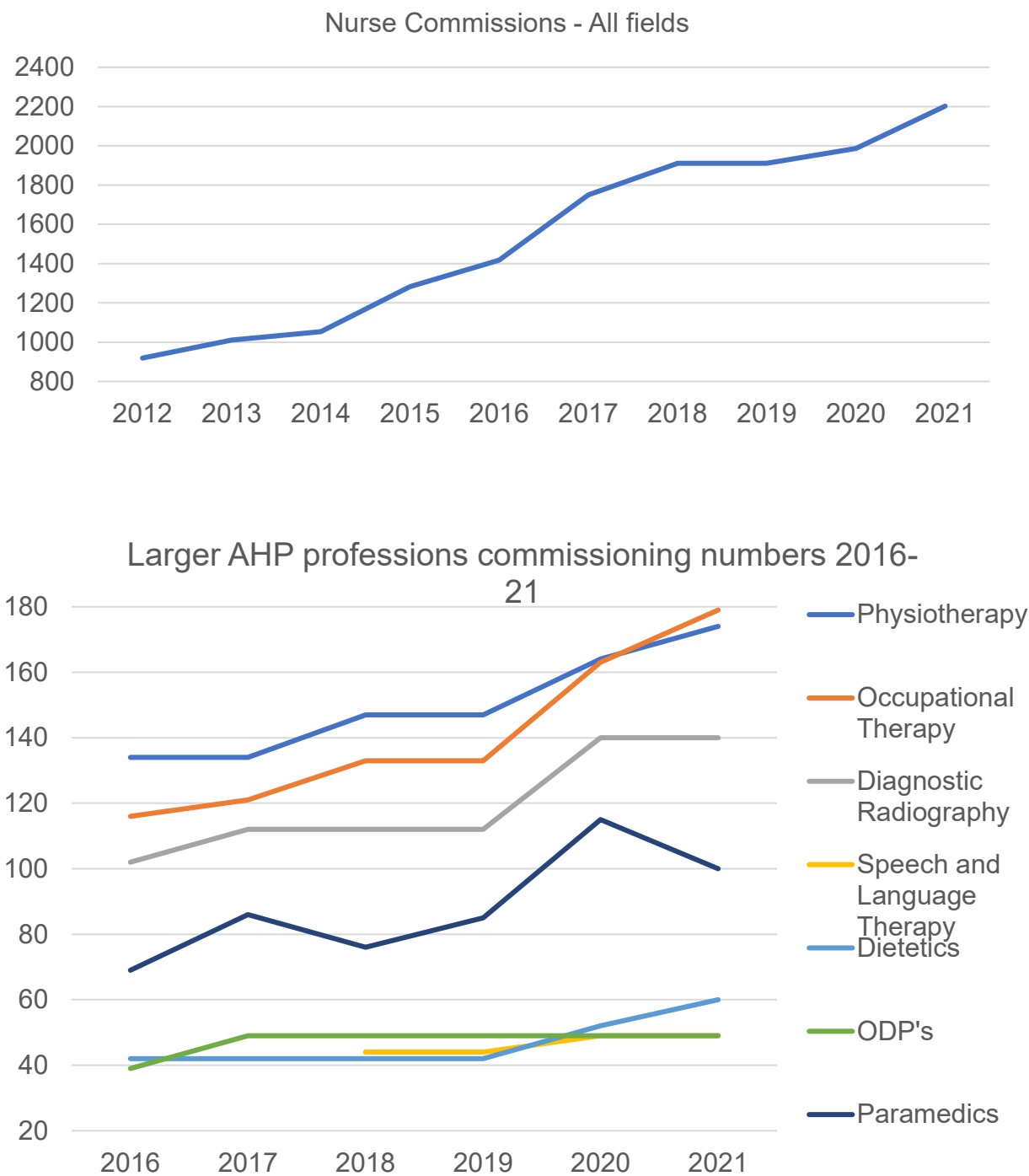
As universities continue to develop blended learning approaches to support students and trainees, their physical infra-structure becomes less of a barrier to growth. However, ensuring students and trainees receive a safe and quality experience is vital and HEIW are working collaboratively across Directorates to assure the quality of education provision. Practice learning experiences are a crucial part of healthcare students' personal and professional development and the quality of placement opportunities are instrumental in supporting the next generation of registrants.

The pandemic has altered the placement landscape, and with more students and trainees, ensuring the right capacity in the right areas are available to enable all students and trainees to accumulate their regulatory learning outcomes is vital. HEIW has recently appointed a Head of Placement Experience and Improvement. This is a national role and will work closely with practice educators across Wales but also with medical, pharmacy, optometry, general practice and dental colleagues internally to ensure that all students and trainees receive quality and safe placements built on common principles. This work will lead, develop, and continually improve quality management aspects of placement learning and experience in line with the strategic vision of HEIW.

APPENDICES One to Nine

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Growth in Students



Appendix two

Health Professional Staff Recommendations

Course Title	2022/23 recommendations
Adult Nursing	1,540*
Child	175
Mental Health Nursing	410*
Learning Disability Nursing	77*
Total Nursing	2,202
Midwifery	185
B.Sc. Human Nutrition - Dietician	40
PG Diploma Human Nutrition - Dietician	20
PG Diploma Medical Illustration	7
B.Sc. Occupational Therapy	129
PG Diploma Occupational Therapy	30
B.Sc. Occupational Therapy (Part Time)	20
Degree in ODP	49
B.Sc. Physiotherapy	174
B.Sc. Podiatry	27
PhD Clinical Psychology Doctorate	36
B.Sc. Speech & Language Therapy	40
B.Sc. S< - Welsh Language	9
B.Sc. Paramedicine	84
Paramedics - EMT conversion	30
Diploma in Dental Hygiene	33
Degree in Dental Hygiene & Therapy	13
Physicians Associates	54
BSc Diagnostic Radiography	140
BSc Therapy Radiography	26
Assistant Practitioners Radiography - Diagnostic	12
HE Cert in Audiological Practice	15
Physiological Science - PTP	
B.Sc. (Hons) Healthcare Science - Cardiac Physiology	24
B.Sc. (Hons) Healthcare Science - Audiology	12
B.Sc. (Hons) Healthcare Science - Respiratory and Sleep Science	8
B.Sc. (Hons) Healthcare Science - Neurophysiology	3
Physical and Biomedical Engineering - PTP	
B.Sc. (Hons) Healthcare Science- Clinical Engineering	2
B.Sc. (Hons) Healthcare Science - Nuclear Medicine	3
B.Sc. (Hons) Healthcare Science - Radiotherapy Physics	3
Life Science - PTP	
B.Sc. (Hons) Healthcare Science- Blood, infection, Cellular, Genetics	25
HIGHER SPECIALIST SCIENTIST TRAINING - HSST	
Physical Sciences	3
Life Sciences	3
Physiological Sciences	2
Post Graduate Healthcare Science Education	
MSc Genomic Medicine	20

Appendix three

Medical Workforce Recommendations for 2022/23

Following a comprehensive review of all information and data made available to HEIW the table below details the recommendations for 2022/23.

Unscheduled Care	
<i>Emergency Medicine</i>	No increases are recommended for the higher emergency medicine programme for 2022 (see unscheduled care section for further details). To review again for 2023.
<i>Higher Anaesthetics</i>	Increase of three higher anaesthetics posts.
<i>Intensive Care Medicine</i>	Increase of four higher training programme posts.
Cancer Care	
<i>Clinical Oncology</i>	Increase by four additional higher training posts implementing year two of the proposal to expand by four posts per year for five years.
<i>Medical Oncology</i>	Increase by three additional higher training posts implementing year two of the proposal to expand by three posts per year for five years.
<i>Palliative Medicine</i>	To increase palliative medicine training by two posts for August 2022 and a further two posts for August 2023.
Small Specialty Review	
<i>Community Sexual and Reproductive Health (CSRH)</i>	To temporarily convert one of the GUM posts to CSRH using existing funding to enable an additional appointment into CSRH for 2021 if possible but if not 2022.
	To recommend an increase of two CSRH posts for August 2022
	To explore options for increasing exposure to both CSRH and GUM on the Foundation Programme and for GUM within Internal Medicine.
<i>Oral and Maxillofacial Surgery (OMFS)</i>	To increase the OMFS training programme by two posts in August 2022.
<i>Clinical Genetics</i>	To increase the clinical genetics training programme by two posts in August 2022. <i>Note - agreement and temporary funding was identified to enable one post to commence in August 2021.</i>
<i>Clinical Neurophysiology</i>	To await the recommendations of the neurophysiology workforce review. This is considered a fragile and vulnerable training specialty.
<i>Clinical Pharmacology and Therapeutics (CPT)</i>	To retain the two posts in CPT and review for 2023. To explore moving one post to North Wales.
	To increase exposure to CPT during internal medicine training to increase recruitment in the specialty.
Diagnostic Specialties	
<i>Medical Microbiology/ Infectious Diseases</i>	Increase of three medical microbiology/infectious diseases posts implementing year three of a plan to increase posts every year for five years.
<i>Clinical Radiology</i>	To support the recommended expansion as required to appoint 22 trainees for the 2022 intake with 20 in the South and two in North Wales.
	To create an INR post which will rotate as required to specialist centres in England to enable Welsh trainees to obtain this much needed training.
	To increase histopathology training in North Wales by one post for August 2022.

	To undertake an urgent review exploring solutions to the training capacity challenges within Histopathology and Paediatrics and Perinatal Pathology to make recommendations to Chief Executives in June 2022.
Mental Health	
<i>Child and Adolescent Psychiatry</i>	North Wales – to increase by two posts for 2022. <i>Note - agreement and temporary funding was identified to enable one of these posts to commence in August 2021 as part of a phased introduction.</i> South Wales – to increase by two posts for 2022 and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.
<i>Old age psychiatry</i>	To increase by two training posts for 2022, two for 2023 and a further two for 2024. With a review once the HEIW review on mental health workforce has reported its findings.
<i>General Adult Psychiatry</i>	To make no changes to the current level of posts on the general adult psychiatry programme and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.
<i>Forensic Psychiatry</i>	To make no changes to the current level of posts on the forensic psychiatry programme and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.
<i>Learning Disabilities</i>	To convert the shared LD/CAMHS post in North Wales to LD, thereby increasing the programme by one post. To review further for 2023 once the HEIW review on mental health workforce has reported its findings.
Foundation, Core and Higher Programme Alignment	
<i>Foundation</i>	To increase the number of foundation year one posts by 30 and foundation year two posts by 30 for August 2022 as detailed in the Foundation Expansion Business Case.
<i>ACCS Emergency Medicine</i>	The ACCS Programme is expanded by a further four posts for 2022 and a further two posts in 2023. This will complete the development of the Bangor programme and enable a new programme in Cardiff to be created to maximise current training capacity.
<i>ACCS Anaesthetics</i>	Five new posts are to be created in emergency medicine and acute medicine to enable the creation of a ACCS Anaesthetics programmes to support the alignment with intensive care training.
<i>Anaesthetics</i>	Increase of five core training programme posts to ensure alignment between core and higher programmes and to meet training curriculum and LTFT requirements going forward.
<i>Internal Medicine</i>	To increase internal medicine training by 12 posts for August 2022.
<i>Core Psychiatry</i>	To increase core psychiatry training by eight posts for August 2022.
Additional workforce priority areas	
<i>Public Health Medicine</i>	Recruitment into existing training posts is to be maximised and to support this funding for two posts is required for 2022 and for three posts in 2023. Work should be undertaken to maximise the current interest in the specialty from junior doctors. This includes the provision of foundation training placements in public health medicine within the foundation expansion programme.
<i>Rheumatology</i>	To increase rheumatology training by two posts for August 2022 and a further two posts for August 2023.
<i>Gastroenterology – Hepatology Specialist post</i>	To create one hepatology sub-specialty post for August 2022 with three months of this time spent in a specialist centre outside of Wales.

Paediatrics

Increase of four ST3 posts to enable the expanded numbers of trainees created in 2020 and 2021 to progress through the training programme and to front-load the programme to maximise %WTE from ST4 onwards.

General Practice

Maintain the current target of 160 intake per annum, with an option to over-recruit to 200 when feasible.

Workforce Analysis

The Covid-19 pandemic will impact on the workforce going forward. 'Health and Social Care in Wales - Covid-19: Looking Forward (March 2021)' identifies that recovery from the pandemic is estimated to take five years, that there will be increased demand across services including in mental health, that there will need to be a greater focus on health and wellbeing and there will be continued working from home. Some of the impact on the workforce is yet to emerge and will need to be monitored. There could be a short-term impact on people choosing early retirements, especially in light of the recent changes to the NHS Pension scheme.

Wales' population continues to grow and age and combined with the impact of the pandemic on the delivery of services, associated backlogs and potential impact on workforce behaviours will drive the need for workforce. The pandemic has seen a rise in flexible working patterns with the requirement for non-public facing staff to work from home where possible and this, coupled with the ongoing changes in attitudes towards work and career will be an important trend to monitor. NHS Wales has invested in supporting the health and wellbeing of staff during and beyond the pandemic, and the need for flexibility to provide people opportunities to maintain a work-life balance will be key.

Patterns of migration are changing in the UK due to the changes being brought about as a result of Brexit. The Government has introduced a new points-based immigration system from January 2021 and this, coupled with the Covid-19 pandemic is likely to accelerate the work to produce a more 'home grown' workforce and reduce the reliance on overseas workers.

The NHS workforce is widely dispersed across Wales, and different parts of the country have very different needs. This is largely due to the urban/rural geography of Wales with staff being attracted more to working in large urban centres than rural areas and thus creating recruitment issues in some of these areas. It is HEIW's role as a system leader, in partnership with NHS organisations, for education and training to bring the different strands of the workforce together and to consider innovative ways of ensuring the provision of education and training for the NHS workforce in rural and remote areas. HEIW will continue to explore how the development of programmes such as Made in Wales, the Strategic Review of Health Professions Education and a move towards more blended learning can contribute to the sustainability of local communities as well as contributing towards the Environment (Wales) Act 2016 by reducing reliance on travel and negative impacts on the climate and environment.

HEIW regularly analyses key workforce trends and the main trends to note for the education and training plan are:

- staffing numbers continue to increase across all staff groups. The overall workforce has grown by 21% (over 15,000 FTE) over the last six years (2015 to 2021)

- during this period, the medical workforce has grown by 24% (up from a 16.5% growth as reported in the last plan - an increase of over 1,500 FTE) and the nursing workforce by 8% (up from a 3.2% as reported in the last plan - an increase of 1,767 FTE)
- over the last six years agency and locum spend has increased by 47% from £135.2 million to £199.1 million (in 2019/20 it was £177 million). This represents an increase of 13%). Nursing and midwifery has the largest agency spend at £94.4 million for 2020/21, an increase of 16% increase on the previous financial year (despite an 8% increase in the workforce between 2015 and 2021). Locum spend for medical and dental was £58.5 million for 2020/21, a 3% decrease on the previous financial year and a reduction of 6% since 2015/16. This will have been driven by the pandemic and mass vaccination programmes
- the cost of the directly employed workforce in 2020/21 is circa £4.8 billion, a 15% increase from the previous year. This is the biggest annual increase in over 10 years and can be attributed to increasing agency spend, the increased size of the workforce and increases in employers pension contributions
- in 2020/21 the 12-month rolling sickness absence level peaked at 6% as compared to 5.6% in the previous year. Over the last few years anxiety/stress and back and other musculoskeletal problems have been the two most common reasons for sickness; however, between April 2020 and March 2021 there was an increase in sickness due to infectious disease/respiratory
- the participation rate for the female workforce equates to 0.85 and 0.95 for males. The NHS Wales workforce is predominantly female, accounting for 77% of the total workforce; however, as the workforce ages staff tend to reduce their hours especially from age 55 onwards
- the age profile of the workforce changed between 2015 and 2021. The workforce aged 55+ has increased by 7,509 in 2021 as compared to 2015. The proportion of staff in this age group has increased from 19% in 2015 to 24% in 2021.

Analysis of Annual Plans

Due to the ongoing Covid-19 pressures felt across the entire NHS, organisations were asked to submit an annual plan, as opposed to a full IMTP, outlining their future strategic aims and workforce planning needs.

The annual plans identified a number of significant workforce risks and challenges including:

Recruitment Challenges

- nursing across all four fields of practice; - adult, children, learning and disability and mental health, and further to the extension of the Nurse Staffing Levels (Wales) Act 2016 with provisions due to extend to paediatric inpatients in late 2021
- health care support workers and gaps within the funded establishment
- existing vacancies within specialist posts which have been hard to recruit into, including CAMHs, child psychiatrists, dermatology, plastic surgery, urology, COTE, intensivists, stroke and psychiatry

- gaps within mental health services, as well as trauma/emergency department
- shortages and pinch points within diagnostic testing including radiology, neurophysiology, cardiac physiology and endoscopy
- shortages of junior doctors across secondary care.

The Impact of Covid-19 and post-Covid-19

The full impact of Covid-19 will be felt over the entire NHS system for years to come. Key concerns impacting the workforce noted in the annual plans included:

- although high levels of retirements are expected across nursing and consultant posts over the next five years due to an ageing workforce, the impact of Covid-19 on staff retention is currently unknown. There may be an increase in the desire of staff to retire earlier than planned
- it is anticipated that there may be a reduction in the workforce available to undertake overtime or out-of-hours shifts, again due to Covid-19 fatigue and where NHS organisations were previously reliant upon staff goodwill to reduce gaps in workforce cover. There has been an increase in the number of requests for flexible or part-time working which may impact upon service delivery
- there is a concern that the focus on the immediate need to sustain services post Covid-19 may have an impact upon organisations' ability to future-focus and undertake long-term workforce planning.

The Impact of Brexit

The annual plans indicate that it has been impossible to fully understand the impact of Brexit following the end of the transition period in January 2020 and the beginning of the pandemic in the early spring of 2020, specifically on overseas recruitment. There will need to be a reset period as the pandemic subsides to fully consider the implications of Brexit on NHS organisations and their ability to regularly recruit from outside of the UK.

The annual plans have also identified a number of opportunities for workforce transformation, as follows:

1. Workforce Redesign

Whilst it will take many years to fully assess and comprehend the impact of Covid-19 on the entire NHS, the pandemic has highlighted that NHS organisations can make better use of digital technology to deliver effective patient care, utilising a range of new technology. It is unlikely that NHS services will ever return to their pre-pandemic ways of operating with virtual appointments with GPs and telephone triage with 111/Phone First (as just two examples) being here to stay. There is a real appetite to make effective use of the technology available to shift how, when and where work is undertaken, making greater use of the range of skills of a diverse workforce to deliver world-class patient care.

2. Strengthening the Multi-Disciplinary Team

Each of the annual plans intends to focus the delivery of care within the community setting for those with chronic or long-term conditions (as far as practicably possible) by integrating speciality practitioners into broader multi-disciplinary teams, utilising cross-organisation working and sharing resources. In addition, the desire is clear to develop Ambulatory Care Assessment Centres within the community, which are integrated with acute community teams to support day cases and reduce hospital admissions, managing patients in their home environment provided it is appropriate and clinically safe to do so.

3. Up-skilling the Existing Workforce

NHS organisations understand that the majority of their workforce of tomorrow is in post today. Promoting top of license working for registrants (whilst reviewing their skill mix), developing new roles and maximising the contributions of the unregistered workforce will all help to up-skill and shape the future workforce. Organisations also see the importance of investing significantly in “Grow your Own” to meet the range of post-pandemic demands, including through the development of the Band 4 Assistant Practitioner post.

The creation of a range of new roles will not only support alternate models of care but will also help in facilitating the move towards seven days working, for example, looking at the introduction of surgical scrub technicians for day surgery cases.

Up-skilling extends beyond secondary care as support will be given to community pharmacy development to increase the number of independent pharmacist prescribers and contribute to a fully integrated community-based multi-disciplinary team.

Across the UK, national bodies continue to recognise the need to grow the workforce in order to meet the increasing demands. Wales is in a similar position, and this plan has been developed in the knowledge that there is a need for the health care workforce in Wales to continue to grow. HEIW has undertaken an extensive modelling exercise for a number of professions to consider future changes in the workforce and used this information to underpin this year’s recommendations to maintain the growth in the numbers of students and trainees.

In recent years the UK Government has made changes to the previous shortage professions list for England/Wales. The Skilled Worker Visa: Shortage Occupations for Healthcare and Education, published 6 April 2021 now indicates that all healthcare professionals are on the list.

The above provides important context for the education and training plan, ensuring that there are clear links to these priority areas, whilst recognising the plan will not address all of the challenges, particularly in the short term.

Appendix 5

Commissioning Trends – Health Professional Staff

Staff Group	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Pre Registration Nursing	2202	1,987	1,911	1,911	1,750	1,418	1,283	1,053	1,011	919	1,035	1,070	1,179	1,095	1,079	1,271	1,265	1,247	1,387	1,291	990	1,113	976	905
Midwifery	185	161	134	134	134	94	94	94	109	107	102	123	110	95	90	100	97	97	100	120	96	86	70	72
District Nurses	80	80	80	80	80	41	41	24	31	20	26	30	26	28	45	71	68	71	65	57	62	69	50	52
DN (Modules)	123	123	123	123	123	123	123	163	172	100	50	40	40	98										
Health Visitors	92	92	92	90	82	71	66	49	39	31	31	36	46	36	36	37	47	53	62	55	48	36	44	44
Health Visitors (Modules)	30	30	30	30	40																			
CPNs	30	30	30	30	39	21	27	23	13	26	20	21	21	21	13	23	15	17	34	34	30	40	16	35
CPN (Modules)	60	60	60	60	40	48	48	40	40	30	20	20	20	20										
CLDNs	0	0	0	0	0	12	12	0	0	5	0	2	3	2	3	6	5	10	10	14	10	13	7	15
CLDNs (Modules)	10	0	10	10	10	12	12	7	8	0	4	10	6	4										
School nurse	30	19	19	19	19	18	18	18	18	27	22	24	24	24	22	21	21	24	20	17	13	6	0	0
School nurse (modules)	0	3	3	3	3	2	2	6	10	0	25													
Practice nurses	30	20	20	20	20	1	1	14	12	39	16	16	18	16	20	23	17	11	15	15	23	0	0	0
PN (Modules)	50	29	29	29	29	29	34	18	8	10	12	16	16	16										
CCN (p/t)	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paediatric nurses	0	7	0	0	16	12	12	11	13	10	8	6	9	7	2	15	10	7	13	15	0	0	0	0
Paed. nurses (Modules)	24	10	24	24	24	3	3	13	8	3	8	8	8	8										

Staff Group	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Occupational Therapists	179	163	133	133	121	116	111	88	79	71	69	102	100	93	81	98	91	106	112	79	65	45	40	37
Physiotherapists	174	164	147	147	134	134	121	96	89	103	90	90	95	85	82	86	101	126	140	115	91	77	73	67
Speech & Language Therapy	49	49	44	44	0	44	44	37	30	25	36	43	35	35	54	44	40	39	40	38	33	33	33	27
Dietetics	40	40	30	30	30									34	22	24	24	30	31	28	28	28	28	27
Post grad. Dietetics	20	20	12	12	12	42	38	30	33	28	30	36	40	12	11	12	12	14	15	15	15	15	15	30
Podiatry	27	24	24	24	24	20	20	26	15	24	24	31	30	26	28	26	26	26	27	28	28	28	28	21
Orthoptics	0	5	5	5	5	5	5	5	3	2	0	0	0	0	0									
Medical Photography	7	5	5	5	5	4	4	4	3	3	2	2	2	2	2	3	3	3	3	3	3	3	3	3
ODPs	49	49	49	49	49	39	39	46	44	28	32	29	30	25	23	32	32	39	41	36	33	32	14	14
Surgical Care Pracs	0	0	0	0	0	0	0	0	0	0	0	0	8	8										
Physicians Associate	61	60	42	32	32	27																		
Clinical Psychologists	32	29	27	27	27	27	27	26	25	21	16	18	19	18	18	21	21	21	20	19	18	15	15	15
Pharmacists - Pre Reg.	160	40	50	41	41	38	38	40	40	39	43	45	43	38	36	40	40	40	40	36	34	4	30	30
Pharmacists Dip & Techs	77	99	85	75	75	60	60	62	63	63	41	54	66	54	51	66	64	50	53	21	20	19	14	12
Dental Hygienists	18	18	18	18	18	18	18	10	12	10	7	9	11	9	9	9	9	9	9	8	8	7	7	6
Dental Therapists	13	13	13	13	13	13	13	12	11	11	6	8	11	8	8	8	8	8	8	7	7	6	6	0
Ambulance Paramedics	105	115	85	76	86	69	94	36	25	24	40	57	75	101	70	90	85	85	70	57	48	48	40	48

Staff Group	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Diagnostic Radiographers	166	140	112	112	112	102	92	73	58	56	51	58	55	51	51	54	49	61	63	61	57	49	27	33
Therapeutic Radiographers	26	22	20	20	20	22	21	21	23	23	15	17	17	17	21	15	13	14	15	14	13	12	8	7
Asst Practitioners Radiography	12	12	12	12	12	0	0	17	12	15	17	18	21	10	19	13								
PTP																								
BMS - Blood/Infection/Cellular/Genetics	25	24	21	21	21	23	27	26	28	0	27	45	45	45	43	53	45	49	51	44	34	34	24	35
HE Cert in Audiological Practice	13	15																						
Clinical Physiologists - Cardiac																								
Physiology/Audiology/Respiratory and Sleep Science	44	39	45	47	47	33	27	30	27	0	34	30	32	40	44	35	35	30	28	23	20	14	10	6
Neuro Physiology	3	4	3	3	3	3	4	5	5	3														
Medical Radiation Techs - Nuclear Medicine & Radiotherapy Physics	6	3	3	3	3	3	3	2	5	0	3	3	4	3	3	3	3	7	7	4	2	2	0	2
Clinical Engineering in Rehab	4	2	3	3	2	1	1	2	1															
Medical Engineering	4	0	0	0	0		1																	
STP																								
Audiological Scientists/Neurosensory Sciences	5	6	6	3	3	5	4	3	4	3	3	3	3	3	3	3	5	5	3	2	2	1	1	1
Neurophysiology	2	0	2	2																				
Respiratory and sleep science	2	1	3																					
Reconstructive Science	0	0	1																					
Cardiac Physiology	7	3	1	3																				
Haematology and Transfusion Science	0	1																						
Biochemists/Blood Sciences	0	4	2	0	3	3	5	3	0	2	2	3	2	2	2	2	1	2	1	1	1	1	1	1
Cytogeneticists	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	1	1	1	1	2	1
Medical Physics/Radiotherapy Physics/INIR/IIR	11	7	3	3	4	4	5	4	3	4	4	5	4	4	3	3	5	6	5	4	3	2	2	2
Molecular Geneticist/Genomics/	1	1	1	1	1	1	1	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	0	1
Cancer Genomics	1	1	1	1																				
Genomic Counselling	1	2																						
Bioinformatics	1	1	1	2	1																			
Tissue Typing/Immunology/Histocompatibility	0	0	0	0	0	0	2		1	0	0	1	1	0	1	0	1	1	0	1	0	1	0	0
Clinical Engineering/DRMG	3	2	1	2	4	1	3	3	4	3	2	2	1	2	2	2	1	2	2	1	0	0	0	0
Cellular Science/Embryology/Andrology	1	1	2	0	0	2	1	0	2															
Infection Science - Clinical Microbiology	0	2	0	3	3	0	1	0	1															
HSST																								
Life Sciences - Genetics/Genomics	0	0	0	0	1	1																		
Microbiology/infection	2	1	0	1																				
Life Sciences - Molecular Pathology of acquired disease	0	0	0	1	0	1																		
Physical Sciences and Biomedical Engineering - Medical Physics (Radiotherapy/radiation protection)	2	1	1	1	1	1																		
Physical Sciences and Biomedical Engineering - Clinical Biomedical Engineering	0	0	1	0	1	1																		
Bioinformatics	2	0	1																					
Audiology	0	1	0	0	1																			
Histocompatibility & Immunology	0	3	1	0	1																			
Transfusion Science	0	0	0	1																				

Appendix 6

Medical Specialty Training Posts and Changes

<i>Specialty</i>	<i>2022 proposals</i>	<i>August 2021 post numbers</i>	<i>Changes August 2021</i>	<i>Changes August 2020</i>	<i>Changes August 2019</i>	<i>Changes August 2018</i>	<i>Changes August 2017</i>
Anaesthetics/ICM							
<i>Core Anaesthetics Training/ACCS Anaesthetics</i>	+9 ¹	122					
<i>Higher Anaesthetics</i>	+3	140	+3	+3			
<i>ACCS Intensive Care</i>		14					
<i>Higher Intensive Care Medicine</i>	+4	31	+4	+4	+2		+4
Emergency Medicine							
<i>Acute Care Common Stem - Emergency Medicine</i>	+4	23	+2				+4
<i>Emergency Medicine (includes PEM and PHEM)</i>		54	+5	+7	+4		+2
Medicine							
<i>Core Medical Training/ACCS Acute Medicine</i>	+12	259	+15	+13			
<i>Acute Internal Medicine</i>		14	+2				
<i>Audiovestibular medicine</i>		1					
<i>Cardiology</i>		38					
<i>Clinical Genetics</i>	+2	5					
<i>Clinical Neurophysiology</i>		1					

¹ Five posts for ACCS anaesthetics to be in emergency medicine and acute medicine and four posts for the core anaesthetics programme

<i>Clinical Oncology</i>	+4	20	+4			
<i>Clinical Pharmacology and Therapeutics</i>		2				
<i>Dermatology</i>		17		+3		
<i>Endocrinology and Diabetes</i>		23				
<i>Gastroenterology</i>	+1	26	+2			
<i>Genito-urinary Medicine</i>		4				
<i>Geriatric medicine</i>		52				+3
<i>Haematology</i>		18				
<i>Immunology</i>		1				
<i>Medical Oncology</i>	+3	9	+3			
<i>Neurology</i>		17				
<i>Palliative Medicine</i>	+2	13				
<i>Rehabilitation Medicine</i>		2		+1		
<i>Renal medicine</i>		17				
<i>Respiratory Medicine</i>		31	+2			
<i>Rheumatology</i>	+2	10				
Surgery						
<i>Core Surgical Training</i>		100				
<i>Cardio-thoracic surgery</i>		7				
<i>General surgery</i>		58	+4			
<i>Neurosurgery</i>		7	-1			
<i>Ophthalmology</i>		40			+4	
<i>Oral and Maxillo-facial Surgery</i>	+2	9				
<i>Otolaryngology</i>		18				
<i>Paediatric Surgery</i>		2				
<i>Plastic surgery</i>		15	+2			

Trauma and Orthopaedic surgery		45			+4		
Urology		20	+4				
Vascular surgery		9					
Pathology							
Chemical pathology		4					
Histopathology	+1	20					+2
Infectious diseases		2					
Medical Microbiology and Infectious Diseases	+3	16	+3	+3			
Paediatric and Perinatal pathology	-1	2					+1
Psychiatry							
Core Psychiatry Training	+8	85					
Child and Adolescent Psychiatry	+4	12					
Forensic Psychiatry		6					
Old Age Psychiatry	+2	11		+2	+2 (not filled)		
General Psychiatry		29					
Psychiatry of Learning Disability		5					
Imaging and Radiology							
Clinical Radiology	+15 ²	92	+10	+ 10	+4	+7	+11
Interventional Neuro Radiology	+1	0					
Nuclear medicine		1					
Women's Health							

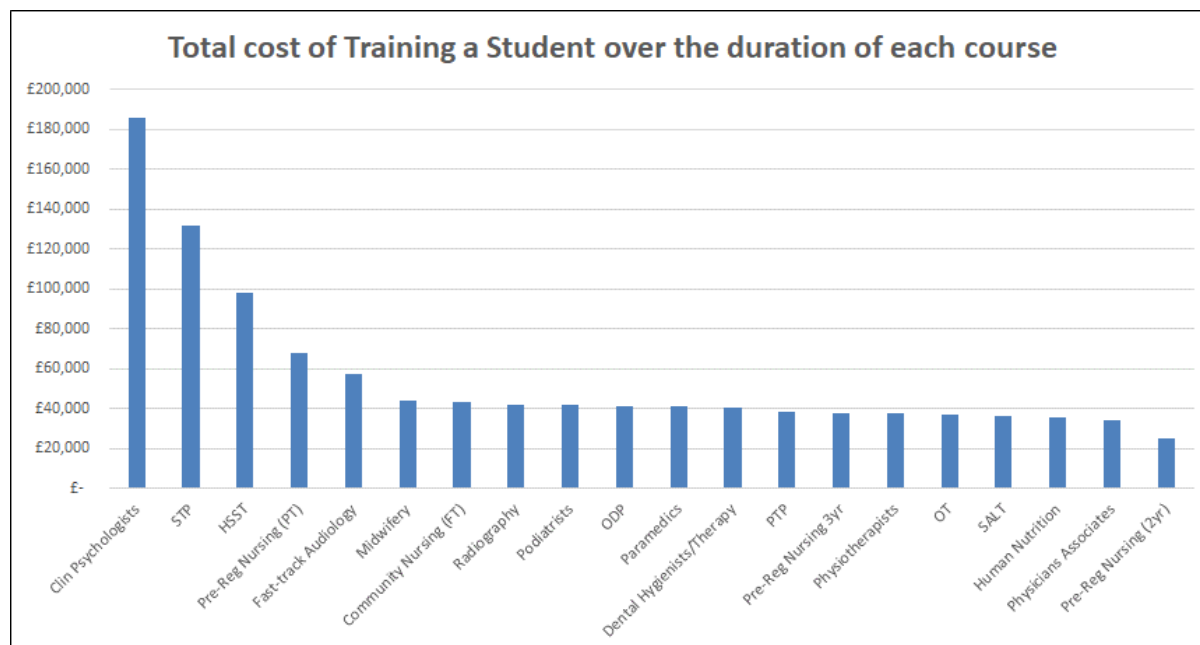
² Estimated number based on current projections of trainees completing in order to maintain an intake of 20 for August 2022

<i>Obstetrics and gynaecology</i>		95	+2				
<i>Community Sexual and Reproductive Health</i>	+2	2					
Paediatrics	+4	149	+6				
Public Health Medicine	+2 ³	23					
Foundation Training							
<i>Foundation Year 1</i>	+30	381	+30	+12			
<i>Foundation Year 2</i>	+30	351	+12				

³ This will not increase the posts numbers beyond 23 however it will maximise the use of these posts which is not currently the case.

Appendix 7

Total Cost of Training a Student over the Duration of the Course



Supporting Information

In developing the recommendations made within this plan a wide range of information has been taken into consideration, the following section provides a commentary on this to inform the position taken within this paper.

1. Nursing and Midwifery

There are five well-established routes into nursing within Wales:

- three-year pre-registration programme
- a two-year graduate entry accelerated education programme leading to registration
- a two-year HCSW accelerated pre-registration programme
- route for HCSW (this includes existing and new HCSW) to complete nurse education on a part-time basis (over four years) while they continue to be employed by their existing NHS employer
- a distance-learning programme for existing and new HCSW which will take on average four years to complete. Staff will be employed by the NHS.

Over the past two years HEIW has commissioned more places on the part-time employed routes. These routes are an excellent route for HCSWs to progress their careers and provide a much-needed workforce of local people who want to train and stay in Wales to work on completion of the programme. HEIW propose a continuation of the increases in the commissioned places for these programmes. This will provide a number of benefits, which include:

- providing widening access to the local workforce
- supporting career development for HCSWs currently employed in NHS Wales, which will promote recruitment and retention within the NHS Wales workforce.
- increase the supply of nurses from the local population
- HCSWs are a valuable supply source for the recruitment to pre-registration programmes and therefore this will contribute to a solution to the recruitment challenges currently faced
- increase the opportunity to make places available to care home providers.

The additional investment in three of the nursing fields as identified below should be considered against the following:

- the potential impact of Brexit on the available nursing workforce
- the potential impact of Covid-19 on the number of people seeking to leave the profession or taking the opportunity to retire
- Health Boards need to comply with the requirements of the Nurse Staffing Levels (Wales) Act (2016) which came into full force from 6 April 2018
- nursing remains a shortage profession
- ongoing recruitment difficulties across the UK

- changes in work patterns – increasing levels of part-time working, resulting in greater flexibility
- agency nursing costs and the need to invest now to prevent an escalation of the agency expenditure in the medium/long term.

Following the award of the new education contracts HEIW will be able to commission more nurse pre-registration education places in Wales. In recent years the HEIs in Wales have struggled to meet the target commissioned pre-registration places in some fields. The number of applicants has not dropped but the number of training places increased. From 2022 HEIW will be commissioning two more adult nursing programmes in Wales that will help to attract people who previously may not have been able to access this training. There will be a full-time programme to service Hywel Dda University Health Board (H DUHB) North and a dispersed training programme in H DUHB and Powys Teaching Health Board (P THB). The dispersed model will require HEIs to deliver training locally to people based in these Health Boards.

HEIW added to the distance learning commissions with a small pilot of pre-registration adult nurse training for care home HCSW. The progression of this pilot is currently being evaluated. HEIW will look to increase the number of places available through this route once the first cohort of students have completed the first year of study.

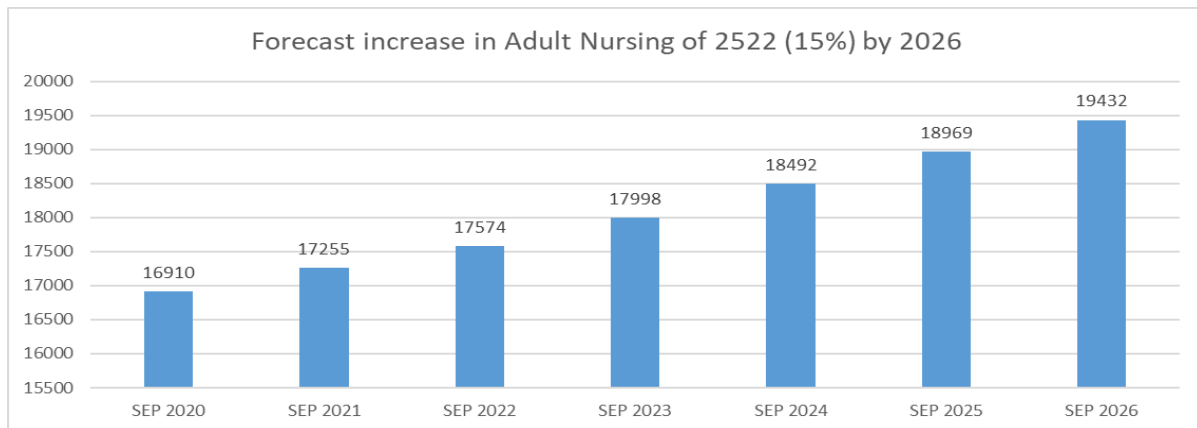
The table below summarises the number of nursing students, recommended for 2022/23 and those commissioned over the past three years.

Course Title	Ed Com. 2019/20	Ed Com. 2019/20	Ed Com. 2020/21	2022/23 (WF Plans)	2022/23 - HEIW Recommendations
Adult Nursing	1,216	1,400	1,540	2,502	1,651
Child	154	154	175	234	175
Mental Health Nursing	330	356	410	576	483
Learning Disability Nursing	77	77	77	117	87
Total Nursing	1,777	1,987	2,202	3,486	2,396

Adult Nursing

It is recommended that adult places will increase by 111 to **1,651**. In 2019/20 1,400 adult places were commissioned. Therefore, in two years the recommendation is for a 18% increase in adult nurse training numbers.

The workforce intelligence model developed by HEIW shows that the adult nursing workforce is projected to grow by **2,522 (15%)** between September 2020 and September 2026, taking the projected workforce to **19,432 FTE's** (see table below). While this is a significant increase, the current expenditure on agency costs would indicate that there is a significant vacancy factor which is yet to be filled.



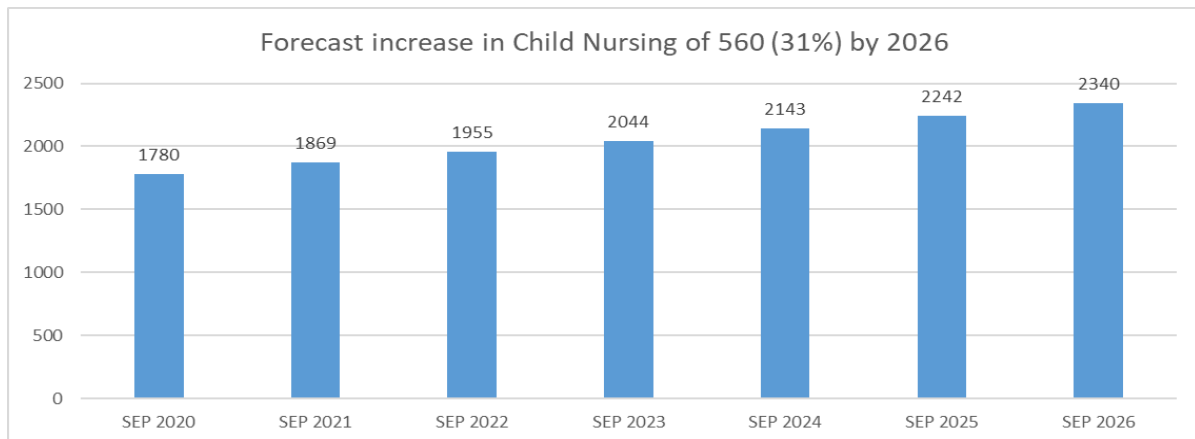
The high-level rationale is set out in the main body of the report but other contributory factors when considering this option include:

- 89% of nursing students are Welsh domiciled
- retention is good for graduates
- agency costs for nursing increased last ten years and all organisations reporting vacancies
- cost effective to train additional nurses.
- reports to WG on Nurse Staffing Act – anticipating identification of vacancy factors in first report to WG on Nurse Staffing Act
- 2022 introduction of two dispersed learning to offer education locally and for rural areas – Hywel Dda and Powys
- new provider in Aberystwyth for North Hywel Dda
- new contracts enable increased commissions: maximum possible in 2022 across all contracts: 1,651
- March cohort under recruited in 2021
- streamlining very successful conversion graduates into employment
- age profile: 22% could retire next five years
- participation rate drops off with age and 85% across other age bands
- +200 health certificate places in addition for existing staff
- working to open new training placements across primary, social care, independent sector etc.
- commissioning of max of 1,651 students likely to give an output of 1,442 graduates.

Children's Nursing

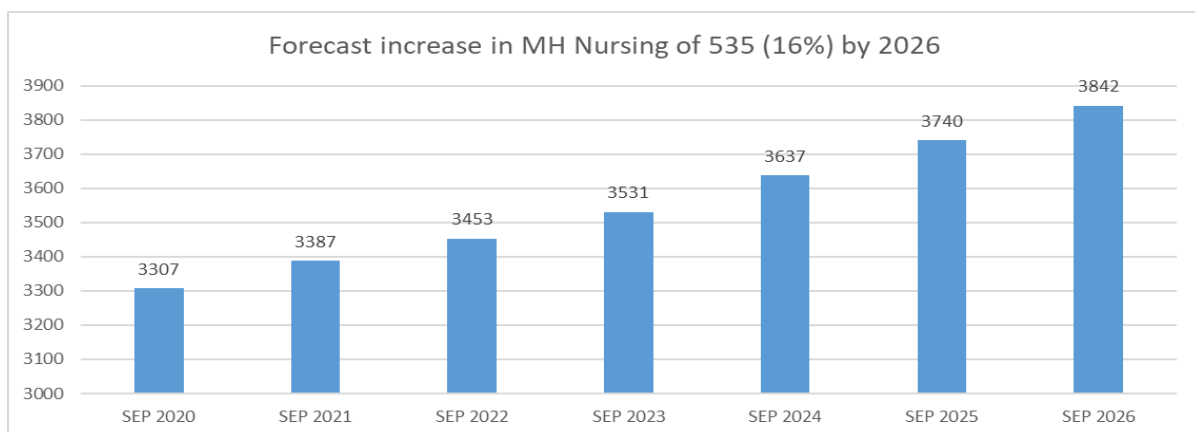
It is recommended that children's nursing numbers are maintained at **175**. In 2021/22 the number of pre-registration training places for children's nursing increased from **154 to 175**, this represents a 14% increase in places. Applications and fill rates for this field remain buoyant and therefore no further increase is recommended for 2022.

In addition, the workforce intelligence model developed by HEIW shows that the children nursing workforce is projected to grow by **560 (31%)** between September 2020 and September 2026 where the forecast is **2,340 FTE's** (see table below).



Mental Health

It is recommended that mental health numbers increase to **483**. The workforce intelligence model identifies that the mental health nursing workforce is projected to grow by **585 (16%)** between September 2020 and September 2026 where the forecast is **3,842 FTE's** (See table below).

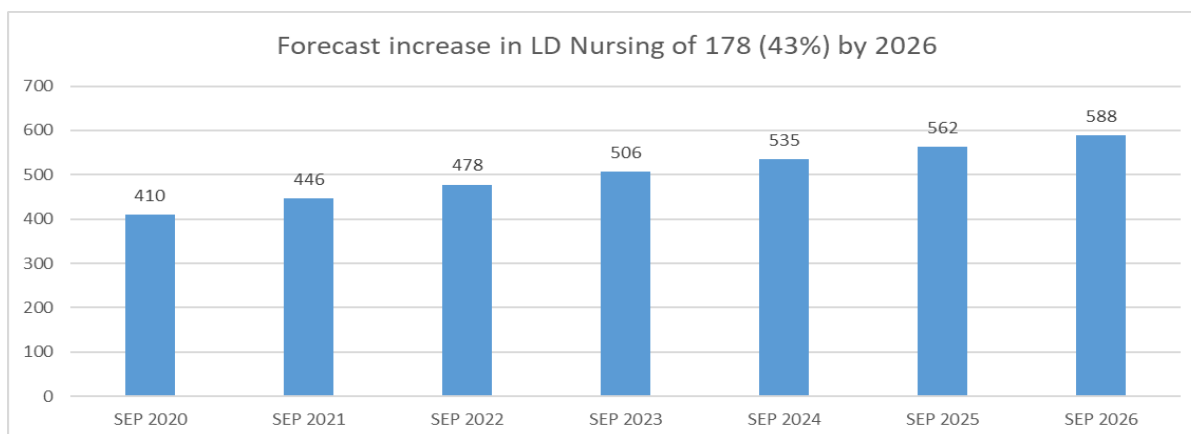


Learning Disability

It is recommended that learning disability field numbers increase to **87**. Over the past three years both Welsh education providers were unable to recruit to the full commissioned education levels. This is a reflection of a national workforce challenge in this sector. The HEIs have worked collaboratively to increase the profile of learning disability nurse education and career opportunities in Wales, and it is anticipated that this commissioning level will be achieved in 2021 and 2022.

In addition, from 2022 HEIW will be commissioning one additional LD nursing pre-registration education programme in South West Wales which allows people to access this education who would not have been able to previously.

The workforce intelligence model identifies that the LD nursing workforce is projected to grow by 178 (43%) between September 2020 and September 2026 where the forecast is 588 FTE.



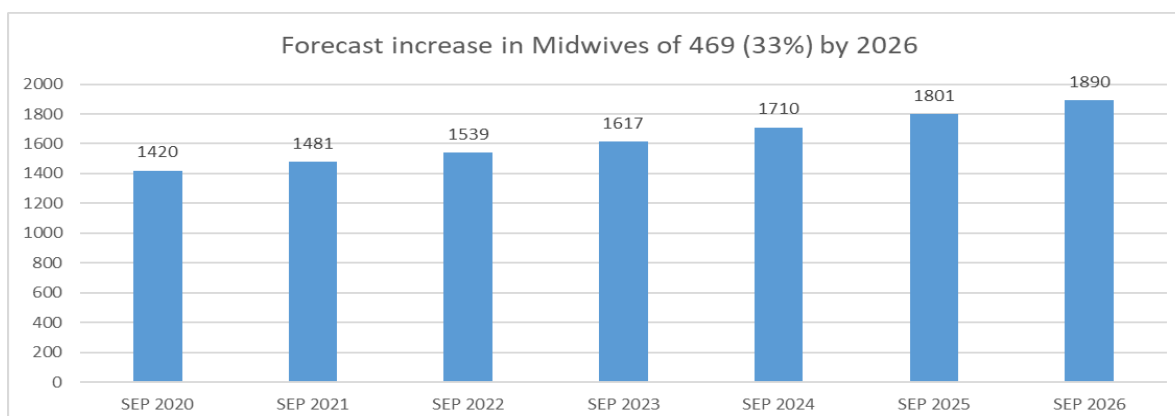
Midwifery

It is recommended that midwifery places will be maintained at **185** (see table below).

Course Title	Ed Com. 2019/20	Ed Com. 2020/21	Ed Com. 2021/22	2022/23 (WF Plans)	2022/23 - HEIW Recommendations
Midwifery	134	161	185	169	185

Over the past four years midwifery places have increased from 134 to the proposed 185, which represents a 38% increase in commissioning numbers. The additional numbers commissioned have now begun to graduate and a streamlining process to match graduates into posts in Wales has now been introduced. Ensuring there are sufficient posts available at the right time to recruit the graduates has been a key ambition of the scheme.

The workforce intelligence model developed by HEIW shows that the midwifery workforce is projected to grow by **469 (33%)** between September 2020 and September 2026 where the forecast is **1,890 FTE's**.



2. Allied Health Professionals (AHPs)

In recent years HEIW has invested in increasing the education commissions for the AHP workforce in order for the 'A Healthier Wales' plan to be realised. AHPs have a

key role to play in the plans to expand community/primary care services and developing a wider range of professionally-led services and support. IMTPs indicated that a number of professional roles will need to be expanded. This was in a climate of growing recruitment challenges for these professionals, with evidence of unfilled vacancies particularly in rural areas. Greater numbers of AHPs in comparison to nursing disciplines opt to work in England following graduation, therefore the bursary two-year tie in with a commitment to work in Wales following the completion of their programme was predicted to have an impact on filling vacancies.

As discussed in section 2.4 HEIW worked with NWSSP to implement a streamlining process for AHP graduates in 2021. The introduction of this process has highlighted issues with the number of vacancies available across Wales for this workforce. Health Boards were required to recruit over establishment in many cases to ensure that sufficient posts were made available at the right time. The impact of Covid-19 on these professions has been significant with many practitioners redeployed during the first wave and a perceived reduction in service development against IMTPs.

In terms of education provision for AHPs in Wales, the majority is based in the Cardiff area and is delivered by sole providers, i.e., only one training programme in Wales exists and is delivered by one university. The Strategic Review of Health Professional Education will address this from 2022 as where it is possible to both;

- maintain financial viability of programmes and
- still provide an excellent student experience.

Commissions will be spread across Wales. This will add resilience to the commissioning model, attract more local students, and also better meet the needs of all parts of Wales when students graduate. HEIW are increasing the numbers of providers in Wales in the following areas:

Course	Current Provision		Shape of Provision in 2022	
	Providers	Location	Providers	Location
Occupational Therapy	2	SEW, NW	3	SEW, SWW, NW
Physiotherapy	3	SEW, NW(x2)	4	SEW, SWW, NW (x2)
Diagnostic Radiography	2	SEW	3	SEW, SWW, NW
Speech and Language Therapy	1	SEW	2	SW, NW
Dietetics	1	SEW	2	SW, NW
ODPs	1	SEW	3	SEW, SWW, NW
Dental Hygiene and Therapy	1	SEW	2	SW, NW
Paramedics	1	SWW	2	SW, NW

Key: SEW - South East Wales, SW - South Wales, SSW - South West Wales, NW - North Wales

Despite recruitment challenges, there have been a number of publications including the NICE guidance on managing the long term effects of Covid-19, UK AHP public Health Strategic Framework, AHP Framework (Wales), Healthy Weight: Healthy Wales Obesity Strategy, three year action plan for the delivery of outpatient services and Rehabilitation Post Covid-19 Evaluation Guidance that lead HEIW to believe that supporting the ongoing growth and development of these professions in Wales is required in the following areas:

- Covid-19 rehabilitation – for example, supporting the multi-professional rehabilitation and self-management following acute and long Covid-19
- rehabilitation – for example, supporting people indirectly affected by Covid-19 (including people with dementia whose quality of life has been compromised by prolonged social isolation)
- public health – for example, reducing the risk of long-term conditions/increasing awareness of existing lifestyle and risk reduction programmes (consider priority populations including childhood obesity – Healthy Weight Healthy Wales / supporting workplace health)
- primary and community care – for example, widening access to AHP services through direct access. Early intervention of rehabilitation and other AHP interventions from primary and community care/restructuring services to provide interventions closer to home
- surgical waiting list reduction – for example, provision of multi-professional lifestyle/behaviour change interventions for people who may not be suitable for surgery
- surgical waiting list support– for example, provision of pre-rehabilitation to ensure those on the waiting list overcome social-restriction-related debility and become fit for surgery.

The table below summarises the number of students recommended for 2022/23 and those commissioned over the past three years.

Course Title	Ed Com. 2019/20	Ed Com. 2020/21	Ed Com. 2021/22	2022/23 (WF Plans)	2022/23- HEIW Recommendations
Allied Health Professionals					
B.Sc. Human Nutrition - Dietician	30	35	40	39	40
PG Diploma Human Nutrition - Dietician	12	17	20	25	20
PG Diploma Medical Illustration	5	5	7	7	7
B.Sc. Occupational Therapy	113	125	129	93	129
PG Diploma Occupational Therapy	20	23	30	20	30
B.Sc. Occupational Therapy (part-time)	0	15	20	24	20
B.Sc. ODP	49	49	49	58	49
B.Sc. Physiotherapy	147	164	174	131	174
B.Sc. Podiatry	24	24	27	24	27

PhD Clinical Psychology Doctorate	27	29	32	56	36
B.Sc. Speech and Language Therapy	36	40	40	23	40
B.Sc. S< - Welsh Language	8	9	9	5	9
B.Sc. Paramedicine	0	52	75	86	86
Paramedics - Diploma	70	70	0	0	0
Paramedics - EMT conversion	15	30	30	30	30

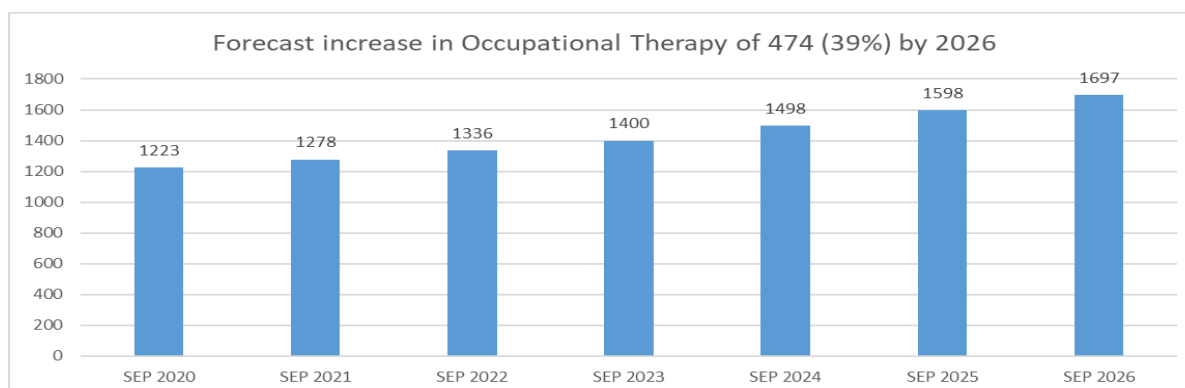
Course Title	Ed Com. 2019/20	Ed Com. 2020/21	Ed Com. 2021/22	2022/23 (WF Plans)	2022/23 - HEIW Recommendations
Other					
Physicians Associates	42	54	54	41	54

Occupational Therapy

Occupational therapists (OT) are key to realising the plan to develop primary care services. Areas of work where OTs can evidence impact and a requirement for future growth include rehabilitation frailty, social prescribing, self-management of chronic conditions, mental health and fitness for work, all linked with A Healthier Wales values of developing health and wellbeing, keeping people in their homes for longer. OTs can reduce demand on GPs by addressing and resolving underlying functional issues that are the root cause of multiple and regular contacts with the practice. Workforce modelling undertaken by HEIW provides evidence that the recent investment in pre-registration training will result in an increase in the workforce in coming years.

HEIW recommends maintaining the commissions for this profession at 179 for 2022/23. Commissions will be split across the full-time, part-time and PG Dip routes and recruitment into Local Authority posts has been included in the total commissioned places.

The workforce intelligence model developed by HEIW shows that the OT workforce is projected to grow by **474 (39%)** between September 2020 and September 2026 where the forecast is **1,697 FTE's**. Note: this does not account for professionals who will be employed outside of the NHS.



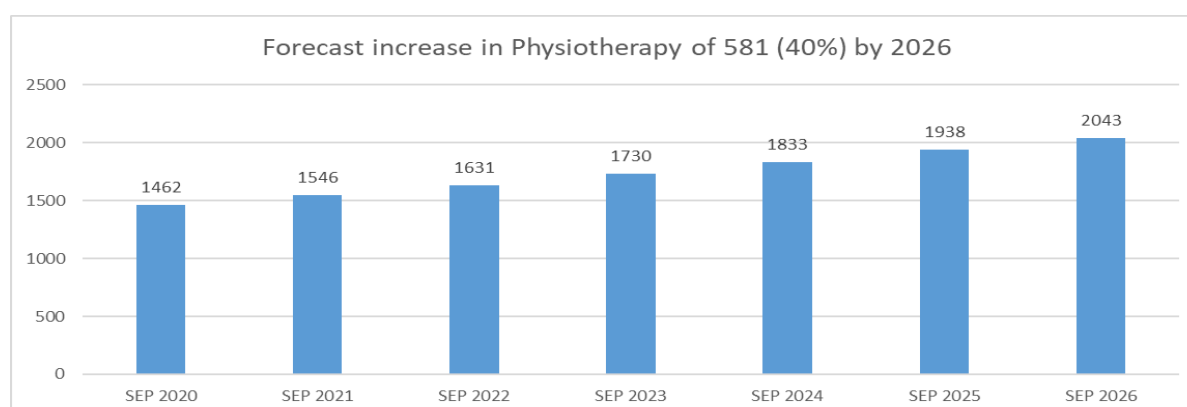
Physiotherapy

NHS Wales currently employs circa 1,462 physiotherapists. In recent years, increasing demand has been driven by the development of first contact physiotherapy services in primary care. Success in the therapy led musculoskeletal (MSK) conditions service has been identified in the IMTPs. There is a well-developed model comprising of band 7 and a smaller number of 8a advanced practice/extended role physiotherapists that undertake prescribing and therapeutic injections reducing dependency on GPs and emergency services. The development of new models of physiotherapy will also potentially impact on requirements in trauma and orthopaedic medical requirements.

Workforce modelling undertaken by HEIW provides evidence that the recent increases in investment in pre-registration training will result in an increase in the workforce in coming years.

HEIW recommends the maintenance of the commissioning numbers of **174** places in 2022/23.

The workforce intelligence model identifies that the physiotherapy workforce is projected to grow by **581 (40%)** between September 2020 and September 2026 where the forecast is **2,043 FTE's**.



Dietetics

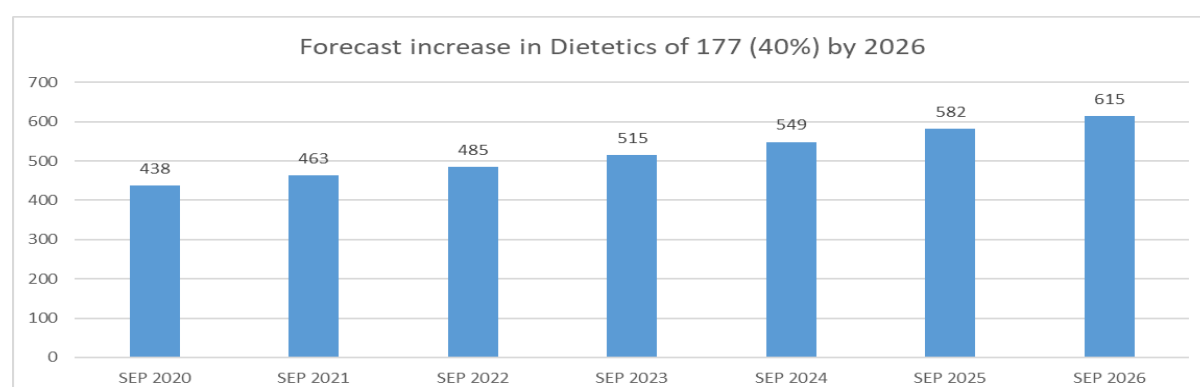
Escalating rates and earlier presentation of diabetes and unacceptably high levels of obesity across Wales are well documented. In line with the Healthy Weight Health Wales obesity Strategy, dietetic services have been developed in all Health Boards and, working with their partners, are providing level one and two services. Aneurin Bevan University Health Board (ABUHB) and Cardiff and Vale University Health Board (CVUHB) offer adult level three services. Other Health Boards are also currently developing their level three specifications, emphasising a future requirement for growth in dietetic services. There has also been a growth in requirement for patient group education to support diabetes management in addition to irritable bowel FODMAP dietary therapy group support. Other developments that will require dietetic services include the single cancer pathway and expansion of eating disorder services.

The nutrition and dietetic workforce in Wales need to be able to meet the challenges of Healthy Weight: Healthy Wales in its entirety from prevention to complex treatment and the long-term challenges of rehabilitation stemming from the Covid-19 pandemic. The core clinical risk factors identified in the pandemic included obesity and diabetes. The demand for dietitians is across the spectrum from prevention and chronic condition management to rehabilitation and reablement. The NHS Wales Delivery Unit has also released Right Sizing Community Services to support hospital discharges. The role of nutrition and dietetics is pivotal in the recovery and reablement pathway and a key enabler to achieving the desired rehabilitation goals. There is also a role in educating the wider multi-professional team in health and social care to enable the wider workforce impact and ensure consistency of nutrition messages across a range of settings.

Evidence exists of ongoing vacancies in service particularly in rural areas of Wales and use of agency staff.

HEIW significantly increased the commissions for this profession in 2021 (52 to 60 places an increase of **43%**). HEIW recommends maintaining commissioning at **60** for 2022/23.

The workforce intelligence model identifies that the dietetics workforce is projected to grow by **177 (40%)** between September 2020 and September 2026 where the forecast is **615 FTE's**.



Podiatry

Within podiatry there is an ageing workforce. Over 55% of the podiatry workforce in Wales are aged 50+ (HCPC data, 2018). It is imperative for the sustainability of the profession that there are adequate numbers of podiatrists being trained to replace those who are retiring.

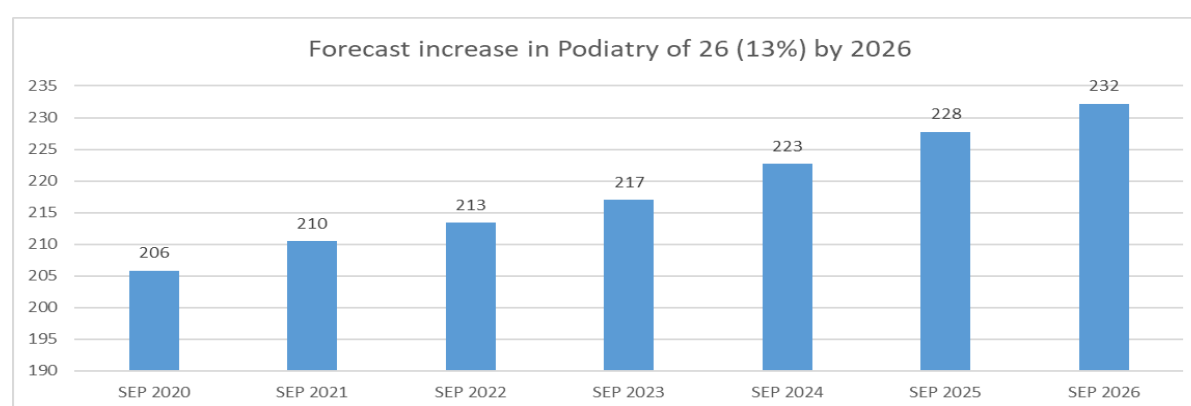
The number of people living in Wales with long term conditions which can affect the feet and lower limbs, such as rheumatoid disease, vascular disease and diabetes continues to rise, as does the population who are at risk of falls. It is vital that the podiatry workforce can meet the podiatric needs of the population both now and in the future as demand for podiatric interventions increases. Investment in the podiatry workforce will prevent a number of adverse and costly health outcomes including

falls and lower limb amputations and help the population to remain healthy, mobile and active, supporting crucial public health outcomes and wellbeing of people across Wales.

Podiatry was not included in the recent round of streaming as one of the smaller professions but also because of the likelihood of progressing to work in the private sector.

HEIW recommends maintenance of the current commissioning numbers at **27**.

The workforce intelligence model developed by HEIW shows that the podiatry workforce is projected to grow by **26 (13%)** between September 2020 and September 2026 where the forecast is **232 FTE's**. Note: this does not account for professionals who will be employed outside of the NHS.



Speech and Language Therapy

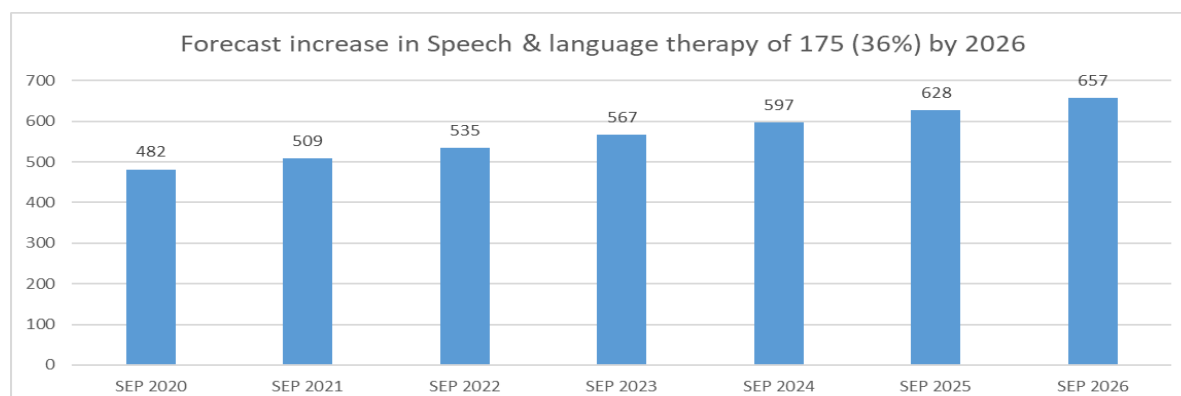
All health boards are required to provide clinical services through the medium of Welsh. However, the pressures in North Wales are more acute than other parts of Wales. Clinical posts exist which are deemed to be Welsh-essential, and it is increasingly challenging to recruit suitably qualified and experienced staff to fill these posts. Welsh language use reported in Anglesey is 57% and Gwynedd 65% of the population. The BCUHB IMTP highlights the need for Welsh speaking speech and language therapist (SLT) professionals specifically.

The strategic review of healthcare professional education will help to address this with the formation of a new SLT pre-registration programme in North Wales.

New developments within unscheduled care, primary care and mental health settings are predicated to lead to greater demand for SLT services. Currently, SLTs have replaced ear, nose and throat (ENT) Consultants' and Radiologists' time within instrumental swallowing clinics. Modelling suggests that currently, demand is being met by the existing training provision apart from Welsh language medium training.

It is recommended that speech and language therapy numbers remain at **49**.

The workforce intelligence model identifies that the speech and language therapy workforce is projected to grow by **175 (36%)** between September 2020 and September 2026 where the forecast is **657 FTE's**.



Paramedics

For 2021 the Welsh Ambulance Service Trust (WAST) IMTP stated the need for 100 paramedics to be commissioned. This is not possible for a number of reasons including the move to two providers in 2022. The need to ensure stable and sustainable growth within this area is vital. Therefore, in 2021 it was recommended that 75 places are commissioned on the BSc programme (an increase of 31%) in addition to an increase in EMT places. From 2022, as a result of the education strategic review, HEIW is able to commission the full number requested in the IMTP.

HEIW recommends **86** on the BSc Programme (**13% increase from last year**) and **30** EMT conversion places. (It is noted that the EMT conversion programme is now two years in duration due to the Health and Care Professions Council (HCPC) requirement to education to degree level for this profession).

Physician Associates

This year saw the third cohort of physician associates graduate. The numbers in training have steadily increased and as part of the bursary tie-in arrangements, physician associates graduating in 2021 have been recruited as part of the streamlining processes. HEIW has worked with organisations to identify suitable positions for the graduates. This has led to an increase in the interest in employing physician associates across a wide range of medical specialties in secondary care and in a number of practices in primary care. Regulation of physician associates will come under the General Medical Council (GMC) in 2022 which will open the opportunity for this role to become independent prescribers.

HEIW are working collaboratively with Bangor University and Swansea University, the Health Boards and Primary Care leads to develop more placements for physician associates. Maintaining commissions at 54 is challenging in the current climate and therefore, until further innovative placement capacity is developed **HEIW recommends maintaining the level of education provision at 54.**

3. Pharmacy

A notable change for 2022/23 is that NHS Wales, as single lead employer, is unique in moving to offer only multi-sector trainee pharmacist programmes, based on General Pharmaceutical Council (GPhC) 2021 interim learning outcomes and standard curriculum which starts to move further towards the new IETPs. The single programme will drive transformational changes to developing the pharmacist workforce. A single learning programme will improve alignment to the HEIW strategic equality plan ensuring an equitable experience for all learners.

As pre-reg foundation pharmacist recruitment is becoming more challenging, with demand for trainees exceeding supply, a very clear offering to students of a single consistent and high-quality national multi-sector programme provides Wales with a marketing and recruitment advantage.

Pharmacy Technicians

In 2017 new initial education and training standards for pharmacy technicians were published incorporating extending learning outcomes in specific areas, such as accuracy checking of dispensed medicines and with an increased focus on person-centred care.

Our future aspiration is for multi-sector training for pharmacy technicians to become the norm to ensure person-centred care across the integrated care pathway. Initial steps have been taken with multi-sector pilots for pre-registration pharmacy technicians, but further explorations into workable models are needed during 2022/23.

Due to the fact that the learning outcomes relating to the preparation of pharmaceuticals changed to 'shows how', rather than 'does', a new pathway has been created to engage a minimum number of trainees, thereby providing new registrants for the pharmacy technical and manufacturing services in Wales. The first intake for both strands of the course is autumn 2021/22.

Existing workforce

During the whole period of implementation of the new initial education and training standards, 2021 to 2026, the HEIW plan is to up-skill the existing pharmacist workforce to achieve independent prescribing (IP) status. A career pathway for new registrants is being developed that will provide the opportunity to achieve IP status alongside a Royal Pharmaceutical Society (RPS) credential which will offer recognition of competence at the 'early career' stage, facilitating the pathway to RPS advanced and consultant level practice.

During 2021 the GPhC are reviewing the current requirement for a pharmacist to have worked in a clinical area for two years before training to prescribe in that area. If this requirement were removed, the rate at which the existing pharmacists' workforce could reach IP status could be accelerated.

The pharmacy technician workforce will be developed to lead pharmacy teams, specifically developing education, leadership and clinical skills in line with the national foundation and primary care frameworks.

Pharmacy requests in IMTPs have been prioritised in the context of the new IETs that must be delivered for pharmacists and pharmacy technicians and the requirement to up-skill the existing workforce to an equivalent level.

Recruitment challenges in specific staff groups and training capacity have been considered along with additional workforce intelligence to supplement Health Board education and training requests which have not all fully captured training needs of primary and community teams.

Recommendations are intended to support diversification within pharmacy teams. The key priorities for the pharmacy workforce in 2022/23 are:

Priority	Purpose
<i>Provide access to programme for health care support staff to gain the necessary entry criteria for level three</i>	Provides a 'widening access' route to pharmacy technician training, and a prudent workforce, releasing pharmacy technicians from historic roles (including dispensing).
<i>Implement a national post-registration foundation pharmacist programme that follows the multi-sector trainee pharmacist programme</i> <i>(pending business case approval)</i>	Equitable support for novice pharmacists in all areas of practice to an RPS credential, assuring employers of 'level of competence' and expediting the registrant journey to prescriber and advanced practice.
<i>Increase annual numbers of independent prescribing courses for community pharmacists to 100 with supporting bursaries</i>	All patient facing pharmacists in Wales are independent prescribers.
<i>Continue to increase competency in advanced practice amongst the existing pharmacist and pharmacy technician workforce and for those transitioning to GP practice</i>	To deliver service transformation in medicines management close to people's homes.
<i>Introduce Wales first 'Pharmaceutical Sciences' Science Training Programmes</i>	Support growth and diversification in the technical services and manufacturing workforce to deliver the Welsh Government Transforming Access to Medicines (TrAMs) project for three new medicines manufacturing hubs in Wales

By ensuring all training of our future pharmacy professionals is of high quality and across all the main sectors of practice, in particular within primary and community care, HEIW can ensure a seamless approach to the care of patients and deliver on the goals of A Healthier Wales.

Pharmacy Support Staff

Health boards report increasing utilisation of pharmacy assistants in place of pharmacy technicians as they can be more easily recruited and retained and can be developed into extended roles, for example undertaking medicines management in critical care during the pandemic.

There is a need to offer routes for progression for the additional assistants recruited during Covid-19. The 'access to' course is a priority with initial delivery planned early in 2022 through the Made in Wales workstream.

Pre-reg Pharmacy Technicians

Health Boards report difficulty recruiting and retaining band 4 pharmacy technicians as the number and type of roles for pharmacy technicians have increased. In addition, the existing pipeline of new registrants has slowed due to the introduction of new IETs requiring a new training programme to be tendered and implemented, delaying the start date for the 2021 cohorts until quarter three.

Currently this development has a course funded through the modern apprenticeship route with NHS employers receiving full salary support for trainees and NHS contractors receiving a £2,000 bursary to support workplace release over two years.

In hospital sites, training capacity for the two-year, work-based apprenticeship is currently a barrier to increasing numbers. In community pharmacy, barriers are the ability of existing staff to meet the entry threshold for the training course, and the need for time with experienced tutors.

Despite the shortage of pharmacy technicians, post numbers are recommended to be maintained at 2021/22 levels for the next 12 months of commissioning. With the new training programme for pre-registration pharmacy technicians expected to commence in autumn 2021, it is recommended the course has time to 'bed-in' before increasing numbers.

During 2022/23 the priority is to introduce the 'access to' course, through the Made in Wales workstream, to create a pathway to pre-registration pharmacy technician training for pharmacy employees working at the assistant level who have the potential to progress. This will create a new pipeline to increase post numbers in future years.

Recommendation

- **NHS Employed 55**
- **NHS Employed Pharmacy Technical and Manufacturing services eight**
- **NHS contractor/community employed 20**

The medium-term aspiration for pharmacy technician training mirrors that for pharmacists; a quality clinical and technical experience across the whole integrated care pathway with an equitable bursary package. Whilst numbers are held constant in 2022/23, workable future models to deliver this aspiration will be explored.

Trainee Pharmacists

Community pharmacists were added to the Home Office shortage occupation list in 2020 and with new GP practice and cluster pharmacist roles continuing to emerge in 2020/21, a continued gradual increase in trainee pharmacist numbers would be desirable.

However, for 2022/23 the number of trainee pharmacists must first be stabilised to facilitate an essential and accelerated transition to the new GPhC IETs through a single multi-sector model, with 100% of training posts having time in hospital, community and GP practice.

Initially, a five-year financial model was generated to support an increase in training post numbers towards 180 in 2022. A revised proposal for 2022/23 outlines why the subsequent announcement of an accelerated implementation of new IETs, requires post numbers first, to be stabilised at 132 to permit additional investment in the infrastructure that this more complex training model requires. The original increasing post funding will be re-purposed to support host organisations in all sectors via increased training grants for local administration, the introduction of Training Programme Director roles and increased staff infrastructure within the pharmacy foundation team.

The picture UK-wide is that the demand for trainee pharmacists in England, Scotland and Wales has begun to exceed the available number of graduates. It is vitally important Wales presents the best quality training model to continue its impressive 100% multi-sector fill rate, supported by the 'This is Wales: Train Work Live' campaign.

Recommendation: 132 multi-sector posts

Post-Reg Foundation Pharmacists

In 2021 the new UK post-reg foundation curricula developed by the Royal Pharmaceutical Society (RPS) will be launched. The curricula and assessment strategy have been produced through extensive stakeholder engagement across all sectors of practice. In addition, the curricula has been adapted to reflect the new GPhC IETs.

HEIW welcomes an agreed UK wide post-reg foundation framework for all sectors of practice. In line with these developments, HEIW intends to reshape the current commissioned clinical diploma/MSc for hospital pharmacists to offer a revised programme of learning aligned to the RPS post-reg foundation curriculum.

For 2022, the Wales transition includes financial modelling for 50 pharmacists on the new 'national post-registration foundation programme' and a final intake of 40 clinical diploma/MSc pharmacists in the NHS managed sector, prior to all posts being commissioned through the new national post-registration foundation programme in 2023.

Foundation Pharmacy Technicians

Requests for developments for this staff group through IMTPs have increased three-fold since last year and include requests from community, primary and secondary care.

There is increasing recognition of the need to up-skill the existing pharmacy technician workforce, primarily as the value of the professional role is acknowledged and secondly, in direct response to role expansion prompted by the changing pharmacist role.

In anticipation of increased development of the pharmacy technician framework in all sectors against foundation and primary care frameworks:

Recommendation:

- **increase the number of £1,000 training bursaries for Level 4 Agored units (education, leadership, professional practice, procurement) from 20 to 30 in community pharmacy**
- **increase the BTEC Level 4 clinical skills to 20.**

Independent Prescribing (IP) and Advanced and Extended Practice (A&EP)

Considering that from 2026 all new pharmacist registrants will be IPs, this presents a five-year window where the need to up-skill Wales existing patient-facing pharmacist workforce is a priority as Wales moves towards greater uniformity in terms of a proposed national programme of community pharmacy services, including independent prescribing.

In 2022/23 there is a need to further increase access to independent prescribing courses and advanced and extended practice developments for pharmacy professionals.

Independent Prescribing

Approximately 50% of Wales 578 NHS employed patient facing pharmacists are IPs and this is significantly lower for the 1,084 NHS contractor employed pharmacists and the figure is not known for locum pharmacists.

Recommendation: increase IP courses to 200 in 2022-23

- **100 hospital and**
- **100 community, including £3,000 bursary**

The number of IP courses cannot realistically be higher due to two limiting factors. Firstly, the availability of Designated Prescribing Practitioners (including Designated Supervising Medical Practitioners). Steps to improve access ready for a continuing increase of commissions must be addressed to realise increases in academic intakes 2022. Also, the demand for affordable IP courses in Wales has reached the current HEI capacity and may necessitate tendering outside Wales.

Advanced and Extended Practice for Pharmacists

Currently rotations in the second year of the diploma provide a pipeline of pharmacists competent to cover specialist hospital wards including, mental health, paediatrics, critical care and technical services. It is important to maintain stability in areas of national clinical priority during the transition, and so adequate access to advanced and extended practice resources for the hospital sector need to remain whilst other mechanisms for developing generalist advanced practice are embedded to follow on from a national foundation programme.

In community pharmacy, the rate of engagement with minor ailments training has proved sustainable and remains a suitable pre-cursor to IP training. Education is one of the 'four pillars of advanced practice'. Due to the need for more quality clinical placements for students and trainees in all sectors of practice to implement the new IETs, there is an increased need for skilled educational supervisors and mentors to be developed in the pharmacy workforce and health boards have not identified this in IMTPs.

As new courses for digital skills development of the clinical workforce are coming online, an increase in IMTP requests in this area has been seen and is supported as the pharmacy workforce seek to engage with this agenda.

Recommend:

- **increase funds 10% for hospital and maintain 2022 level for community**
- **£242,000 hospital and £250,000 community**
- **GP transition programme**

The GP transition programme is currently the required programme for any pharmacist to achieve competence working in this sector. For 2022/23, continuing provision at current levels matches well with demand. This will be reviewed within 12 months as outputs from the primary care group aligning programmes to a central primary care training model.

Recommendation: 30 transition programmes

Specialist Services - Pharmacy Technical Services

Pharmacy technical and manufacturing services in Wales are currently undertaking a transformation project with Welsh Government. An approved capital fund of 67 million over the next five years will be used to reconfigure the way in which medicines are prepared and manufactured to meet the populations growing demand of 5-10% per annum. NWSSP will be the employer for three new manufacturing hubs across Wales, with one Clinical Director.

Overall, a skilled technical and manufacturing workforce needs to be grown using existing Health Board sites to train the staff for the future NWSSP units. The future workforce must be more diverse using different supply lines like science graduates and health care science apprenticeships alongside the minimum number of qualified pharmacy professionals required to attain regulatory compliance with the Medicines

and Healthcare products Regulatory Agency (MHRA) and for the Quality Assurance of Aseptic Services Standards.

Pharmacy professionals

There have been difficulties recruiting specialist pharmacists due to a lack of skills and experience in this area due to significant underfunding for training over many years.

Manchester University provides the only manufacturing MSc - Pharmaceutical Technology and Quality Assurance (PTQA) which enables pharmacists to specialise in technical services and, following a pan-Wales approach, pharmacy has a plan to stabilise and sustain the service through specialist staff development which can be seen through IMTP requests.

Recommendation: seven MSc/PTQA courses

Pharmacy procurement

Purchase of medicines is a specialist role outside of NHS Welsh Health Supplies and requires a team trained to a global standard. The value of this service was proven during the pandemic as high demands on a narrow range of medicines was dealt with by skilled teams for which we need to undertake succession planning.

A foundation in the area will be provided through vocational training with an Agored level four qualification in procurement. For those then looking to specialise the entry level qualification is Chartered Institute of Procurement and Supply Diploma level four, which has previously been considered outside of the current advanced practice criteria but needs to be available to enable succession planning for the whole of Wales in this specialist area. Level five and six have already been supported through the advanced practice route.

Recommendation: five CIPS course at the required level Consultant Level Practice

An interim review of a 'Learning Needs Analysis', of the advanced practice pharmacist workforce, provides new evidence that pharmacists need support to develop multi-professional practice research credentials.

HEIW will work with stakeholders to identify the learning needs of the pharmacist workforce, which will prepare them for Consultant Pharmacist roles.

4. Healthcare Scientists

Healthcare scientists within healthcare represent a broad range of professional groups and specialisms and represent a rich and diverse group of over 50 disciplines. Staff numbers within each specialism or discipline are relatively small and the number of staff trained each year reflects this. There are greater numbers commissioned at undergraduate level Practitioner Training Programme (PTP) with smaller numbers at MSc Clinical Scientist Training Programme (STP) and PhD Higher Specialist Scientist Training (HSST) level. There has been a year-on-year

increase in trainees at STP and there are now the most scientist trainees in the system than ever.

Healthcare Science PTP

The pathology workforce has been identified as a key area for workforce development following the demands of the pandemic and projected changes to workforce requirements in the development of diagnostic hubs and workstream progression such as the single cancer pathway. HEIW therefore recommends the expansion of the commissioned education for these professions.

HEIW recommends **28** commissioned places (**10% increase from 2021**).

The clinical engineering professions have been key to meeting the demands of the pandemic and development of this very small workforce is at risk. HEIW has undertaken some work to commission a PTP programme in Wales as part of the education strategic review.

HEIW recommends **eight** (**four** rehabilitation engineering and **four** medical engineering).

Workforce shortages and the service development plans in both neurophysiology and respiratory physiology has led to recommendations to increase commissions **eight** and **four** respectively.

Healthcare Science STP

The STP trainee programme continues to be a highly competitive and sought-after training programme with the NHS Wales recruitment process for 2021 lead by HEIW yielding 1,500 applicants for the 35 available posts.

New areas to be introduced within the recommended numbers **39** for 2022/23 are cellular pathology **HEIW recommend three posts** and MSc clinical science (pharmaceutical) **HEIW recommend three posts**

- MSc clinical science (pharmaceutical) trainees will utilise specialist centres in technical services production, radio pharmacy, quality assurance and quality control to create a new career pathway for science graduates. STP pharmaceutical sciences are already established in England. Graduates from Wales first cohort will complete in 2025 as new opportunities within Wales manufacturing units are anticipated to be coming online.
- The curriculum review of the cellular pathology STP programme undertaken by the National School of Healthcare Science has initiated an appetite to train STPs in this field, as previously the curriculum was not deemed suitable.

HEIW recommends an increase of clinical scientist trainees (STP) to 39 for 2022/23.

HEIW recommends maintaining the same level of HSST at eight for 2022/23.

Equivalence routes to registration

HEIW worked successfully with NHS organisations throughout 2019 to embed 'equivalence' pathways into the NHS for the healthcare science workforce. This supports individuals to gain professional registration and progress through the scientific career structure.

There is a continuing theme around a need for "grow-your own" and for in-house training to extend practice for healthcare science. Using equivalence to develop clinical and consultant scientists is a cost-effective way of realising the increase in numbers as reported in the IMTPs, whilst recognising the value and skills currently employed. This will enable the workforce to grow and develop and will support staff within the service to progress their careers whilst continuing to work.

HEIW recommends that investment in equivalence continues at current level of £80,000.

5. Post Registration and Post Graduate Education

Developing the registrant workforce is integral in supporting the transformation and redesign of clinical services. Providing clinicians with funding to access education provides the NHS with the opportunity to develop new roles and develop a flexible workforce able to keep in step with changing service requirements. This in turn ensures service users receive high-quality patient care from expert practitioners.

There are a number of different funding streams to support staff development:

- advanced and extended practice education
- non-medical prescribing
- medical ultrasound education
- reporting radiography education
- genomic medicine education
- community health studies (SPQ)
- specialist community public health nursing (SCPHN).

The recommendations in relation to the proposed commissioning arrangements for each of these budget areas are outlined below.

Advanced and Extended Practice Education

Investment has been consistently growing year-on-year. This has supported a wide range of clinicians to develop advanced and extended skills and has also supported health services to gain advanced practitioners. Priority areas identified for Health Boards and Trust to target their spend for 2022 will be:

- community and primary care/GP OOHs
- unscheduled care to include emergency care, critical care
- cancer services
- diagnostics

- eye health/ophthalmology access
- mental health.

It is clear that the Covid-19 pandemic affected the ability for registrants to be able to be released to undertake post graduate education programmes, as we saw an underspend against this budget at year end 2020/21. The pandemic affected the ability for registrants to be able to be released to undertake post-graduate education programmes. HEIW are working with Health Boards to minimise the impact on study leave in 2021/22. The post-reg education budget was £500,000 in 2016 and has increased to £2m in 2021/22. Fully utilising the £2m in 2021/22 and 2022/23 is challenging and is significantly higher than previous investment levels. Full spend to maximise benefits to staff and services is challenging but achievable and affords the opportunity for record numbers of staff to undertake masters level education.

The recommendation is that the budget remains at £2 million

Non-Medical Prescribing Education

Investment in these programmes increased for 2020/21 to £500,000. It is clear that the Covid-19 pandemic affected the ability for registrants to be able to be released to undertake these programmes, as we found ourselves in the same position as with advanced practice education. Also, the capacity within the universities in terms of numbers per cohort is at its upper limit.

The recommendation is that the budget remains at the current level of £500,000

Reporting Radiographers

Consultant radiologists as well as radiographers remain on the occupational shortage list, therefore there is a need to develop more reporting radiographers and expand other areas of advanced practice in radiography to better utilise and develop skills and support shortages across the profession. Due to pressures on the service, it is difficult to increase the budget above the 2020/21 level of £40,000.

The recommendation is that the budget remains at the current level of £40,000

Medical Ultrasound/Sonography

The development of medical ultrasound/sonography skills amongst clinicians is now well established within NHS Wales. In 2019/20 the fund started to be accessed across a broader range of professionals, for example, podiatrists and physiotherapists. The level of need amongst the workforce continues to be significant, with some of this education requiring topping up from the advanced practice funding. This programme will be re-tendered for as part of phase two of the strategic review and the plan is to have new contracts in place by 2022. HEIW have had discussions with the Imaging Academy with regards to what part they can play in the delivery of this education. This funding also includes salary backfill funding at two-thirds of the current trainee salary.

HEIW recommends that the budget remains at current level to enable new contracts to embed within the system.

MSc in Genomic Medicine

Genetics and genomic medicine continue to build momentum within healthcare provision. Advances in this field have provided patients with earlier and more accurate diagnosis and more individualised treatment and patient care. Welsh Government has identified a need to increase the capacity and capability of the scientific workforce in genomic medicine, and the genomics for precision medicine strategy was published in July 2017, which sets out the Welsh Government's plan to create a sustainable, internationally-competitive environment for genetics and genomics to improve health and healthcare provision for the people of Wales. Since then, the Topol report (2019) has also been published which contains eight recommendations for genomics specifically, with a heavy emphasis on workforce development and planning. This budget has seen significant rises in recent years and maintaining the growth will provide a challenging but achievable target.

HEIW recommends that the budget remains at the current level.

Community Education

Specialist Practice Qualifications (SPQs): These programmes are currently under review by the NMC and a consultation on draft new standards is underway. The NMC states that:

“Our new standards will ensure that people who use health and care services can be confident that they will receive high quality care from their specialist practitioner whether they're at home, in the community, or accessing public health services.”

These standards have not been reviewed in around 15 years and now need to reflect how modern healthcare services are delivered in the community. Currently the funding supports the following:

- programmes which lead to a **recordable** qualification, for example, district nurse, practice nurse, community psychiatric nurse, community learning disability nurse, paediatric community nurse
- programmes which may lead to an academic award which is not formally recognised by the NMC.

The tables below identify the number of students which it is recommended are commissioned for 2022/23.

Course Title	Ed Com. 19/20	Ed Com. 20/21	Ed Com. 21/22	22/23 (WF Plans)	2022/23 - HEIW Recommendation s
Community Health Studies					
District Nursing (Part-time)	80	80	80	114	80
District Nursing Modules	123	123	123	100	123

Practice Nursing (Part-time)	20	20	20	22	30
Practice Nursing Modules	29	29	29	78	50
Community Paediatric (Part-time)	0	0	0	12	0
Community Paediatric Modules	24	24	24	17	24
CPN (Part-time)	30	30	30	62	30
CPN Modules	60	60	60	19	60
CLDN (Part-time)	0	0	0	10	0
CLDN Modules	10	10	10	12	10
Additional Modules	472	560	560	22	560

Specialist Community Public Health Nursing

Health Visiting

These programmes are currently under review by the NMC and a consultation on draft new standards is underway. Health visiting is currently delivered through a number of routes:

- full-time: This is a full-time continuous 45-week course with a period of consolidation which takes the student up to 52 weeks
- part-time: The part time route is undertaken on a part-time basis and usually completed over a period of two years
- modular: Students undertake one or more specific taught modules over an undefined period of time.

The modular route continues to prove a challenge to service in releasing staff to undertake this programme.

This a priority area in phase two of the strategic review. HEIW recommend maintaining the same level of education provision as in 2021/22.

The tables below identify the number of students which it is recommended are commissioned for 2022/23

Course Title	Ed Com. 19/20	Ed Com. 20/21	Ed Com. 21/22	22/23 (WF Plans)	2022/23 - HEIW Recommendations
Health Visiting (Full-time)	58	58	58	85	58
Health Nursing (Part-time)	34	34	34	13	34
Health Visiting (modules)	30	30	30	6	30
School Nursing (Full-time)	14	14	20	31	20
School Nursing (Part-time)	5	5	10	8	10
School Nursing (modules)	3	3	0	0	0
Occupational Health (Full-time)	0	0	0	3	0
Occupational Health (Part-time)	0	0	0	7	0

6. Healthcare Support Worker Development

Healthcare support workers (HCSWs) make up 41% of the NHS Wales workforce and make a valuable contribution to service delivery in all settings with over half of this 41% working in roles supporting nurses and allied health professionals. Workforce profiling suggests that 80% of tomorrow's NHS workforce is in post today. Therefore, greater priority needs to be given to developing the skills and competences of the current workforce, to better meet the health and care needs of service users today and tomorrow. Without building capacities and capabilities in the HCSW workforce there is the risk of being perpetually out of step and continually training and developing a workforce to address yesterdays and not tomorrow's healthcare needs. There is an urgent need, therefore, to develop and invest in HCSWs working in primary, community and hospital services. In addition, many of the current HCSW workforce have the knowledge, skills, values and behaviours to undertake pre-registration programmes with minimal extra support. Evidence would suggest that these individuals would stay with their local Health Board/Trust employer.

In addition, there needs to be equal opportunities for all HCSWs including those who work within healthcare science and facilities services. HEIW previously have worked to fill the education gaps within the HCSW career framework and broadened it to include non-clinical areas by developing appropriate work-based learning qualifications. A number of HCSW qualifications sit within apprenticeship frameworks and HEIW have developed a draft governance framework for work-based learning. This includes examples of the different models for delivery and where HEIW could add value to the learner's experience. This workforce pipeline which starts with HCSWs needs to be underpinned by robust education and training programmes to ensure that individuals are competent to undertake their current role whilst also allowing for career progression.

Since the introduction of the Apprenticeship Levy in 2016, organisations have sort to increase the numbers of HCSWs undertaking apprenticeships, which are referenced to within a number of the IMTPs. It is expected that organisations will continue to maximise the use of apprenticeship funding, which would increase the breadth of support that could be given to organisations from the non-medical education budget. HEIW is now the Welsh Government's Development Partner for the Healthcare Apprenticeship Frameworks, a role previously held by Skills for Health. An overarching steering group has been established, chaired by Alex Howells. One of the purposes of this group is to ensure that NHS Wales has a suite of apprenticeship frameworks that meet the needs of the HCSW workforce.

Other areas for the development of HCSWs outlined within the IMTP/annual plans and from ongoing discussions with Health Boards and Trusts include:

- primary care
- joint health and social care roles
- theatres

- healthcare science
- therapies, including rehabilitation support workers.

Healthcare support workers are playing an increasingly important role in the delivery of care across all areas of healthcare provision. HEIW has reviewed and refreshed the All-Wales delegation guidelines to support the better use of the skills and competencies of health care support Workers. HEIW will continue to increase its investment in the education of this workforce to ensure they are competent and confident to take on new areas of care and registered practitioners are confident to delegate work to them.

The development of this workforce will also provide those with the aspiration to continue their career and progress on to formal training programmes to become registered healthcare professionals, thus delivering the 'Made in Wales' ethos and also enabling individuals to 'earn while they learn'. Where possible this will be achieved using existing apprenticeship frameworks and the development of new frameworks should this be required.

There has been significant increases in healthcare support worker funding over recent years with the budget increasing from £500,000 in 2016 to £2.5m in 2021/22. Due to restrictions on staff study leave during 2020/21 the budget was not fully utilised. Therefore, utilising the full budget of £2.5m in 2021/22 is achievable but challenging and will result in the highest number of health care support workers being supported in Wales.

HEIW therefore recommends that funding levels are maintained in 2022/23 which maintains the growth in the system.

7. Medical and Dental

For 2022/23 the approach to workforce planning for the medical workforce has focused on several key themes:

- impact of the Covid-19 pandemic on medical training
- unscheduled care
- cancer care
- review of small specialties, which have not been considered to date
- diagnostic specialties
- review of specialties aligned to supporting mental health
- promoting training programme sustainability by ensuring appropriate alignment of foundation, core and higher training post numbers
- other workforce priority areas identified by national policy or local university Health Board need.

Following a decision on the specialties for review for 2022/23 a series of engagement and planning meetings were set up, with membership comprising the Postgraduate Medical Dean and other leads within HEIW, to review workforce intelligence and data submitted by Training Programme Directors, Heads of School,

Royal Colleges, Health Board IMTPs and any other relevant source of information in the following areas:

- description of the demographics of the current medical workforce in the specialty including data and trends over time
- predicted regional and national demand for the future workforce
- current supply routes for the workforce
- impact on quality of training programme if places were increased/decreased
- opportunities for changes to service delivery, for example, up-skilling other healthcare professionals
- recruitment and retention trends within the specialty.

This systematic approach has enabled a detailed review of a large number of medical specialties (table one), further developing our ambition to provide a comprehensive, responsive and consistent modelling approach to medical workforce planning.

Recommendations to commission or decommission training posts as outlined in this paper were agreed following an analysis of the key data as highlighted above alongside consideration of the recruitment and retention rates and historical trends within the specialty to determine appropriate levels of change (see table two for the workforce planning 2022/23 - criteria with supporting data).

In addition to the process as outlined above, a 'deep dive' analysis was undertaken for renal medicine and diabetes and endocrinology; specialties where previous workforce modelling by the Centre for Workforce Intelligence indicated a potential oversupply of trainees in Wales and elsewhere in the UK. This 'deep dive' process has analysed and mapped trainee and consultant data over time to identify potential trends to assist with modelling and forecasting future numbers. This detailed process remains a work in progress and so at the point of writing recommendations for these specialties are not yet available and so will feature in the 2023/24 plan.

The medical workforce planning process and its recommendations is not undertaken in isolation from the process for other healthcare professionals. It is increasingly important to understand how new roles and new ways of working might support delivery of service in areas which were traditionally considered the remit of the doctor. Cross sectional collaboration within HEIW is undertaken to explore future needs in this context and ensure clear understanding of progress for establishing new roles in other healthcare professionals, which could impact on the recommendations for medical training posts. This work is ongoing and, at this point in time, has relatively little impact on the medical recommendations in the specialty areas included for 2022/23. It is important to notice that in several specialty areas there is a limit in available medical training capacity for example, histopathology and neurophysiology, something which impacts not just on medical training post opportunities but also on the support and supervision available to develop alternative roles for specialist/advanced practitioner provide future service.

Table one – Medical Specialties Considered for 2022/23

Unscheduled care		
Intensive Care Medicine	Emergency Medicine	Anaesthetics
See Foundation, Core and Higher alignment for Acute Care Common Stem, Core Anaesthetics and Internal Medicine		
Cancer Care		
Clinical Oncology	Medical oncology	Palliative Medicine
Small specialties		
Community and Sexual Reproductive Health	Oral and Maxillofacial Surgery	Clinical Genetics
Clinical Neurophysiology	Clinical Pharmacology and Therapeutics	
Diagnostic specialties		
Medical Microbiology/ Infectious Diseases	Clinical Radiology	Histopathology
Mental Health		
Child and Adolescent Psychiatry	Old Age psychiatry	Forensic Psychiatry
Learning disabilities	See Foundation, Core and Higher alignment for Core psychiatry	
Foundation, Core and Higher alignment		
Internal Medicine	Core Psychiatry	Acute Care Common Stem
Core Anaesthetics		
Additional workforce priorities		
Paediatrics	Public Health Medicine	Rheumatology
Gastroenterology/Hepatology	Diabetes and Endocrinology	Renal Medicine

Impact of the Covid-19 Pandemic on Medical Training

The pandemic which commenced in early 2020 has impacted medical training in a number of key areas and highlighted the need for more resilience in some specialties. There has also undoubtedly been an impact on the wellbeing of the medical workforce with reports suggesting increased levels of fatigue and potentially burnout. The Professional Support Unit (PSU) has seen a significant increase in the numbers of self-referrals from medical trainees for health reasons since the second wave of the pandemic. It remains to be seen whether this will impact future recruitment and retention

Foundation Training: The majority of foundation trainees were redeployed to support the care of Covid-19 patients during the pandemic, significantly impacting on their experience and planned placements. However, due to the generalist nature of foundation training, this had minimal impact on their progression.

Core and Specialty Training: Contingency arrangements were introduced for recruitment into core and specialty programmes with the introduction of online interviews and increased use of situational judgment testing as a method of entry. The necessary changes to the recruitment timetable will mean that final appointed numbers will not be available until mid-May for round one (core level (CT1/ST1)) and the end of June for round two (higher specialty (ST3/4)). Deferral arrangements and delayed start dates may need to be introduced for certain trainees who, due to VISA applications and travel restrictions, are unable to commence their programme as originally planned.

Completion of Specialty Training: Amendments to the Annual Review of Competence Programme (ARCP) process remain in place with the continuation of Covid-19 specific ARCP outcomes alongside derogations of Training curriculum requirements. These have enabled the vast majority of trainees to progress in their training programme or from core to higher training, however the focus now is ensuring arrangements are in place going forward to support trainees and ensure outstanding competence and training requirements are met. Whilst derogations have enabled progression in the short term there is a significant cumulative risk and it is crucial this is mitigated by avoiding future redeployment of those most impacted up to this point. Of those trainees at critical progression points, i.e., approaching their Certificate of Completion of Training (CCT), we anticipate 10% are at high risk and 20% at intermediate risk of non-progression.

General Practice Specialty Training: Following initial suspended sittings of the MRCGP examination as well as GP trainees having to shield due to the pandemic, the number requiring extensions to their training has increased. Additionally, a number of recruits had to defer their start dates to 2021 because of Covid-19 related issues. These developments will delay the achievement of some GP CCTs for mostly only a few months, and hence an equivalent number of applicants for qualified GP vacancies in Wales in the next few years. A potentially much greater impact of the pandemic on progression has however been mitigated by supporting the RCGP to create a new exam, the Recorded Consultation Assessment (RCA) instead of the cancelled Clinical Skills Assessment (CSA), enabling the vast majority of GP specialty trainees to qualify as GPs no later than they otherwise would have.

Table two –Workforce planning 2022/23 - Criteria with supporting data

Specialty	Longstanding consultant vacancies/ understaffed departments	Significant consultant /SAS retirement projected for next 5 – 10 years	Significant increase in demand	Curriculum changes/ Training shortage	Impact of part time working on training output and consultant WTE	Royal College recommendations
<i>Intensive Care Medicine</i>			✓			
<i>Emergency Medicine</i>	✓	✓	✓		✓	
<i>Anaesthetics</i>	✓	✓	✓	✓	✓	✓
<i>Clinical Oncology</i>	✓	✓	✓			✓
<i>Medical Oncology</i>	✓	✓	✓			
<i>Palliative Medicine</i>		✓	✓	✓	✓	
<i>Community and Sexual Reproductive Health</i>		✓	✓			
<i>Oral and Maxillofacial Surgery</i>	✓	✓	✓			
<i>Clinical Genetics</i>		✓	✓			
<i>Clinical Neurophysiology</i>	✓	✓				
<i>Clinical Pharmacology and Therapeutics</i>		✓	✓			
<i>Medical Microbiology/ID</i>	✓	✓	✓			
<i>Histopathology</i>	✓	✓	✓			✓
<i>Clinical Radiology</i>		✓	✓			✓
<i>Child & Adolescent</i>	✓	✓	✓			
<i>Old Age Psychiatry</i>	✓	✓	✓			
<i>General Adult Psychiatry</i>	✓	✓	✓			
<i>Forensic Psychiatry</i>						
<i>Learning Disabilities</i>	✓	✓	✓			
<i>Paediatrics</i>		✓			✓	✓
<i>Public Health Medicine</i>			✓			
<i>Rheumatology</i>	✓	✓	✓	✓		
<i>Gastroenterology – Hepatology</i>	✓			✓		
<i>Renal Medicine</i>						
<i>Diabetes and Endocrinology</i>						

Unscheduled Care

Emergency Medicine, Anaesthetics and Intensive Care Medicine:

The supply and demand analysis for emergency medicine, anaesthetics and intensive care highlights a need to increase training post numbers just to maintain current levels but also to increase output to futureproof services against projected consultant retirements. Each of these three specialties have seen expansion agreed through recent workforce plans however in the case of intensive care medicine and anaesthetics further expansion is required.

Emergency medicine will require further expansion in future years due to a rapid increase in the proportion of trainees and consultant workforce choosing to work part-time. The main feeder programme for emergency medicine higher training is the Acute Care Common Stem (ACCS) pathway. Although recruitment directly into higher training in emergency medicine is feasible, this has traditionally not been a successful route in Wales. The focus therefore needs to be on ensuring that the ACCS programme can deliver what is needed. There is currently significant attrition from the programme meaning that the alignment between ACCS and the higher programme is not ideal and needs to be addressed to ensure sustainability. A review of the ACCS programme is currently underway to address these issues. Recommendations to expand ACCS follow below.

Alongside increased post numbers in these key areas, expansion is also required in core programmes directly aligned to these specialties. i.e., core anaesthetics, ACCS and internal medicine to ensure a constant pool of applicants for future higher programme vacancies. This is covered in more detail in the foundation, core and higher alignment section.

Cancer Care Clinical and Medical Oncology

Cancer services remain a priority for Welsh Government as highlighted in the Cancer Delivery Plan for Wales (2016 – 2020) with incidences of new cases rising by approximately 1.5% a year and set to rise by at least 2% a year for the next 15 years⁴. Both clinical and medical oncology are projected to see a significant workforce shortfall in future years due to an increase in demand and projected consultant retirements.

Palliative Medicine

With a recognised increased lifespan of patients with advanced disease and comorbidities requiring longer periods of specialist palliative care and a need to support the provision of palliative care services in hospital, care home, and community with particular focus on community provision out of hours, the demand for end-of-life care has increased significantly. Projected consultant vacancies in palliative medicine over the next five years will not be met by the current projected supply of trainees on the training programme.

⁴ Welsh Cancer Intelligence and Surveillance Unit (2015) Cancer in Wales: 2001-2013. <http://www.wcisu.wales.nhs.uk/sitesplus/documents/1111/WCISU%20Official%20Stats%20Report%20Final%20English.pdf>

Small specialty review

Community and Sexual Reproductive Health Medicine

Community Sexual and Reproductive Health (CRSH) is a relatively new training programme and a small specialty with two training posts in Wales commencing at ST1. The Faculty for Sexual Reproductive Health (FSRH) is concerned that the CSRH consultant workforce is in a succession crisis as it is estimated that one third of the current medical workforce (in Wales and the rest of the UK) could retire in the next five years. There is considerable overlap between Genito Urinary Medicine (GUM) and CSRH, but also a different emphasis on areas of expertise. GUM consultants work closely with CSRH colleagues to provide complex sexually transmitted diseases and HIV care as well as basic contraception services. CSRH specialists have greater expertise in complex contraception and gynaecology, but also possess some of the basic skills of a GUM physician. Whilst CSRH is a popular specialty with high competition rates across the UK, GUM has experienced sustained recruitment challenges with vacant posts despite multiple recruitment rounds. As a result of long-term vacancies on the GUM programme in Wales and for the reasons outlined above, a temporary shift of funding from GUM to enable CSRH post expansion has been agreed for August 2021.

Oral and Maxillofacial Surgery

Across Wales there are ongoing recruitment challenges to consultant posts in Oral and Maxillofacial Surgery (OMFS). There have been reported consultant and SAS grade vacancies in almost every University Health Board in Wales over the past five years. This is despite successfully recruiting specialty trainees at almost every recruitment round and excellent retention post CCT, showing that the output from the training pipeline is currently insufficient to meet the needs of the service in Wales. With an ageing population and an associated significant rise in skin cancers and other malignancies of the head and neck, the demand for OMFS services will continue to rise.

Clinical Genetics

The recommendations from the genomics for precision medicine strategy launched by Welsh Government in July 2017 reflect the increasingly important role of genomics in future healthcare, something that was also highlighted in the Topol Review published in 2019⁵. Both reports recognise the need for more genomically-trained clinicians, including consultants in clinical genetics. As a result of the genomics for precision medicine strategy funding was made available for two new full-time consultant posts within the All-Wales Medical Genomics Services (AWMGS). Unfortunately, the service was unable to recruit to these posts as no Wales genetics trainees had completed their training at that point and there was no interest from outside of Wales. The lack of applicants from outside Wales is not unusual; in the last 20 years, only one of the eleven substantive consultants recruited to South Wales was not on the Wales genetics training programme. AWMGS are therefore very dependent on the Wales training programme to supply

⁵ [The Topol Review — NHS Health Education England \(hee.nhs.uk\)](https://www.hee.nhs.uk/the-topol-review)

and maintain the permanent workforce. Other genetics services across the UK are in a similar situation and there are a significant number of unfilled posts nationally.

Clinical Neurophysiology

Clinical neurophysiology is a small specialty with a small number of consultants spread across Wales, one of whom is likely to retire in the next five years. There are long term consultant vacancies reported across most Health Boards. The training programme comprises one training post which is currently vacant following an inter-deanery transfer. Historically recruitment into the specialty is challenging with posts remaining vacant on the programme following multiple recruitment rounds. Both previous trainees completing training in Wales subsequently took up consultant posts in England. Across the UK there is a significant demand for clinical neurophysiology consultants. Previous reviews by Welsh Government have suggested that much of the work delivered by the consultant workforce could be performed by non-medically trained physiologists. Swansea Bay UHB and CVUHB Joint Executives, the Chief Scientific Adviser in Welsh Government agreed to sponsor an All-Wales neurophysiology project in 2019 under the [National Healthcare Science 'Looking Forward' Framework](#), bringing together neurophysiology colleagues from across Wales to identify key issues that neurophysiology face as a service. With concerns regarding the current training capacity, recruitment and retention impacting on the sustainability of this training programme in Wales we await the outcome of this review prior to making further recommendations.

Clinical Pharmacology and Therapeutics

The Clinical Pharmacology and Therapeutics (CPT) programme comprises two posts with one trainee having recently commenced in February 2021. Recruitment into this programme has been a challenge with multiple years of unsuccessful recruitment attempts. It is a higher training programme (recruitment at ST3 level) and the fact that trainees have very little exposure to CPT during their foundation and core training is thought to be part of the reason for poor recruitment into the specialty. With recent consultant expansion in CPT across North Wales, along with an increase in the training capacity we will be exploring the movement of the current vacant training post from South Wales to North Wales. Within the proposed expansion of internal medicine, a post will be created in CPT to provide exposure to the specialty earlier in a trainee's career, which can influence career choices if the training experience is good.

Diagnostic Specialties

Medical Microbiology and Infectious Diseases

Demand for medical microbiology and infectious diseases continues to increase, a need further highlighted by Covid-19. There is a recognised national shortage of trained medical microbiology/infectious diseases staff and these shortages are also present for nursing and scientific staff in this specialty area. Across the current establishment of consultants in this area in Wales approximately 30% of posts are currently vacant and projected retirements over the next five years will exacerbate this.

Histopathology

Workload in histopathology increases year-on-year and complexity of reporting has dramatically increased in recent years especially around cancer reporting and the developing requirements and technology for genetic and molecular testing. The evolving field of genomics will significantly increase histopathology workforce requirements. The most recent Royal College of Pathology Census report highlighted that in Wales, 36% of consultant staff are aged 55 years or over, a disproportionate percentage compared to the other UK nations. There is a need for an increase in the number of histopathology training posts in Wales to support the current and future workforce needs. There is however a major challenge is retaining these trainees due to a significant pay differential between England and Wales and limited training capacity to support expansion. Exit interviews with two trainees who have been awarded CCTs in May 2021 confirm high satisfaction with the training programme but both flagged the issue of pay differential as impacting on retention of some of their trainee colleagues. Work is underway to explore the issues around training capacity and potential solutions.

The training sites in South Wales are at the limit of training capacity, however there is scope to expand by small numbers in North Wales.

Paediatric and Perinatal Pathology

Paediatric and perinatal pathology is a relatively new specialty with two training posts in Wales, which are now vacant. The only trainee to complete training on this programme has recently finished and taken up a post in Bristol due to a lack of suitable consultant vacancies in Wales. With only one consultant trainer on the programme, recruitment into the programme is currently frozen as the current trainer feels unable to train alone.

Clinical Radiology

The five-year clinical radiology training programme has seen a significant expansion in recent years resulting from recommendations in previous workforce plans. The expanded numbers of radiology trainees will result in an increased output of CCT holders from 2023 on. The expansion was driven by the stated needs from UHBs in Wales and it is essential UHBs begin to plan for this output and commit to appointing them as consultants. The most recent Royal College of Radiologists census report highlighted continued issues with the radiology workforce in Wales with 25% of the consultant workforce predicted to retire by 2024. To ensure the training programme continues to sustain an intake of 20 per year in South, Mid and West Wales and up to two per year in North Wales, further expansion is required for 2022 in line with the Imaging Academy workforce recommendations.

Interventional Neuro Radiology

Interventional Neuroradiology (INR) is a subspecialty within the clinical radiology training programme. Across Wales there is an unmet need in INR most significantly in the south. The INR service in South Wales does not currently support a full mechanical thrombectomy service to meet the needs of patients presenting with

large vessel stroke. A GMC regulated credential in mechanical thrombectomy is likely to be approved in 2021. This is intended to enable existing CCT holders with relevant endovascular catheter skills, for example, cardiologists and neurosurgeons, to undertake training to support mechanical thrombectomy services in Wales. There is however a significant concern that the training of this credential may not currently be deliverable in Wales. HEIW continues discussions with the stroke lead for Wales and radiology colleagues to explore how this might be supported. Even if deliverable, this approach is unlikely to address the service gap and patient needs long term and there is a requirement to also support radiology trainees to access the relevant INR training as part of their training programme. In the absence of current training capacity, this training will initially have to be provided outside Wales. Arrangements have been put in place to pilot this approach in a specialist centre in London commencing February 2022.

Mental Health

The supply and demand analysis for higher psychiatry training and associated services highlights a need to increase training post numbers to address current shortfalls in consultant numbers, projected consultant retirements and future service demand.

Child and adolescent, old age, general adult psychiatry and learning disabilities all report significant workforce challenges now and in the future. Forensic psychiatry, however, has a stable NHS consultant workforce with young consultants and with good recruitment and retention in the specialty. Whilst expansion is needed within the higher general adult psychiatry training programme, this is not currently recommended as recruitment to the current establishment remains challenging with ongoing vacancies; therefore, the priority for this specialty is to recruit to the current establishment before expanding further. Expansion in child and adolescent and old age psychiatry is also much needed and the probability of filling any vacancies within these specialties is much higher. Recruitment into higher psychiatry specialty training remains a challenge following successive years of low fill rates in the core psychiatry programme (the feeder stream); a range of incentives have seen an increase in recruitment to core psychiatry over the last few years, and we are reviewing the impact of this on recruitment to higher psychiatry training.

Foundation, Core and Higher alignment

When reviewing training workforce plans and recommendations, it is essential that an overall view considers the training pipeline from foundation to core and then to higher training where applicable. Any increase or decrease in post numbers will impact alignment between training grades and subsequent recruitment and retention into the specialty.

Foundation to Core alignment

In 2019 a business case was shared with Welsh Government outlining a need to expand training posts at foundation level to address training pipeline challenges we have now and in the future with expanded Medical School output and increases across specialty training programmes as detailed in this and previous education and

workforce plans. The paper recommended a phased expansion programme commencing in August 2020 with increases to foundation year one and year two posts required over a five-year period as detailed in table three.

Table three – Proposed Foundation Expansion Programme

	Number of F1 posts	Number of F2 posts
<i>August 2020</i>	351 (+12)	339
<i>August 2021</i>	381 (+30)	351 (+12)
<i>August 2022</i>	411 (+30)	381 (+30)
<i>August 2023</i>	450 (+39)	411 (+30)
<i>August 2024</i>	450	450 (+39)

Core to Higher Alignment

The medical workforce recommendations incorporated within this paper for the August 2022 intake include expansions within higher training programmes to ensure the output aligns to the future consultant workforce needed. However, candidates for these higher programmes will need to have completed core training or equivalent to be eligible at application. As a result, a review considering the alignment of our core to higher programme has been undertaken to ascertain what impact expanding posts at the higher level may have if no change is made to the feeder streams.

Internal Medicine

Within this paper recommendations have been included to increase the number of higher medicine programmes (clinical and medical oncology, clinical genetics, rheumatology and palliative medicine). Recruitment into internal medicine has previously been a challenge however following curriculum changes and a move to a three-year programme instead of two years has enabled a redistribution of posts across the three years. This however has reduced the number of trainees progressing through the internal medicine programme which in turn will reduce the output of the programme and trainees eligible to apply for and progress into higher medical training. The ratio is currently 1:1 in terms of numbers completing Internal medicine training and posts advertised for higher training. However, as expansion continues across the higher programmes this ratio will reduce in future years.

Core Psychiatry

Within this paper, recommendations have been included to increase the number of training posts in higher psychiatry programmes (child and adolescent and old age psychiatry). In addition to this there are long term vacancies across the higher programme with insufficient suitable applicants at present. Applicants to higher psychiatry training must have completed core training or demonstrate equivalence.

After years with significant recruitment challenges the core psychiatry training programme has been able to demonstrate fill rates of 100% over the last few years which will provide a throughput of more eligible applicants for higher training. However, the rates currently completing core training remain too low to address the significant vacancy levels across all higher psychiatry training areas therefore an expansion to this programme is recommended to meet future current and future workforce demand across this specialty area. There is a risk that the significant expansion of core psychiatry posts across England may impact on fill rates of these core posts in Wales, but it is considered important to try and align core and higher and maximise the intake at core level

Acute Care Common Stem and Core Anaesthetics

The Acute Care Common Stem (ACCS) programme is made up of two years rotating across emergency medicine, intensive care medicine, anaesthetics and acute medicine before a final two years in the 'parent' specialty. This programme is the feeder programme for higher emergency medicine training and provides run through training opportunities for emergency medicine trainees thereby removing a need to apply for the higher emergency medicine programme. In order to ensure appropriate alignment between ACCS and the higher emergency medicine programme, address attrition rates within the programme and expand CCT holders to meet service demand there remains a requirement to increase the numbers of trainees following the ACCS emergency medicine pathway. Whilst recruitment to emergency medicine training can also occur at ST3/ST4 this is a less attractive option to trainees and has been a much less successful approach in Wales.

Trainees who have undertaken the ACCS anaesthetics programme are much more likely to dual accredit and train in Intensive Care Medicine (ICM) and anaesthetics.

For those trainees entering ICM who have not completed an ACCS programme they immediately need to take time out of programme to obtain the necessary skills in emergency medicine and acute medicine prior to commencing ICM training. This creates temporary gaps on the ICM programme and pathway. To meet ICM future demand we are recommending an increase in the number of posts on the ACCS anaesthetics programme. Existing core anaesthetics posts will be converted to ACCS anaesthetics posts however to enable the completion of the programme additional posts in emergency medicine and acute medicine will be required.

In August 2022 the new anaesthetics training pathway will be introduced which will see core training increasing by one year (from two to three years) and higher training reducing by the same amount (from five to four years). To maintain the required output of the higher programme to meeting projected consultant demand and ensure alignment between core and higher training going forward a small increase in posts on the core anaesthetics programme will be required.

Additional workforce priorities

Public Health Medicine

The Covid-19 pandemic response has highlighted long-standing challenges within public health medicine highlighting the work of health protection and epidemiology alongside broader work of the specialty in terms of determinants of health inequalities. The need for public health medicine to address the post-pandemic impact on health, wellbeing and inequalities will keep the demands on the specialty elevated for very many years and will necessitate expansion in the workforce.

Rheumatology

Across the UK it is estimated that 40% of rheumatology posts are unfilled with a high turnover of jobs in some areas, including parts of Wales with longstanding vacancies. The demand for rheumatology services are increasing and consultant expansion is progressing in other parts of the UK. This is to meet this demand alongside initiatives to improve waiting times and the requirement for early and intensive treatment of inflammatory arthritis following the development of new drugs which transform patient outcomes. Several centres in Wales have explicitly outlined the need to expand their consultant workforce, and there are long standing vacancies in other centres in Wales. The service need has been accentuated as trainees have been required to dual train with general medicine for the last few years and more are opting to support general medicine services as consultants thus reducing the proportion of their time to support rheumatology service delivery.

Gastroenterology – Hepatology

There is currently no provision for Wales gastroenterology trainees to undertake advanced hepatology training leading to sub-specialty accreditation in hepatology. Over the last few years Welsh trainees have had to apply for these posts in England/Scotland and relocate; over half of those moving returned to Wales to become consultant hepatologists. Liver disease is the commonest cause of premature death in men in the UK and has resulted in a major rise in outpatient and inpatient episodes. During the past five years, 50% of advertised gastroenterology and hepatology consultant posts particularly in district general hospitals in the UK, have been unfilled because of an undersupply of CCT holders. A significant expansion in hepatology consultants is required, according to workforce data and the need to improve outcomes for patients with liver disease. From September 2022 with the introduction of the new training curriculum, gastroenterology trainees will do two years of core training in gastroenterology and hepatology and trainees will have a choice of spending the final two years in luminal gastroenterology or hepatology. Gastroenterology trainees currently would have to become sub-specialty accredited in hepatology to become consultant hepatologists. The sub-specialty accreditation is achieved by spending nine months in a level two hepatology training unit and three months at a transplant centre in London to address training requirements.

Paediatrics

The most recent Workforce Census Overview from the Royal College of Paediatrics and Child Health (RCPCH) estimates that the demand for paediatric consultants in

the UK is 21% higher than the workforce in place in 2017. The report notes that demand for paediatrics is increasing stating that paediatric emergency admissions have grown in Wales by 17.2% between 2013/14 and 2016/17. There has also been an increase in the numbers of children presenting to primary care and secondary care as well as increases in paediatric A&E cases. The paediatrics consultant workforce has a fairly even age profile in Wales, however 2017 RCPCH Census data highlighted that 49% of consultants in Wales are aged 50 or over. Within the training programme, there is a move towards less than full time training (LTFT) with rates in paediatrics having increased across the UK. With almost 75% of UK paediatric trainees now being women, the proportion of trainees choosing to train LTFT is likely to increase further, and early data suggest this may also translate into an increase in part-time working at the consultant grade. The increase in the numbers of trainees opting to train LTFT, coupled with the feminisation of the workforce and increased frequency of maternity leave is leading to an increase in rota gaps particularly in the higher part of the programme (ST4+). Paediatrics is predominantly a run through training programme with most recruitment occurring at ST1 level. Trainees often commence the programme working at 100% whole time equivalent (WTE) at ST1 level, with at least 30% reducing to 60-80% whole time equivalent by ST4 and therefore the intake at ST1 needs to reflect this change in working pattern.

General Practice

In early 2019, Welsh Government supported HEIW to increase its GP training input target from 136 to 160 with the option to recruit up to 200 if suitable applicants were available. GP training capacity has been increased significantly to support this expansion. This target window was provided in the knowledge that future variability both in numbers of applicants passing selection assessments, and also placement capacity between these limits, would be likely to vary somewhat from year-to-year. This is depending on training capacity, applicant numbers and numbers requiring extensions to training, which will inevitably increase as a consequence of both the increased intake and Covid-19 related factors.

In 2019, 187 doctors were successful recruited to GP training in Wales. In 2020, this number increased to 200. HEIW is scoping methods to help understand current qualified GP workforce levels in Wales and to help develop ways to predict the future required workforce. These initiatives will help inform future refinements to the target window for recruitment to GP specialty training in Wales. **In the interim, we recommend that the current target of 160 intake per annum, with an option to over-recruit to 200 when feasible, is maintained.**

Workforce Recommendations for 2022/23

Following a comprehensive review of all information and data made available to HEIW the table below details the recommendations for 2022/23.

<i>Unscheduled Care</i>	
<i>Emergency Medicine</i>	No increases are recommended for the higher emergency medicine programme for 2022 (see unscheduled care section for further details). To review again for 2023.
<i>Higher Anaesthetics</i>	Increase of three higher anaesthetics posts.
<i>Intensive Care Medicine</i>	Increase of four higher training programme posts
<i>Cancer Care</i>	
<i>Clinical Oncology</i>	Increase by four additional higher training posts implementing year two of the proposal to expand by four posts per year for five years.
<i>Medical Oncology</i>	Increase by three additional higher training posts implementing year two of the proposal to expand by three posts per year for five years.
<i>Palliative Medicine</i>	To increase palliative medicine training by two posts for August 2022 and a further two posts for August 2023.
<i>Small Specialty Review</i>	
<i>Community Sexual and Reproductive Health (CSRH)</i>	To temporarily convert one of the GUM posts to CSRH using existing funding to enable an additional appointment into CSRH for 2021 if possible but if not 2022.
	To recommend an increase of two CSRH posts for August 2022
	To explore options for increasing exposure to both CSRH and GUM on the Foundation Programme and for GUM within Internal Medicine.
<i>Oral and Maxillofacial Surgery (OMFS)</i>	To increase the OMFS training programme by two posts in August 2022.
<i>Clinical Genetics</i>	To increase the clinical genetics training programme by two posts in August 2022. <i>Note - agreement and temporary funding was identified to enable one post to commence in August 2021.</i>
<i>Clinical Neurophysiology</i>	To await the recommendations of the Neurophysiology workforce review.
	This is considered a fragile and vulnerable training specialty.
	To retain the two posts in CPT and review for 2023. To explore moving one post to North Wales.

<i>Clinical Pharmacology and Therapeutics (CPT)</i>	To increase exposure to CPT during internal medicine training to increase recruitment in the specialty.
Diagnostic Specialties	
<i>Medical Microbiology/ Infectious Diseases</i>	Increase of three medical microbiology/infectious diseases posts implementing year three of a plan to increase posts every year for five years.
<i>Clinical Radiology</i>	To support the recommended expansion as required to appoint 22 trainees for the 2022 intake with 20 in the South and two in north Wales.
	To create an INR post which will rotate as required to specialist centres in England to enable Welsh trainees to obtain this much needed training.
<i>Histopathology</i>	To increase histopathology training in North Wales by one post for August 2022.
	To undertake an urgent review exploring solutions to the training capacity challenges within histopathology and paediatrics and perinatal pathology to make recommendations to Chief Executives in June 2022.
Mental Health	
<i>Child and Adolescent Psychiatry</i>	<p>North Wales – to increase by two posts for 2022. <i>Note - agreement and temporary funding was identified to enable one of these posts to commence in August 2021 as part of a phased introduction.</i></p> <p>South Wales – to increase by two posts for 2022 and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.</p>
<i>Old age psychiatry</i>	To increase by two training posts for 2022, two for 2023 and a further two for 2024. With a review once the HEIW review on mental health workforce has reported its findings.
<i>General Adult Psychiatry</i>	To make no changes to the current level of posts on the general adult psychiatry programme and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.
<i>Forensic Psychiatry</i>	To make no changes to the current level of posts on the forensic psychiatry programme and to review further for 2023 once the HEIW review on mental health workforce has reported its findings.
<i>Learning Disabilities</i>	To convert the shared LD/CAMHS post in North Wales to LD thereby increasing the programme by one post. To review further for 2023 once the HEIW review on mental health workforce has reported its findings.

Foundation, Core and Higher Programme Alignment

<i>Foundation</i>	To increase the number of foundation year one posts by 30 and foundation year two posts by 30 for August 2022 as detailed in the foundation expansion business case.
<i>ACCS Emergency Medicine</i>	The ACCS programme is expanded by a further four posts for 2022 and a further two posts in 2023. This will complete the development of the Bangor programme and enable a new programme in Cardiff to be created to maximise current training capacity.
<i>ACCS Anaesthetics</i>	Five new posts are to be created in emergency medicine and acute medicine to enable the creation of a ACCS anaesthetics programmes to support the alignment with intensive care training.
<i>Anaesthetics</i>	Increase of five core training programme posts to ensure alignment between core and higher programmes and to meet training curriculum and LTFT requirements going forward.
<i>Internal Medicine</i>	To increase internal medicine training by 12 posts for August 2022.
<i>Core Psychiatry</i>	To increase core psychiatry training by eight posts for August 2022.

Additional workforce priority areas

<i>Public Health Medicine</i>	Recruitment into existing training posts is to be maximised and to support this funding for two posts is required for 2022 and for three posts in 2023.
	Work should be undertaken to maximise the current interest in the specialty from junior doctors. This includes the provision of foundation training placements in public health medicine within the foundation expansion programme.
<i>Rheumatology</i>	To increase rheumatology training by two posts for August 2022 and a further two posts for August 2023.
<i>Gastroenterology – Hepatology Specialist post</i>	To create one hepatology sub-specialty post for August 2022 with three months of this time spent in a specialist centre outside of Wales.
<i>Paediatrics</i>	Increase of four ST3 posts to enable the expanded numbers of trainees created in 2020 and 2021 to progress through the training programme and to front-load the programme to maximise %WTE from ST4 onwards.
<i>General Practice</i>	Maintain the current target of 160 intake per annum, with an option to over-recruit to 200 when feasible.

Medical Workforce challenges

This workforce review has highlighted several key themes which require further work and consideration over the next 12 months.

Training Capacity: Anaesthetics novice opportunities are currently limiting our ability to expand the ACCS emergency medicine pathway to the rate required to produce sufficient applicants for the higher emergency medicine programme to meet future consultant workforce demands. Likewise, within histopathology there is a clear workforce need to expand training numbers within this specialty however training capacity, particularly in the South, limits Wales' options to deliver this.

Fragile specialties: Paediatrics and perinatal pathology has seen recruitment frozen this year due to insufficient trainers on the programme to deliver sustainable training. The occupational medicine programme is also on hold due to limited sustainable training options. The clinical neurophysiology is now also vacant with concerns regarding sustainability across this programme where trainers are fragmented across Wales. These small fragile programmes require a detailed review to ascertain the most appropriate action to inform future workforce and delivery plans for Wales.

8. Dental

Oral health care in Wales is delivered predominantly in primary care settings with independent contractors in general dental practice, however dental services operate across all healthcare sectors. The dental team provide routine, urgent and out of hours emergency dental services. Dental specialist care is also available in primary and secondary care settings. Most dental speciality training is undertaken at Cardiff Dental School and District General Hospitals situated in Local Health Boards.

In order to meet current and future oral health needs, evidence suggests that there needs to be increased access to dental teams, specifically those professionals that can deal with the needs of an ageing and more vulnerable population. The emphasis on dental care is likely to shift from multiple treatments to the prevention of disease and the dental team is well placed to address this. The introduction of dental contract reform will allow greater participation from Dental Care Professionals (DCPs) that would allow the capacity of the whole system including those working across the community sector to increase.

Greater numbers of consultant/specialist dental staff need to be trained, along with additional skilled DCPs to meet identified needs. In general, Wales does not have a problem recruiting undergraduate dental professionals, however there is a lack of dental expertise as there is a failure to retain many of the young professionals that are trained. Policies need to be developed to attract and encourage dental professionals to train, live and work in Wales on a long-term basis to sustain the workforce supply.

Workforce planning – Dental Specialty Training (DST) – work has commenced to bring DST into the planning cycle for the HEIW annual education training and

commissioning plan. This will ensure posts are commissioned and training is provided in areas of need based upon evidence.

Workforce planning – Dentists with Enhanced Skills (DES) – a key aim of A Healthier Wales is to provide patients with rapid and increased access to specialised services close to their home, thus reducing unnecessary referrals to secondary care. HEIW are planning to develop an All-Wales dentists with enhanced skills framework that will provide quality assurance for those who wish to undertake the next level of training to deliver specialised services in general dental practices. Health Boards will be able to commission the services of those trained to meet local need.

Workforce planning – Dental Care Professionals (DCPs) - to date there is little contemporaneous information on the DCP workforce to evidence workforce, training and education needs. This is a priority area for dental and HEIW as this workforce underpins much of the system reforms in primary dental care. We will work with workforce analytics colleagues in HEIW to address this.

We will engage with a range of key stakeholders to ask specific scoping questions regarding the development needs of DCPs in regard to meeting the expectations of A Healthier Wales, and the Looking Forward publication which will be produced by the CDO in the next few months, to support the whole system change that dentistry will adopt later in 2021 and into 2022.

We want to be able to accurately place the right emphasis on delivering the skills and competencies the workforce needs in order that we can meet the needs of our service users today and tomorrow. This will build on capacity and capability within our existing dental workforce. Workforce planning suggests that 80% of tomorrow's workforce is in post today.

We will work with colleagues in the All-Wales faculty for DCPs to identify career pathways and training routes for DCPs, engaging with the Made in Wales campaign. This would further support a positive route for attracting and retaining staff into a role as a dental nurse and help to support a career structure for DCPs.

Priority Workforce Areas

Critical Care

In July 2018 the Minister for Health and Social Services announced an additional £15 million for critical care in Wales. A task and finish group was established that made recommendations to Welsh Government in July 2019 on the workforce. It is recognised that Covid-19, which commenced in March 2020, impacted on the Health Boards implementation plans for critical care, as emergency planning for the pandemic saw an immediate expansion of critical care capacity across all health boards. Welsh Government has established a revised group to consider workforce issues in this area and HEIW is a key stakeholder in this group, including as a representative on the UK group looking at education and training for critical care nursing.

HEIW has reviewed Health Board annual plans in regard to workforce planning for the critical care workforce and to inform specific recommendations within the education and training plan including in relation to medical training. HEIW will prioritise requests for funding for extended practice training for critical care.

Diagnostics

There have been a number of strategic documents published in the past five years that outline the issues and the need for change in diagnostic services. The recent pandemic has also highlighted pressures on these services which has led to an increase in demand due, in part to backlogs as a result of Covid-19, and as a result of issues such as changes in practice and potential further increase in demand due to Long Covid.

The two statements of intent for imaging and pathology note a number of workforce challenges within diagnostic services and recommended the need for changes to the workforce including development of extended roles and the need for skill mix change. Despite the impact of Covid-19, work has started to develop strategic workforce plans and during 2021/22. HEIW will be working with the NHS Wales Collaborative to develop workforce plans for the imaging and cellular pathology workforces in Wales.

HEIW has reviewed Health Board annual plans in regard to workforce planning for these areas and to inform any recommendations within the education and training plan. For imaging this has been in relation to diagnostic radiographers and ongoing increase to the training of radiologists and in cellular pathology this has been in relation to healthcare science and medical training. Consideration will also be given to requests for extended skills training in advance of the development of the national strategic workforce plan, and to the need for radiology assistant practitioners or alternative Level four training routes.

The National Endoscopy Programme for Wales was introduced as part of the Welsh Government initiative to ensure that services were able to meet the increasing demands for this service as part of the support for the single cancer care pathway.

The demand for services is currently significantly higher than the available core services, the development of a sustainable solution is of paramount importance.

HEIW will work with the National Endoscopy Programme to develop approaches that support Health Boards to review their endoscopy workforce. This will ensure sufficient capacity is planned with commissioning of the endoscopy training programme to include all bands of staff, developing sustainable and transformational roles to accommodate the demand, and to maximise the output of the endoscopy service in Wales.

Infection Prevention and Control

HEIW have been working with the service, Social Care Wales and Welsh Government to support improvements in the compliance of infection control practices across the system. HEIW worked with partners to produce Infection Prevention and Control (IP&C) educational standards which are providing the foundation for the development of new programmes of training and development. This includes a review of the current mandatory training in NHS Wales and a new programme targeted specifically at operational clinical leaders, including nursing leads within care homes.

HEIW is progressing work on the development of an IP&C workforce plan for the specialist IP&C workforce which will be completed during 2021/22.

Proposals for a Primary and Community Education and Training Framework

Working with partners, HEIW is leading a programme of work to establish an All-Wales framework for primary and community care education, training and workforce transformation, that supports a network of locality training hubs that will sit alongside Health Boards.

The HEIW vision will enable local training hubs to support the delivery of a multi-disciplinary team model of working through a consistent all Wales approach and influence service and workforce development in the following way by:

1. creating more training practices for training the future multidisciplinary primary care workforce
2. increasing the impact of health professionals in primary care
3. having more health care professionals with supervision roles
4. ensuring that multi-disciplinary training and interprofessional learning become regarded as markers of training quality.

The aim is to establish an All-Wales framework for education, training and workforce transformation for a wide range of occupational groups. HEIW proposes a network of 'locality' training hubs that will sit alongside and have close links with Health Boards. The locality hubs would be supported and guided by a multi-professional group within HEIW.

More work is required, in terms of consultation and project planning, prior to Welsh Government scrutinising HEIW's proposals.

Optometry/Eye Care

Eye care is delivered across all sectors by a wide range of healthcare professionals in primary and secondary care in both scheduled and unscheduled services. Given the aging population, the development of new treatments and the cancellation of outpatients' appointments during Covid-19, demands on all eye care services are increasing. Ophthalmology currently has the second-largest waiting list of all specialities. The 'Future approach to Optometry Services in Wales' document from Welsh Government outlines the direction for the future delivery of eye care services over the next decade. Negotiations for a new optometry contract are in line with recent changes to dental and GP contracts, with emphasis on clinical service development and patient-centred decision making. The new contract will be phased in from 2022.

The optometry regulator, the General Optical Council (GOC) are making major reforms to the education and training of optometrists across UK nations. The first cohort of students on the new programme will commence in 2023/24. GOC key reforms include 48 weeks of placements integrated throughout any programme and a registrable degree. Additionally, degrees are likely to include independent prescribing and take four years. Changes will also be introduced such that new postgraduate CPD which will include reflection and be targeted at scope of practice.

Commissioning of Training and Education

Extended eye care services in primary care optometry practice requires personnel with appropriate training and qualifications to manage patients. NICE guidance provides clear evidence-based monitoring and management options for eye care professionals, for example, in glaucoma. Additionally, having more optometrists capable of independent prescribing enables greater numbers of patients to be treated in community without onward referral, reducing demand on secondary care and General Practice. Continuation of commissioning will continue to ensure that there is at least one optometrist in every cluster in Wales with higher qualifications and independent prescribing registration by 2023 to support a reduction in demand for ophthalmology. HEIW began commissioning three types of higher qualifications and placements in 2019, with the aim of having at least one optometrist qualified in every cluster in each Health Board by the end of 2022. In 2019 only one health board (Hywel Dda) had 100% coverage for one qualification. The situation by the end of this year is shown in the table below.

% qualified for all clusters in each HB			
Health Board	Independent Prescribing	Medical Retina	Glaucoma Higher Certificate
Aneurin Bevan UHB	100%	100%	50%
Betsi Cad UHB	64%	107%	29%
Cardiff and Vale UHB	144%	178%	44%
Cwm Taf Morg UHB	113%	175%	88%
Hywel Dda UHB	142%	229%	114%
Powys THB	113%	125%	50%
Swansea Bay UHB	167%	100%	50%

During 2020/21, independent prescribing optometry services (IPOS) have been in operation in three Health Boards. These services have ensured that patients can have access to independent prescribing optometrists so that they can be managed in primary care without referral. As an example of how these services have proved effective, during Covid-19 in CAVUHB using four optometry practices resulted in 375 IPOS appointments between 1 April 2020 and 31 May 2020, with 95% of appointments resulting in no onward referral to the hospital (UHW). HEIW is in discussion with BCU optometry advisers to facilitate further placements to support the increase in independent prescribing and glaucoma higher certificates.

The challenges have been qualifications requiring placements; these stopped during Covid-19. This has meant there is a lag for higher certificate in glaucoma progress. There has also been a reluctance in some Health Boards for optometrists to attend glaucoma clinics as there is a lack of glaucoma consultants. This is an ongoing challenge, but some health boards have taken on extra placements to ensure continuity.

HEIW supports the allied health professions and nursing workforce by funding postgraduate qualifications. Publication of the Royal College of Ophthalmologists Ophthalmic Common Clinical Competency Framework (OCCF) in 2019, creates a common educational pathway for secondary care for allied health professions and nursing teams to upskill. It includes a set of clinical competencies suitable for supporting the delivery of eye care to specific groups of patients in hospital eye care services. It assesses those competencies to defined standards in several key areas of ophthalmology. The OCCCF may be a useful tool to help secondary care service

provision by making best use of the nursing and AHP workforce to support ophthalmology.

To optimise the nursing and orthoptists workforce to provide extended eye care services, targeted education and training is necessary. HEIW has set up a working group with representatives from each Health Board in Wales with the aim of delivering education and training that supports and delivers optimal patient services for all the eye care workforce. Agored Level three training has been developed which HEIW has supported to ensure that health care support workers and other professionals can take on roles within hospital eye units and be trained in basic ophthalmology skills. HEIW will work with health board representatives to support and build the eye care workforce from Agored Level three up to advanced practice.

Development of a Workforce Plan and Strategy

Optometry is a growing profession. The numbers of optometrists registered with the GOC stating that they work in a practice in Wales has grown from 602 in 2012 to 743 in 2020 (GOC, personal communication). There are currently approximately 1,000 optometrists with supplementary list numbers registered in Wales, representing all practicing optometrists, employed, locum and cross border optometrists. The discrepancy in the numbers highlights the problems associated with a changing workforce picture. Currently, to register on a Wales supplementary list or contractor list, each performer (optometrist) must apply to NHS Wales Shared Services Partnership (NWSSP) via a paper application form. An optometrist performer must apply to a specific Health Board. Dispensing opticians and contact lens opticians are not required to be on any list. Once approved, each performer (optometrist) is issued with a list number. The list details are checked annually although if the performer is still active throughout the year, it is presumed that no details have changed. The list number is assigned to the Health Board to which the performer (optometrist) applied for, although the performer is able to use the same list number to work in any Health Board area.

To implement a workforce strategy, robust data of our existing workforce 'shape' needs to be collected. HEIW has set out to collect and collate the workforce data for optometry and the ophthalmic workforce in all areas of Wales, including a standard supply model outlining the supply, shape and skill mix of our workforce. Our current data does not allow this, therefore, HEIW has implemented a workforce survey supported by NHS SSP, Welsh Government and the profession. The results of this survey will be used to start to define the current and potential future shape of our workforce. A first proper, informed workforce plan can then start to be developed alongside recommendations for future workforce data gathering. The results from the workforce survey will be presented in September 2021.

HEIW will continue to build on the work initiated to extend the role of optometrists through additional postgraduate education, to shift the focus of common eye conditions into primary care optometry practices. We will integrate the training, education and support of optometrists and contact lens opticians in Wales into HEIW and we have extended the Welsh Clinical Leadership Training Fellowship programme to incorporate optometrists as the next phase of developing this into a multi-professional programme.

Evaluating a new mentor and support service for newly qualified optometrists will enable us to determine further plans and link into Continuing Professional Development (CPD) and scope of practice. We will build on success in providing multi-professional education and continuing professional development in line with HEIW's aspirations with a focus on quality assurance and determining the value of CPD in changing practice.

Mental Health

HEIW is undertaking a review of the current workforce model and is working with the Mental Health Network, Social Care Wales and Welsh Government to develop recommendations for future roles. Development of roles will focus on a sustainable long-term workforce.

The education mental health practitioner is a newly developed role within England and early indications are that this would be an opportunity to commission places in Wales specific to the CAMHS workforce with a focus on early intervention and prevention in line with Welsh Government "together for mental health, delivery plan 2019/22". Similar roles will be explored for the entire mental health workforce with a view to commissioning appropriate training and education programmes.

We are working with the perinatal and early years CAMHS Task and Finish Group to develop an infant mental health training programme, open and accessible to a range of professions at multiple levels.

HEIW is commissioning 30 places for the CAMHS level seven this year and is reviewing and developing in partnership with our education providers expanding a portfolio of relevant modules linked to ensuring increased skills and knowledge of children and young people (including identified areas of perinatal mental health).

Clinical Psychology

Demand is increasing across the service due to increased demand for mental health services, this has been exacerbated by the pandemic. The mental health workforce plan identifies a need to grow the workforce which delivers talking therapies and sufficient clinical psychology workforce is needed to ensure we have adequate numbers to support and supervise the introduction of new roles and extended team. Workforce data also shows that there is an ageing workforce with the risk of a third retiring within the next five years.

There have been large rises in psychology trainees in England which has been widely publicised which has led to greater pressure for Wales to follow suit. The number of trainees has been rising year on year in Wales but only by very small margins, due to placement capacity. September 2020 saw 29 trainees commence as agreed in the training plan, but we were fortunate to be able to provide an extra two places which have been deferred to September 2021.

The second phase of the strategic review of health professional education will include the procurement of the clinical psychology doctoral programme which is

currently commissioned from Bangor University and a Cardiff and Vale/Cardiff University collaboration. Numbers for these programmes are relatively small however IMTP's each year identify that more numbers of trainees need to be commissioned. This training programme is the most expensive one to fund as trainees are employed on a band six salary and HEIW also covers faculty costs. If numbers continue to grow sufficiently and the investment in this workforce is forthcoming, then we may be in a position to introduce a third provider to cover the west Wales hard to reach areas.

HEIW recommends that clinical psychology doctorate trainee numbers will increase to 36.

Clinical Associate Psychologists (CAPs)

In the training plan for 2021 we introduced CAPs as an emerging role, that will help to increase access to psychological therapies. These roles have been successfully introduced in England over the past few years. This role is an exciting opportunity to expand the psychological workforce. These roles are open to psychology graduates who undergo one year of training at master's level to become part of the applied psychology workforce at pre-registration level. This is an employed model of training which is predominantly work based. There is a supply chain as there are a copious amount of these graduates exiting from HEI's annually. CAPs are an advanced practice role which deliver psychological assessments and interventions, under the supervision of a registered practitioner psychologist.

The plan for 2021/22 is to commence the procurement process to be in a position to commission these roles by 2023 hence the need to increase the clinical psychology workforce who will supervise their training. This training programme has been incorporated into phase two of the strategic review and we aim to go out to tender for a contract to deliver this training in Wales alongside the tender for Clinical psychology provision.

Rehabilitation/AHP Workforce (Advanced AHP)

There are 13 Allied Health Professionals (AHPs) which make a diverse contribution across the whole health and care system. AHPs are core professions providing rehabilitation and other therapeutic interventions across all health and care settings, for all age groups and have played a significant role in meeting the rehabilitation needs of people directly or indirectly affected by Covid-19. Previous years' commissioning numbers reflected the key role that AHPs play in the plans to expand community/primary care services. Whilst this transition has not yet taken place across Wales, there is a continued need for transformation in this direction. This need is reinforced by the impact of the Covid-19 pandemic, greater strategic leadership for AHPs in the strategic programme for primary care and initiation of the AHP programme to support the delivery of the AHP Framework: 'Looking Forward Together'.

There has been a climate of growing recruitment challenges for AHPs, with evidence of unfilled vacancies, particularly in rural areas. 2021 saw the introduction of streamlining for AHP graduates to overcome this challenge and to reduce the

number of graduates trained in Wales under the bursary scheme who are lost to other the wider UK job market.

In terms of education provision for AHPs in Wales, the majority has been based in the Cardiff area and delivered by sole providers, i.e., only one training programme in Wales delivered by one university. With the strategic review of pre-registration education contracts in 2021, for some AHP professions there will be new courses initiated in 2022. In order to maintain financial viability of all courses and continue to provide an excellent student experience, minimum commissioning numbers have been included in the contracts. This will add resilience to the commissioning model, enable students to have local access to healthcare education and support more regions of Wales to develop a more local workforce.

HEIW will build on recent innovations in practice through the delivery of the AHP framework for Wales – Looking Forward Together over the next two years. Through improvements in workforce design and planning, education, training, innovative service models and leadership development we aim to support the development of the AHP workforce to transform how we meet the needs of people in Wales. The AHP programme of work aims to marry the key themes from the AHP framework, A Healthier Wales and the Workforce Strategy for Health and Social Care. This will support health and social care recovery and reset following Covid-19 by making the most of the current spotlight on the key role AHPs play. This programme offers the opportunity for AHPs to showcase their offer to improve population resilience and enable their ability to self-care. There is a commitment to whole systems shift from hospital-centric models to out of hospital/community and primary care provision, from reactive management to early intervention and prevention. The programme embraces the need to think more broadly around how people can have their care needs met closer to home. The programme aims to build on HEIW priorities to ensure AHPs embrace digital technologies in practice, build accessible rewarding career pathways for the registered and unregistered workforce and enhance the leadership infrastructure for AHPs.

Close working with both multidisciplinary and multi-sector partners will aim to improve innovation in the provision of practice placement education to increase the range and quality of education outcomes and student experience. These partnerships will also be instrumental in shaping the AHP offer within in primary and community care, and associated education and training required to support this shift in practice.

We will also review the learning from the streamlining agreement that has been put in place for AHP graduates to ensure that the process meets the needs of services and graduates, facilitating a smooth transition from education into employment across the health and care system in Wales.