

United Kingdom



Pharmaceutical Assistant's and Technician's **Work Placements**

Birmingham Metropolitan College



Education and Culture DG

Lifelong Learning Programme

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Pharmaceutical Assistant's and Technician's Work Placements in United Kingdom

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1. Introduction

Dear Student

◆ This information package is designed to give you an overall view of vocational education and work in the pharmaceutical sector in England, United Kingdom, together with some useful background information related to legislation on and dispensing of pharmaceuticals. We hope that the package will help you in preparing for your period of practical training in our country. On reading this material package you may find both differences and similarities in pharmaceutical work in comparison to your country. However, due to your position as a foreign student at your placement address your duties may be limited to those you would be allowed to carry out in your own country.

From a learning viewpoint it might be beneficial for you to go through both your own country's material package and that of your destination country and to compare the two.

In Chapter 2 you will find a general description of our country's education system and more information on how pharmaceutical training is provided in our country.

Chapter 3 gives an overview of the structure of the pharmaceutical sector and how it is organised.

Chapter 4 defines how pharmaceutical professions are defined and their core expectations. This chapter focuses on the services that are available for foreign students as placement opportunities in our country. The sub-chapter also include descriptions of daily work which are intended to assist you in defining the work you will encounter during your practical training period. These “snap shot” descriptions have been written by students during their practical training periods.

Chapter 5 describes the most relevant legislation governing the pharmaceutical sector in England.

Chapter 6 has some links to help you with search for more detailed information.

Chapter 7 describes some specific terms and acronyms.

We hope you will find this information package useful and we wish you every success with your practical training period in our country!

A warm welcome to England!

◆ During your stay we hope you will have a broad range of experiences that will compliment your practical studies and work placement. Most of all we want your experience to enhance your current studies and that you enjoy your time with us.



The capital city is London, made up of a population of 8,174,100 and was host to the 2012 Olympic Games.

Other major cities include Birmingham, famous for its role in the industrial revolution; Manchester renowned for its textile industry and of course football! Historical cities include the Roman cities of Bath and York that date back to 60AD and are now recognised as World Heritage Sites.

The currency of England is the pound sterling (£) and 'God Save the Queen' is the national anthem which is used by many of the Commonwealth

England is a country that is reaped in history, culture and has played a major part in influences many different cultures around the world.

At the start of 2012 the population of England was approximately 62,640,000.



States. Our patron saint is St. George who lends his name to the National Flag – The St. George Cross. St George is believed to have been a Roman Soldier who is most famous for slaying Dragons.

The highest mountain in England is Scafell Pike (978 Metres) set in the Lake District National Park. National sports include Football, Cricket and Rugby with over 15 million people participating in active sports every week.

The purpose of the information pack is to provide you with an insight into how Pharmaceutical Services are delivered and planned in England. A brief history will be used to introduce this sector and further information will explain the day to day challenges experienced by the Pharmaceutical industry and those employed in this medical professional area.

To fully understand the Pharmacy technician provision in England we have included descriptions and responsibilities of all job roles in this professional vocational career. There will be similarities to your own practices in your home countries however there will be differences for you to investigate and research. Overall this will support you when you take up your work placement in England.

Vocational training is a strong element of this information source and it informs you of the academic progression that is available in England for individuals

wanting to register with the General Pharmaceutical Council as Pharmacy Technicians.

Educating medical professionals is a challenging process regardless of which European country you are from. Maintaining professional standards is the most important factor in ensuring the health and safety of the general public. In England the recruitment of learners onto Pharmaceutical programmes continues to be strong which is good for the profession in the coming years.

We encourage you to use the information in this pack to help you with your studies and hope that you will enjoy your time in England.



**Royal
Pharmaceutical
Society**
of Great Britain

2. English Educational System

◆ The English Educational system is organised by a governmental department called the Department of Education. This is led by the Secretary of State for Education. Nine principal local authorities are responsible for education within their allocated region. These are subdivided into a further 193 authorities that have varying responsibilities for education.

As part of a new approach to education the government now requires learners to stay in full time education up to the age of 18. Educational development is banded by learner age and starts with Nursery provision, ages 3–4; Primary provision, ages 4–11; Secondary education 11–18.

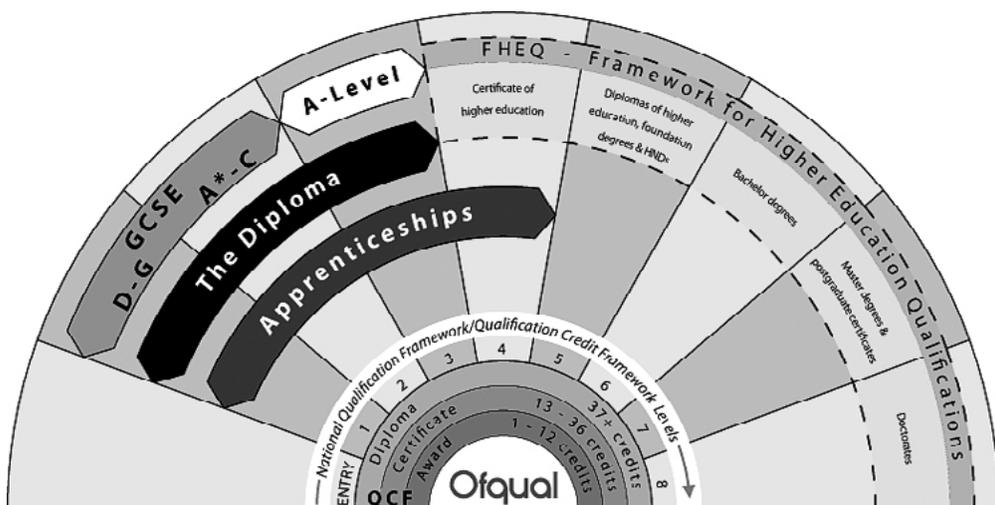
The academic development is assessed at various points in a learner's journey that ends with a GCSE examination at the age 16yrs. Students can then choose to enter into Further education at colleges or stay at school in a Sixth Form. Colleges provide a varied range of vocational courses and apprenticeships. They also provide education for those who want to study GCE A levels. Sixth Form departments tend to focus on GCE A levels only.

The quality assurance of pre-higher education in England is OFSTED. This organisation inspects educational organisations including pre-school environments



Comparison of Academic Levels

The diagram below shows the bands of education that exists in the English System.



and assesses the quality of teaching and learning. Reports are published in order for all stakeholders to assess the performance of schools and colleges.

BIS | Department for Business Innovation & Skills

Higher education is part of a different government department. The Department for Business, Innovation and Skills (BIS) has its own ministerial responsibilities and team. This department is responsible for the allocation of higher education student budgets and targets.



Amongst other roles including financial responsibility of higher education programmes is monitored by a council called HEFCE – Higher Education Funding Council for England. The allocated budget from the BIS is provided to universities in order for the institution to allocate student numbers to each faculty.

Adult education (19+) is supported and funded by The Skills Funding Agency and is a link organisation to the **Department for Business, Innovation and Skills (BIS)**.

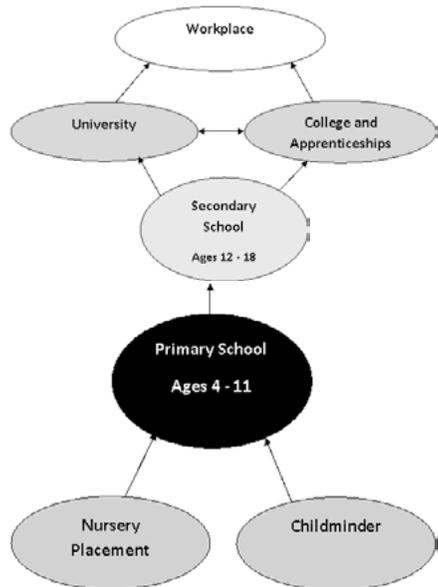
The development of skills for adults utilises 220 Further Education colleges,

900 independent training providers and 2,500 training organisations.



The allocation of funding through this department is based upon sector need and the performance of courses. It also regulates Apprenticeships that is a government policy for encouraging learners to engage with employment and education.

Flowchart of Academic Development in England



2.1. Pharmaceutical Education

◆ The General Pharmaceutical Council (GPhC) accredits courses for pharmacy assistants and technicians in the UK. Courses are accredited by the GPhC when all process involved in the qualification have been quality assured.

Pharmacy assistants are required to obtain a level 2 qualification and technicians need level 3 qualifications. Below is a table of accredited qualifications within the UK.

<i>Accreditation Title</i>	<i>Level of Qualification</i>	<i>Course provider / awarding body</i>
Dispensing Assistants Qualifications	2	City and Guilds Edexcel Scottish Qualifications Authority (SQA)
Dispensing Assistant Courses	2	Boots UK Buttercups Training UBM Medica (Chemist and Druggist) Communications International Group (CIG) Healthcare Partnership National Pharmacy Association Scientia Skills LTD
Medicines Counter Assistant Courses	2	Boots UK Buttercups Training UBM Medica (Chemist and Druggist) Media Pharm National Pharmacy Association Scientia Skills LTD
Pharmacy Technician Qualifications	3	City and Guilds Edexcel Scottish Qualifications Authority (SQA)
Technician Knowledge – Based Courses	3	Buttercups Training National Pharmacy Association

2.2. Qualifications and Curriculum Contents

Pharmacy Assistants:

Pharmacy assistant courses have no minimum entry requirements. Levels of Maths and English may be assessed prior to commencement of the qualification / course depending upon the provider.

All courses enable learners to gain level 2 qualifications and are mapped to the Quality Credit Framework (QCF) and agreed National Occupational Standards (NOS). Courses are delivered in a variety of ways and require learner's to be working within a pharmacy setting. Courses are delivered through the accredited course providers and awarding bodies in the following ways:

- Knowledge qualifications / courses provided at colleges or via distance learning

- Competence based qualifications / courses assessed within the workplace
- Knowledge Qualifications / courses:

Learners are required to undertake 180 guided learning hours and obtain 30 learning credits to obtain this qualification. The award consists of 3 mandatory units and 7 optional units (of which learners must complete a minimum of three to obtain their qualification). The qualification is delivered and completed in a six month period.

Below is an example of the qualification taken from the Edexcel BTEC level 2 Certificate in Pharmaceutical Science (QCF).

<i>Unit</i>	<i>Mandatory Units</i>	<i>Credits</i>	<i>Unit Aim</i>
1	Communicating with Pharmacy Customers	5	This unit will ensure that the learner will have the necessary knowledge and understanding to be able to communicate effectively with pharmacy customers
2	Law, Regulation, Health and Safety in Pharmacy	5	This unit will ensure that the learner will have the necessary knowledge and understanding to be able to carry out their pharmacy job role lawfully and safely
3	Working in the Pharmacy Team	5	This unit will ensure that the learner will have the necessary knowledge and understanding to be able to function as a productive member of the pharmacy team.

<i>Unit</i>	<i>Optional Units</i>	<i>Credits</i>	<i>Unit Aim</i>
4	Ordering and Issuing Stock in the Pharmacy	5	This unit provides learners with knowledge of the importance of efficient, safe stock management when ordering and issuing stock
5	Receiving, Storing and Maintaining Stock in the Pharmacy	5	This unit provides learners with knowledge of the importance of efficient, safe stock management when receiving, storing and maintaining stock
6	Preparing for and Manufacture of Aseptic Products	5	The unit will help the learner develop the necessary knowledge and understanding to be able to work safely in an aseptic unit
7	Assisting in the Preparation, Manufacture and Assembly of Medicinal Products	5	The aim of this unit is to provide the learner with the knowledge to understand the processes and procedures required for assisting in pharmacy manufacturing
8	Selling Over the Counter Medicines in the Pharmacy	5	This unit provides the knowledge required to assist with the sale of over the counter medicines and the provision of information and advice on symptoms, products and healthcare
9	Processing a Prescription	5	This unit provides learners with knowledge of processing prescriptions
10	Assemble Prescriptions Safely	5	This unit aims to provide learners with knowledge and understanding required for assembling prescribed items safely

Competence Qualifications / courses:

Learners are required to obtain 20 credits for this qualification. The award consists of 3 mandatory units and 13 optional units (of which learners must complete a minimum of four to obtain their qualification). The qualification is

completed within the work place and assessed over a twelve month period. On the next page is an example of the qualification taken from the Edexcel level 2 NVQ Certificate in Pharmacy Service Skills (QCF).

<i>Unit</i>	<i>Mandatory Units</i>	<i>Credits</i>	<i>Unit Aim</i>
001	Assist with the provision of a pharmacy service to meet individuals' needs	3	The aim of this unit is to provide learners with the knowledge and skills needed to deal with individuals' needs and provide information and advice to satisfy their requirements. The unit also focuses on how to deal with instances of day-to-day complaints.
002	Ensure your own Actions Reduce risks to Health and Safety	2	This unit is about health and safety in your day to day work. This includes identifying and dealing with risks and hazards in your workplace
003	Contribute to the effectiveness of teams	3	The aim of this unit is to introduce learners to the skills and knowledge that will ensure that they contribute to the effectiveness of teams. The unit also addresses time management, legislations and policies
<i>Unit</i>	<i>Optional Units</i>	<i>Credits</i>	<i>Unit Aim</i>
4	Assist in the sale of medicines and products	8	This unit enables the learners to competently sell over the counter medicines and products in a pharmacy setting
5	Assemble prescribed items	3	The aim of this unit is to provide the learner with the skills needed to assemble prescribed items accurately and safely whilst applying knowledge of the legal, ethical and health and safety requirements that affect this activity

6	Assist in the Issuing of Pharmaceutical Stock	4	This unit will enable the learner to assist with the issue of pharmaceutical stock and know why stock must be issued correctly
7	Assist in the manufacture and assembly of medicinal products	7	The aim of this unit is to provide the learner with the knowledge and skills needed to assist in the manufacture and assembly of medicinal products
8	Prepare aseptic products	10	This unit introduces learners to the legislation and policies around the preparation of aseptic products. The aim of this unit is to provide the learner with the skills needed for the preparation of aseptic for both dispensing and manufacturing
9	Prepare documentation, materials, components and other items for the preparation of aseptic products	6	The aim of this unit is to provide the learner with the skills needed to ensure that documentation, materials and other items are correctly Prepared prior to the preparation of aseptic products
10	Assist in the preparation of documentation, materials and other items for manufacture and assembly of medicinal products	10	The aim of this unit is to provide the learner with a basic understanding of health and safety procedures, including decontamination. The learner will acquire the skills needed to assist in the preparation of documentation and material for the manufacture and assembly of medicinal products
11	Assist in the issuing of prescribed items	3	This unit will enable the learner to correctly issue prescribed items to individuals. The learner will work within current regulatory and ethical frameworks

12	Receive prescriptions from individuals	3	The aim of this unit is to provide the learner with skills and knowledge needed to effectively receive and process prescriptions that are presented at the pharmacy before they are passed on to the dispensing process
13	Receive Pharmaceutical Stock	3	This unit enables learners to receive and store pharmaceutical stock. This unit requires learners to show that they understand current legislation and good practice when receiving pharmaceutical stock
14	Maintain pharmaceutical stock	3	This unit enables learners to understand how to maintain pharmaceutical stock and storage areas. Learners will need to show that they can accurately carry out stock checks
15	Undertake an in-process accuracy check of assembled prescribed items prior to the final accuracy check	4	This unit enables learners to have the skills to check their own dispensing work prior to the final accuracy check
16	Order Routine Pharmaceutical Stock	3	The learner will be able to identify ordering requirements, accurately completing all necessary documentation

Pharmacy Technicians:

Pharmacy technician courses entry requirements vary depending on the course provider. The General Pharmaceutical Council (GPhC) set the following guidelines, four GCSEs at grade C or above, including mathematics, English language, science and one other subject.

Learners are required to obtain the following in order to register with the GPhC as a Pharmacy Technician. One of the approved GPhC knowledge qualifications, one of the approved GPhC competency qualifications and provide evidence of having completed the qualifying periods of work experience. Details for registration require-

ments should be checked by the learners at www.pharmacyregulation.org/ prior to commencement of their programmes and work placements.

All courses enable learners to gain level 3 qualifications and are mapped to the Quality Credit Framework (QCF) and agreed National Occupational Standards (NOS). Courses are delivered in a variety of ways and require learner's to be working within a pharmacy setting. Courses are delivered through the accredited course providers and awarding bodies in the following ways:

- Knowledge qualifications / courses provided at colleges or via distance learning

- Competence based qualifications / courses assessed within the workplace

Knowledge Qualifications / courses:

Learners are required to undertake 720 guided learning hours and obtain 120 learning credits to obtain this qualification. The award consists of 19 mandatory and is delivered and completed in two years.

Below is an example of the qualification taken from the Edexcel BTEC level 3 Diploma in Pharmaceutical Science (QCF).

<i>Unit</i>	<i>Unit Title</i>	<i>Credits</i>	<i>Unit Aim</i>
1	Chemical Principles for Pharmacy Technicians	5	The aim of this unit is to give learners the underpinning knowledge of the fundamental principles of chemistry needed for the understanding of pharmaceutical concepts
2	Biological Principles for Pharmacy	5	The aim of this unit is for learners to develop knowledge of biological principles applicable to pharmacy. This unit will give the learner knowledge and understanding of the basic structure and functions of biological chemicals
3	Microbiology for Pharmacy	5	The aim of this unit is to give learners an understanding of the relevance of microbiology to pharmacy

4	Human Physiology for Pharmacy	10	This unit aims to provide the learner with a broad knowledge of the structure and function of the human body as a basis for learning about the use of medicines
5	Action and Uses of Medicines	10	This unit provides learners with basic information and concepts to help them understand how medicines work. It relates physiological function with disease and eventual treatment to help learners with their work in the Pharmacy
6	Gastrointestinal and Nutritional Medicines	5	This unit examines the main medicine categories and their actions in the treatment of gastrointestinal, nutritional and blood disorders
7	Cardio-Respiratory Medicines	5	This unit examines the main medicine categories and their actions in the treatment of cardiovascular and respiratory disorders
8	Central Nervous System Medicines and Anaesthesia	5	This unit examines the main medicine categories and their actions affecting the central nervous system
9	Infections, Immunological Products and Vaccines	5	This unit will provide learners with an understanding of the main medicine categories, including immunological products and vaccines used in the treatment and prevention of infections
10	Endocrine and Genito-Urinary Medicines	5	This unit examines the main medicine categories and their actions in the treatment of endocrine genitourinary disorders
11	Malignant Disease, Immunosuppressive and Musculo-skeletal Medicines	5	This unit aims to provide learners with knowledge of the action and uses of drugs in the treatment of malignancy, immunosuppressive and musculoskeletal disorders

12	Eye, Ear, Nose and Dermatological Medicines	5	This unit examines the main medicine categories and their actions in the treatment of disorders of the eye, ear, nose, throat, skin, hair and nails
13	Community Pharmacy Practice	5	This unit provides the knowledge required to assist in the supply of appliances, dressings and other non medicinal products, and the provision of services outside of the pharmacy
14	Professional Development in Pharmacy	5	This unit aims to provide the learner with the knowledge and understanding to function as a professional in the pharmacy environment and give them the necessary skills to support their own learning and that of others.
15	Communicating in Pharmacy	5	This unit delivers the knowledge required by pharmacy technicians to effectively communicate in a Pharmacy environment
16	Dispensing and Supply of Medicines	5	This unit aims to provide the learner with the knowledge and understanding to dispense prescriptions appropriately and to be able to order, receive, dispose and return pharmaceutical stock
17	Pharmaceutics	10	This unit prepares the learner to be able to produce extemporaneous medicinal products for patients. The learner will be able to calculate formulae and use techniques that will ensure a safe and accurate product is produced.
18	Pharmacy Law, Ethics and Practice	10	This unit will ensure that the learner will have the necessary knowledge and understanding to be able to supply and issue medicines ethically, legally and safely

19	Making Medicines for Pharmacy	10	The unit will ensure the learner will have the necessary knowledge and understanding to be able to work safely in the pharmaceutical manufacturing environment
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Competence Qualifications / courses:

Learners are required to obtain 75 credits for this qualification. The award consists of 14 mandatory units and 13 optional units (of which learners must complete a minimum of three and 7 credits to obtain their qualification). The qualification is completed within

the work place and assessed over a two year period.

Below is an example of the qualification taken from the City and Guilds level 3 NVQ Diploma in Pharmacy Service Skills (QCF).

<i>Unit</i>	<i>Mandatory Unit</i>	<i>Credits</i>	<i>Unit Aim</i>
001	Provide an effective and responsive pharmacy service	4	To enable candidates to provide an effective and responsive pharmacy service by identifying and responding to individuals' needs
002	Process pharmaceutical queries	5	To provide candidates with the knowledge and skills which will enable them to provide pharmaceutical information and advice
003	Ensure your own actions reduce risks to health and safety	2	To be able to identify and deal with risks and hazards in the workplace
004	Reflect on and develop your practice	4	To provide candidates with the knowledge and skills required to reflect on evaluate and improve personal and professional practice

005	Receive prescriptions from individuals	3	To provide the candidate with the knowledge and skills needed to effectively receive and process prescriptions that are presented at the pharmacy before they are passed onto the dispensing process
006	Confirm prescription validity	14	To provide candidates with the technical skills and knowledge to assess the validity of a prescription before it is dispensed
007	Assemble prescribed items	5	The unit introduces candidates to activities to be carried out when assembling prescribed items. It emphasises the need to work accurately and neatly, using correct equipment within the constraints of the occupational role
008	Issue prescribed items	10	To provide the candidate with the technical skills and knowledge to safely issue a prescription after it is dispensed
009	Prepare extemporaneous medicines for individual use	4	To enable the learner to safely and accurately prepare extemporaneous products that are fit for purpose
010	Order pharmaceutical stock	3	This unit covers stock control requirements, including ordering stock from the correct supplier and dealing with complex orders such as seasonal variations
011	Receive pharmaceutical stock	3	The unit enables learners to receive and store pharmaceutical stock. This unit requires learners to show that they understand current legislation and good practice when receiving pharmaceutical stock

012	Maintain pharmaceutical stock	3	This unit enables learners to understand how to maintain pharmaceutical stock and storage areas. Learners will need to show that they can accurately carry out stock checks
013	Issue pharmaceutical stock	4	This unit will enable the learner to issue pharmaceutical stock and understand why stock must be issued correctly
014	Undertake an in-process accuracy check of assembled prescribed items, prior to the final accuracy check	4	This unit enables learners to have the skills to check their own dispensing work prior to the final accuracy check
<i>Unit</i>	<i>Optional Unit</i>	<i>Credits</i>	<i>Unit Aim</i>
015	Provide advice on symptoms and actions and uses of medicines	7	To enable the learner to provide up to date information and advice on healthcare and medicines
016	Assist in the sale of medicines and products	8	This unit enables learners to competently sell over the counter medicines and products in a pharmacy setting
017	Manufacture and assembly of medicinal products	13	To provide the candidate with knowledge of legislation and policies relevant to a pharmacy services setting, including documentation. It also provides candidates with the skills needed in order to manufacture and assemble medicinal products
018	Prepare aseptic products and carry out in process checking	12	To provide candidates with the skills needed for the preparation of aseptic products for both dispensing and manufacturing

019	Prepare documentation, materials and other items for manufacture and assemble of medicinal products	12	To provide the candidates with the skills and knowledge needed to prepare documentation, materials and other items for the manufacture and assembly of medicinal products
020	Prepare documentation materials, components and other items for the preparation of aseptic products	6	To provide candidates with the skills needed to ensure that documentation, materials and other items are correctly prepared prior to the preparation of aseptic products
021	Check documentation, starting materials, components for the production of aseptic products	4	To provide candidates with the knowledge and skills needed in order to check documentation, starting materials, components and other consumables for the production of aseptic products
022	Provide an effective service in a setting outside of the pharmacy	2	To enable a learner to assist in the provision of pharmacy services to clients who are unable to visit the pharmacy
023	Assist in the supply of pharmaceutical appliances	2	To enable the learners to demonstrate their competence in the selection and supply of appliances
024	Process prescriptions for payment	5	This unit covers endorsing prescriptions in readiness for payment by the pricing authority
025	Prepare to conduct a review of an individual's medicines	5	This unit enables the learner to prepare an individual or carer for medicine review. This involves explaining the review process, making the individual comfortable and obtaining basic information ready for the review in accordance with standard operating procedures

026	Enable learning through demonstrations and instructions	3	This unit enables learners to plan, deliver and review training. This includes demonstration skills and giving instructions to others
027	Contribute to the effectiveness of teams	3	To introduce candidates to the skills and knowledge that will ensure that they contribute to the effectiveness of teams. This unit also addresses time management, legislations and policies

3. Organisation Structure of Pharmaceutical Sector

Placements

In order to complete the pharmacy assistants' course (Level 2) or the Pharmacy technicians' course (Level 3), the student has to have a placement within a pharmacy setting to gain work experience. The student will have to

complete a minimum of 15 hours per week in the placement in order to gain valuable pharmacy experience and in order to meet the course criteria. It is common for the placement to be in a community pharmacy setting or a hospital pharmacy setting.

3.1. Community Pharmacy

◆ Community pharmacies are often referred to as chemists, the term “chemists” is what pharmacies were called in the past. Every day about 1.8 million people visit a pharmacy in England, which emphasises the importance of them.



You will find community pharmacies situated along a local high street in supermarkets, in neighbourhoods and also near to General Practitioners (GP)

surgeries. Community pharmacies are open long hours and form an essential part of the community where patients can access healthcare information and

professionals when other resources are not available. It has been known in the UK to even have “drive through” pharmacies for those customers who have less time on their hands.

There are different sizes and types of community pharmacies, ranging from large high street chains, such as Boots and Lloyds; pharmacies within a supermarket which are a convenient measure for customers; down to small independent pharmacies that are privately run and can be found in the most rural or deprived of areas.

“Community pharmacists are easily accessible with around 10,500 community pharmacies in England located where people live, shop and work. The latest information shows that 99% of the population – even those living in the most deprived areas – can get to a pharmacy within 20 minutes by car and 96% by walking or using public transport.”
(http://www.psn.org.uk/pages/about_community_pharmacy.html)

The role of a community pharmacy in years gone by was to dispense prescriptions written by General Practitioners (GPs), but in later years, community pharmacies have taken on more of a clinical role which involves performing Medicines Use Reviews (MURs), advice on “self-medicating” and most community pharmacies even provide services such as pregnancy testing, blood pressure monitoring and Cholesterol testing. Most community

pharmacies will have a consultation room to discuss any sensitive issues or to carry out the services detailed above. All of these services allow a community pharmacy to integrate and play a vital role alongside the rest of the NHS.

Gone are the days that community pharmacies opened at 9am and closed at 5pm. Most community pharmacies are open to accommodate for the local GP surgery close to them. So if the GP surgery closes at 6.30pm, the community pharmacy will stay open until 7pm to ensure the patients can get their prescription dispensed. Some community pharmacies may be open much later and they will be marketed as “late night” pharmacies.

The core role of a community pharmacy

Dispensing – A community pharmacy will dispense prescriptions written by a GP. The pharmacy will label the items with the correct directions so that the patient is aware of how to take their medication. There are other prescribers, such as nurse prescribers, dentists and vets. The pharmacy will treat these prescriptions the same as a GP prescription.

Repeat dispensing service – This is a service that is accessible to people who have prescriptions for their medication on a regular basis. It allows the patient to collect their “repeat prescription” from the pharmacy without having to go back to the GP surgery when they

require more medication. This service usually entails the patient phoning the pharmacy and ordering their repeat medication. The pharmacy will then contact the GP in order to obtain a prescription. The pharmacy will collect the prescription from the GP surgery and dispense it. The patient will then either collect their medication from the pharmacy or set up a delivery service where the pharmacy delivers the patients' medication to their home address. Some pharmacies reserve this service for patients that struggle to get to the pharmacy to collect their medication, such as the elderly.

Health promotion – Pharmacies also provide information on various health promotion topics to its customers. The topics may include leaflets or brochures to help with smoking cessation, weight loss, healthy eating. This information will allow people to make an informed decision if they wish.

Support with self-medicating – This service helps people to treat “minor ailments” such as coughs and colds. It avoids people having to go to their GP. The pharmacy can offer their customers advice on symptoms and products and help the customer choose the best product for their “minor ailment”. The products that the pharmacy offers their patients will be Over the Counter (OTC) items that do not require a

prescription and as the name suggests, can be bought “Over the Counter”.

Disposal of medication – If a customer has any unwanted medication, they can take it back to their local pharmacy and they will dispose of it. The medication will be disposed of in a doop bin and the bins are sent for incineration when they are full. The person disposing the medication must make sure they wear protective clothing such as gloves to ensure their own safety.

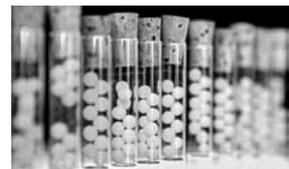
Medicines Use Reviews (MUR's)

MUR's are also a critical part of a community pharmacy. Brought into community pharmacies in 2005, a MUR is a discussion between a pharmacist

and a patient that is designed to allow the patient to find out more about their medication.

It also allows the patient to ask any questions regarding the use of their medication. MUR's will be conducted in a private area, usually a designated consultation room which allows the patient to ask any

questions without being overheard. MUR's work alongside GP consultations and give a more clinical depth regarding the patients' medication. Any patient can have a MUR as long as they have used the pharmacy for at least three months. This is to ensure that the pharmacy has a detailed record of the patient's medication.



Enhanced services offered by a community pharmacy

Pharmacies may also offer a variety of enhanced services. Usually the enhanced services that are offered are done so on a “community demand” basis and will be decided by the local area authority. For example, if the local area has a high rate of drug abuse, then it makes sense for the pharmacy to offer a supervised methadone dispensing service and a needle exchange scheme. Other

enhanced services that community pharmacies may provide are:

- providing emergency hormonal contraception
- Screening services e.g. blood pressure monitoring, diabetes checks
- Out of hour’s services that provides medication to terminally ill patients
- Smoking cessation
- Minor ailments scheme that allows patients to access certain items of medication without going to the GP

Staff structure and roles within a community pharmacy

<i>Member of staff</i>	<i>Role and education</i>
Pharmacist	<p>The pharmacist will have completed a Masters in Pharmacy degree (Mpharm). The degree usually takes 4 years to complete and then they will complete a “pre-registration” year in a pharmacy before sitting an exam that deems them competent to practice as a pharmacist. A pharmacist then has to register with the General Pharmaceutical Council (GPhC)</p> <ul style="list-style-type: none">• Their ultimate role is for the safety of the patient. <p>The pharmacist has a clinical role to ensure that the prescriptions that are being dispensed are safe for the patient. If the patient is on a number of different medicines, the pharmacist’s role is to ensure that they are all safe to take together.</p> <ul style="list-style-type: none">• They are also responsible for the members of staff that they supervise in order to ensure correct dispensing processes.• Pharmacists in community pharmacy also provide advice on symptoms and medication to patients that request it.• Conduct MURs with patients• They are also there to oversee any OTC sales of medication conducted by the staff working in the pharmacy• They have a supporting role to GP’s to provide a repeat prescription service and effectively manage this service.

<i>Member of staff</i>	<i>Role and education</i>
Accredited Checking Technician (ACT)	ACT technicians are pharmacy technicians that have undergone additional training that allows them to perform an accuracy check of dispensed medication. The prescription has to be clinically checked by a pharmacist, but frees the pharmacist from having to do an accuracy check at the end. ACT work in a supporting role to the pharmacist.
Pharmacy Technician	Pharmacy Technicians work in a supporting role to the pharmacist. Their principle role in community pharmacy is the dispensing of prescribed items and the management of the dispensing process. The role of a pharmacy technician is forever evolving and some pharmacy technicians within a community setting may also be in charge of dispensing medication for care homes and managing their set up. Registration with the (GPhC) became compulsory for technicians from the 1st July 2011. A pharmacy technician has to have completed a level 3 knowledge based and a level 3 vocational based qualification defined by the GPhC in order to register with them.
Dispenser/ dispensing assistant	Dispensers also support the pharmacist and the pharmacy technician in the dispensing process. They may also be responsible for the management of the stock within the pharmacy; They may also help with selling OTC medicines. A dispenser has to have or be working towards or have completed a Pharmacy Services Scottish/National Vocational Qualification (S/NVQ) level 2 qualification.
Medicines Counter Assistant (MCA)	A MCA is usually the first point of call for the patient using the pharmacy. Their role is to undertake the receipt of the prescription and ensure the declaration is complete. They may also need to examine and exemptions of payment the patient may have. A MCA may also provide advice on OTC medicines and sell them under the supervision of the pharmacist, They may also carry out any screening checks, such as pregnancy testing or blood pressure monitoring, They would have undergone the correct training and the processes will be carried out under the supervision of the pharmacist. They may have to complete a designated course such as an OTC course that is related to their job role.



Stock management within a community pharmacy

Good stock management is essential in community pharmacy; this is to ensure that the pharmacy has enough stock to fulfil the patients' prescription requirements. This prevents patients having to return to collect outstanding items. It's inevitable that some items may be out of stock because the pharmacy doesn't routinely stock that item. The pharmacy will use their computer system to set up "ordering parameters" for routine stock, so when it falls below a certain level, the dispenser is warned and they can add it to the suppliers order list. The manager or the pharmacist in charge of the pharmacy will usually be in charge of setting up the "ordering parameters"; but it's the responsibility of the dispensing staff to inform them if they are suddenly using less or more of a particular medication.

Community pharmacies also have to take into account "seasonal variations" when considering their order levels of particular medication. For example,

during the months of the year where hay fever is more prevalent, the pharmacy will have to ensure that they increase their stock levels for their hay fever treatments.

Good stock management is also essential to reduce stock wastage. All staff must ensure that they follow the stock rotation procedure to ensure that stock with a longer expiry date is placed behind any stock with a shorter expiry date. This is to reduce the amount of stock that has to be disposed of.

Marketing and Promoting

Community pharmacies are a business and therefore must work to attract new customers. There may be several pharmacies located in a small area and the pharmacy has to make their pharmacy appealing to potential customers and retain its regular customers.

Community pharmacies will have to continually work to market their pharmacy and come up with new ideas on how to attract new customers. The

pharmacy may do this by offering free health information in the form of leaflets and brochures. Some pharmacies have a designated stand for such material to make it look attractive to customers. A community pharmacy may attract new customers by having offers on certain medication at the time of year it is prevalent, such as hay fever season or cough and cold medication during the winter months. The pharmacy may also attract new customers by offering a free item, for example a reusable shopping bag.

Excellent customer service is also an effective marketing technique. If a customer receives a good service and is made to feel that their custom is valued, then they are more likely to return to the pharmacy again. Good customer service involves greeting the customer in a welcoming manner, so instead of saying “I’ll be with you in a minute”, ask the customer “how can I help” and if you are busy, explain to them what you are doing and that their request is next in line to be delay with. This will make a customer feel much more valued.

Window displays and promoting products

Window displays are also an excellent promoting tool, especially when promoting products. A window display must be eye catching and to the point so that it draws a customer or potential customer to look at it. However, staff working in the pharmacy shouldn’t

offer promotions to customers that may lead to inappropriate use of medicines or that aren’t suitable for the customer. As a member of staff working in a pharmacy, you have a duty of care to the customer.

Medicines have their own laws when it comes to advertising them, if advertising a General Sales List (GSL) or Pharmacy (P) medicine, pharmacies must follow codes of conduct as well as legal requirements from the Medicines Products Regulatory Agency (MHRA). For example, you couldn’t advertise that a product is free from side effects unless it has been proven to be so. Prescription Only Medication (POM) cannot be advertised in the UK and in fact it is against the law to do so. However, the pharmacy can explain to a customer what a POM medicine is used for and give then advice and information related to the product.



DO'S and DON'Ts for promoting products

DO

- Make customers aware of what promoted items are for
- Highlight how products can help reach health goals, such as stopping smoking or improving diet
- Use caution and judgment when deciding what to promote
- Watch out for customers buying inappropriate quantities of medicines

DON'T

- Make claims about medicines that aren't on the product's licence
- Give a personal endorsement of a medicine – only recommend a product
- Encourage inappropriate use of a medicine
- Encourage a patient to buy a medicine they do not need

3.2. Hospital Pharmacy

◆ As the name suggests, hospital pharmacies are situated with a hospital. It can be either a NHS or Private hospital. Hospital pharmacies are an essential part of a patient's healthcare while staying on a ward within the hospital, attending an outpatient appointment or attending Accident and Emergency. Hospital pharmacies usually stock a wider range of drugs when compared to a community pharmacy. They may also have stock of clinical trial drugs. These are drugs that are undergoing an investigational phase before being available as a licensed medication.

Hospital pharmacies tend only to provide medication to patients that have attended the hospital either as an inpatient on a ward, an outpatient in a clinic or as an emergency at Accident and Emergency. They are not a retail establishment like a community pharmacy.

Hospital pharmacies will vary in their opening hours, but traditionally they open at 9am and close anything from 5.30pm up until 8pm, with some closing even later. The pharmacies which operate a "late night" policy will cover the late shift on a rotation basis. So as a member of staff, each week you will cover a late night and the day may vary each week. Once the pharmacy has closed, an on call service is provided for any out of hour requests or emergencies. The person on call will be a pharmacist or there may even be more than one pharmacist on call depending on the size of the hospital. Traditionally,



hospital pharmacies employed resident pharmacists that had to stay on the hospital site when they were on call. This is to ensure the pharmacist is readily available in case of any out of hour's emergencies.

The number of staff employed by a hospital pharmacy is typically much greater than the amount of staff that works in a community pharmacy. This is to cater for the ever demanding varied needs of the hospital in-patients and the patients that visit the hospital.

The core roles of a hospital pharmacy

Dispensing – Like a community pharmacy, one of a hospital pharmacies main roles is to dispense medication for patients. However, in a hospital pharmacy, dispensing is much more varied than community pharmacy. The different types of dispensing include:

- In-patient dispensing where the medication is dispensed off the patient's drug chart or ordered by the pharmacist or technician that has visited the ward.
- Discharge medications for people going home that have been an in-patient on a ward. The prescription are either called TTO's (To Take Out) medication or TTA's (To Take Away) medication.
- Out-patient dispensing. This is dispensing for patients that have attended a clinic at the hospital, but haven't had to stay overnight on a

ward. This is similar to community pharmacy dispensing.

- Controlled drug dispensing forward stock. This is where the wards order the controlled drugs that they need for stock in a controlled drug book and it is dispensed in the pharmacy.

Manufacturing – It is common for a hospital pharmacy to have an aseptic manufacturing department. However, the smaller hospital pharmacies may not have an aseptic manufacturing department. Aseptic means “free from infection” or contamination and aseptic products are made in a designated room called a clean room. Within the clean room will be a piece of equipment called an isolator or laminar flow cabinet where the products will be made. The staff preparing the products will have to have undergone specialised training and wear protective clothing. This is to protect the product from contamination and to also protect the operator. The products that are commonly made by aseptic manufacturing are:

- Total Parenteral Nutrition (TPN) – This is basically an intravenous feed that supplies a patient with all of their daily nutrients. This is only a short term measure and is used for patients that cannot receive their nutrition any other way, either due to surgery, such as bowel surgery or because they are unconscious.



- Chemotherapy – This is a drug used to treat cancer. It may also be used to treat conditions such as lupus or rheumatoid arthritis.
- Radiopharmaceuticals – These are radioactive compounds most commonly used for diagnostic purposes. They are injected intravenously and may be used to look at bone density for example. However, they do have many other diagnostic uses.

Stock management – Stock management is essentially the same in hospital pharmacy as it is in community pharmacy, just on a much larger and more varied scale. The management of the pharmaceutical stock is usually a separate section within the pharmacy. This area will usually contain the order office as well. Any stock that is ordered into the pharmacy will be received at this designated area and kept here until it is needed by the dispensary. The dispensary will keep a small amount of stock in order to fulfil the dispensing process, and then it will be replaced by stock from the “stores” area.

Robotic dispensing and storing of stock is now becoming more popular with a hospital pharmacy. Basically the stock is placed into the machine and when the staff member generates a label for the item, the item is selected and robotically delivered to their dispensing station. This is extremely sophisticated and isn't available in all hospital pharmacies. The same principles of stock rotation

apply to hospital pharmacy as described under community pharmacy and order level parameters will be set for routine stock as described under community pharmacy to ensure good stock management.

Ward based activities – A large part of a hospital pharmacies role is to support the healthcare professionals that work on the wards. The pharmacist within a hospital pharmacy will participate in ward rounds along with the doctors and nurses and advise them on a patients' medication or suggest the best treatment for the patient or alternative treatments that may benefit the patient. The pharmacy technician's role on a ward has also expanded over recent years, with many technicians employed solely to work on the wards and monitor the patient's usage of their medication and to ensure that they have a constant supply while staying in the hospital. This is referred to as “medicines management”. The ward pharmacist and the ward technician will work together to ensure that a patients' medication is managed effectively while they are a patient on the ward.

Pharmacy also provides a top-up service to the wards. This entails members of the pharmacy team visiting the ward once a week, for example to “top up” the routine stock that it has been authorised the wards can keep in a locked cupboard on their ward. The pharmacy staff member will have a stock list of the medication the ward

is allowed to keep as stock and the number of boxes the ward is allowed to have as stock. Obviously, if the ward is under their allocated amount, it is recorded and the stock is picked in the stores area within the pharmacy and sent to the ward in a designated locked ward box.

Patient counselling – Like community pharmacy, it is the role of a hospital pharmacy to counsel the patients on the ward and the outpatients on how to

get the best from their medication. This could include telling them to take their medication “with or after food” or “on an empty stomach”. They may need to be told to “keep their medication stored in a fridge”. Whatever the information is, it is the role of qualified members of staff within the pharmacy to provide the patient with all the information they need in order to take their medication correctly and to ensure the safety of the patient when taking their medication.



Staff structure and roles within a hospital pharmacy

<i>Member of staff</i>	<i>Role and Education</i>
Pharmacist	<p>The education for a hospital pharmacist is the same as a community pharmacist. However, hospital pharmacists usually complete a clinical diploma that gives them a more in depth clinical knowledge needed to work in a hospital pharmacy. The role of a hospital pharmacist may vary widely depending on your banding and job role. A pharmacist may have a management position, so their main job role will be to oversee the day to day running of the pharmacy and manage the rest of the pharmacists in the department. Senior pharmacists will most likely have specialised in a specific area. For example, their main role and specialist knowledge may be in Aseptic production, coronary care, procurement, paediatrics, oncology, intensive care, to name but a few. It is very difficult to define the main role of a hospital pharmacist as it depends on their specialised area.</p> <p>Ultimately, their role is to provide the best care to patients as regards their medication and to ensure the safety of the patient when they are taking their medication.</p> <p>A hospital pharmacist is also responsible for the overall running of their specialised section and to supervise any other pharmacy staff that work alongside them.</p>

Accredited Checking Technician (ACT)	Their role and education is exactly the same as a community ACT
Rotational Pharmacy Technician	<p>A rotational technician is usually a newly qualified pharmacy technician who would have completed the same qualifications as mentioned under community pharmacy. As the name suggests, a rotational technician will rotate around all the different sections within a hospital pharmacy. This is to ensure that they are trained in all aspects of pharmacy and to give them an insight into each area. The areas that a rotational pharmacy technician will rotate into are:</p> <ul style="list-style-type: none"> • Dispensary • Aseptic production • Procurement and stores • Ward based • Outpatients • Specialist dispensaries, such as eye and skin dispensaries (dependent on the hospital)
Higher grade pharmacy technician	<p>Once a technician has completed the rotational phase, it is common for them to find an area that they enjoy the most and have a passion for. This leads to a pharmacy technician specialising in a specific area. Once they have specialised, their job role depends upon their area of work. For example a ward based technician will work along the pharmacist responsible for that ward to make sure that the patients are provided with all of their medication and have all the knowledge they need to ensure effective use when taking their medication.</p> <p>A technician that specialises in aseptic production will manufacture products such as TPN, chemotherapy or radiopharmaceuticals within a clean room setting. The technician will use specialist equipment and devices to complete the process</p> <p>Whichever area that a technician specialises in, it is likely that they will undergo further training and education in order to increase their knowledge in their chosen specialist area.</p>

Pharmacy
Assistant

Pharmacy assistants work alongside pharmacy technicians and under the supervision of a pharmacist. The role of a pharmacy assistant is varied and some pharmacy assistants work on a rotation basis. They will have completed or be working towards the same level 2 qualification as a dispenser in community pharmacy. Their role may include the following:

- selecting specific pharmaceutical items from within a store area, according to a list, for assembly and delivery to departments, clinical areas or community sites
 - answering queries on supply and availability of medicines, where it is within their competence
 - alerting clinical pharmacists or pharmacy technicians, to any problems or queries raised
 - ordering items for use within a department
 - receiving, loading, unloading incoming goods from wholesalers, manufacturers and elsewhere
 - delivering pharmaceuticals and other goods to sites within a pharmacy department and wards/departments/clinical areas
 - assisting in the maintenance of reasonable stock levels
 - pre-packing, assembling and labelling medications
 - aseptic preparation of medicines (preparations of medicines in a very clean environment using special techniques)
 - using dispensary and stores computer systems to generate stock lists and labels
 - liaison with appropriate healthcare professionals to ensure the effective use of resources across the primary/secondary care interface as delegated
 - responding to telephone and face to face routine enquiries from patients, their representatives and a wide range of staff groups, either in a pharmacy or in a ward, and refer appropriate queries to the relevant member of the pharmacy team when necessary
-

Community and Hospital Pharmacy

Labelling – Both hospital and community pharmacies will have a labelling system. This is in order to produce to generate labels for the dispensing process. Any medication that is dispensed off a NHS prescription, drug chart, outpatient prescription etc... requires a label to be generated with all of the correct details on. This is to ensure the patient has all the information they require to use and take their medication correctly. The information that should be present on a label includes the following:

- Name, strength and form of drug
- Quantity dispensed
- Directions for use
- Cautionary warnings e.g. take with or after food
- Name of patient
- Date of birth of the patient
- Date dispensed
- Name and address of the pharmacy



Clothing – The clothing of a staff member in a pharmacy will vary from pharmacy to pharmacy. Ideally the members of staff should wear a uniform, not only does it look professional, it also stops your own clothes becoming contaminated with any substances a member of staff works with in the pharmacy.

Clothing may range from a white lab coat through to a uniform which may consist of a tunic and a pair of trousers/skirt or a shirt/blouse and a pair of trousers/skirt. It is always advisable to wear closed toe shoes as a protective measure to protect your feet just in case a heavy object falls or a substance is spilt on the floor.

Monitoring of storage conditions –

Monitoring of storage conditions within a pharmacy is an essential daily task. The fridge(s) that are used to store drugs have to be monitored to ensure they are working at the correct temperature range, which is usually between 2 degrees Celsius and 8 degrees Celsius. One of the first jobs that should be done in before the pharmacy opens are the fridge checks to ensure they are working at the temperatures stated above. The fridge will have a device in that monitors the temperature and it will usually be shown on a digital display. However, some fridges may have a paper display as well, which works by a needle loaded with ink. The needle will move round that paper over a 24 hour period and draw a line on the temperature that the fridge is reading at. The paper disc will have to be changed every day.



Once the temperature has been taken, it needs to be recorded for quality control purposes. This is to ensure there is an audit trail of all the fridge recordings if ever they should be needed.

Any fridge items that are dispensed on a prescription should be given to the patient and the patient must be told that the item needs to be stored in a fridge. If it isn't, it may affect that quality of the active ingredients. If an item has been dispensed and the patient isn't there to collect it, then it should be placed back in the fridge until the patient comes to collect it.

If a fridge item is being sent to another department or hospital, or out for delivery from a community pharmacy, then the cold chain should be maintained. The cold chain is a term used to describe the continuous maintenance of a low temperature. A pharmacy should have specialist packaging that will maintain the low temperature of the item, so that it arrives at its destination fit for purpose. The packaging may consist of a cool bag which can hold ice blocks. The cool bags will vary in size depending on the size of the product or the quantity to be sent.

Team work – Team work is an essential part of a pharmacy's working life, whether it be in community pharmacy with four members of staff, a community pharmacy with fifteen members of staff; or a hospital pharmacy with seventy members of staff! Everybody has to work



together to ensure that the patient's needs are fulfilled and their standard of care is upheld. The patient should be the focus of every task that is done.

Team work with a pharmacy consists of multidisciplinary working. This means that the members of staff within a pharmacy, not only work with each other, but with other professions as well such as doctors, GP's, nurses, care homes, occupational therapists, physiotherapists and many others! Each and every member of the multidisciplinary team works together to provide the patient with the best care to ensure that all their expectations are fulfilled.

Communication skills – Excellent communication skills are a fundamental part of working in a pharmacy, whether it is hospital or community pharmacy. The members of staff will have to deal with many customers/patients every day within a pharmacy and make sure all of their needs are met. On occasions, their needs may not be met and the staff has to know how to communicate with the customer/patient to solve the issue.

If a customer/patient has a query, it is essential to obtain all of the relevant information so that their query can be dealt with. Therefore, it is essential that the staff that works within a pharmacy have good questioning skills. It is also important that a staff member shows that they are interested, however small the query is. This will demonstrate to the customer/patient that you care about what they are asking.

Every now and again pharmacy staff members will have to deal with angry or upset customers. In this situation, it is vital that you show empathy

with the customer and reassure them that you are doing your utmost to deal with their query. No matter how rude a customer may be, it is essential that you stay calm and try and diffuse the situation. However, if the query becomes out of control, then assistance will have to be obtained.

Politeness and body language is the key when working in a pharmacy! Always try and smile and stand in a way that shows you are interested. This will make the customer/patient feel that you are interested in what they have to say and it will give them faith in the service they are receiving.

3.3. Wholesale Companies

◆ Another area of pharmacy is wholesaling. However, it is unlikely that a student would complete a placement at a wholesale company, as it doesn't give them the scope they need to complete the qualification. It is a specialised area and they may wish to enter into this sector when they are qualified.

Wholesaling within pharmacy can be defined as the sale of large quantities of medicinal items and devices to a hospital or community pharmacy. The pharmacy then issues the items to the patients as they are needed. A "standard" customer/patient cannot access a wholesaling business. Basically, the goods are bought from

the wholesaler via the pharmacy and then issued to the patient when a prescription is generated. Pharmacies obtain all the stock they require from the wholesalers. Some examples of pharmacy wholesalers are AAH Pharmaceuticals, Unichem, Mawdsleys, Lexon and Phoenix.



Within the UK, AAH pharmaceuticals are the leading distributor of pharmaceutical and healthcare products and services to pharmacies and it is also the largest pharmaceutical wholesaler within the UK, with around 3800 staff! The company is made

up of directors who are ultimately responsible for their section and all the staff that work in it. Other wholesale companies may have a similar set up, but job titles and roles will vary from company to company. An example can be seen in the table below:

<i>Member of staff</i>	<i>Role</i>
Managing Director	The managing director of the company will be responsible for the leadership and direction of the wholesaling company. They will co-ordinate their staff to meet the needs of its customers.
Operations and services director and its team.	<p>The job role of the operations and services director will be to oversee the warehouse and transportation activities. This includes customer service, order accuracy and stock management. Within this section will be middle management that oversees a particular section. For example, there may be a customer services manager and a stock management manager that oversee their section and the staff that work within in.</p> <p>Customer services will be responsible for dealing with all of the wholesaling companies clients. So if a pharmacy has a question or query regarding a product or order they have placed, the customer service team will be able to help them.</p> <p>The warehouse staff will be responsible for ensuring the warehouse where all the products and supplies are kept functions correctly. This will involve processing the orders that the wholesale company receives from the pharmacies, picking the stock, packing the stock and printing the documentation to accompany the order to its correct destination. It will also involve ensuring that the packed orders are put onto the correct van for transportation and that the delivery driver has all the information that they need to deliver the stock to the pharmacies.</p> <p>It is the role of the operations and services director to oversee the whole process.</p>

<p>IT and HR director and its team.</p>	<p>The role of this director is to oversee the Human resources section that look after the staff that work at the company. They also look after the Information Technology section to ensure the all the orders are received and processed correctly. This ensures that the pharmacies receive the correct items that they have ordered.</p> <p>The staff in this section will be responsible for making sure that the computer system is update with all the products they have in stock and the quantities they have in stock. Overall, they will be responsible for the smooth running of the IT system. There will be staff at different levels that have a specific job role.</p>
<p>Sales director and its team.</p>	<p>The role of the sales director and ultimately the staff that work in this section is to make pharmacies aware of the products that AAH can provide to them and at what cost.</p> <p>This team will include sales reps that may go out to pharmacies to give them all the information they need about the company and the products they can provide to the pharmacy. The sales team will be responsible for drawing up contracts to ensure that they secure orders from a pharmacy for certain items. Once again there may be staff at different levels with specific job roles, depending on the size of the company.</p>

3.4. Drug Companies and Pharmaceutical Industry

◆ Another area of pharmacy is drug companies and industry. It is unlikely that a student would complete a placement within this sector, as it doesn't give them the scope they need to complete the qualification. It is a specialised area that they may enter into once they are qualified.

There are many drug companies within the UK that are responsible for drug development. Examples of drug

companies with operations within the UK are:

- 3M Healthcare LTD
- AstraZeneca UK LTD
- Sanofi-Aventis LTD
- Bristol-Myers Squibb pharmaceuticals LTD

The main role of pharmaceutical industry and drug companies is:

- to develop new drugs

- to collect, monitor and evaluate information relating to the drugs and their side effects during the clinical trial phase
- to manufacture the drug to the correct standards to ensure it is fit for purpose following a Quality Assurance process
- once the drug has passed its clinical

phase and is available to the general population, it is the responsibility of the drug company to monitor any adverse side effects that a patient may experience.

The majority of drug companies within the UK are vast in size, with many employing thousands of staff and even tens of thousands of staff in some cases.

4. Definitions of Professions

4.1. Pharmaceutical Assistant and Technicians in England

◆ Under UK law and the standards for conduct, ethics, proficiency and the standards for safe and effective practice (regulated by the General Pharmaceutical Council – GPhC) it is a requirement that all pharmacy assistants, pharmacy pre-registration technicians and pharmacy technicians work under the supervision of a registered pharmacist.

Pharmacy assistants / support staff:

Pharmacy assistants work in a variety of environments within pharmacy including hospital pharmacies and community pharmacies. They work alongside pharmacy technicians and under the supervision of a registered pharmacist.

Pharmacy assistants have a variety of roles and responsibilities depending upon the environment they work in. These specific roles and responsibilities determine the title the assistant is given. In the community environment the terms dispensing assistant and medicines counter assistant are commonly used whereas hospital pharmacy assistants are commonly termed assistant technical officer (ATOs).



Community Assistants Roles:
Pharmacy assistants working within the community environment perform a variety of roles dependent upon the post requirements. General duties include:

- Assist in the sale of General Sales List (GSL) and Pharmacy (P) medications
- Provide information to customers on symptoms and products
- Receive prescriptions from individuals including patients, their representatives and other health care professionals
- Assist in prescription collection and delivery services
- Assemble prescribed items against a valid prescription
- Ordering routine stock, to maintain stock levels, from a range of suppliers
- Receive stock from suppliers ensuring invoices / documentation is completed
- Store pharmaceutical stock and maintain storage areas



- Receive prescriptions from individuals including patients, their representatives and other health care professionals
- Assist in prescription collection and delivery services
- Assemble prescribed items against a valid prescription
- Ordering routine stock, to maintain stock levels, from a range of suppliers
- Assisting in the maintenance of reasonable stock levels for wards, clinics and departments within the hospital against a valid/ approved stock list
- Receive stock from suppliers ensuring invoices / documentation is completed
- Store pharmaceutical stock and maintain storage areas
- Use computer systems to generate stock picking lists
- Select pharmaceutical items according to a picking list, for assembly and delivery to wards, clinical areas and other departments

Hospital Assistants Roles

Pharmacy assistants working within the hospital environment perform a variety of roles dependent upon the post requirements. Some posts may require staff to work on a rotational basis within the pharmacy environment. This can include the dispensary, stores, stock distribution and manufacturing departments. General duties include:

- Answer queries on supply and availability of medicines of routine stock
- Pre-pack, assemble and label medications
- Assist in the cleaning of aseptic preparation areas
- Assist in the setup of prescriptions, batch sheets and consumables for the aseptic preparation of medicines

Pharmacy Technicians:

Pharmacy technicians work in a variety of environments within pharmacy including hospital pharmacies and community pharmacies. They work under the supervision of a registered pharmacist and adhere to the General Pharmaceutical Councils (GPhC) code of ethics. Roles and responsibilities are varied depending on the working environment and range from roles similar to that mention for assistants to the operational management of service delivery and staff provision.

Community Technician Roles:

Pharmacy technician working within the community environment perform a variety of roles dependent upon the post requirements. In addition to the duties performed by assistants they may also perform the following duties within their job role:

- Support pharmacy assistants in their job roles offering advice on medications, symptoms and minor ailments
- Deliver and co-ordinate training for assistants and new employees
- Prepare rotas to ensure staff provision is met



- Liaise with healthcare professionals to ensure an effective repeat prescription service is delivered to patients and care homes
- Provide information and advice to patients about their prescribed medications including side effects and warnings
- Ensure end of month procedures are followed to ensure prescriptions are processed ready for payment from the Prescription Pricing Authority (PPA)
- Perform the final accuracy check of assembled prescribed items
- Provide additional pharmacy services to patients including smoking cessation advice, blood pressure monitoring and pregnancy testing

Hospital Technician Roles:

Pharmacy technician working within the hospital environment perform a variety of roles dependent upon the post requirements. Some posts may require staff to work on a rotational basis within the pharmacy environment or manage services within a department. This can include the dispensary, stores, stock distribution and manufacturing departments In addition to the duties performed by

assistants they may also perform the following duties within their job role:

- Support pharmacy assistants in their job roles offering advice on medications, availability of products and job competencies
- Develop, deliver and co-ordinate training for assistants and new employees
- Prepare rotas to ensure staff provision is met
- Provide information and advice to patients about their prescribed medications including side effects and warnings
- Perform the final accuracy check of assembled prescribed items
- Aseptically prepare products for patient use
- Respond to pharmacy queries from patients and other healthcare professionals

- Provide a ward based medicines management service to ensure availability of medications to patients. Duties will include Patients own drug (POD) assessment, medication history taking and ordering of prescribed medications
- Liaise with healthcare professionals to ensure an effective and responsive service is provided
- Contribute to the strategic planning and organisation of pharmacy services



4. 2.Students' Descriptions of Daily Work

Jalihi – 27 February 2012

My Day at Work

A typical day consistent at work would include familiarisation with the working environment. This would include reading and familiarising oneself to the (SOP) standard operating procedure at work. Due to be new to the subject is nice to accept the working ethics. Observation is also required day at work. Ensure that it is understood what is expected from you. To understand the stock and where certain high usage medicine is kept.

You may be given a routine to follow and keep with the upkeep of your job description making sure that your workplace is prepared to the



specification of the job requirements, and standard requirements.



To make sure all communications are noted and complete so the required stock or medicines are available to keep a 'minimal level' stock maintenance.

Familiarising oneself with the workplace and knowing what is required from previous orders, that needs can be met within twenty four hours of the order being placed. Accuracy and priority needs to be adhered to. Making sure all items ready to be dispensed and are labelled both the package and the medicines.

To make sure procedures are acknowledged and the correct order of procedure is carried out.

Perveen Akhtar – 27 February 2012

My Day at Work (Community Pharmacy Assistant Level 2)

At 9.30 am I arrive at work, after putting my belongings away in the staff



room I go to the pharmacy counter and make sure the certificate for the correct pharmacist responsible for day is displayed correctly.

I then put away the order which has arrived from Colorma, and AAH (Wholesalers). I check all of the medications against the delivery note, and check the expert date of all the medications.

I make sure that there are no short date medications sent and ensure that all medication is in good condition not damaged or anything.

I then check the prescription owings baskets to make sure that all the medication that has been ordered for the owings is redeemed. I log into the prescript system and redeem all the owings. I print off the labels and stick them onto the correct medication always checking the strength and dosage before placing labels on. I pass all the redeemed items on to the pharmacist to be checked. Then I put all the other medication away on to the shelves ensuring I observe stock rotation as I put them away in generic order.

I put the fridge lines into the fridge once they have been checked off and date checked.

When all the stock has been put away I enter all the invoices onto the spreadsheets and file the invoices away.

Any controlled drugs received are entered on to the controlled drugs register and a running balance is kept. The drug itself is put into a locked CD Cabinet. The invoice is date stamped and signed and put into a controlled rug invoice folder which is kept separately.

I make sure all the medications are put away safely and nothing is left lying around.

I then go onto the shop floor tidy up and fill up shelves with missing items. I make a list of any products that are missing so that I can re-order the products. I also do the same with all the P medications.

I greet all the customers and serve them. I take in the prescriptions from the customers. I check that the prescriptions are signed and dated, and that customer has ticked an exemption if they are not paying. I always check to make sure the prescription has been signed by the doctor. I enter the details into the PMR system, locate and choose the correct patient. I find the drug



details and enter the directions then print the label. I collect the drugs, make sure I have the correct amount and it is in date. I fix the label to the drugs and then pass the prescription and the dispensed drugs to the pharmacist to be checked.

During the day I continue to greet customers and dispense their prescriptions and put away any orders that are delivered.

Gurcharan Singh

A day in my Community Pharmacy (Pharmacy Assistant Level 2)

I would arrive at 9 am into the pharmacy and my first duties is either endorsing the prescriptions received from the surgery or collect the medicines off the shelves, which correspond to the correct prescriptions. I must either separate the correct labels for the prescriptions or double check the medicine to the prescription and label them correctly, ready for the acting pharmacist to check.

Once the prescriptions from the surgeons are finished I usually assist the pharmacist with prescriptions received in store. These duties include entering the patients PMR and endorsing or adding the medicines required to the system, ensuring the correct medicine (whether generic or branded) is requested, the correct quantity and the correct dose instructions are included. On occasion I also have to change the prescription type to the correct one in case it is dental or from the surgery.

On occasions I may be required to enter the owing items into the system if not enough medicine is available and notify the pharmacist and patient. I print an owing label and place it in the owings book. Other duties include splitting packs of medicine, using the triangle or pill counter and making up bottled medicine such as oxycodone or amoxicillin. When entering PMR's I must also notify the responsible pharmacist of minor or major interactions with prescriptions. In quieter periods I clean the beakers and empty the bins. Also on quieter periods I maintain a level of health and safety, ensuring work areas are clean and replenish stock following stock rotation.

Throughout the day I receive and sign for stock deliveries. I separate wholesale stock with OTC and other medicines. I separate generic and branded items placing them in the correct areas and signing off each item as I check them. Once this is complete I sign the invoice and put them into administration folders. I also help with Nomad and Medical packs for the last couple of hours of my day. I ensure I maintain a clean work area as I work.



Dharmmeet Pankhania **A day in the life of a Student Pharmacy Technician at Listers Chemist**

The day begins by taking the messages from the answer phone which consist of patients prescription orders. The corresponding repeat forms are ticked and sent to the surgery.

Depending on the level of staff present on the day, I may have to tend to the shop serving customers, working in the dispensing with the pharmacist processing, picking and assembling prescriptions or working in the back dispensing preparing monitored dosage system packs either for home delivery or care homes.

Prescriptions that have come into the front dispensary will either be for delivery, preferably on the same day or to be stored on the shelf for patients who collect their medication.

Throughout the day we also receive a minimum of five deliveries of stock from our suppliers, which need to be checked and put away in the appropriate drawers, cabinets or shelves.

As dispensing stock gets used up throughout the day, I would also be required to replenish the stock from the store room containing bulk packages of most products.

Other tasks I may be required to do are to deliver medication to the patients in

the event the delivery driver is absent. I also trade stock over a pharmacy based internet company.



As a key holder to the pharmacy I am required to open and lock the pharmacy if the pharmacist is not present.

Helen Williams

A day in the life of a student pharmacy technician at a dispensing doctors surgery.

I travel in my car 5 minutes to my work place called Cookley Medical Centre.

When I get there:

- I let myself in using a key
- I hang my coat and bag in the secure area
- I come into the dispensary and label prescriptions left from the last day or as they are printed off.
- I check my labels against the product and prescription
- I deal with patients and carry out drums (see if the patient is conversant with meds).
- I then swap and whilst my work is checked, I label and deal with any urgent prescriptions sent from the G.P. rooms.
- Label and pack medi-dose boxes
- Sometimes I deliver them to patients' homes
- I enter the controlled drugs into the registers for specific patients
- I make sure all the 'exemption of fees' is signed on the prescription or payment is taken.

- I put the dispensed items into bags and store them on the shelves in order alphabetical order.

- I print any waiting prescriptions and place them on the side for signature by the doctors.

- I enter the patients in and out of the reception book for appointments
- I book appointments and medical reviews with the patients for the doctor.
- I place fast line stock items onto the shelves and ensure stock rotation is followed and expiry dates are noted.
- I take the nurses prescriptions and order any missing items from separate suppliers
- I give the vitamin B12 injections and dressings to the nurses in the surgery
- I send the order at 12 pm and 6 pm to the different company's
- I count the prescriptions at the end of day and endorse what has been dispensed.

There are many other general queries and different activity's that happen during the day.



Joanne Young

A day in the life of a dispenser at a GP Practice.

When I arrive at work the first thing I do is turn on the computers. I then do any final checks on the medication that has been dispensed the previous day; I bag it and put it on the shelf for collection. Patients come to the dispensary hatch to collect medication either pre-ordered or if they have just seen a GP. We dispense from the queue, label it have a second check done, bag it and give to patient. Patient completes prescription form and we take appropriate payment if necessary and put it through the till.

The order arrives, I take delivery and sign for it put any fridge items away and complete the Controlled Drug Register if any controlled drugs are received and put them into safe custody. The queue from previous day is taken from the computer, paired up ready for dispensing. The order is loaded onto the computer and the owed queue is dispensed off. The order is unloaded and dispensing of medication and final checking and bagging takes place. We also answer



queries at the hatch or on the phone from suppliers/GP's and patients. Orders are sent on the computer twice daily and any specials or queries on medication are dealt with

by phone. Shelves are tidied and re-stocked and patient's medication is constantly being collected. Any queries re-medication is sent via email to GP and once a reply is received it has to be dealt with. I am responsible for doing stock checks monthly on Controlled Drugs and entering stock flow in and out in the register.

Uzma Naz

My day at work

I start my day by waking up at 7 am. I get to work for 9 am. First I put my coat and bag in my locker provided then start off by filling up the shelves. If there is a space missing I would stock it up. At 10 am we have order coming in. I count the boxes and sign the invoice papers. I then open all boxes and tick them according to what medicine and the quantity, then I price them and stack them in their places.

I serve customers, take their prescription, make sure they have signed ticked their exemption. I give the prescriptions to my pharmacist and dispense the medicine after checking.

I go through the order book and order any GSL stock for the shop floor/or any medicines that need to be ordered e.g. Paracetamol/Calpol.



I call up each company that we order out stock from to order each statement for the past month. My manager gives me a bundle of invoices to tick off from the statements.

I date check all the shelves, and take out any expired medicines or order anymore.

I talk to the customers, listen to their needs and make my best effort to assist them. I sell general stock over the counter. If a patient wants Paracetamol,

I ask them the appropriate questions and if they are not on any medications then I would sell the medication to them if a patient is asking for Ibuprofen and has taken it before and has asthma I would ask the pharmacist to check the patients record and open the system and see if the patient can take the medicine.

In the end I open the till and count the money. After I have counted and recorded the amount in the till book I then give the money to my manager.

5. Legislation

◆ Pharmacy Law is governed by the Medicines Act 1968 which was the first comprehensive licensing system for medicines in the United Kingdom. Information is given on:

- Licensing
- Sale, Supply and Export
- Manufacture and assembly of Medicinal Products

All legislation is governed by the Secretary of State concerned with health in England; the Medicines Commission performs the functions assigned to the Commission under the Act.

The aim of the Medicines Act is to ensure the efficacy and safety of medicines used for both humans and

animals, guaranteeing the quality of such products. Medicines are sold under licence and are either branded or generic however a branded should not be sold as a preference to an identical generic equivalent.

The only criterion for which legislation to control human medicines is founded is Safety, quality and efficacy. The Medicines Healthcare products Regulatory Agency (MHRA) and the expert advisory bodies set up by the Medicines Act ensure that the balance between safety and effectiveness is achieved. The current relevant legislation is given in the European Directive 2001/83/EC relating to medicinal products for human use, although the European legislation takes

precedence, there are regulations in the Medicines Act specific to the UK.

Marketing

Marketing authorisations (MA's) are the European licensing system for medicines and they replaced the product licence (PL) system, they are valid for 5 years and are renewed by re-evaluation of the risk and benefit. Applications for MA's mainly come from the pharmaceutical industry, however anyone with the necessary supporting data can apply.

Reimbursement of medical expenses

The Department of Health has issued new guidance which provides patients with the option to seek healthcare, this includes private health care, in another European Economic Area (EEA) Member State. The patient has to be entitled to the treatment in question under the NHS, if so they are eligible to have their costs reimbursed. This guidance is entitled 'Cross Border Health Care and Patient Mobility,

(Article 56)' and Primary Care Trusts (PCTs) must provide patients with the option to obtain reimbursement for the costs outlined under this article. Patients can potentially obtain reimbursement for two types of medical costs:

- Prescription medicines
- Treatment/service costs

The cross border document aims to provide a guide to the process.

For patients travelling from the UK to an EEA State for treatment, reimbursement can be up to, but not exceeding, the level of the cost for the same treatment provided in the UK under the NHS with the individual meeting any further costs themselves. The patient can receive treatment in the state provided sector or they can access services in the private sector for NHS funded treatment.

The principle of reimbursement assumes that the patient will pay the overseas provider before treatment, and then claim it back from their local PCT.



6. References

Pharmacovigilance

Pharmacovigilance is the process of:

- Monitoring the use of medicines in everyday practice to identify previously unrecognised adverse effects or changes in the patterns of already recorded adverse effects
- Assessing the risks and benefits of medicines in order to determine if any action is necessary to improve their safe use
- Providing information to healthcare professionals and patients to optimise the safe and effective use of medicines
- Monitoring the impact of any action taken
- The reporting obligations of marketing authorisation holders and sponsors of clinical trials are defined in the Community legislation, in particular **Regulation (EC) No 726/2004**, **Directive 2001/83/EC** and **Directive 2001/20/EC**.

The Royal Pharmaceutical Society

The Royal Pharmaceutical Society is the professional body for pharmacists and pharmacy in England, Scotland and Wales. The Society works to ensure that Pharmacists are treated as professionals and experts in medicine by the NHS



**Royal
Pharmaceutical
Society
of Great Britain**

and wider society, promoting the advancement of science in education and practice <http://www.rpharms.com/home/home.asp>



The General Pharmaceutical Council (GPhC)

The GPhC is the independent regulator for pharmacists, pharmacy technicians and pharmacy premises in Great Britain and are responsible for the protection, promotion and maintenance of health, safety and wellbeing of the general public.

The GPhC guarantee this by:

- Approving qualifications for pharmacists and pharmacy technicians and accrediting education and training providers
- Maintaining a register of pharmacists, pharmacy technicians and pharmacy premises
- Setting standards for conduct, ethics, proficiency, education and training, and continuing professional development (CPD)
- Establishing and promoting standards for the safe and effective practice of pharmacy at registered pharmacies

- Establishing fitness to practice requirements
- Monitoring pharmacy professionals' fitness to practise and dealing fairly and proportionately with complaints and concerns

<http://www.pharmacyregulation.org/>

Indemnity Insurance

Pharmacy Technicians now belong to a regulated profession, because of this, members should have indemnity insurance to cover their work; they are now responsible for the work that they do and as such if they make an error this could be very costly, indemnity insurance provides peace of mind and protection against corporate and civil action.



**National Institute for
Health and Clinical Excellence**

NICE

NICE stands for The National Institute for Health and Clinical Excellence.

NICE is an independent organisation which was set up by the Government in 1999 which decides what drugs and treatments are available on the NHS in England and Wales.

The reason for introducing NICE was the elimination of the post code lottery as some drugs and treatments were available in some parts of the country,

but not in others. NICE aims to give independent advice about which treatments should be available on the NHS in England and Wales, also ensuring that patients have the same access to treatment and care wherever they happen to live.

NICE main functions are:

- To assess new drugs and treatments as they become available
- To provide guidelines on how a particular condition should be treated
- NICE considers whether a treatment benefits patients
- NICE will help the NHS meet its targets

Once NICE issues its guidance, the NHS trusts and primary care organisations must find the money to make the drugs or treatments available.

www.nice.org.uk/

National Health Service (NHS)

The NHS is divided 2 groups, Primary and Secondary Care

Primary is initial care and covers the following groups:

- NHS Direct
- NHS Walk-in centres
- GP's
- Dentists
- Opticians
- Pharmacists

Secondary care cover hospital groups such as:

- are Trusts
- Mental Health Trusts
- NHS Trusts
- Ambulance Trusts
- Emergency and Urgent care.

The NHS in England provides free healthcare for all, based on need and not on ability to pay. The Department publishes strategies and policies on wide ranging issues that are relevant for the NHS including:

- Modernisation
- Innovation
- Patient safety
- Resources for NHS managers

Prescription prices are set per item and issued against a prescription that is prescribed by a suitably qualified professional:

- Doctor
- Dentist
- Vet
- Nurse

The prescription is then taken to a chemist to be dispensed by pharmacy professionals and assistants and the client is charged if they are between the ages of 18 and 60 and not on any state benefits or have medical exemptions.

[http://www.nhs.uk/
Pages/HomePage.aspx](http://www.nhs.uk/Pages/HomePage.aspx)



7. Glossary

General Pharmaceutical Council – the independent regulator for pharmacists, pharmacy technicians and pharmacy premises in Great Britain.

Department of Education/secretary of state – is a Cabinet Minister in charge of the Government Department for Education

General Certificate of Education – leaver's certificate awarded at age 16

National Occupational Standards – specify UK standards of performance that people are expected to achieve in their work

Quality Credit Framework – sets out the minimum credit values that programme structures must require students to take in order to gain a specific level of qualification

Aseptic – refers to a procedure that is performed under sterile conditions

Community Pharmacy – High street chemist

Hospital Pharmacy – dispensing chemist situated in a hospital

General Practitioner – a doctor working in the local community

Self-medicating – an individual uses un-prescribed drugs to treat undiagnosed medical ailments.

Medical Use Reviews – an opportunity for patients to discuss their medicines with a qualified pharmacist

Private hospital – a hospital owned by a profit company or a non-profit organisation and privately funded through payment for medical services by patients themselves, by insurers, or by foreign embassies

Procurement – is the acquisition of goods, services or works from an external source

Quality Assurance – is the process of determining whether products meet customers' expectations

Minor ailments – common conditions such as colds, aches, allergies and eczema

Doop bin – pharmaceutical waste bins

Multidisciplinary – groups of professionals from diverse disciplines who come together to provide a service

Medicines management – maximising health gain through the optimum use of medicines

Ofsted – The official body for inspecting schools

National curriculum – standardised content taught across schools

Marketing Authorisation – product licence.

Fitness to Practice – a set of requirements designed, implemented and monitored by a Governing Body (GPhC) for practicing professionals.

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- www.kellebeek.nl
- www.ssfkz.si
- <http://www2.stjohnscollege.ie/>
- www.ttk.ee

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