GIG CYMRU
NHS WALES

Addysg a Gwella Iechyd
Cymru (AaGIC)
Health Education and
Improvement Wales (HEIW)

Pharmacy Integrated Workforce Plan

Data Technical Document

Index

1. NHS Workforce Overview

Between 2015 and 2021 the workforce has increased in size year on year from 73,611 to 88,746, a 21% increase for the period (Source NHS Wales' Workforce Trends (as at 31st March 2021, Available at NHS Wales Workforce Trends (as at 31 March 2021) - Final (1).docx (live.com))

2. Data Specifications

This report contains information from various sources and describes what the profile of the pharmacy workforce, looks like, where possible. The report is limited to the pharmacy workforce providing NHS services, including contractor commissioned services.

3. Pharmacy Roles

Role	Description
Pharmacist	registrants with the General Pharmaceutical Council (GPhC)
Pharmacy technician	registrants with the General Pharmaceutical Council
Pharmacy assistants	non-registrants who have completed the required GPhC approved vocational qualifications suitable for their role in the medicines use process
Trainees	undertaking a GPhC accredited training programme which leads on to one of the above roles

4. Data Sources

a) General Pharmaceutical Council (GPhC) Register

What's available?

All registered pharmacists and pharmacy technicians are listed on a searchable public register which is updated weekly.

An illustration of the pharmacist fields are below

Surname	Forenames	Postal Town	Annotations[1]	Superintendent[2]	GPhC registration number[3]	Status[4]	Expiry date of registration[5]	Fitness to practise information?[6]
Surname	First Name	CARDIFF	Independent prescriber, Supplementary prescriber	Name of company where superintendent	2000000	Registered	31/12/2019	

Pharmacists may be annotated as prescribers and superintendent.

An illustration of the pharmacy technician fields are below:-

Surname	Forenames	Postal Town	GPhC registration number[1]	Status[2]	Expiry date of registration[3]	Fitness to practise information?[4]
Surname	Forename	Swansea	5000000	Registered	30/11/2019	

There are no annotations for pharmacy technicians.

Who can access information?

GPhC offer a data subscription service. This is an agreement that must be signed each year to obtain the subscription. Payment for the service is £600 for the All Registers. NHS Wales Shared Services Partnership Primary Care Services and HEIW have an annual subscription.

Over 8 years ago Welsh Government asked NWSSP to create an All Wales Community Pharmacy Database. NWSSP run checks between its database and GPhC data to verify premises registrations, superintendent registrations and individual pharmacist registrations against accreditations to provide services for monitoring compliance with the community pharmacy contract.

HEIW uses GPhC data to verify individuals as registrants who are entitled to access free Continuing Professional Development resources from HEIW. HEIW also has a Memorandum of Understanding with GPhC for sharing trainee and designated supervisor data relating to the Pharmacist 'Foundation Training Year' and assessment outcomes.

Limitations
Postal towns of registrants are published, but are often a home not a work address. Previous work on pharmacy graduates and newly qualified pharmacists has suggested cross boarder flow between England and Wales are at similar levels. Therefore, using postal town as an indication of the number of registrants in the nation is reasonable as a similar number of registrants will work as pharmacists on the opposite side of the border from where they work.

Figure 1 - Distribution of the pharmacy workforce providing NHS services
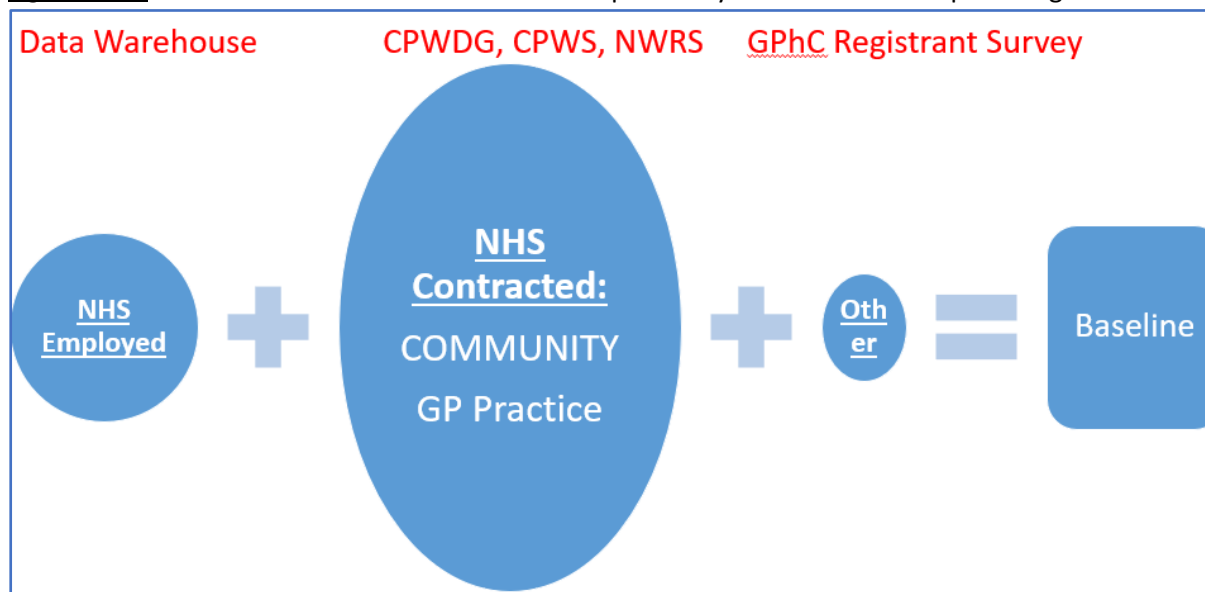
b) Electronic Staff Record – NHS employed

What's available?

A large number of mandatory fields are recorded for all NHS employed staff in England and Wales making this a comprehensive human resources workforce management tool for NHS employed pharmacy teams. The tool has a range of functionality with great potential for reporting and analysis to further inform workforce planning.

The quality of the pharmacy data is relatively good due to an established 3 yearly cycle of data cleansing between pharmacy leads and workforce information managers. In 2020 the Chief Pharmacists group introduced a limited list of job titles for use in ESR to improve data quality and lay the foundations for advanced reporting (see appendix). Implementation has been 70% due to being unable to change local custom and practice in 3 South East Wales Health Boards. In that area organisations have prioritised using the job title field to provide information in a single place for payroll teams, this practice is not

To keep the dataset clean in future, without the need for periodic cleansing exercises, the HEIW data analytics team built the Pharmacy Data Checker Tool which highlights compliance with the data standards and is automatically updated from ESR Data Warehouse monthly.

Since summer 2022 there are now automatic weekly updates of individual's registration status and alerts to managers where this had lapsed.

ESR fields that record Independent Prescribing status of pharmacists are also automatically populated from the GPhC register.

Figure 2 - Pharmacy Data Checker Tool. Screenshot of Compliance with Pharmacy Data Standards
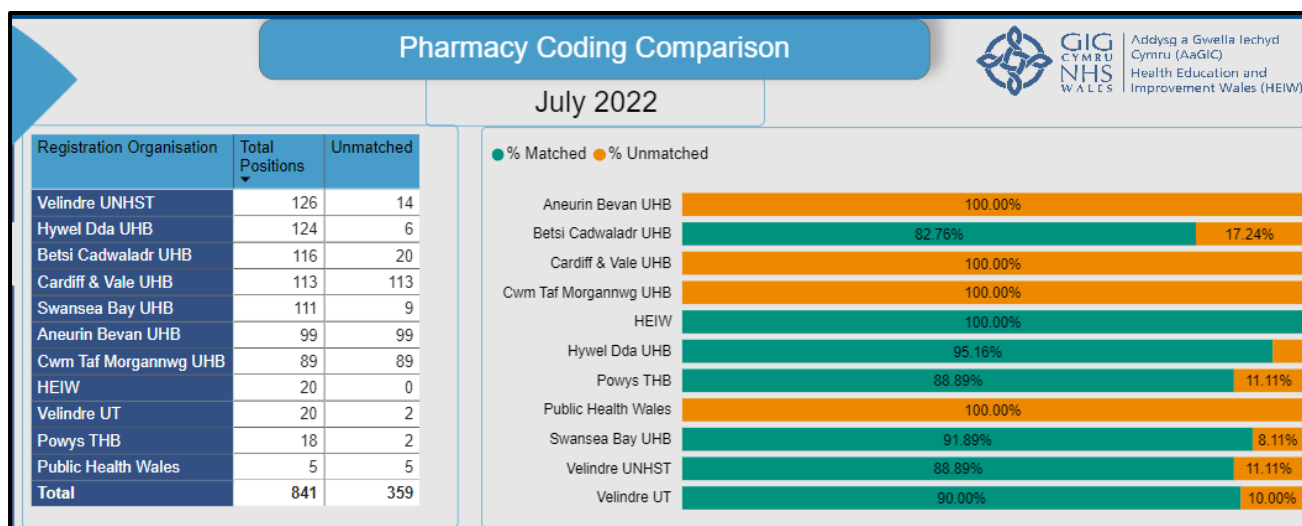
Who can access the information?

Individual NHS employers and managers can access their own data locally and generate reports using a Business Intelligence function, 'Power BI'. Reports are available utilising the fields shown in Figure 2 Anecdotally the pharmacy team rarely see or review their own data.

Figure 3 Electronic Staff Records Fields available for utilisation in Reporting and Workforce Planning

• Headcount, FTE • Participation rate • Grades / Skills mix • Job role	• Occupational Job role • Gender • Staff group • Age

HEIW can draw All Wales pharmacy data from the ESR Data Warehouse. The database is 2 months behind the live data in ESR but can be used to provide show trends in the workforce going back to 2007. The HEIW Data Analytics team have worked with pharmacy to prepare a Pharmacy Workforce Dashboard

Currently, ad hoc ESR data requests need to be logged, planned and prioritised by the Data Analyst team. Due to the imminent publication of the pharmacy workforce plan, HEIW Analytics have prioritised using pharmacy to pilot production of a protype ESR Dashboard, which will eventually be rolled out to all groups.

The target is that by the end of the financial year 2022-23 a visual representation of trends in the following data will be available for the NHS employed pharmacy workforce. Agreement will need to be reached around how openly the dashboard can be shared.

Limitations

The ESR shows where there are staff in post but there is a lack of staff vacancy data.

Figure 4 and 5 – Screenshots of an early prototype of the NHS Employed Pharmacy Workforce Dashboard

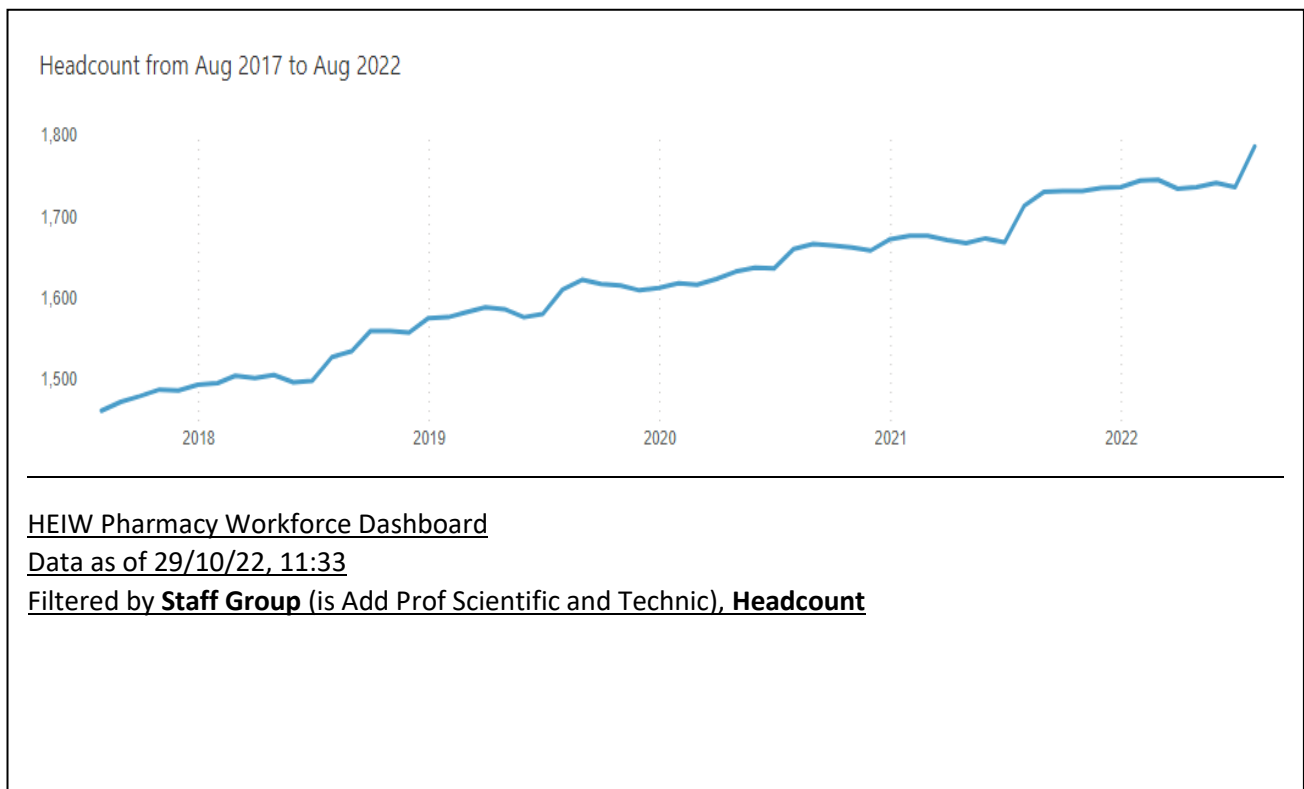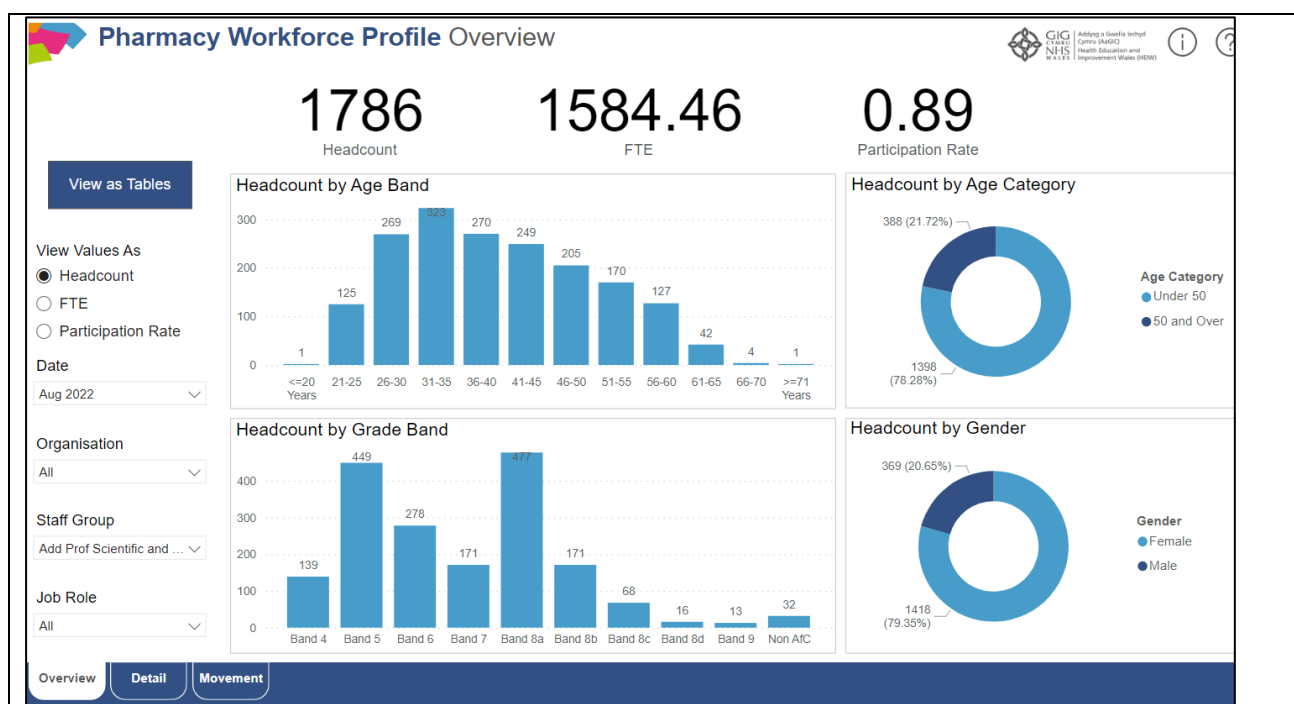*Figure 4* – NHS Employed Pharmacy Workforce 5 Year Trends

HEIW Pharmacy Workforce Dashboard
Data as of 29/10/22, 11:33
Filtered by **Staff Group** (is Add Prof Scientific and Technic), **Headcount**

Figure 5: 2022 Pharmacy Workforce Data picture

c) Wales National Workforce Reporting System (WNWRS)

Link - Wales National Workforce Reporting System

What's available?

    i)   General Practices

The Welsh Government commission NHS Wales Shared Services Partnership to administer and oversee development of this digital Primary Care Workforce Tool. Its original purpose in 2019 was to provide the necessary workforce information required to provide cover for General Medical Practice Indemnity has now also enabled better workforce planning. Pharmacists and pharmacy technicians working in general practice are a small but growing number and they are captured within the tool.

Some high level national and practice level reports are available at the touch of a button and include pharmacists, and other more specific reports can be run by the local team from requests which are logged and prioritised.

Who can access?

This digital tool is accessible to anyone with an email address ending *@wales.nhs.uk* to view.

Limitations

Pharmacists are included in the category of staff described as 'Direct Patient Care' and can be viewed in some of the standard reports in the tool. Pharmacy technicians are included in the system but are not visible to standard users of the tool.
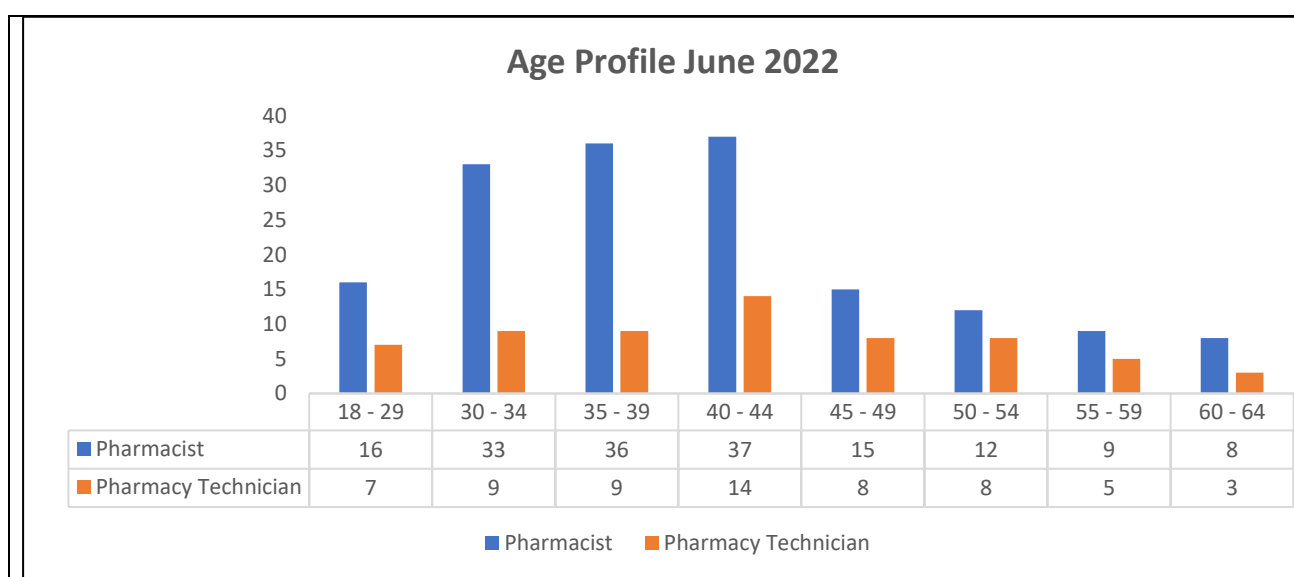
For specific data to support integrated pharmacy workforce planning, requests need to be made to the central team to be assessed for priority against other requests. For example, the table below shows the growing

number of pharmacy professionals working in general practice in Wales over the last 4 years since data collection began.

Figure 6 – General Practice Pharmacy Workforce 3 year trend (data collection commenced in 2019)

Pharmacy Professionals in General Practice

Source: Wales National Workforce Reported System

Figure 7 - Demographic of pharmacy workforce in general practice

Age Profile June 2022

	18 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Pharmacist	16	33	36	37	15	12	9	8
Pharmacy Technician	7	9	9	14	8	8	5	3

ii) Community pharmacies

What's available?

Wales has 709 privately owned community pharmacies providing NHS contracted services through 155 (Dec 2022) different employers. Employers range in size from small independent contractor to large multi-national company. There has been a shift in the last decade from a position where workforce information was considered 'business sensitive' with a reluctance between employers to pool data to provide intelligence to a

more balanced position. As pharmacy professionals often move between sectors of practice, the consensus has developed that workforce planning needs to be undertaken for the whole NHS system.

In 2019 payment for the Quality Survey in the Community Pharmacy Contractual Framework was used as an initial lever to drive participation in the first HEIW Community Pharmacy Workforce Survey 2019. One hundred percent participation was achieved and the first manually collected data on the community pharmacy workforce was published https://heiw.nhs.wales/files/pharmacy-report-final/

The survey report recommended that the feasibility of a single workforce tool for NHS Wales contractors should be mandated through contracts and align with job roles in the Electronic Staff Record for analysis and modelling.

In September 2022 a pilot expansion of the WNWRS to include 20 community pharmacy employers began and will expand further to include all community pharmacies from April 2023.

<u>Who can access?</u>

This remains to be established.

<u>Limitations</u>

The level of alignment of data between ESR and NWRS remains to be seen. Recommendations have been made by HEIW but the fields for inclusion in WNWRS in the pilot have been negotiated between Community Pharmacy Wales and NHS Wales Shared Services Partnership.

d) National recruitment via Oriel

<u>What's available?</u>

National Recruitment of Trainee Pharmacists to Foundation Training posts across the UK happens annually via a centralised system hosted by the National Recruitment Office (NRO) in Health Education England.

Each recruitment round generates data on number of applications at each stage of interviews and compares fill rates across each home nation. The NRO has a duty to look at how those with protected characteristics perform in the selection process.

HEIW have been able to access more detailed information in relation to the relative popularity of Welsh programmes and gain access to data about the number of trainees preferencing Wales training posts in their Top 30.

<u>Who can access?</u>

Requests for data are limited to the Head of Foundation contacting the NRO.

<u>Limitations</u>

Receipt of reports depends on the workplan and workload in the NRO as to how responsive they can be to Wales request

e) HEIW Education to Employment Pipeline

What's available?

Historic data from academic year 2017 to current has been collected for all HEIW centrally funded trainees from recruitment into programmes, followed through to employment in the workforce in Wales.

Who can access?

The tool is currently in a prototype version and is accessible by the HEIW Data Analytics team.

Limitations

The foundation of the current tool is an Excel Workbook which requires manual updates every quarter by three HEIW pharmacy training teams.

Using a combination of exit surveys, local intelligence and periodically searching registration numbers in ESR are currently haphazard methods for detecting whether trainee have been retained in the Workforce in NHS Wales and processes need systemising.

Figure 8 – Screenshot example of the Education to Employment Pipeline Prototype (with incomplete data)
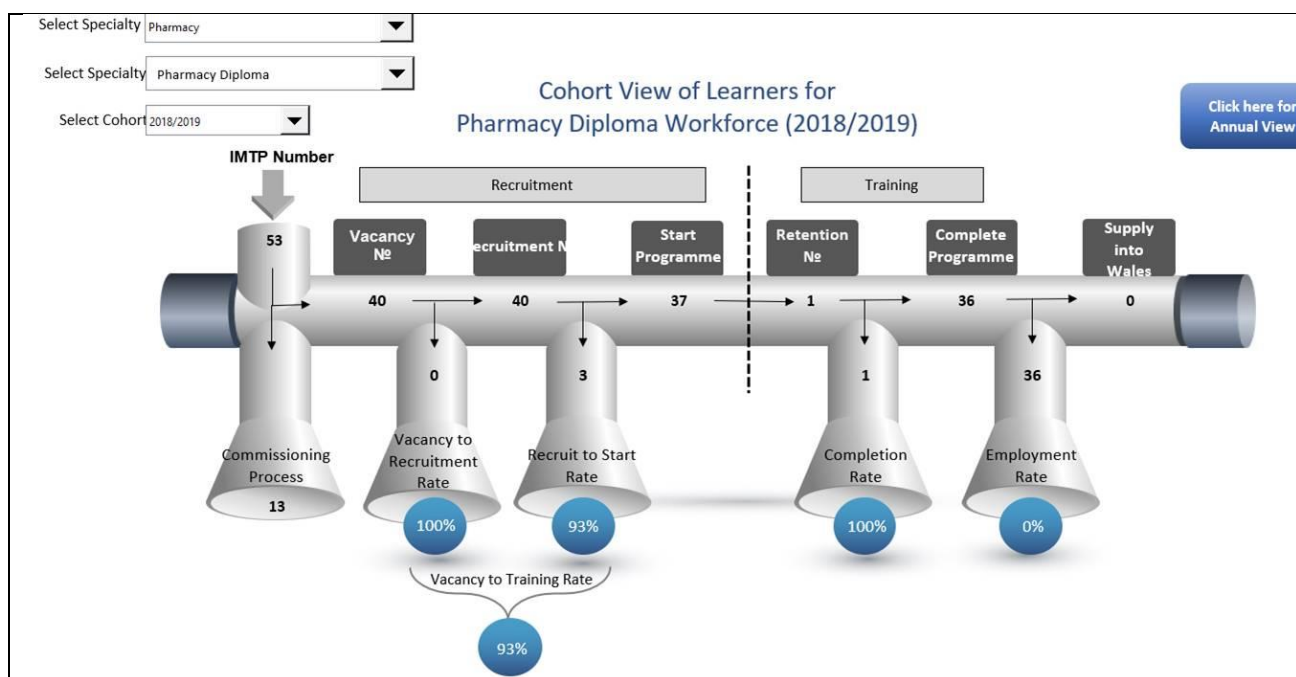
f) Workforce Mapping Data

What's available?

Between 2013-2018 Chief Pharmacists developed an annual standardised data collection of various categories of NHS pharmacy services. The data could be manipulated to produce workforce pictures such as staff

hours/costs per staff type per service category, staff costs per service category per site, or workforce changes year on year.

For 2019 the data collection was narrowed to support the Welsh Government Transforming Access to Medicines (TrAMS) project, specifically in relation to the pharmacy technical services workforce (sterile and non-sterile production). The average times that pharmacy staff spend undertaking the 'inclusion activities' to deliver the pharmacy technical services workload in Wales, in a notional "typical week" is recorded.

The historic data may provide a useful baseline for comparison as provision of hospital pharmacy services change.

Who can access?

The historic data currently sits with the Pharmacy Deanery and can be accessed by the Pharmacy Dean, Head of Pharmacy Workforce Planning and the Pharmacy Data Officer.

Limitations

The annual paper-based data collection was time consuming and there was minimum analysis and utilisation of the data.

5. Supply

There are a number of potential sources of information that could be used to inform the supply data for pharmacy workforce planning. Currently there is no strategic approach to collating and analysing this data.

Pharmacists

Data	Source
Schools of pharmacy that feed Wales for Trainee Pharmacists	Oriel and HEIW Foundation Team
Total number of MPharm students for next 5 years	Pharmacy Schools Council
Total number of A level students for next 5 years	Government Education Department
Number of GCSE students that go on to do Chemistry annually	Government Education Department
Number of students undertaking pharmacy access/foundation programmes	Pharmacy Schools Council

Pharmacy Technicians

There are more flexible entry points

Data	Source
Source of pre-registration pharmacy technicians, school leavers, A level, graduates, mature students	Head of Pre-registration Pharmacy Technician team

Pharmacy Assistants

These posts are Agenda for Change Salary scale Band 2-4 and in community pharmacy they are minimum wage entry level roles. It may be of value to attraction and recruitment to show numbers that progress into professional roles from the data sources above for pharmacy technicians and pharmacists.

An additional information source could be Schools of Pharmacists relating to types of students enrolling on Foundation Pharmacy Programmes for entry to the MPharm degree.

6. **Demand**

Currently there is no strategic approach to forecasting future demand for pharmacy roles in NHS Wales. The following sorts of information would be important in this work.

Data	Source
Number of community pharmacies	WNWRS
Number of general practices	WNWRS
Number of areas of work for pharmacy	ESR
Future service models	Hospital Pharmacy Review
Vacancies	Manual capture
Number of cluster pharmacy roles	Manual capture
Trends in working patterns	Analysis of participation rates over time in NWRS and ESR
Trends in retention from national training programmes	Education to Employment Pipeline

Limited List of 12 Pharmacy Job Titles for Electronic Staff Record, Agreed by Chief Pharmacist Group Wales Sep 2020 - Revised Nov 2020

From this limited list of 12 Job Titles there are 25 possible combinations to describe the whole pharmacy team. These are the only permissible combinations of Job Title with Occupational and Band Codes. Any combinations outside of these should be queried, with any validated developments being added to this guidance through the **HEIW Pharmacy Workforce Group**.

Number	Job title	Occ Code	Band code	AfC Band	Guidance
1	Pharmacy Assistant	S9P	XR02	2	Work under supervision of a pharmacy professional in a medicines supply role. Unregistered but completion of GPhC approved training is mandatory for role.
2			XR03	3	
3			XR04	4	
4	Pre-registration Pharmacy Technician	S8P	XR04	4	Undertaking a GPhC approved training programme, typically 2 years, leading to registration as a pharmacy technician.
5	Pharmacy Technician	S4P	XR04	4	GPhC protected title. Includes 'Lead Pharmacy Technician' roles if they are Band 5
6			XR05	5	
7	Senior Pharmacy Technician	S4P	XR06	6	Management responsibility for staff or a service area e.g. dispensary or homecare services manager. May include 'Lead' pharmacy technician titles where this is linked to operational service delivery for a service area.
8			XR07	7	
9			XR08	8a	
10	Advanced Pharmacy Technician	S4P	XR06	6	These are any clinical or specialist roles where pharmacy staff are integrated or provide medicines leadership within a team and have in depth knowledge of that area e.g. renal services or cardiac services. May include 'Lead' pharmacy technician titles where these are for a clinical area.
11			XR07	7	
12			XR08	8a	
13	Pre-registration Foundation Pharmacist	S3P	XR05	5	GPhC dictate that the term 'Foundation' will replace the term 'Pre-registration trainee pharmacist' from August 2021. The terminology in Wales for this 52 week GPhC training programme leading to registration as a pharmacist has been updated.
14	Post-registration Foundation Pharmacist	S2P	XR06	6	Entry grade pharmacists are developing to become proficient practitioners. This includes HEIW centrally funded Cardiff University Diploma Pharmacists.
15	Pharmacist	S2P	XR07	7	Developing further experience and proficiency towards advanced practice.
16	Advanced Pharmacist	S2P	XR08	8a	Includes hospital pharmacists who are integrated within a clinical team with expert knowledge of that speciality. May also be suitable for primary care or GP practice pharmacist job titles which are very clinically orientated.
17			XR09	8b	
18			XR10	8c	
19	Principal Pharmacist	S2P	XR09	8b	Management of staff or a pharmacy **service area** e.g. patient services or education and training lead in a hospital. Includes 'Pharmacist Team Managers' in Primary Care with responsibility for managing other pharmacists and pharmacy technicians.
20			XR10	8c	
21			XR11	8d	
22	Consultant Pharmacist	SAP	XR10	8c	Protected NHS title with post and appointee externally approved by Royal Pharmaceutical Society
23			XR11	8d	

24	Director of Pharmacy Services	S0P	XR11	8d	Only one service Director post per Health Board. Others to be assigned Principal Pharmacist in ESR
25		S0P	XR12	9	

Summary Table of Pharmacy Workforce Data Sources

Data Source	GPhC Number	Head Count	FTE	Vacancies	Age	Sex	Job Title	Job Role	Band/ Super- intendent	IP status	ACPT	Level (Foundation, Advanced)	Welsh Language Competency
All pharmacists and pharmacy technicians with a postal address in Wales, all sectors													
General Pharmaceutical Council Register	✓							✓	Super- intendent	✓			
All managed sector employees (NHS Employed)													
Electronic Staff Record (ESR)	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	Consultant Pharmacists are identifiable	✓
Primary Care Workforce													
National Workforce Reporting System – General Practice	✓	✓	✓	✓	✓	✓		✓					
Community Pharmacy Workforce Survey 2019		✓	✓	✓				✓		✓	✓	NESA accreditations	✓
National Workforce Reporting System – Community Pharmacy													
HEIW Workforce mapping													
2018 Workforce mapping data		✓	✓	✓	✓	✓		✓	✓	✓	✓ (also MM)	Consultant pharmacists	

Abbreviations

FTE   Full Time Equivalent

ACPT   Accredited Checking Pharmacy Technician

MM   Medicines Management training pharmacy technician