Bundle EDUCATION, COMMISSIONING AND QUALITY COMMITTEE (Open) 1 July 2019

	AGENDA
	Education Committee Agenda 1 July - Open (D).docx
1	PRELIMINARY MATTER
1.1	Welcome and Introductions
1.2	Apologies for Absence
1.3	Declaration of Interest
1.4	To Receive and Confirm the Minutes of the Committee held on 16 May 2019
	1.4 - DRAFT Education_Commissioning_Quality Committee Minutes_2019-05-16 (Open) (F) V3.docx
1.5	Action Log
	1.5 - DRAFT ECQC Action Log _2019-05-16.docx
1.6	Matters Arising
2	STRATEGIC ISSUES
2.1	NHS Wales Education, Commissioning and Training Plan 2020/21
	2.1a - Board DD Paper - Education and training plan cover paper June 2019.pdf
	2.1b - v4 Education Training Plan for 2020.21pdf
3	CLOSE
3.1	Any Other Business
3.2	Reflection on Today's Committee



EDUCATION, COMMISSIONING AND QUALITY COMMITTEE (Open)

Thursday, 1 July 2019 2.00pm – 3.00pm

HEIW, Conference Room

AGENDA

PART 1	PRELIMINARY MATTERS	2.00-2.15
1.1	Welcome and Introductions	Chair/Oral
1.2	Apologies for Absence	Chair/Oral
1.3	Declarations of Interest	Chair/Oral
1.4	To receive and Confirm the Minutes of the Committee	Chair/
	held on 16 May 2019	Attachment
1.5	Action Log	Chair/
		Attachment
1.6	Matters Arising	Chair/
		Oral
PART 2	STRATEGIC ISSUES	2.15—2.50
2.1	NHS Wales Education, Commissioning and Training	Director of Nursing/
	Plan 2020/21	Attachment
PART 3	CLOSE	2.50-3.00
3.1	Any Other Business	Chair/Oral
3.2	Reflection on Today's Committee	Chair/Oral
3.3	Date of Next Meeting: To Be Confirmed	Chair/Oral



UNCONFIRMED

Minutes of the Education, Commissioning and Quality Committee held on 16 May 2019 in Meeting Room 11, HEIW, Ty Dysgu, Nantgarw CF15 7QQ

Present:

Dr. Ruth Hall Chair and Independent Member

Tina Donnelly Independent Member

In Attendance:

Alex Howells Chief Executive
Dafydd Bebb Board Secretary

Eifion Williams Interim Director of Finance

Prof. Pushpinder Mangat Medical Director Stephen Griffiths Director of Nursing

Martin Riley Head of Education, Commissioning & Quality Kay Barrow Corporate Governance Manager (Secretariat)

PART 1	PRELIMINARY MATTERS	Action
ECQC:	WELCOME AND INTRODUCTIONS	
16/05/1.1		
	The Chair welcome everyone to the inaugural meeting of the	
	Committee and introductions were made.	
ECQC:	Apologies for Absence	
16/05/1.2		
	There were no apologies.	
ECQC: 16/05/1.3	Declarations of Interest	
	Eifion Williams declared an interest as the Director of Finance at	
	Powys Teaching Health Board and Non-Officer Member at	
	Swansea University and was a member of the Swansea	
	University Finance Committee.	
Resolved	The Committee noted the Declaration of Interest.	

PART 2	STRATEGIC ISSUES	
ECQC: 16/05/2.1	Review of Committee Terms of Reference	
16/05/2.1	Dafydd Bebb presented the Terms of Reference which had been approved by the Board. However, in presenting, he tabled a highlighted copy and recommended some minor amendments. In relation to the Committee membership, Tina Donnelly questioned the Quorum should she not be able to attend a meeting, given that the membership was 2 Independent Members. The Committee considered increasing the number of Independent Members on the Committee to a minimum of at least 3.	
Resolved	The Committee received the Terms of Reference and, subject to the amendments below, approved them for submission to the Board at its next meeting: Page 1 – Purpose: first bullet: Removal of the words 'quality assurance framework procured and delivered'. Insert the words 'provide assurance' after and so that it reads ' and provide assurance on behalf'. Page 2 – Delegated Powers: iii. Removal of the duplicated 'the'. vii. Removal of the work 'equity' and add in the words 'in relation to'. viii. a. include the word 'equity' after the word 'including' so that it reads ' including equity, equality legislation' viii. b. include the word 'equity' before the word 'equality' so that it reads ' in relation to equity, equality and'. Remove the roman numeral viii before a. Remove the roman numeral iv before b.	DB
	Ruth Hall to discuss with the HEIW Chairman the Committee's recommendation that 3 Independent Members sit on the Committee and, if necessary ask the Board to consider the recommendation.	RH
ECOC:	Alex Howells joined the meeting	
ECQC: 16/05/2.2	Strategic Review of Health Professional Education	
	Stephen Griffiths presented the progress in relation to the work being undertaken to secure the future education provision for the health professional workforce across Wales.	

In presenting the update Stephen Griffiths highlighted that the contracts were due for renewal in 2021. He confirmed that KPMG had been appointed to undertake a programme of work around the pre-market consultation that would inform the tender specifications. This work was due to completed by 30 June 2019 however, this had been extended by 5 weeks to enable further engagement work to be undertaken.

The governance and assurance arrangements in place and the associated timelines were outlined. It was anticipated that by the Summer, the configuration, provision and delivery of education would be better understood and would assist to reshape the contracts.

Discussions ensued in terms of contract period and it was noted that there were challenges and risks in awarding lengthy contracts particularly in relation workforce requirements and advancing technology.

Martin Riley advised that the approach of the Project Board and sub groups would be informed by the outcome of the KPMG consultation.

Ruth Hall asked how the Committee could support the Project Board in terms of ensuring robust governance and risk management arrangements and assurance in the development of the tender specifications.

In terms of key working relationships, it was highlighted that HEIW meet with KPMG on a regular basis and individual meetings with the regulators would be taking place over the Summer period. The Project Board was being supported by Legal and Risk services and the Employment Team. However, concerns were raised in relation to ensuring that a project of this size received adequate legal support. It was confirmed that additional support had been costed into the business case.

Eifion Williams advised the Committee that this programme of work would involve an extremely large financial process due to the size of the investment to be made and that this should not be underestimated. He clarified that colleagues in the Finance Department were engaged in the process and would provide the necessary support going forward. The Committee recognised the significant financial investment required in the awarding of

	The Committee questioned how it could add value to the report when the Executive Team had already had sight of it but the outcome of that discussion was not known. It was clarified that any patient risks were fed back to the respective Health Board to be addressed. It was explained that historically the Deanery had managed the process however, there was a need a more holistic approach going forward. Alex Howells informed the Committee that a paper was being developed for consideration at the all Wales CEOs meeting which would include the triangulation with other available information and also the public accessibility of reports. Tina Donnelly questioned whether this reporting could be triangulated with other professional groups. Martin Riley advised that HEIW was currently looking at placements across MDT areas and the impact on other staff groups when enhanced monitoring arrangements were in place.	
Resolved	 Alex Howells to share the all Wales CEO report once finalised with Committee members. The Committee received the report and asked for a cover 	АН
	sheet to be added to the report that provided the outcome of the Executive Team discussion/outcome.	PM
ECQC:	Future Quality Reporting Mechanisms	
16/05/3.2		
	This item was deferred to the next meeting.	
Resolved	The Committee agreed for a detailed paper on Future Quality	SG
	Reporting Mechanisms to be presented at the next meeting of	
	the Committee.	
PART 4	FOR INFORMATION	
ECQC: 16/05/4.1	NHS Wales Bursary for 2020/21 – Implications for HEIW	
	Stephen Griffiths provided an update in relation to the position in Wales and confirmed that the education sector was awaiting a decision from Welsh Government regarding the NHS Wales Bursary.	
	In presenting the report, he highlighted that most students had favoured the bursary arrangements in previous years however, current arrangements were not clear.	
	Tina Donnelly asked whether contract in Wales to tie a student in for 2-years post-graduation was demonstrating success. It was clarified that this was not yet known as the scheme commenced in 2017 and those students were in their second year. Although,	

Resolved	it was highlighted that since the introduction of the Diamond Package, students appeared to be making more informed financial decisions in terms of how they fund their studies. In relation to Learning Disabilities (LD) Nursing, Tina Donnelly commented that the Chief Nursing Officer had raised concerns about the low application numbers. Stephen Griffiths advised that from 2020 LD aspects would be built into the core curriculum for all undergraduates. Ruth Hall asked that consideration be given to including an interface with social care. The Committee:	
	Noted the content of the report and that the decision was crucial in determining the financial cost of the provision of training for 2020 onwards.	
	 Requested a breakdown of first choice funding regarding bursary versus Diamond Package. 	SG
ECQC: 16/05/4.2	Business Cases	
	Eye Care – Business Case has been shared with Dr Andrew Goodall as aligned to 'A Healthier Wales'. Nik Sheen has subsequently been contacted by Welsh Government. The Committee commented that this would be a good research project.	
Resolved	The Committee received and noted the Business Case.	
	General Practice – Agreement has been reached to increase trainee fill rates from 136 to circa 200 subject to positive recruitment.	
Resolved	The Committee received the Business Case and noted the positive news.	
	Pharmacy Pre Registration – Professor Pushpinder Mangat advised that the business case had been agreed and was currently being implemented. Recruitment was positive as this was a popular programme.	
Resolved	The Committee received the Business Case and looked forward to receiving progress.	PM
ECQC: 16/05/4.3	Forward Work Programme	
	Dafydd Bebb presented the Committee Work Programme and highlighted that it was work in progress.	
Resolved	The Committee agreed the following additions to the work programme: 1st July 2019 – New Performance and Quality Reporting	DB

		DB		
	 October 2019 – Review of Committee Terms of Reference Consider bringing October meeting forward to September to review the outcome of the KPMG Review. 			
ECQC: 16/05/4.4	GMC Quality Response			
	Pushpinder Mangat advised that the Deanery routinely undertake a Quality Assurance visit every 5 years. He explained that the process was being modified with the introduction of an annual process.			
	Tina Donnelly questioned whether education issues were picked up from reports following reviews by inspectorate organisations such as Healthcare Inspectorate Wales. It was confirmed that this had been recognised as a gap and had been raised in the four nations meeting held recently.			
Resolved	 Alex Howells agreed to discuss with Dr Andrew Goodall the transparent sharing of relevant information between organisations where workforce issues/concerns are raised. The Committee noted the position and looked forward to receiving the final report following the review. 	AH PM		
PART 5	CLOSE			
ECQC: 16/05/5.1	Any Other Business			
	Reflection on Today's Committee – It was confirmed that this would be a standing item on each Committee agenda. This was a mechanism to allow Committee members and officers to reflect on the meeting and provide any feedback.			
Resolved	 Committee members and officers to reflect on the meeting and provide any comments on today's meeting to either Dafydd Bebb, Ruth Hall or any Committee member. Ruth Hall and Tina Donnelly to draw out any key matters for raising with the Board at its meeting on 30 May 2019. 	AII RH/TD		

Dr. Ruth Hall (Chair)	Date:



Education, Commissioning and Quality Committee 16 May 2019 Action Log

(The Action Sheet also includes actions agreed at previous meetings of the Education, Commissioning and Quality Committee and are awaiting completion or are timetabled for future consideration for the Committee. These are shaded in the first section. When signed off by the Education, Commissioning and Quality Committee these actions will be taken off the rolling action sheet.)

Minute Reference	Agreed Action	Lead	Target Date	Progress/ Completed
ECQC: 16/05/2.1	Review of Committee Terms of Reference:			•
	Terms of Reference to be amended to reflect the minor amendments agreed by the Committee.	Board Secretary	ASAP	Completed.
	Ruth Hall to discuss with the HEIW Chair the Committee's recommendation that at least 3 Independent Members sit on the Committee.	Committee Chair	ASAP	Completed. Revised Terms of Reference to be present to the Board at its May meeting for consideration.
ECQC:	Strategic Review of Health			
16/05/2.2	Professional Education:			
	 Clarification in relation to the Project Board reporting arrangements to the Committee. 	Director of Nursing	July 2019	Update to be provided at the July Committee meeting.
	 Committee to have sight of key Project Board documents such as Terms of Reference. 	Director of Nursing	July 2019	Relevant documents will be shared with Committee members.



Minute Reference	Agreed Action	Lead	Target Date	Progress/ Completed
	Proposals be presented for consideration by the Committee at its October meeting. However, in the meantime, any exceptions to be reported.	Director of Nursing	October 2019	Added to the Committee forward Work Programme for October 2019
ECQC: 16/05/3.1	Monthly QA Review of Postgraduate Medical Education:			
10/03/3.1	Alex Howells to share the all Wales CEO report once finalised with Committee members.	Chief Executive	TBC	Date to be confirmed for presentation at CEO meeting.
	 A cover sheet to be added to the report that provided the outcome of the Executive Team discussion/outcome. 	Medical Director	July 2019	Noted for future reporting.
ECQC: 16/05/3.2	Future Quality Reporting Mechanisms:			
	 Detailed paper to be presented at the next meeting of the Committee. 	Director of Nursing	July 2019	Added to the Committee forward Work Programme for July 2019.
ECQC:	NHS Wales Bursary for 2020/21 –			
16/05/4.1	Implications for HEIW: Committee requested a breakdown of first choice funding regarding bursary versus Diamond Package.	Director of Nursing	July 2019	Work ongoing and will be reported to the Committee when completed.



Minute Reference	Agreed Action	Lead	Target Date	Progress/ Completed
ECQC: 16/05/4.3	Forward Work Programme:			
	 Forward Work Programme to be updated to reflect the Committee discussions. 	Secretariat	ASAP	Completed
ECQC: 16/05/4.4	GMC Quality Response:			
	Alex Howells agreed to discuss with Dr Andrew Goodall the transparent sharing of relevant information between organisations where workforce issues/concerns are raised	Chief Executive	ASAP	Completed
	 Committee to receive the final report following the review. 	Medical Director	TBC	To be scheduled into the forward Work Programme when review timescale known.
ECQC:	Committee Reflections and Board			
16/05/5.1	Summary Reporting:			
	 Committee members and officers to reflect on the meeting and provide any comments on the meeting. 	Committee Members and Officers	ASAP	Completed
	 Ruth Hall and Tina Donnelly to draw out any key matters for raising with the Board at its meeting on 30 May 2019. 	Committee Members	ASAP	Summary Report for the Board presented at its May meeting.

Meeting Date	27 th June 201	9	Agenda Item			
Report Title	NHS Wales Education Commissioning and Training Plan					
- Koport Titlo	for 2020/21					
Report Author	Stephen Griffiths					
Report Sponsor	Alex Howells					
Presented by	Stephen Griffi	iths				
Freedom of	Closed					
Information						
Purpose of the	This paper pro	ovides recomme	ndations on the	level of		
Report		ation and training al and wider hea				
Key Issues	The recomme having taken	endations are basinto account:	sed on workfor	ce need		
		ation from NHS ous three years),	organisations IM	TP's		
	ii. workforce modelling and wider available workforce intelligence iii. Welsh Government strategic direction (<i>A Healthier Wales</i>) and wider policy requirements,					
	iv. capacity within the system to support training/student/trainees,v. opportunities to transform the workforce through innovation/new roles and new ways of working.					
	HEIW is recommending a growth in education and training places across a range of staff groups as set out in Section 7.					
	Recommendations are based on a whole workforce solution and recognise the contribution of the multidisciplinary team.					
Specific Action	Information Discussion Assurance Approval					
Required		_				
(please ✓ one only)		✓				
Recommendations		asked to: ler the recommer e main report	ndations as set c	out in section		

Governance ar	nd Assurance			
Link to corporate objectives (please)	As a new organisation establishing HEIW as a valued and trusted partner, an excellent employer and a reputable and expert brand	Building a sustainable and flexible health and care workforce for the future.	With Social Care Wales shaping the workforce to deliver care closer to home and to better align service delivery.	Improving quality and safety by supporting NHS organisations find faster and more sustainable workforce solutions for priority service delivery challenges.
	Improving opportunities for use of technology and digitalisation in the delivery of education and care.	Reinvigorating leadership development and succession planning across health and social care in partnership with Social Care Wales and Academi Wales	Demonstrating value from investment in the workforce and the organisation.	

Quality, Safety and Patient Experience

The provision of high quality education I the preparation of the future workforce is critical to the delivery of high quality patient care. The recommendations within this paper outline the future investment in health education during 2020/21.

Financial Implications

The following detail sets out the total funding requirement for Education Commissioning and Training for 2020/21 calculated as £184.3m increasing to £206.2m by 2022/23. This can be broken down into £127.8m for the wider health professional education with more detail in section 8.1, £3.2m for pre-registration pharmacy training following agreement of the business case and £53.2m for medical training places summarised in section 8.2.

	2020-21 £m	2021-22 £m	2022-23 £m
Health professional commissioning	127.798	138.585	145.810
Pre-Registration Pharmacy	3.240	3.648	4.056
Medical training	53.247	55.234	56.290
Total	184.285	197.467	206.156

Legal Implications (including equality and diversity assessment)

There are no known legal implications associated with these recommendations.

Staffing Implications

There are no known staff implications associated with these recommendations.

Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)

The recommendations within this report will support individuals as they undertake education. this will support the following goals:

- A prosperous Wales
- A resilient Wales
- A Healthier Wales
- A more equal Wales

Report History	No previous reports have been submitted to the Board
Appendices	The main report is attached



NHS Wales Education Commissioning and Training Plan for 2020/21

July 2019

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Appendix 1 Appendix 2 Appendix 3 Appendix 4	Commissioning Trends Health Professional Medical Speciality Training Posts and Changes Total Cost of Training a Student over the duration of the course 2020/21 Supporting Information	I

NHS Wales Education Commissioning and Training Plan for 2020/21

PURPOSE

This paper provides recommendations on the level of national education and training to be supported in 2020/21 for the medical and wider health professional workforce.

1. Introduction

Health Education and Improvement Wales (HEIW) was established in October 2018 as a Special Health Authority and provides the strategic leadership for NHS Wales on a wide range of education and workforce issues. This is the first year HEIW has developed a national education commissioning and training plan for the health workforce. The plan includes recommendations for the future education and training (centrally commissioned) for the medical and wider health professional workforce.

The report makes recommendations on the level of education and training required for 2020/21, across the following areas:

- Centrally funded Healthcare Support Worker development
- Undergraduate health professional education and training (nurses, midwives, allied health professionals and health care science)
- Non-medical prescribing
- Post-registration education programmes/modules
- Post graduate medical education training places
- Pre-Registration Pharmacy and Pharmacy Technicians

In developing this plan, HEIW has agreed with Welsh Government:

- a. The recommendations are to be based on **workforce need** having taken into account:
 - i. information from NHS organisations IMTP's (previous three years),
 - ii. workforce modelling and wider available workforce intelligence
 - iii. Welsh Government strategic direction (A Healthier Wales) and wider policy requirements,
 - iv. capacity within the system to support training/student/trainees,
 - v. opportunities to transform the workforce through innovation/new roles and new ways of working.
- b. The Minister for Health and Social Services will sign off the final education and training numbers and investment required. This will require investment in education and training for 2020/21 to be agreed by the end of September 2019.

2. Strategic & Policy context

A Healthier Wales: our Plan for Health and Social Care was published in June 2018 in response to the Parliamentary Review of the Long Term Future of Health and Social Care.

Healthier Wales set the intent for 'Health Education and Improvement Wales (HEIW) and Social Care Wales (SCW) to develop a long-term workforce strategy in partnership with NHS and Local Government, the voluntary and independent sectors as well as regulators, professional bodies, and education providers.' HEIW and SCW are currently working with The Institute of Public Care at Oxford Brooke University (IPC) to develop this strategy.

This workforce strategy is critical to deliver *A Healthier Wales*, which sets out a long-term future vision of a 'whole system approach to health and social care', focussed on health and wellbeing and on preventing illness.

Planning for transformative models of care requires an understanding of the impact on the workforce in terms of numbers and skills needed in the future, to ensure safe, effective care, continuous improvement and staff health and wellbeing. The development of the workforce strategy and its associated implementation will inform future education and training plans.

Whilst the purpose of this paper is to make recommendations on future education and training levels it is recognised that there will also be significant work to do around the type of training and where it is delivered.

HEIW is responsible for ensuring that staff have the appropriate knowledge, skills and attitudes to provide care that enables individuals to manage their future health and wellbeing: This will include:

- Creating opportunities for staff to learn together, across multi-disciplinary and multi-agency teams, working towards joined-up training and development for professionals, volunteers and carers, particularly promoting generalist skills delivered in the local areas.
- > Supporting access to good quality care for rural communities with a focus on rural health and design principles.
- > Encouraging and supporting joint workforce planning at regional and local levels
- Expanding and advancing generalist skills and new ways of working that supports the prudent healthcare agenda and capitalising on this expertise across professional boundaries
- ➤ Working with Social Care Wales (SCW) on new skills development and the creation of specific integrated career paths for the health and social care workforce at a scale aligned with the new models of care
- Continuing to address key staff shortages and deficits that affect service delivery and patient care.

The development of this education and training plan therefore reflects where possible these priorities and priority areas which have been identified through the work on the Health and Care strategy to date.

HEIW is currently undertaking a strategic review of its health professional education as the current contracts with education providers is due to expire in July 2021. This will enable HEIW to set out its strategic direction for education for the coming years and ensure alignment with the workforce strategy.

3. Workforce planning and trends

3.1 Workforce trends

HEIW has produced a range of key trends and data analysis reports. Key points to note are:

- > Staffing numbers continue to increase across all staff groups. The overall workforce has grown by 9.4% over the past 4 years.
- During this period, the medical workforce has grown by 12.5%; the nursing workforce by 3%
- Agency costs have increased by 6% and in 2018/19 were £143 million
- Cost of the directly employed workforce in 2018/19 is circa £3.8 billion
- Sickness rates remain at around 5%
- The age profile of the workforce shows that 23% of staff employed are now aged 55 or over.

Across the UK, national bodies are recognising 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 grow. HEIW has undertaken an extensive modelling exercise for a number of professions to consider future changes in the workforce and used this information in the development of the recommendations.

Investment in education and training is a key enabler to growing the workforce, **Appendix 1 and 2** provides information on education and training over recent years.

There are a number of staff groups, which the UK Government includes on a Nationally Recognised Shortage Professions list for England/Wales. Inclusion on this list influences visa and migration status. Staff groups include Nursing, Radiographers, Paramedics, Sonographers, Medical Consultants in Clinical Radiology, Emergency Medicine, Old Age Psychiatry, Neurophysiology Scientists, Nuclear Medicine Scientists and others¹. This has been taken into account in this plan.

¹ https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-k-shortage-occupation-list

3.2 Integrated Medium Term Plans 2019

The NHS Wales Planning Framework 2019/22 sets the tone and direction for the next three years and focuses on the delivery of *A Healthier Wales*. Organisations were required to ensure their IMTP's continue to demonstrate a truly integrated planning approach with the overarching strategic priority being to improve population health, focussing on prevention and reducing health inequalities based on the prudent health and care philosophy.

The integrated plans for seven organisations have been approved following a robust assessment process. At the time of preparing this report, three organisations were unable to submit Board approved three-year plans. Education commissioning numbers have been collated and reviewed using centrally available data. Where appropriate, organisations have been asked to review the education commissioning numbers submitted as part of the IMTP process and to confirm that a number of strategic issues had been fully taken into consideration.

The IMTPs identified a number of areas of significant workforce risk and challenge including:

- ➤ Recruitment challenges in a range of areas including:
 - Nursing across all fields of practice,
 - Medical specialties including Psychiatry, GPs (including out of hours), Radiologists, Acute Physicians, Emergency Medicine and Occupational Health. PH Consultants, Oncologists, Trauma & Orthopaedics, General Surgery, O&G, Diabetes, Pathology specialties, Orthogeriatrics, Dermatology, Care of the Elderly Anaesthetics, Neurophysiology, Palliative, Haematology, Paediatrics, Histopathology, Microbiology, Urology, Geneticist, Sexual Health, Endoscopy and ENT,
 - Allied health professionals,
 - Pharmacy,
 - Biomedical scientists in some organisations,
 - Others including, Bio-informaticians IT technicians and Information Analysts, Estates staff, Cyber security, Business Intelligence, Clinical coders and experienced senior and executive level managers, CBT therapists.

IMTPs also identify a number of **opportunities** for workforce transformation:

- ➤ Redesign: The majority of the plans emphasise the need to redesign their workforce to mitigate against recruitment challenges and ensure the workforce sustains fragile services, especially for the medical workforce. The emphasis seems to be on skill mix particularly the development of extended roles, advanced practitioners and prescribing rights with most focusing their target on primary care.
- Growing the multi-disciplinary team particularly in primary care:
 - Pharmacists including Pharmacy Technicians
 - Paramedics Pilots of advanced paramedics planned in a number of areas supporting GP sustainability and admissions avoidance
 - Advanced practitioner roles across nursing and AHP professions

- Physicians Associates
- Independent prescribing for Nurses/Pharmacists/Dietetics
- Extended roles for example within Cardiac Physiology
- Non-medical consultant roles Consultant Midwife, Clinical Biochemist, CAMHS and Microbiology
- New emerging roles including
 - Care Navigators
 - Social care co-ordinators
 - Non-medical social prescribing
- > Delivering a cluster model

Workforce implications of the 111 service are not specifically referred to in the plans, but direct links to that work stream highlight ongoing additional paramedics and pharmacy requirements.

Additional detail on the above risks and opportunities from IMTPs is incorporated in the detailed staff group narrative contained in the appendices to this report.

3.3 Agency costs

Nursing & Midwifery agency cost across NHS Wales increased in 2018/19 by 27.2% from 2017/18. In 2017/18, the nurse agency bill for NHS Wales was £51.4m and this has risen by £14m to £65.4m in 2018/19. This is a historical high. For comparison, in 2012/13 the total nurse agency bill to NHS Wales was £9.2m, therefore the last 6 years has seen a 609% increase in costs.

The agency costs for **Allied Health Professionals** (AHP) across NHS Wales is also increasing with approximately £600k spent on AHP agency staff every month. In 2018/19 the total spend on AHP agency staff was £8.3 million, which compares to £800k in 2014/15.

Medical & Dental locum cost across NHS Wales has seen a large reduction, £22.7 million (48% reduction) over the last two years. In 2016/17, the locum cost was £77.3 million and in 2018/19, the cost reduced to £54.6 million. It is considered that this is in part a result of the introduction of the locum cap.

For the first time Nursing and Midwifery agency costs exceeds Medical & Dental agency costs, with Nursing and Midwifery agency cost £10.8m higher than Medical and Dental costs.

The increase in agency expenditure is a reflection of the vacancies across the health sector and the ongoing difficulties organisations are experiencing in recruitment and retention of staff. The need for increased training places has been reflected in the IMTP's and in response to this, the numbers commissioned increased significantly from 2015. Nurse and AHP commissions are now at a record high. This increased investment, whilst not providing a short-term benefit to the service, builds the infrastructure, capacity and resilience in both the higher education sector and the service (in terms of placements)

and provides a robust base for nurturing, providing and developing the workforce to meet the needs of an increasingly complex Health and Social Care Wales.

This investment in the workforce will assist in the delivery of A Healthier Wales.

4. Priority Service and Workforce Areas

This multi-professional education and training plan reflects future workforce priorities. While each individual professional/staff group is identified separately, there are many inter-related training/workforce issues. In many cases, the solution to one workforce challenge cuts across many different staff groups, for example, the current challenges in providing the primary care service/workforce, requires additional GP trainees but also requires investment in, physicians associates, advanced practitioners/extended skills practitioners (nurses and AHP), pharmacists, healthcare support workers and non-medical prescribing etc..

HEIW has identified a number of national service/workforce priorities, which are identified in its annual plan for 2019/20; these are identified below along with associated workforce implications:

4.1 Unscheduled care including OOH Primary Care

The challenges facing unscheduled and primary care are well known and HEIW has worked over recent months with Welsh Government and the NHS across a number of areas. Examples includes:

- increasing the number of GP trainee places for 2019, with an ambition to increase this in future years
- development of an integrated pre-registration pharmacy programme to increase the contribution of pharmacists
- changing the optometry workforce
- increase the number of advanced practitioners and staff with extended skills
- increase the number and utilisation of physician associates to support unscheduled and primary care
- increase the use of the wider workforce e.g. nursing, allied health professionals, paramedic and pharmacy in unscheduled care and primary care
- continue investment in education and training for non-registered (both clinical and non-clinical) staff
- develop workforce tools to support workforce modernisations e.g. online verification of death training resource for non-medical staff
- roll out of the behavioural science approach resulting in a less risk averse culture and practice
- increase in non-medical prescribing to upskill the workforce

4.2 Cancer/Diagnostics

The workforce challenges facing the cancer and diagnostics workforce are complex and require a whole system approach. The Welsh Government has launched the Single Cancer Pathway, which is an ambitious plan to improve cancer services. HEIW is working with NHS organisations to ensure plans are in place to deliver the workforce required. In addition to training additional medical consultants across a range of specialities, there are many other workforce opportunities, these include:

- Advanced practitioner roles/extended skills, e.g. reporting radiographers, radiography assistant practitioners etc.
- Clinical endoscopist's
- Sonographers
- Development of Scientific Training Programme (STP) and Higher Specialist Scientific Training (HSST) roles
- Ability to develop the clinical scientist workforce through equivalence routes

4.3 Access (eye care)

Eye care is delivered across all sectors by a wide range of healthcare professionals and is both a scheduled and unscheduled service. Given the aging population and the development of new technologies, demands on eye care services are set to increase. In light of this, new care-pathways are currently under development that utilise the skills of the multi-professional team and the capacity of the whole system including those working across the community sector.

The new care-pathways will provide greater access to eye health care within the community setting and enable specialist services delivered by secondary care to focus on those areas of practice, which require the level of expertise delivered from them.

Additional training for optometry staff working in the community to manage glaucoma and wet macular degeneration pathways are already being developed, however, additional training for nurses and other clinical staff needs to be considered as part of the overall implications for this education and training plan.

4.4 Maternity services

In recent months, maternity services have been under significant scrutiny following the publication of the Royal College of Obstetricians and Gynaecologists report into maternity services in Cwm Taff University Health Board. This review has highlighted workforce challenges across a number of staff groups and these have been reflected in this report.

5. Factors which influence education commissioning numbers

In section 1, of this paper it was identified that the recommendations for future education and training are based on **workforce need** having taken into account:

- i. information from NHS organisations IMTP's (previous three years),
- ii. workforce modelling and wider available workforce intelligence
- iii. Welsh Government strategic direction (*A Healthier Wales*) and wider policy requirements,
- iv. capacity within the system to support training/student/trainees,
- v. opportunities to transform the workforce through innovation/new roles and new ways of working.

In addition to these issues there are other factors, which influence future education intentions, these include:

- Recruitment challenges which are reflected through increasing agency costs
- The overall funding available and the cost of training each individual. The funding of post-graduate medical trainees differs significantly to that of the wider health professional workforce. Medical trainee funding is shared between the service and HEIW due to the service provision they deliver as part of their training.
- Overall cost of the student/trainees education see **Appendix 3** (health professional staff). Given the variation in costs, small changes in the commissioned numbers for the higher cost groups can have a substantial impact on the education budget. Small or moderate changes to commissioned numbers for the lower cost student groups have far less impact.
- The number of students being supported for each professional group
- The capacity of the service to provide clinical placements, e.g. nursing.
- The complexity of placements across professions which use common areas for training e.g. Emergency Departments need to support: nurses, paramedics, physicians associates, medical trainees from a number of specialty programmes
- Viable cohort sizes for smaller professional groups
- The need to increase multiple pathways e.g. full time, part time and accelerated pathways requires viable numbers

A common and increasing significant issue, which affects the number of students and trainees needed across all professions, is the increasing popularity of part-time working as seen below. The effect of this change in working practice means that additional students have to be trained just to maintain the full time equivalent workforce at the same level, yet alone increase the workforce.

Percentage of Full Time / Part Time by Staff Group based on Headcount @ Apr 19			
	Full	Part	
Staff Group	Time	Time	Total
Allied Health Professionals	66%	34%	100%
Medical and Dental	81%	19%	100%
Nursing and Midwifery Registered	58%	42%	100%
Total	64%	36%	100%

In developing this plan, all of these factors have been taken into consideration.

6. Engagement in developing this plan

In developing this plan, HEIW has engaged with a wide range of stakeholders and received their support for the recommendations made. Stakeholders include:

- Chief Executive officers
- Directors of Workforce and OD
- Nurse Directors,
- Directors of Therapy and Healthcare Science
- Medical Directors
- Professional bodies/trade unions
- Welsh Government Policy leads
- Training Programme Directors and Heads of Specialty Schools

7. Summary of commissioning recommendations

Detailed information, which has been considered during the preparation of this plan, is contained in **Appendices 4**. Having reviewed all of the available evidence, including identified organisation needs, capacity within the system, published evidence and the information from HEIW workforce intelligence tools, the following recommendations are made:

7.1 Wider health professional staff

a. Education commissions should continue to:

- i. Expand the number of education programmes delivered through part time and shortened programmes
- ii. Increase the proportion of pre-registration nursing places delivered by the part time/distance learning route

- iii. Expand the provision of part time nursing places available to the care home sector.
- iv. Maintain current level of investment in advanced practice and health care support worker development

b. Increases are proposed in the following areas:

	FROM	ТО
Adult Nursing places	1,216	1,400
Mental Health Nursing places	324	356
Midwifery places	134	161
Diagnostic Radiography places	112	140
Therapeutic Radiography places	20	22
Dietetic places	42	52
Physiotherapy places	147	164
Speech and Language Therapy places including Welsh	44	49
Language Provision		
Doctorate in Clinical Psychology places	27	29
Healthcare Science:		
STP's places	24	30
PTP BMS places	21	24
Physicians Associates	42	54
Increase post registration modules for community staff	472	560
To increase the Non-Medical Prescribing budget	£300k	£500k

c. New areas for investment

- i. To commission education to enable existing radiographers to extend their practice and undertake radiography 'reporting' this will support the cancer/diagnostic workforce challenges by optimising their contribution to the MDT in line with the prudent healthcare principles. It is proposed to fund this at £40,000 recurring annually for 2 years initially
- ii. The HCPC have announced that from 2021 paramedic science education must be at degree level. In order to maintain high calibre application for this programme it is recommended that the degree programme is introduced in Wales from 2020. This will also support the service demands for this critical workforce. This has no financial implication in year 1 and 2 of this programme.

7.2 Medical

a. General Practice

i. HEIW has agreed with the Welsh Government that following the successful recruitment to the GP trainee scheme the available places can increase from the current 136 to 160 with the intention to increase to 200 by 2021. The Welsh Government have indicated that additional funding will be made available for students recruited in addition to the 136, these costs have not been reflected in the financial assessment set out in section 8.

b. Emergency Medicine:

i. 7 higher training posts to commence in 2020; 4 posts to ensure that the additional trainees appointed to the ACCS training scheme are able to complete their training in Emergency Medicine and 3 posts to provide training in Paediatric Emergency Medicine and Pre Hospital Emergency Medicine.

c. Intensive Care Medicine

- 13 additional CT2 posts from August 2020 to meet the Internal Medicine curriculum requirements for the CT1 trainees appointed in 2019 to progress into CT2. This is an ongoing cost commitment for Internal Medicine Training.
- ii. No change to training numbers for higher ICM trainees and to be reviewed again in 2020.

d. Anaesthetics:

i. 3 additional higher training posts for 1 cohort and the specialty reviewed for 2021.

e. Old Age Psychiatry:

- i. 2 additional higher specialty training posts per annum in Old Age Psychiatry using a roll forward of the funding from the 2019 plan.
- ii. Continuation of the incentive payment for the MRPsych examination fees.

f. Paediatrics:

- i. No additional funded posts requested through this plan for 2020 but expansion explored with Health Boards directly.
- ii. Specialty requirements are reviewed again for 2021.

g. Community Sexual & Reproductive Health (CSRH)

 No change to training numbers and a review of the specialty in a couple of years

h. Dermatology:

 Additional higher training posts to address the current deficit in consultant numbers and provide opportunities for Clinical Fellows appointed following agreement of the CEOs to move into a training programme.

i. Medical Microbiology:

 3 additional posts per year for 5 years and to expand the training programme into Swansea and North Wales to support the increase in the Clinical Infection workforce.

j. Clinical Radiology

i. increase the current intake to 20 trainees for 2020 intake and review again for 2021. This maximises the capacity of the Imaging Academy.

k. Rehabilitation Medicine

 1 additional post in Rehabilitation Medicine to be created from August 2021 to support the workforce requirements of the Major Trauma Network.

8 Education Commissioning and Training Financial Impact

Following the establishment of HEIW, commissioning budgets associated with the activities of the legacy organisations transferred into HEIW to form part of the core allocation. The budget set for 2018/19 was effectively managed through the transition process and a breakeven position was reported as at 31st March 2019, subsequently the audit opinion was unqualified.

The following detail sets out the total funding requirement for Education Commissioning and Training for 2020/21 calculated as £184.3m increasing to £206.2m by 2022/23. This can be broken down into £127.8m for the wider health professional education with more detail in section 8.1 below, £3.2m for pre-registration pharmacy training following agreement of the business case and £53.2m for medical training places summarised in section 8.2.

	2020-21 £m	2021-22 £m	2022-23 £m
Health professional commissioning	127.798	138.585	145.810
Pre-Registration Pharmacy	3.240	3.648	4.056
Medical training	53.247	55.234	56.290
Total	184.285	197.467	206.156

8.1 Health professional education commissioning

Budget Requirements 2020/21

The table below summaries the calculated requirement for 2020/21:

				crease) Against Levels:
	Budget Requirement £m	Commissions (WTE)	Commissions Budge	
2020/21 HEIW Recommendations	127.8m	4,227	19%	12%

To commission the numbers set out above funding of **£127.8m** would be required. A number of assumptions underpin the calculation of this value as set out below:

- all newly commissioned places will be fully recruited to,
- > an inflationary uplift of 2% has been applied to the fee per student
- ➤ a 1% inflationary uplift has been applied to the value of the bursary.
- ➤ The top sliced running costs for Student Awards remains unchanged.
- There is no further increase in budget for Healthcare Support Workers and Advanced Practice
- Take up of bursary funding will remain at 96%. This assumption is set out in more detail below.

A total requirement of £127.8m would represent an increase of £14.2m (12%) above the 2019/20 budget level of £113.6m. The additional cost is due to a number of factors including:

- an overall increase in the commissioned numbers to meet demand (circa £9m);
- Initiatives to improve flexibility and access which include but are not limited to an increase in the number of places for training through 4 year part time routes which incur higher costs due to the extended length of the course and the commitment to fund backfill costs (circa £2m);
- Inflationary pressures based on the assumptions set out above (circa £3m).

Implications for future years

It is important to note that the increased number of commissioned places will only affect 7 months of the 2020/21 financial year and therefore the full impact of the increase will not be apparent until 2021/22 and beyond. The increased number of students will be in the system for the full financial year 2021/22 and 2022/23 therefore it is important to highlight the associated funding requirements for future years.

The tables below shows the future impact of the current funding requirement described above:

Financial Year	2020-21 £m	2021-22 £m	2022-23 £m
Core Budget	100.775	111.429	118.016
Bursary	31.408	34.336	36.092
Non-take up of tie in Fees Element	-2.977	-4.859	-5.576
Non-take up of tie in Bursary Element	-1.409	-2.321	-2.722
Total	127.798	138.585	145.810

Predicting funding requirements beyond 2020/21 is difficult as the needs of the service, which inform the commissioning numbers for 2021/22 and beyond, will not be known until NHS organisations have submitted and agreed their IMTPs for the period 2021/22 to 2023/24, likely to be between December 2019 and March 2020. However the numbers set out above demonstrate the future full year impact of the funding requirement based on the broad assumptions that are set out here:

- > The level of attrition will remain at current levels.
- Commissioning numbers will remain at similar levels.
- Inflationary pressures in future years will be consistent with current levels.
- The regulatory environment for education provision remains unchanged.
- > The bursary system remains unchanged.

Impact of students selecting to take the Student Finance support package

The figures presented above include an assumption firstly that the bursary system will remain unchanged, and secondly that a number of students will select student loans instead of the NHS Wales Bursary and so will not be subject to the 2 year commitment to work in Wales.

There were 59 students that selected student loans over the option of NHS Wales Bursary funding with the associated two-year tie-in in September 2017. The position for September 2018 was circa 165 based on actual autumn numbers and estimated for spring 2019. The assumption made for the calculation in the table below, is that this could increase to 200 per year, which would represent circa 7% of the total numbers commissioned.

The increase is thought to be due to the enhanced package offered as a result of the "Diamond Review" which was implemented across Higher Education in Wales in 2018.

The table below illustrates the anticipated impact across a three-year time scale. It is important to note that if a higher number of students select student loans instead of the NHS Wales Bursary option the actual costs would reduce further. Any material favourable or adverse change in bursary uptake would change the total requirement. The assumption made is deemed reasonable based on information available at this time but further dialogue with Welsh Government may be required in this event to manage significant variation to the figures quoted below.

Bursary	20/21 Student No	21/22 Student No	22/23 Student no
Sep-19	200	200	83.3
Sep-20	116.7	200	200
Sep-21		116.7	200
Sep-22			116.7
Sep-23			
Total Students	316.7	516.7	600
Average bursary £	-£4,448	-£4,493	-£4,537
Total bursary	-£1,408,546	-£2,321,136	-£2,722,467
Fees	20/21	21/22	22/23
1003	Student No	Student No	Student No
Sep-19	200	200	66.7
Sep-20	133.3	200	200
Sep-21		133.3	200
Sep-22			133.3
Sep-23			
Total Students	333.3	533.3	600
Average fees £	-£8,932	-£9,110	-£9,293
Total fees	-£2,977,278	-£4,858,918	-£5,575,608
Overall Total	-£4,385,824	-£7,180,053	-£8,298,075

Pre-Registration Pharmacy Training

Following the submission and agreement of a business case to expand the pre-registration pharmacist training programme for 2020/21 to 2023/24 the following additional funding will be required. This is reflected in the overall cost for the education commissioning and training budget.

		2020-2021	2021-2022	2022-2023	2023-2024
	Current	£'000	£'000	£'000	£'000
	No				
NHS Pre Registration Pharmacist Trainees					
	60	60	60	60	60
Community Practice Pre Registration					
Pharmacy Trainees	64	100	110	120	130
Total	124	160	170	180	190
Additional Funding Required		£3,240	£3,648	£4,056	£4,466

8.2 Medical training places – funding implications

The financial analysis below relates to the cost of existing and additional medical training posts and assumes the ongoing funding for existing trainees as indicated by the training grade salary allocation in the table below.

Total Allocation

	2020/21 £m	2021/22 £m	2022/23 £m	2023/24 £m
Training Grade Salary Allocation	51,218,280	52,242,646	53,287,499	54,353,248
Additional Workforce	2,028,461	2,991,012	3,002,055	3,062,096
Total	53,246,741	55,233,658	56,289,553	57,415,345

Revised Salary and Support Costs Schedule

A revised cost schedule, comprising salary and support (study leave) costs is shown in the following tables. Costs have been provided based upon a 100% contribution increase from the Welsh Government for the additional posts recommended into the Training Grade Salary budget reflected from August 2020 to August 2025.

Costing is based on STRH grade with the exception of radiology at STRL grade.

Total of Salary plus Support Costs - Per Trainee

			Total		
Speciality	2020/21	2021/22	2022/23	2023/24	2024/25
Intensive Care Medicine	£31,107	£46,429	£46,429	£46,429	£46,429
Clinical Radiology	£31,107	£46,429	£46,429	£46,429	£46,429
Dermatology	£31,107	£46,429	£46,429	£46,429	£46,429
Old Age Psychiatry	£31,107	£46,429	£46,429	£46,429	£46,429
Radiology	£26,815	£40,022	£40,022	£40,022	£40,022
Emergency Medicine	£31,107	£46,429	£46,429	£46,429	£46,429
Medical Microbiology	£31,107	£46,429	£46,429	£46,429	£46,429
Anaesthetics	£31,107	£45,964	£0	£0	£0

Total of Salary plus Support Costs - Overall Cost

			Total		
Speciality	2020/21	2021/22	2022/23	2023/24	2024/25
Intensive Care Medicine	£404,393	£603,572	£603,572	£603,572	£603,572
Clinical Radiology	£622,143	£928,572	£928,572	£928,572	£928,572
Dermatology	£93,321	£139,286	£139,286	£139,286	£139,286
Old Age Psychiatry	£62,214	£92,857	£92,857	£92,857	£92,857
Radiology	£402,221	£600,330	£600,330	£600,330	£600,330
Emergency Medicine	£217,750	£325,000	£325,000	£325,000	£325,000
Medical Microbiology	£93,321	£139,286	£139,286	£139,286	£139,286
Anaesthetics	£93,321	£45,964	£0	£0	£0
Total	£1,988,687	£2,874,868	£2,828,903	£2,828,903	£2,828,903
Total plus inflation @ 2%	£2,028,461	£2,991,012	£3,002,055	£3,062,096	£3,123,338

Incentive Payments

Incentive payments are not included in the total funding requirement above as they are held centrally by Welsh Government and drawn down as required on an actual basis.

GP Incentives: Assuming that a maximum of 38 incentive places are maintained and based on an incentive payment of £20,000 with NI contribution, this would give a total estimated cost of £858,800.

There would be an additional cost of £2,000 per trainee, for GP psychiatry examination fees at a total cost of £272,000 (based on 136 GP trainees).

GP Psychiatry Examination Fees:

Incentiv	e Cost
Part A	445.00
Part B	1318.00
&	
CASC	

	2019/20	2020/21	2021/22	2022/23	2023/24
Part A	£37,825	£37,825	£37,825	£37,825	£37,825
Part B & CASC	£0	£112,030	£112,030	£112,030	£112,030
Total Exam Costs	£37,825	£149,855	£149,855	£249,855	£149,855

Appendix 1
Commissioning Trends - Health Professional Staff

Serimone in Brieflag Treatment and Treatment																						
Staff Group	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	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	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	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	163	172	100	50	40	40	98										
Health Visitors	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	40																			
CPNs	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	40	48	48	40	40	30	20	20	20	20										
CLDNs	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	10	10	12	12	7	8	0	4	10	6	4										
School nurse	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)	3	3	3	2	2	6	10	0	25													
Practice nurses	20	20	20	1	1	14	12	39	16	16	18	16	20	23	17	11	15	15	23	0	0	0
PN (Modules)	29	29	29	29	34	18	8	10	12	16	16	16										
Paediatric nurses	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	24	24	3	3	13	8	3	8	8	8	8										

Staff Group	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Occupational Therapists	133	133	121	116	111	88	79	71	69	102	100	93	81	98	91	106	112	79	65	45	40	37
Physiotherapists	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	44	44	0	44	44	37	30	25	36	43	35	35	54	44	40	39	40	38	33	33	33	27
Dietetics	30	30	30	42	38	30	33	28	30	36	40	34	22	24	24	30	31	28	28	28	28	27
Post grad. Dietetics	12	12	12	42	36	30	33	20	30	30	40	12	11	12	12	14	15	15	15	15	15	30
Podiatry	24	24	24	20	20	26	15	24	24	31	30	26	28	26	26	26	27	28	28	28	28	21
Orthoptics	5	5	5	5	5	5	3	2	0	0	0	0	0									i
Medical Photography	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	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	8	8										i
Physicians Associate	42	32	32	27																		i
Clinical Psychologists	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.	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	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	10	12	10	7	9	11	9	9	9	9	9	9	8	8	7	7	6
Dental Therapists	13	13	13	13	13	12	11	11	6	8	11	8	8	8	8	8	8	7	7	6	6	0
Ambulance Paramedics	85	76	86	69	94	36	25	24	40	57	75	101	70	90	85	85	70	57	48	48	40	48

Staff Group	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Diagnostic Radiographers	112	112	112	102	92	73	58	56	51	58	55	51	51	54	49	61	63	61	57	49	27	33
Therapeutic Radiographers	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	0	0	17	12	15	17	18	21	10	19	13								
, according to the second second																						
PTP																						
BMS - Blood/Infection/Cellular/Genetics	21	21	21	23	27	26	28	0	27	45	45	45	43	53	45	49	51	44	34	34	24	35
Clinical Physiologists - Cardiac																						1
Physiology/Audiology/Respiratory and Sleep																						'
Science	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	3	3	3	4	5	5	3														
Medical Radiation Techs - Nuclear Medicine &																						
Radiotherapy Physics	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	3	3	2	1	1	2	1															
Medical Engineering	0	0	0		1																	į į
STP																						
Audiological Scientists/Neurosensory Sciences	6	3	3	5	4	3	4	3	3	3	3	3	3	3	5	5	3	2	2	1	1	1
Neurophysiology	2	2																				
Respiratory and sleep science	3																					
Reconstructive Science	1																					
Cardiac Physiology	1	3																				
Biochemists/Blood Sciences	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	1	1	1	1	1	1	2	2	1	1	1	1	2	1
Medical Physics/Radiotherapy Physics/INIR/IIR	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	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	0	1
Cancer Genomics	1	1	_	_				_	_						_			_	_	_		
Bioinformatics	1	2	1																			
Tissue Typing/Immunology/Histocompatibility	0	0	0	0	2		1	0	0	1	1	0	1	0	1	1	0	1	0	1	0	0
Clinical Engineering	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	2	0	0	2	1	0	2		_		-	_	_		-	_	_	_				
Infection Science - Clinical Microbiology	0	3	3	0	1	0	1															
mice and selective control where solding y	Ĭ				-																	
HSST																						
Life Sciences - Genetics/Genomics	0	0	1	1																		
Microbiology	0	1	_	_																		
Life Sciences - Molecular Pathology of acquired	l	_																				
disease	О	1	О	1																		1
Physical Sciences and Biomedical Engineering -																						[
Medical Physics (Radiotherapy)	1	1	1	1																		1
Physical Sciences and Biomedical Engineering -	Ī																					İ
Clinical Biomedical Engineering	1	О	1	1																		1
Bioinformatics	1																					
Audiology	0	0	1																			
Histocompatability & Immunology	1	0	1																			
Transfusion Science	0	1																				

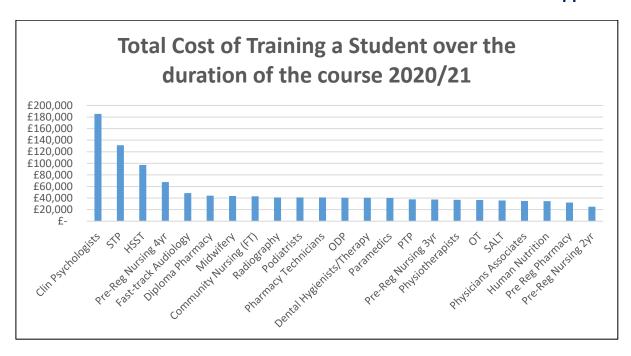
Medical Specialty Training Posts and Changes

Specialty	2020 Recommendations	Current training post	Changes August 2019	Changes August 2018	Changes August 2017
Anaesthetics/ICM					
Core Anaesthetics		122			
Training/ACCS Anaesthetics					
Higher Anaesthetics	+3	134			
ACCS Intensive Care		14			
Higher Intensive Care		21			+4
Medicine					
Emergency Medicine					
Acute Care Common Stem - Emergency Medicine		21			+4
Emergency Medicine (includes PEM & PHEM)	+7	42	+4		+2
Medicine					
Core Medical Training/ACCS	+13	241			
Acute Medicine	113	271			
Acute Internal Medicine		12			
Audiovestibular medicine		1			
Cardiology		38			
Clinical Genetics		5			
Clinical Neurophysiology		1			
Clinical Oncology		18			
Clinical Pharmacology and		3			
Therapeutics					
Dermatology	+3	14			
Endocrinology and Diabetes		23			
Mellitus		24			
Gastroenterology		24 4			
Genito-urinary Medicine Geriatric medicine		4 52			+3
					+3
Haematology		18			
Immunology Medical Openlagy		<u> </u>			
Medical Oncology		17			
Neurology Palliative Medicine					
	1.1	13			
Rehabilitation Medicine	+1	1 17			
Renal medicine		17			
Respiratory Medicine Rheumatology		29 10			

Surgery					
Core Surgical Training		100			
Cardio-thoracic surgery		7			
General surgery		54			
Neurosurgery		8			
Ophthalmology		40		+4	
Oral and Maxillo-facial Surgery		9			
Otolaryngology		18			
Paediatric Surgery		2			
Plastic surgery		13			
Trauma and orthopaedic		45	+4		
surgery					
Urology		16			
Vascular surgery		9			
- '					
Pathology					
Chemical pathology		4			
Histopathology		20			+2
Infectious diseases		2			
Medical Microbiology and	+3	10			
Virology					
Paediatric and Perinatal		2			+1
pathology					
Psychiatry					
Core Psychiatry Training		85			
Child and Adolescent		12			
Psychiatry					
Forensic Psychiatry		6			
Old Age Psychiatry	+2	9	+2 (not		
			filled)		
General Psychiatry		29			
Psychiatry of Learning		5			
Disability					
Imaging and Radiology					
Clinical Radiology	+ 20	72	+4	+7	+11
Nuclear medicine		1			
Women's Health					
Obstetrics and gynaecology		93			
Community Sexual &		2			
Reproductive Health					

Paediatrics		143			
Public Health Medicine		23			
Foundation Training					
Foundation Year 1	Separate	339			
Foundation Year 2	business case	339			
General Practice	Subject to				
	separate				
	business case				
Wales Clinical Academic Track		37			
Total	+52	2461	+12	+11	+27

Appendix 3



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 & Midwifery

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

- 3 year pre-registration programme
- > A 2 year graduate entry accelerated education programme leading to registration
- > A 2 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 4 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 4 years to complete. Staff will be employed by the NHS

Over the past two years HEIW has established a four year part-time and two year accelerated preregistration nursing programme. Numbers allocated to these programmes have initially been modest as there was a need to establish them within the universities and health boards. HEIW now propose to increase the commissioned places for these programmes. This will provide a number of benefits, which include:

- Provide widening access to the local workforce
- > Support career development for HCSWs currently employed in NHS Wales, which will promote recruitment and retention within the NHS wales workforce.
- Increase 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 two of the nursing fields as identified below should be considered against the following:

- ➤ Health Board need to comply with the requirements of the Nurse Staffing Levels (Wales) Act (2016) which came into full force from 6th April 2018.
- Nursing remains a shortage profession,
- Ongoing recruitment difficulties across the UK
- Changes in work patterns increasing levels of part time working, this results in a greater
- Significant increase in agency nursing costs and the need to invest now to reduce the agency expenditure in the medium/long term

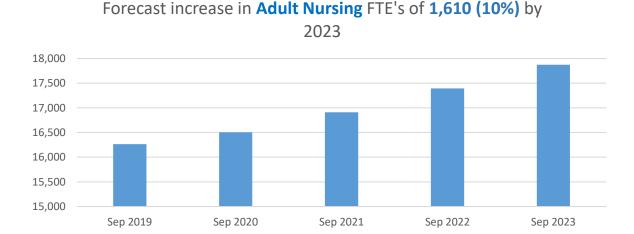
The table below summarises the number of nursing students, recommended for 2020/21 and those commissioned over the past 3 years.

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
Adult Nursing	1100	1210	1216	2193	1400
Child	140	154	154	278	154
Mental Health Nursing	300	330	324	533	356
Learning Disability Nursing	70	77	77	131	77
Total Nursing	1610	1771	1771	3135	1987

Adult Nursing

It is recommended that Adult places will increase from 1,216 to **1400**. This is an increase of 184 from 2019/20 levels, representing a 15.1% increase.

The workforce intelligence model developed by HEIW shows that the adult nursing workforce is projected to grow by **1,610 (10%)** between September 2019 (16,264 FTE's) and September 2023 taking the projected workforce to **17,874 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.

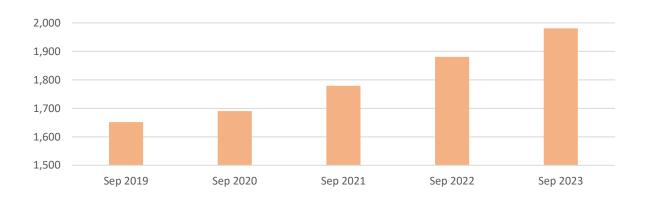


Children's Nursing

It is recommended that Children's nursing numbers are maintained at **154**. However, commissioning numbers in 2016/17 were 100 and commissioning numbers have increased by 54% over the last 4 years.

In addition the workforce intelligence model developed by HEIW shows that the children nursing workforce is projected to grow by **329 (20%)** between September 2019 (1,652 FTE's) and September 2023 where the forecast is **1,981 FTE's** (see table below).

Forecast increase in Child Nursing FTE's of 329 (20%) by 2023

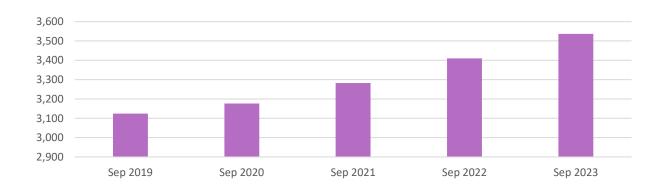


Mental Health

It is recommended that Mental Health numbers will increase from 324 to **356**. This is an increase of 32 from 2019/20 levels, representing a 10% increase.

The workforce intelligence model identifies that the mental health nursing workforce is projected to grow by **413 (13%)** between September 2019 (3,124 FTE's) and September 2023 where the forecast is **3,537 FTE's** (See table below).

Forecast increase in **Mental Health Nursing** FTE's of **413 (13%)** by 2023

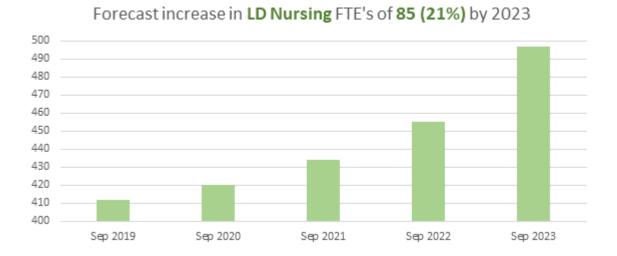


Learning Disability

It is recommended that Learning Disability field numbers are maintained at 77. The number of Learning Disability Places has increased over the past three years, however both Welsh education providers were unable to recruit to the commissioned education levels previously agreed. This is a reflection of a national workforce challenge in this sector. Work has commenced between both education providers to increase the profile of learning disability nurse education and careers in Wales and the Welsh Government has prioritised this workforce as part of its Train, Work, Live, campaign.

Additionally, it is proposed to explore the development of joint Learning Disability programmes with other programmes to deliver a dual qualification such as Learning Disability and Mental Health qualification or Learning Disability Nursing and Children's Nursing qualification etc.

The workforce intelligence model identifies that the LD nursing workforce is projected to grow by 85(21%) between September 2019 (412 FTE) and September 2023 where the forecast is 497 FTE.



Midwifery

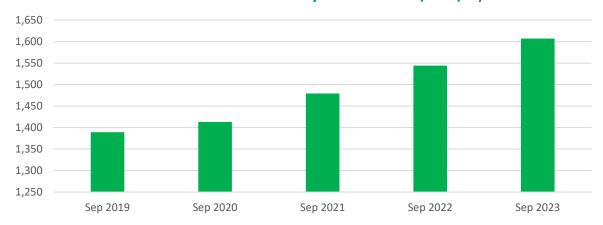
It is recommended that midwifery places will increase from 134 to 161 (see table below). This is an increase of 27 from the 2019/20 levels, representing a 20% increase.

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
Midwifery	134	134	134	210	161

Over the past four years midwifery places have increased from 94 to the current 134. The additional numbers commissioned from 2017/18 will start to graduate in 2020 and therefore the service has not yet received the benefit of the additional investment. This, together with the further increase in commissioned places proposed for 2020 has the following effect on the workforce,

The workforce intelligence model developed by HEIW shows that the midwifery workforce is projected to grow by **218 (15%)** between September 2019 (1,389 FTE's) and September 2023 where the forecast is **1,607 FTE's**.

Forecast increase in Midwifery FTE's of 218 (15%) by 2023



2. Allied Health Professionals

In order for the 'A Healthier Wales' plan to be realised the requirement to expand the AHP workforce has been highlighted in the IMTPs. Allied Health Professionals 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 predict that a number of professional roles will need to be expanded. This is 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 will go some way to meeting the demands of the current workforce in the coming years.

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 delivered by one University. Glyndwr University is set to run a part time Occupational Therapy programme commencing in 2020 and this is the sole part time route available in Wales for AHPs. Meeting the service needs of the local population in more rural locations is problematic. In order to meet the needs of rural populations and provide development opportunities for the existing workforce HEIW seeks to build the support worker progression routes to pre-registration education. Development of the 'Therapy support worker framework' will contribute to a widening access to pre-registration training programmes into the future. Additionally, in recent years, universities have not always been able to fill the commissioned places for some disciplines and this has been taken into account when planning the commissioned numbers.

The table below summarises the number of nursing students, recommended for 2020/21 and those commissioned over the past 3 years.

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
Allied Health Professionals					
B.Sc. Human Nutrition - Dietician	30	30	30	39	35
PG Diploma Human Nutrition - Dietician	12	12	12	22	17
PG Diploma Medical Illustration	5	5	5	7	5
B.Sc. Occupational Therapy	101	113	125	150	125
PG Diploma Occupational Therapy	20	20	23	46	23
B.Sc Occupational Therapy (Part Time)	0	0	0	0	15
Degree in ODP	49	49	49	58	49
B.Sc. Physiotherapy	134	147	147	204	164
B.Sc. Podiatry	24	24	24	21	24
B.Sc Orthoptist	5	5	5	8	5
PhD Clinical Psychology Doctorate	27	27	27	70	29
B.Sc. Speech & Language Therapy	Fallow	36	36	40	40
B.Sc. Speech & Language Therapy - Welsh Language	Year	8	8	10	9
B.Sc Paramedicine	0	0	0	0	52
Ambulance Paramedics - EMT conversion	38	28	15	30	30

Allied Health Professionals: academic intake 2020/21

Increases to the workforce are recommended in the following areas:

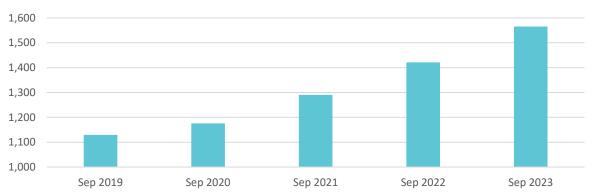
Occupational Therapy

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; frailty, social prescribing, self-management of chronic conditions, mental health and fitness for work, all linked with the Healthier Wales values of developing health and wellbeing; keeping people in their homes for longer. Occupational Therapists can reduce demand on General Practitioners 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. However, a 10% increase in commissions via the part time training route is recommended whilst maintaining the overall number of places at the same level as 2019.

The workforce intelligence model developed by HEIW shows that the OT workforce is projected to grow by **436 (39%)** between September 2019 (1,129 FTE's) and September 2023 where the forecast is **1,565 FTE's.** Note: this does not account for professionals who will be employed outside of the NHS.

Forecast increase in Occupational Therapy FTE's of 436 (39%)





Physiotherapy

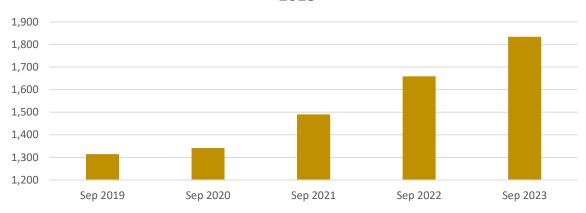
It is recommended that Physiotherapy numbers will increase from 147 to 164. This is an increase of 17 from 2019/20 levels, representing a 12% increase.

NHS Wales currently employs circa 1,290 physiotherapists. In many areas, increasing demand is being driven by the development of first contact physiotherapy services in primary care. Success in the therapy led MSK conditions service is 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 General Practitioners and emergency services. The development of new models of physiotherapy will also potentially impact on requirements in Trauma & 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. However, a 12% increase in commissions via the full time and part time training routes are recommended to support growth in service demand.

The workforce intelligence model identifies that the physiotherapy workforce is projected to grow by **520 (39%)** between September 2019 (1,315 FTE's) and September 2023 where the forecast is **1,834 FTE's.**





Dietetics

It is recommended that dietician numbers will increase from 42 to 52. This is an increase of 9 from 2019/20 levels, representing a 21% increase.

Escalating rates and earlier presentation of diabetes and unacceptably high levels of obesity across Wales are well documented. In line with the obesity pathway 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, Cardiff, and Vale University Health Board offer adult level 3 services. Other health boards are also currently developing their level 3 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.

There has been no increase in commissioned places for pre-registration dietitians in recent years. Evidence exits of ongoing vacancies in service particularly in rural areas of Wales and use of agency staff. Therefore, a 21% increase in commissions is recommended via the 2 year post grad and 3 year BSc routes to meet the predicted demand of dietetic services in 2022-23.

Speech and Language Therapy

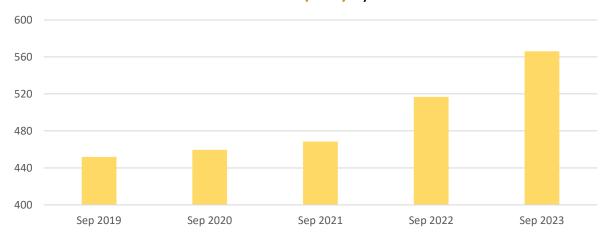
It is recommended that speech and language therapy numbers will increase from 44 to 49. This is an increase of 5 from 2019/20 levels, representing a 10% increase.

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 BCU IMTP highlights the need for Welsh speaking SLT professionals specifically.

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 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. However, 10% increase in commissioned training is recommended to meet the future increase in service demand.

The workforce intelligence model identifies that the speech and language therapy workforce is projected to grow by **114 (25%)** between September 2019 (452 FTE's) and September 2023 where the forecast is **566 FTE's.**





Clinical Psychology

It is recommended that clinical psychology numbers will increase from 27 to 29.

Increased prevalence in mental health problems (as discussed elsewhere in this document) have led to developments in mental health services, which are highlighted on the IMTPs. Service improvements include collaborative approaches to mental health requiring a cross cutting approach from health boards, the local authority, police, ambulance and third sector agencies. In order to support new models of service delivery an increase of 8% in commissioned training places for clinical psychologists is recommended.

Paramedics

The intention to increase paramedic roles in changing the way primary care services is delivered is one of the strongest themes in IMTPs this year. This includes reference to a number of pilots including paramedic practitioners supporting GP sustainability working across in hours and OOH; home visits to assess and report to GP and me visits to assess, treat, refer, resolve.

Whilst formal evaluation is not yet available for pilots, early assessment is that they are successful in terms of admission avoidance. Nuffield Trust research summary "Shifting the balance of care:

Great expectations" identified paramedic triage to the community as providing the most positive evidence of relative strength of evidence of reduction in activity and whole-system cost.

WAST's IMTP recognises that additional paramedics would be needed in order to release existing paramedics to undertake training in advanced practice to support new models of delivery in primary care, if such ambition is to be effectively realised without adversely affecting the delivery of WAST services.

HCPC has announced that from 1st September 2021 they will withdraw approval from existing paramedic's programmes that are below degree level. HEIW have discussed the implications of this with WAST and Swansea University.

It is recommended that the programme delivered in 2020/21 is at degree level. This will ensure Swansea University can continue to recruit to its programme.

It is recommended that 52 places are commissioned in 2020/21 on the BSc programme. In addition, HEIW will continue to commission the EMT programme with 30 places divided between two cohorts of 15 to be delivered in 2020/21.

3. Additional Professional Scientific & Technical and other professions

The tables below identifies the number of students which it is recommended are commissioned for 2020/21.

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
Diploma in Dental Hygiene	18	18	18	4	18
Degree in Dental Hygiene & Therapy	13	13	13	3	13
Physicians Associates	27	32	42	54	54
Pharmacy Technician	35	35	45	58	45

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	Already committed 2020/2021	2020/21 (WF Plans)
Pharmacy Diploma	32	40	40	40	40
Pre Reg Pharmacy - Combined Programme	0	50	0	160*	63

Commentary is provided below only on those professions where there is something exceptional to highlight.

Physicians Associates

The first cohort of Physicians Associates in 2016/17 have now graduated and are now undertaking a period of internship within the health boards. Physicians Associates are identified as a solution to fragile rotas and medical recruitment challenges across all IMTPs. The majority of IMTPs indicate a need to train more PAs to support the development and transformation and sustainability of services. Some refer to evaluating the role in primary care with an aim to expand the role, and also exploring the option of rotational roles across Mental Health, Primary Care and Medicine.

HEIW recommends increasing the level of education provision by 28% from 42 to 54 places in 2020/21.

Pharmacy

The pharmacist role is to optimise clinical and therapeutic outcomes from medicines, which includes a prescribing role. The pharmacy technician role is leading on medicines management including medicines administration and use. Other health and social care staff who make decisions or administer medicines will have a named pharmacy professional for support. This will include all nursing homes and community reablement teams by 2030.

Pharmacy team growth requires an appropriate skill mix of pharmacists and pharmacy technicians to be commissioned to deliver A Healthier Wales in line with prudent healthcare.

Modernisation of services with more clinical care from the community and primary care workforce.

In future only people who require urgent, intensive or highly specialised care will require access to pharmacy teams in the hospital sector. Primary Care Cluster or GP practice pharmacists will see newly diagnosed or people with worsening LTC's. All pharmacists in these patient facing roles will be prescribers by 2022.

Community pharmacies are often open longer hours and at weekends when GP practices are closed. Each community pharmacy will have an independent prescribing pharmacist by 2030 so that consistent services can be commissioned out of hours. By 2022, 30% of community pharmacies will have an active independent prescribing pharmacist.

Pre-registration Pharmacists

To secure a sustained increase in the number of appropriately trained pharmacists in the workforce, Welsh Government signed off a 2019 HEIW business case for additional funding to transform preregistration pharmacist training. The additional funding confirms total pre-registration pharmacist training commissions (all sectors) will grow from 160 in 2020-21 to 200 by 2023-24 with all trainees being NHS employed and multi-sector trained. The funding for the business case identified the additional cost for delivering the integrated programme and increasing the numbers above that agreed for 2020/21. Therefore within the funding identified within this plan it only includes the costs for the previously agreed number of places for the hospital pre-registration programme.

Foundation pharmacists

To enable timely recruitment of pre-registration pharmacists into Band 6 jobs, the diploma commissions have traditionally been 2 years in advance of recruitment. The diploma numbers for 2020 academic intake are already set at 40 posts. As the Welsh Government have confirmed that the commissioning numbers will be agreed in the autumn of 2019 it removes the necessity to agree the numbers a year in advance. Therefore as the places for 2020 have been agreed previously this is taken forward into this year's plan.

Pharmacy Technicians

HEIW has traditionally supported pharmacy technicians who work in the NHS, although in the past year the Welsh Government have funded HEIW separately to support the training of community technicians as well. This plan identifies the number of pharmacy technicians specifically for NHS organisations.

HEIW recommends 45 commissions for the 2020 intake.

4. Healthcare Scientists

The tables below identifies the number of students which it is recommended are commissioned for 2020/21.

Course Title		Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
B.Sc. Diagnostic Radiography	112	112	112	140	140
B.Sc Therapy Radiography	20	20	20	22	22
HEALTHCARE SCIENTIST - PTP					
Physiological Science - PTP					
B.Sc. (Hons) Healthcare Science - Cardiac Physiology	24	24	24	27	24
B.Sc. (Hons) Healthcare Science - Audiology	18	18	16	19	10
HE Cert in Audiological Practice	0	0	0	0	15
B.Sc. (Hons) Healthcare Science - Respiratory and Sleep Science	5	5	5	13	5
B.Sc. (Hons) Healthcare Science - Neurophysiology	3	3	3	4	4
Physical and Biomedical Engineering - PTP		•			
Clinical Engineering	3	3	0	0	0
B.Sc. (Hons) Healthcare Science - Nuclear Medicine &	2	2	2	2	0
Radiotherapy Physics	3	3	3	2	3
Life Science - PTP					
B.Sc. (Hons) Healthcare Science - Biomedical Science	21	21	21	28	24
Total PTP Programmes	77	77	72	93	85
SCIENTIST TRAINING PROGRAMME - STP					
Physiological Sciences - STP					
M.Sc. Clinical Science in Neurosensory Sciences - Audiology	3	3	6	7	6
M.Sc. Clinical Science in Neurosensory Sciences - Neurophysiology	0	2	2	3	2
MSc in Clinical Science in Cardiac Physiology	0	3	1	1	1
MSc in Clinical Science in Respiratory & Sleep	0	0	3	0	0
Life Science -STP					
M.Sc. in Infection Science - Clinical Microbiology	3	3	0	4	3
M.Sc. in Blood Sciences - Clinical Immunology	0	0	0	0	0
M.Sc in (Blood Sciences) Haematology and Transfusion Science	0	0	0	1	1
M.Sc in (Blood Sciences) Histocompatibility and Immunogenetics	0	0	0	1	1
M.Sc. in Blood Sciences - Clinical Biochemistry	3	0	2	4	3
M.Sc. in Blood Sciences - Genomics	1	2	1	3	2
M.Sc. in Blood Sciences - Cancer Genomics	0	0	1	1	1
M.Sc in Genomic Counselling	0	0	0	0	0
M.Sc in Cellular Sciences - Reproductive Sciences - Clinical	0	0	0		0
Embryology and Andrology	0	0	2	3	2
M.Sc in Cellular Sciences - Histopathology	0	0	0	1	1
M.Sc in Cellular Sciences - Cytopathology	0	0	0	0	0
Physical Sciences and Biomedical Engineering - STP					
M.Sc. in Clinical Science - Medical Physics	4	3	0	0	3
M.Sc. in Clinical Engineering	4	2	1	3	2
MSc in Clinical Bioinformatics	0	2	1	0	2
Total STP Programmes	18	20	20	32	30
HIGHER SPECIALIST SCIENTIST TRAINING - HSST					
Physical Sciences	2	2	2	3	2
Life Sciences	2	2	3	0	2
Physiological Sciences	1	1	0	0	1
Toal HSST Programmes	5	5	5	3	5
1 Out 11 Ogramilies 3 3 5 5					
Post Graduate Healthcare Science Education					
M.Sc. Genomic Medicine	20	20	20	4	20

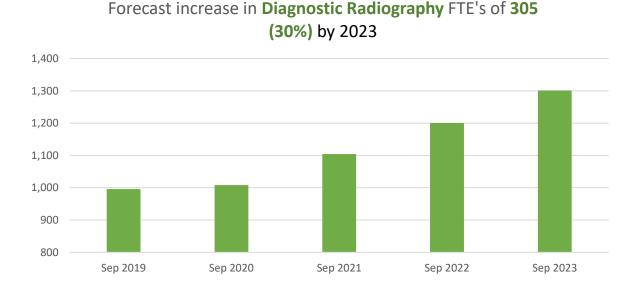
Diagnostic radiotherapy

It is recommended that diagnostic radiography numbers will increase from 112 to 140. This is an increase of 28 from 2019/20 levels, representing a 25% increase.

One of the core objectives aligned to the Wales Cancer Delivery plan has been detecting cancer earlier. This has led to an increase demand for radiotherapy services to speed up diagnosis. The single cancer pathway builds on the success of rapid diagnostic clinics. IMTPs highlight the future requirement for growth in these services.

A 25% increase in commissioned training places in recommended to meet the service demand.

The workforce intelligence model identifies that the diagnostic radiography workforce is projected to grow by **305 (30%)** between September 2019 (996 FTE's) and September 2023 where the forecast is **1,301 FTE's.**



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 can be relatively small in number 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 Scientist Training Programme (STP) and PhD Higher Specialist Scientist Training (HSST) level, however, a gradual increase in trainees at STP and HSST/consultant level is being realised, which is encouraging.

The STP trainee programme continues to be a highly competitive and sought after training programme with the NHS Wales recruitment process for 2019 lead by HEIW yielding 1,208 applicants for the 24 available posts.

Advances in technology including, the development of artificial intelligence, informatics, genomics, regenerative medicine including cell and gene therapy, and precision medicine, along with investment in education for the Healthcare Scientist workforce provide many opportunities to not only reshape, extend and provide new service provision, but also to reconfigure the workforce. The

"Healthcare Science in NHS Wales Looking Forward" is a framework that sets out how the skills and knowledge of the healthcare scientist can make a major contribution to the changing landscape of healthcare, through integrated service planning and delivery, research, innovation, improvement, education and system leadership.

The majority of IMTPs have reported the need to increase clinical scientists within the workforce seeing them being used increasingly in primary care to prevent people coming into hospital ensuring that they stay well in the community.

HEIW recommends and increase in STP commission to 30 places for 2020/21

Equivalence routes to registration

HEIW will continue to work with NHS organisations to embed 'equivalence' pathways into the NHS, which will support individuals to gain professional registration and progress through the scientific career structure.

Some IMTPs report 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 will continue to investment in equivalence (£40,000) for education to enable the equivalence route to registration with further evaluation of the benefits.

5. Post Registration Education

Introduction

Post registration education is essential in supporting the vision set out in *A Healthier Wales* in terms of transforming services for the Welsh population, care closer to home and echoes the core values that underpin the NHS in Wales specifically:

- Putting quality and safety above all else providing high value evidence based care for our patients at all times.
- Investing in our staff through training and development, enabling them to influence decisions and providing them with the tools, systems and environment to work safely and effectively.

Post registration education that supports the training of clinicians to undertake a new role or that advances or extends their scope of practice is integral in supporting health organisations with the transformation and redesign of clinical services. It also promotes and supports the diversification within teams and a healthy balance of skill mix. Supporting clinicians 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.

HEIW supports staff at post registration level in a number of ways, these include:

- Advanced and extended Practice education
- Non Medical prescribing
- Community Health studies
- Specialist Community Public Health Nursing (SCPHN)
- Medical ultrasound education
- Genomic Medicine Education

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

Advanced and Extended Practice Education Funding

Welsh Government has made significant investment in advanced/extended education and since 2016 the budget has grown from 500k to 1.5m in 2019/20. This investment has supported a wide range of clinicians to develop additional skills and knowledge and has also supported health services to gain advanced practitioners.

During 2018/19 the budget of £1.25m funded 726 individuals to undertake advanced/extended practice education, which equates to an investment on average of £1721.00 per head. Use across the larger professions is fairly balanced which is encouraging with 50% of the budget utilised by therapy roles, 37% by nursing, 9% by Pharmacists and 4% by healthcare scientists.

HEIW are committed to supporting organisations with the development of their workforce and strictly monitors the use of this budget. The allocation of the funding should be reflective of the requests that are submitted on the education commissioning template via the IMTP process and meet the priority areas identified each year. Priority areas identified for 2019/20 are:

- Community and Primary care/GP OOHs
- Unscheduled care to include, emergency care, critical care
- Cancer services
- Diagnostics
- Eye Health/Ophthalmology access

The trend is for Health Boards to develop a multi-disciplinary approach to care especially in Primary Care; Advanced Practitioner roles replacing what were traditionally Medical roles.

As this budget has seen significant increase over the last few years the recommendation is that the budget remains at the current level with further evaluation of the benefits.

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. Therefore it is proposed that an additional budget ring fenced for development of these roles in supported for 2020/21.

HEIW's proposal is to fund 10 individuals to undertake PG Dip in radiographic reporting.

Non-Medical Prescribing

HEIW currently supports the funding of a number of prescribing courses:

- Independent prescribing.
- Supplementary prescribing
- Prescribing by Community Practitioners from the Nurse Prescribers' Formulary for Community Practitioners
- ➤ Non-Authorisation of blood transfusion

This funding provides education for additional professional groups to undertake a prescribing role to support the workforce modernisation and redesign agenda across NHS Wales. For 2018/19, the first paramedics were funded to train as independent prescribers, leading the way to further increase prescribing paramedics for the future. Although nurses remain the dominant professional group accessing this training, it is increasingly being utilised by pharmacists who used 23% of the allocations in 2018/19.

Investment in this education has remained at £300k for a number of years. Increases in university fees have in effect reduced the availability of this programme and there is an increasing demand to train prescribers especially with the development of community services. The establishment of a National Endoscopy Training Programme for non-medical endoscopists will also require health professionals on this programme to train as prescribers, which will increase the demand.

HEIW is recommending an increase in the budget for 2020/21 to 500k.

Community

The community health studies programmes actively support the Government's policy to move services from secondary care to community/primary care. Investment in this area can be categorised into three main areas:

Programmes which lead to a <u>recordable</u> qualification i.e. 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.
- Programmes which lead to a <u>registerable</u> qualification with the Nursing and Midwifery Council (NMC) i.e. Health Visiting, School Nursing and Occupational Health Nursing.

The tables below identifies the number of students which it is recommended are commissioned for 2020/21.

Course Title	Ed Com. 2017/18	Ed Com. 2018/19	Ed Com. 2019/20	2020/21 (WF Plans)	2020/21 - HEIW Recommendations
Health Visiting (Full-time)	48	63	58	72	58
Health Nursing (Part-time)	34	27	34	6	34
Health Visiting (modules)	40	30	30	7	30
School Nursing (Full-time)	14	14	14	26	14
School Nursing (Part-time)	5	5	5	6	5
School Nursing (modules)	3	3	3	0	3
Occupational Health (Full-time)		0	0	4	0
Occupational Health (Part-time)		0	0	8	0
Community Health Studies					
District Nursing (Part-time)	80	80	80	96	80
District Nursing Modules (in modules)	123	123	123	92	123
Practice Nursing (Part-time)	20	20	20	73	20
Practice Nursing Modules (in modules)	29	29	29	84	29
Community Paediatric Nursing (Part-time)	16	0	0	18	0
Community Paediatric Nursing Modules (in modules)	24	24	24	20	24
CPN (Part-time)	39	30	30	37	30
CPN Modules (in modules)	40	60	60	36	60
CLDN (Part-time)	0	0	0	15	0
CLDN Modules (in modules)	10	10	10	14	10
Additional Modules	472	472	472	18	560
Return To Practice	140	140	140	152	140

Community Health Nursing

Community nurse education currently funds the development of staff working in the community and is delivered either part time or on a modular basis. Part time education is completed over a two-year period and the modular route can take a number of years. All pathways commence with completion of the foundation module for Community/Practice. Additional modules are also funded to support staff to complete the programme on the modular basis and to undertake additional education to support role development.

As previously identified, community and primary care are priority service areas and it is critical we have the right workforce in place to support these. In 2017/18, the Welsh Government identified additional funding for 2018/19 and 2019/20 to increase the number of district nurses. The funding will support existing staff to be released to commence and or complete education programmes funded through this budget.

HEIW recommends an increase in the additional modules from 472 modules to 560.

Health Visiting

Health Visiting is 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 2 years
- Modular: Students undertake one or more specific taught modules over an undefined period of time.

The modular route introduced in 2017/18 continues to prove a particular challenge to service in releasing staff to undertake this programme.

Welsh Government policy is for the introduction of skill mix into all clinical teams and for flexible modular routes to education to be available and the modular route meets these requirements. This approach is supported by HEIW as it provides the opportunity for skill mix and better use of the available resources. The Chief Nursing Officers Office and HEIW will work with the NHS to continue to embed this route.

HEIW recommend maintaining the same level of education provision as in 2019/20.

Medical Ultrasound/Sonography

Medical ultrasound/sonography education has been funded for two years and has been fully utilised by the NHS organisations across Wales. The level of need amongst the workforce continues to be significant, with increases in demand identified within the IMTP's submitted this year. There was an increase in commissioned numbers for 2019/20 of which the impact is yet to be felt.

HEIW recommends that the budget remains at the current level of 15 places per year with further evaluation of the benefits

MSc in Genomic Medicine

Genetics and Genomic medicine is a growing field of 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.

The MSc genomics medicine programme is delivered via Swansea and Bangor universities and is aimed at a wide range of health care professionals, and has been particularly sort after in Swansea University. It can be undertaken either as modular or part time study. Part time study is over 2 years, with successful completion leading to a Masters degree in Genomic Medicine. The intention is to increase the intellectual capacity in this growing area of medicine and to support future innovation and development of services.

HEIW recommends that the budget remains at the current level.

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. 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. This has resulted in the development of partnership arrangements between Health Boards/Trusts and their local Education or Training Provider. 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.

Other areas for the development of HCSWs outlined within the IMTPs include:

- Primary Care
- Joint Health and Social Care roles
- Theatres
- Critical Care
- Midwifery
- Ophthalmology

7. Medical & Dental

The 2019 – 2022 IMTPs refer to a number of areas of **medical recruitment difficulties**, which vary across specialties, organisations and grades but include:

- Ophthalmology
- Emergency Medicine
- Psychiatry
- Radiology
- Oncology
- Acute Physicians
- General Practice
- Occupational Health
- Urology (Female)
- Haematology
- Microbiology
- Histopathology
- Anaesthetics

It was agreed that the following medical specialties would be reviewed for the 2020 intake:

- ➤ Emergency Medicine to explore and make workforce planning recommendations based on recommendations made as part of the current work being undertaken by the Unscheduled Care Sub Group.
- Anaesthetics consideration of the impact of dual accreditation with Intensive Care Medicine
- ➤ Intensive Care Medicine a further review of Higher Specialty training in Intensive Care Medicine and to review the requirements needed to deliver the new Internal Medicine training programme
- Old Age Psychiatry a further review of Higher Specialty training in Old Age Psychiatry, considering the impact of the previous recommended changes and ongoing recruitment.
- ➤ Paediatrics a review to explore supply considering the recent work undertaken by the Royal College of Paediatrics and Child Health which indicated that there is now potential for undersupply.
- ➤ Community Sexual and Reproductive Health (CSRH) a review of current training provision in view of NHS England's recent decision to increase training places.
- Dermatology a review of training numbers following recent recommendations to CEOs from the Welsh Dermatology Board to create clinical fellow posts to address a shortage of consultants.
- ➤ Clinical Radiology a review of the impact of the recent increases in the number of trainees in this specialty.
- Medical Microbiology a review of the specialty in light of discussions with CEOs and Public Health Wales regarding infection control.

In addition to the above, work has been undertaken by HEIW to review a number of further specialties:

General Practice and Foundation Training - Separate to this paper, HEIW has also been undertaking a review of General Practice training and capacity alongside the development of a series of recommendations to expand the Foundation training programme, to accommodate the anticipated increases in medical graduates and to increase exposure to general practice.

Bids and business cases have been developed and are being considered to expand training opportunities in General Practice at both the Foundation and Specialty Training grades. These recommendations are therefore not included within these main recommendations, but should be considered alongside it as part of the overall expansion programme for Wales.

Rehabilitation Medicine - Following discussion with the NHS Wales Collaborative regarding the development of the Major Trauma Network and the associated workforce requirements to establish the Network, it is noted that rehabilitation medicine will be a key contributor to the success of the Network.

Internal Medicine - The new Internal Medicine training programme and curriculum was introduced from the August 2019 intake. From previous Workforce modelling it is recognised that there are a number of Medicine specialties in which Wales is currently projected an oversupply of CCT holders and should therefore be considered for disestablishment. These posts have not yet been incorporated into any workforce plan as it is anticipated that these posts will be reallocated to

Internal Medicine (IM3) posts from 2021 onwards to meet the demand of the Internal Medicine training programme. The implementation of the Internal Medicine curriculum will cause significant issues for service delivery across medicine particularly in August 2021 when recruitment into Stage 2 programmes will be frozen due to the introduction of the IM3 year. With this instability in mind there are no plans for 2020 to decommission medicine training posts until the requirements going forward have been explored with Health Boards and service implications during this transition period mitigated.

This complex piece of work will continue to be worked through in the forthcoming year and a number of medical specialties will be reviewed, including the consideration of any implications of these changes and any recommendation for changes.

Clinical Oncology - This specialty was reviewed in a previous workforce plan, with no recommendation to change the training numbers at that point. With recent developments to deliver a single cancer pathway further work is required to understand the workforce requirements for Clinical and Medical Oncology. As a result it is recommended that these specialties are reviewed for August 2021.

Summary of Recommendations:

No recommendation to increase training places

Follow analysis for the specialties of Paediatrics, Community Sexual & Reproductive Health and Intensive Care Medicine, the recommendation is not to make any changes to current training numbers but that these specialties are reviewed again.

The specialty of Intensive Care Medicine will be impacted on by the introduction of the new Internal Medicine curriculum (introduced from August 2019 as part of the Shape of Training review). Whilst the recommendation is for no change to higher training numbers in ICM at this point, there will need to be increases to Core Trainees (see below). ICM should be should be reviewed again in 2021.

Recommendation to increase training places

The following provides a summary of the specialties where changes to current training numbers are recommended and the reasons for these increases. The table below provides a summary of those changes:

Training Recommendations 2020/21 Summary Core & Specialty Training in priority order

Specialty	Increase/Decrease required August 2019
Intensive Care	+ 13. (CT2 for the Internal Medicine curriculum changes)
Medicine	
Emergency	+7 HST to accommodate ACCS and PHEM and PEM
Medicine	
Medical	+3 p.a. for 5 years
Microbiology	
Dermatology	+3 HST (progression of Clinical Fellows into training)
Radiology	Increase intake to 20
Rehabilitation	+1 HST
Medicine	
Anaesthetics	+ 3 for 1 year (then review for years 2 and 3)
Old Age Psychiatry	+2 (second year out of a 3 year increase)
Paediatrics	No change but reviewed following introduction of HB funded posts
Community Sexual	No change
& Reproductive	
Health	

Emergency Medicine:

Demand for Emergency Medicine continues to increase. Recent Royal College of Emergency Medicine (RCEM) publications, including work undertaken with Health Education England, has indicated that additional Consultant posts are needed to meet increased demand and that Wales also requires additional Consultant posts to meet demand. Several organisations are reporting recruitment difficulties for Emergency Medicine in their IMTPs. It is projected that up to 8 trainees will gain their CCT over the summer.

The Consultant workforce is ageing and there is a recognition that Emergency Units, across Wales are currently under staffed as compared to Royal College recommendations. In Wales, the National Unscheduled Care Board has been established and has reviewed the workforce requirements for Emergency Medicine. Work is continuing to ensure that Consultant numbers in Emergency Units across Wales are increased in line with the RCEM recommendations. HEIW is supporting the work of the Unscheduled Care Board and has considered the demand for the expansion of the Consultant workforce in line with this work.

Previous medical workforce planning recommendations have included recommendations to expand the Acute Common Stem (ACCS) programme. ACCS is the feeder training programme for Emergency Medicine and almost all of the Emergency Medicine trainees undertake this training programme before entering higher training in Emergency Medicine. Over recent years, the ACCS training programme has been expanded to enable increased output with the posts to support this coming

from the conversion of unfilled higher posts into the lower grade of ACCS and newly funded posts. As the expanded number of ACCS trainees are now working through the system additional higher training posts are required in Emergency Medicine to ensure the retention of these ACCS trainees within the higher Emergency Medicine training programme but also to provide opportunities for growth within Emergency Medicine.

There are many examples, across Wales of the development of the wider multidisciplinary team within Emergency Medicine, but it is recognised that within the short term, there remains a need for Consultants to provide the training and supervision for the new and emerging roles. There is also an increased demand for Consultants with sub specialty experience including Pre-Hospital Emergency Medicine and Paediatric Emergency Medicine along with a need to increase the training opportunities for trainees to develop these sub specialty skills. Wales currently has a very limited number of such posts and Wales's trainees are often required to undertake out of programme training placements in England to obtain this experience with the associated risk of losing these trainees to take up consultant posts in England.

Intensive Care Medicine:

There remains a steady increase in demand for intensive care due to the ageing population, associated increases in complexity of patients and the move towards an increased expectation of out of hours care being delivered by consultants. A survey in 2014 indicated that NHS Wales had a lower average number of intensive care beds per head of population compared to the rest of the UK. ICU beds are running at occupancy rates of over 80%. The Intensive Care National Audit and Research Centre (ICNARC) has undertaken a long-term overview of critical care bed needs and concluded that if trends continue that there would need to be an estimated increase of approximately 4% per annum in overall bed days. Welsh Government has established a Critical Care Task and Finish Group, specifically to consider how and where capacity could be improved. The recommendations of this work were received by the NHS Wales Executive Board including a recommendation for a phased expansion of level 3 critical care beds. These recommendations included that further consideration should be given to increasing the number of medical training posts.

With the implementation of the new Internal Medicine training programme, introduced from August 2019, the new curriculum requires all medical trainees in their second year of the programme to have exposure to intensive care, spending a minimum of 10 weeks in intensive care and to be fully integrated in all aspects of the Intensive Care Unit's work, including delivery of out of hours. To meet these curriculum requirements and to enable the additional CT1s appointed to Internal Medicine in August 2019 to progress to CT2, an additional 13 training placements in ICM will need to be created at CT2 from August 2020.

ICM training has been expanded over the past 5 years to now incorporate 20 posts and there are currently 24 trainees progressing through the programme. Trainees enter this programme at higher training and often dual accredit (work towards 2 CCTs) with either Anaesthetics, Emergency Medicine or Acute Medical specialties. Each programme is unique to an individual as it will depend upon existing competence levels and the programme they are dual accrediting which results in gaps of varying duration in the ICM training programme. Recruitment to this training programme is good and the expansion in posts in recent years have been filled successfully.

Due to the projected gaps within the programme as a result of existing trainees requirements it is recommended that no additional ICM higher training posts are created for the August 2020 intake however this position will need to be continually monitored and reviewed once more information is obtained regarding the destinations of these dual accrediting trainees, post CCT.

Anaesthetics:

Demand for anaesthetics is increasing due to the age of the population, increasing complexity, demand for out of hours consultant cover, increases in post anaesthesia care and peri-operative medicine and the move to 7 day working and ICU requiring 24 hour consultant cover. The consultant workforce works sessionally and increasing numbers are opting to work 10 sessions or less. The workforce is ageing with a large proportion of both the consultant and SAS workforce likely to retire over the next 5 years; this coupled with increases in part time working, the increase in potential retirements could mean an increase in vacancies. Recent changes to pension rules are leading to some consultants retiring earlier than initially projected and returning on a small number of sessions making modelling more challenging. The bulk of retirements anticipated over the next 5 to 10 years could mean that up to 81 consultants retire.

Anaesthetics department tend to have a high proportion of SAS doctors working within them and this workforce is also ageing and both recruitment and retention are proving challenging in a number of areas. Smaller and more rural hospitals in Wales are more dependent on the SAS workforce. A continued failure to recruit to vacant SAS posts could lead to some of these clinical sessions having to be covered by consultants.

There are currently 129 training posts in Anaesthetics and fill rates for training in anaesthetics are good, however, high numbers of trainees are opting for less than full time training (LTFT). There is scope to develop additional training capacity within Wales. There are a high number of trainees gaining their CCT this year and it will be important to track whether these trainees take up consultant posts in Wales. Anaesthetics trainees also form part of the route in to ICM.

Given the level of anticipated retirements over the forthcoming years a small and sustained increase to training numbers is required and the specialty should be reviewed to monitor the impact of these changes.

Old Age Psychiatry:

The demand for Old Age Psychiatry is influenced by the ageing of the population with increasing prevalence of age related mental health problems e.g. dementia. There is an increasing recognition of other mental health problems and increasing complexity of mental health presentations, with patients having increased prevalence of dual diagnosis. The life expectancy of people with existing mental disorders is also lengthening, increasing demand for Old Age Psychiatry. It is estimated that 1:4 people will suffer from a mental illness at some point in their life-time and there is a continued drive towards providing more Mental Health within community settings and Primary Care, including earlier intervention, combined

with a drive toward provision of an 'ageless service' as patients transition between Adult and Old Age Psychiatry. Mental Health is key priority for Welsh Government.

Consultants in Old Age Psychiatry are on the Shortage Occupation List and Wales has an ageing workforce as explored in previous workforce plans. Several organisations are reporting difficulties in recruiting to Old Age Psychiatry within their IMTPs. Whilst there has been an improvement in recruitment to Core Psychiatry Training, the two dual accredited higher training posts (Adult and Old Age Psychiatry), approved as part of previous recommendation, were not been recruit to as part of the 2019 intake.

The Psychiatry sub group has continued to meet and has been undertaking work to explore and make recommendations on how to improve the recruitment into Psychiatry training. To date this has included:

- The continued focus on Psychiatry, and specifically Old Age Psychiatry, as part of the Train, Work, Live campaign.
- ➤ The National Psychiatry Student Conference was held in Cardiff in February 2019. The sub group worked with the student committee to ensure that there was a focus on opportunity to train in Wales and on research and developments in Psychiatry within Wales.
- A second year of the incentives has been made available for all Core Trainees to have one sitting of the MRCPsych membership examinations paid (paper A,B and the CASC) mirroring the incentive scheme in place for GP trainees. Work is underway to evaluate whether the availability of the incentive has impacted on trainees' decisions to train in Wales (the second year of trainees eligible for the incentive payment commenced training in August 2019)
- Work is ongoing to explore the experiences of those foundation doctors who have had placements in Psychiatry and to explore their perceptions of training in Psychiatry.
- Work is ongoing to explore medical students' perceptions of training in psychiatry and to identify recommendations to improve the chances that these students will go on to decide to train in psychiatry in Wales. This work is being led by a higher trainee in conjunction with Cardiff and Swansea University and the RCPsych.

Of note the fill rates for Core Psychiatry have increased incrementally each year following the introduction of these recommendations.

Paediatrics:

In January 2019, the Royal College of Paediatrics and Child Health (RCPCH) published the 2017 Workforce Census Overview as the first part of their RCPCH State of Child Health Reports with the focus on Wales published in May 2019. This report 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, secondary care as well as increases in paediatric A&E.

The South Wales Plan has seen Health Boards concentrating their inpatients units. This has been completed at Glangwilli Hospital for West Wales and from March 2019 paediatric inpatients for Cwm Taf Morgannwg UHB will have concentrated their paediatrics inpatients in Prince Charles Hospital and in North Wales the SURNICC has opened.

There is a move towards more part time working and less than full time training (LTFT) rates have increased across the UK with almost ¾ of UK trainees now being women, the proportion of trainees choosing to train LTFT is likely to increase further. The proportion of female consultants has also increased across the UK from 52% in 2015 to 54% in 2017. The RCPCH report found that there has been a 5.1% increase in Consultants in Wales, the lowest rate of increase across the 4 nations. In recent years there have been difficulties in filling training places in Paediatrics, and in 2018 the fill rate across the UK was 87.5%. In Wales the fill rates have improved and for round one of the 2019 recruitment we saw a fill rate of 100% for the first time in a number of years. There are, however, gaps in the training programme due to maternity leave and LTFT training. A number of MTI appointments have been made into Paediatrics across Wales, with overseas trainees appointed into training for a period of two years (MTI trainees do not take up a training placement on completion of the programme).

Work undertaken by the specialty, to consider training capacity if additional posts were allocated has indicated that there are training capacity issues if we were to increase the training numbers. Work is currently on going with Health Boards to explore which of them would like to expand their training posts in line with their local workforce requirements. Following expressions of interest from Health Boards to increase training posts across Wales the creation or conversion of fully funded Health Board posts will be explored in the first instance prior to future recommendations for additional funding to support further increases. This work is due to be completed by autumn 2019.

Community Sexual & Reproductive Health (CSRH):

Community Sexual and Reproductive Health was recognised as an independent specialty in 2010 and prior to this, training was via a sub specialty path in Obstetrics and Gynaecology. Consultants currently in post come from a variety of backgrounds, including O&G, Public Health and General Practice.

Whilst there is scope to diversify the workforce, with nurses in more recent years undertaking a wider range of practices including coil fitting, pressures on General Practice have impacted on this services. Consultant vacancies can be difficulty to recruit to, with one organisation reporting a recruitment difficulty in their IMTP this year, training schemes are popular.

Two trainees are due to gain their CCT in 2019 and two new recruits in the training programme are commencing in August 2019. The current workforce is younger and no additional consultant vacancies were reported by organisations. There is a need to undertake further work in forthcoming years to explore this specialty further alongside GUM.

Dermatology:

The ageing population, increased skin cancer rates (including melanoma) coupled with the development of newer therapies and an ability to treat is increasing demand for Dermatology across Wales. Dermatology as a specialty, relies on the ability to diagnose, which requires medically trained staff, however, it is possible to train the multi-disciplinary team to perform treatments post diagnosis and there is potential to develop the multi-disciplinary team to support the medical workforce. In Wales there have been successful developments in using tele-dermatology consultations and moving enhanced services for skin into the community setting.

The Dermatology workforce is ageing, with 34% of consultants aged over 50 and 12% over 60. Similarly the SAS workforce has 57% of its workforce aged over 50 and 14% over 60. A number of posts are also vacant across Wales or covered by locums. Whereas previously, many GPs developed a special interest in Dermatology, this is no longer the case and, coupled with the reduction in the numbers of GPs and GP trainees has impacted on Dermatology. There are emerging difficulties with retention in Dermatology in Wales with a proportion of trainees requesting inter-deanery transfers during their training. The training scheme in Wales has no difficulty in recruiting, however, across the UK recruitment into Dermatology training is highly competitive, which can mean that doctors training in Wales often have intentions to return to different geographical locations on completion of their CCT.

Following approval by the NHS Wales Chief Executives, a Dermatology Clinical Fellowship programme has been developed with the aim of enabling junior doctors to gain more exposure and training in Dermatology. It is hoped that this programme will lead to increased numbers of doctors choosing to remain as Specialty Doctors in Dermatology, progressing to Consultant posts via the CESR route or having gained extra skills and training that will enable them to be more competitive for training numbers. The Clinical Fellows are equivalent of ST3 for a period of 12 months and 6 posts have been created

Medical Microbiology:

Demand for Medical Microbiology is increasing with a noted increase in antimicrobial resistance (AMR), Healthcare Associated Infections (HCAI), increased complexity of infections, emerging infection threats and the move towards delivering healthcare in the community. The Welsh Government has signed up to the UK AMR Action Plan with health security becoming a greater public health priority whilst recognising that Health Protection/Infection Services are fragile.

There is a recognised national shortage of trained medical staff and these shortages are also present for nursing and scientific staff. There are currently a high number of vacant Consultant posts within the Wales Medical Microbiology establishment, with only approximately 71% of posts filled – if the RCPath guidelines are considered, this percentage rate would be lower.

There will be up to 5 retirements of Consultant Medical Microbiologists over the next 5 years and it is estimated that up to 10 trainees will complete CCT in the next 5 years, with 2 completing this year. Assuming full retention of these staff within Wales, this will not fill all the existing vacancies. Recruitment to training is currently not difficult within Wales however there are difficulties at a UK level.

Welsh Government have agreed with Public Health Wales (PHW) to invest in the Clinical Infection workforce and PHW has committed to employing an additional 12 Consultants in infection. Alongside these workforce changes, there are plans to increase the numbers of Consultant Clinical Scientists from the current 4 (plus one in training) by an additional 5 posts and to develop Biomedical Scientists with extended skills. PHW is also looking to appoint Physician Associates as part of the wider workforce changes.

To enable these workforce changes, it is proposed that training is expanded with programmes covering Swansea and North Wales to be developed to attract and retain trainees and future consultants into those areas of Wales. PHW have funded 2 new trainees from August 2019 at no financial impact to HEIW.

Radiology:

The recommendation in previous workforce plans was to increase to, and maintain an intake of 13 trainees per annum for three years. The last year of the three year recommendation was 2019/20 and all additional posts have been filled for the 2019 intake. Overall, the additional Welsh Government funding over the past 4 workforce planning rounds, plus funding from the Deanery, has meant that there has been an overall increase in trainees from 42 in July 2016 to 72 in August 2019 The average programme length is 5 ½ years therefore the first cohort of the additional trainees is likely to gain their CCT in 2022.

Demand for imaging continues to increase. Estimates are that demand for CT will increase by 33% and MRI by 31% and developments such as the single cancer pathway will increase demand for diagnostics. The recent Census conducted by the Royal College of Radiology has identified that whilst Consultant posts have increase since 2010 across the whole of the UK, Wales still has a lower proportion of Consultants per head of population than the rest of the UK. Overall the UK has one of the lowest proportion of Consultants per population than the rest of Europe.

The increase in demand for imaging is noted and the Business Case for the National Imaging Academy identified a need of 20 training posts, it is therefore recommended that the intake for 2020 is increased to 20 (previosulym13).