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Pharmacy technicians: an assessment of the current UK landscape, and proposals to develop community pharmacist and pharmacy technician roles and skill mix to meet the needs of the public

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Contents

List of Tables	11
List of abbreviations appearing	12
About the PDA	16
Foreword from the Chair of the PDA.....	18
Executive summary.....	25
Chapter 1 – Professionalism: the differences between healthcare professionals and healthcare technicians.....	25
Chapter 2 - The public protection delivered by pharmacy regulation.....	26
Chapter 3 - Pharmacy technicians - initial education and training.....	27
Chapter 4 - Pharmacy technicians – a European outlook.....	30
Chapter 5 - Challenges to the professional status of pharmacy technicians in the UK.....	31
Chapter 6 - The need to define the responsibilities and accountabilities of pharmacy technicians	34
Chapter 7 - Aligning the interests of pharmacists and pharmacy technicians	35
Chapter 8 - How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed	36
Summary of recommendations	38
Chapter 1 - Professionalism: the differences between healthcare professionals and healthcare technicians.....	38
Chapter 2 - The public protection delivered by pharmacy regulation.....	39
Chapter 3 - Pharmacy technicians – initial education and training	40
Chapter 4 - Pharmacy technicians – a European outlook.....	44
Chapter 5 - Challenges to the professional status of pharmacy technicians in the UK and reliance upon the capabilities of the group	45

Chapter 6 - The need to define the responsibilities and accountabilities of pharmacy technicians	48
Chapter 7 - Aligning the interests of pharmacists and pharmacy technicians	49
Chapter 8 - How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed	50
1 Professionalism: the differences between healthcare professionals and healthcare technicians	53
1.1 The role of a healthcare professional	53
1.2 The technician's role	56
1.3 The role of employers in supporting professionalism	57
1.4 The role of the regulator in supporting practice	57
1.5 The role of a professional body in supporting professionalism	58
1.6 Hierarchies in healthcare labour	59
1.7 The difference between a professional and a technician	60
1.8 Pharmacy technicians in the hospital setting	61
1.9 Pharmacy technicians in community pharmacy	62
1.10 Body of knowledge	63
1.11 Conclusions	64
1.12 Recommendations	65
2 The public protection delivered by pharmacy regulation	67
2.1 Understanding how public protection is delivered	67
2.2 A comparison of the salaries paid to healthcare technicians	68
2.2.1 Pharmacy technicians in the community pharmacy setting	68
2.2.2 Pharmacy technicians in the hospital sector	70
2.2.3 Dental technicians	71

2.2.4	Dispensing opticians	72
2.2.5	Veterinary nurses.....	72
2.3	National average wages	72
2.4	Findings – pharmacy technician salaries.....	74
2.5	Regulatory traction for pharmacy technicians	75
2.6	The ultimate sanction and the lack of regulatory traction	77
2.7	Participation in the regulatory process.....	78
2.8	Conclusions	80
2.9	Recommendations	82
3	Pharmacy technicians – initial education and training.....	84
3.1	Initial education and training requirements	84
3.2	Pharmacy support staff role definitions	85
3.3	The lack of distinction of the pharmacy technician role in Great Britain.....	87
3.4	The lack of distinction of the pharmacy technician role in Northern Ireland	90
3.5	Recruitment	93
3.6	The grandparent clause	94
3.6.1	Routes to grandparented registration.....	96
3.6.2	Countersigning requirements.....	98
3.7	The view of the regulator.....	100
3.8	Other governance and public safety assurance issues with pharmacy technician training – for the pharmacy regulator	100
3.8.1	Length of course / training period.....	100
3.8.2	Entry requirements.....	102
3.8.3	Supervision of initial education and training.....	102
3.8.4	Training completion rates.....	104

3.8.5	Protected training time	104
3.8.6	Variance in quality of training within and between sectors	105
3.8.7	Multiple methods of assessment	107
3.8.8	Variance between awarding bodies	108
3.8.9	Syllabus of learning.....	108
3.8.10	The study of ethics.....	109
3.8.11	Ability to plagiarize, cheat or collude on exams and assessments	109
3.8.12	Regulatory oversight of training.....	111
3.9	Initial education and training in other healthcare sectors - a comparison of qualifications and educational status	112
3.9.1	The dental sector	112
3.9.2	The optical sector	116
3.9.3	Veterinary medicine	117
3.10	An independent viewpoint on the appropriateness of technician qualifications in the UK 120	
3.11	Conclusions	123
3.12	Recommendations	128
4	Pharmacy technicians – a European outlook.....	133
4.1	Pharmacy technician practice across the European continent	133
4.2	Previous research.....	134
4.3	The community pharmacy model in Denmark in 2017	136
4.4	The community pharmacy model in the Netherlands in 2017.....	137
4.5	The community pharmacy model in Sweden in 2017	139
4.6	Conclusions	141
4.7	Recommendations	144

5	Challenges to the professional status of pharmacy technicians in the UK and reliance upon the capabilities of the group	146
5.1	Pharmacy technicians – an occupational group or a healthcare profession?	146
5.1.1	A Health and Care Professions Council definition	146
5.1.2	The APTUK	146
5.2	Acting professionally or being a professional?	151
5.2.1	Continuing fitness to practise (CFtP) and the renaming to “revalidation”	154
5.3	Recommendations of the Francis Inquiries	158
5.4	The approach being taken by the Rebalancing Medicines Legislation and Pharmacy Regulation programme board	159
5.5	Acting professionally or being a professional, and the use of terminology	160
5.6	Public trust and confidence in pharmacists	163
5.7	Remote supervision	163
5.8	GPhC involvement in supervision proposals.....	166
5.9	Pharmacy technicians as a newly-regulated group	168
5.10	Accuracy checking technicians.....	170
5.11	GPhC understanding of the accountability for the final accuracy check of dispensed medicines.....	172
5.12	Conclusions	173
5.13	Recommendations	175
6	The need to define the responsibilities and accountabilities of pharmacy technicians	179
6.1	Informing pharmacy technicians’ values	180
6.2	Delegation versus distribution of responsibility	182
6.3	Delegation	182
6.4	Accountability	184

6.4.1	Professional / regulatory accountability	184
6.4.2	Criminal accountability	184
6.4.3	Civil accountability	186
6.5	Conclusions	187
6.6	Recommendations	188
7	Aligning the interests of pharmacists and pharmacy technicians	190
7.1	The success of skill mix in hospital pharmacy	190
7.2	The lessons from skill mix in hospital practice have not been learned by policymakers.	192
7.3	The views of pharmacists and pharmacy technicians	196
7.4	Patient Group Directions (PGDs) as a possible role for pharmacy technicians?	198
7.4.1	What is a PGD?	199
7.4.2	The views of pharmacists	200
7.5	The views of pharmacy technicians	202
7.6	The impact of pharmacy technician support on pharmacist workload [79].....	206
7.7	Conclusions	208
7.8	Recommendations	211
8	How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed	213
8.1	Advanced pharmacy technician practice	214
8.2	New ways of working – learning from successful exemplars in other sectors.....	215
8.3	Proposals for a national career structure and better skill mix	217
8.4	How a structured career framework could support the developing roles of pharmacists and pharmacy technicians.....	218
8.4.1	Practitioner pharmacy technician	218

8.4.2	Advanced practitioner pharmacy technician	220
8.4.3	Specialised practitioner pharmacy technician.....	221
8.4.4	Established specialised practitioner pharmacy technician	222
8.5	The value of the structured career / skills and salary escalator	223
8.6	Dovetailing the structured career framework of pharmacy technicians with one for community pharmacists.....	228
8.7	Conclusions	229
8.8	Recommendations	230
9	Overall conclusions	233
9.1	The differences between pharmacy technicians in the hospital and community pharmacy settings	233
9.2	A lack of regulatory traction	234
9.3	Acting professionally or being a professional: causing confusion through the incorrect use of terminology.....	237
9.4	Qualifications and responsibilities	238
9.5	Pharmacists’ and pharmacy technicians’ views on PGDs	240
9.6	Sectoral differences in the roles of pharmacy technicians.....	240
9.7	The development of pharmacy technician roles in community pharmacy	242
10	Overall recommendations	244
11	Appendices	249
11.1	Appendix A: Differences between pharmacy professionals and pharmacy technicians..	249
11.2	Appendix B: Pharmacy technicians in the hospital and community pharmacy settings – key differences	256
11.3	Appendix C: Issues with the “Identifying the roles of pharmacy technicians” research study by the APTUK and the University of East Anglia	266

11.4	Appendix D – Examples of potential cheating, collusion or plagiarism to pass pharmacy technician assessments	270
11.4.1	List of additional abbreviations appearing in this appendix	271
12	References	308

List of Tables

Table 1 - Pharmacy technicians working in hospital – NHS Agenda for Change pay bands and rates for 2016/17 [35] [36].....	70
Table 2 - Dental technicians – NHS Agenda for Change pay bands and rates for 2016/17 [35] [37] [38] [39].....	71
Table 3 - A comparison of non-managerial technician salaries in 2016.....	73
Table 4 - Examples of excerpts from fitness to practise determinations relating to pharmacy technicians.....	78
Table 5 – Royal Pharmaceutical Society of Great Britain (RPSGB) Pharmacy Support Staff Definitions, 2004.....	86
Table 6 - Technician and intermediate roles supporting health professionals in regulated healthcare environments - training and registration compared.....	118
Table 7 - Examples of level 3 health qualifications	122
Table 8 - Reasons that pharmacy technicians are against adopting an extended role.....	203
Table 9 – Pharmacy technicians’ reasons for not considering taking on more demanding roles and responsibilities.....	204
Table 10 - Changes required before pharmacy technicians would consider taking on more demanding roles and responsibilities.....	205
Table 11 - Additional tasks that pharmacy technicians would consider taking on.....	205
Table 12 - Proposed career structure for pharmacy technicians (for illustrative purposes)	224

List of abbreviations appearing

AAH	All About Health
ABDO	Association of British Dispensing Opticians
ACT	Accuracy Checking Technician
AfC	Agenda for Change
APTUK	Association of Pharmacy Technicians United Kingdom
BIG	Beroepen in de Individuele Gezondheidszorg (the public register for healthcare professionals in the Netherlands)
BNF	British National Formulary
BPharm	Bachelor of Pharmacy
BSc	Bachelor of Science
BTEC	Business and Technology Education Council
Dsc	Doctor of Science
CCA	Company Chemists' Association
CD	Controlled Drug
CfTP	Continuing Fitness to Practise
CfWI	Centre for Workforce Intelligence
CLPD	Common Law Police Disclosure
CPD	Continuing Professional Development
CPA	Commonwealth Pharmacists' Association
CPPE	Centre for Pharmacy Postgraduate Education
CPS	Crown Prosecution Service
DoH	Department of Health
DipAgVetPharm	Diploma in Agricultural and Veterinary Pharmacy
EU	European Union
EWHC	England and Wales High Court
FEC	Further Education College
FFRPS	Faculty Fellow of the Royal Pharmaceutical Society
FOI	Freedom of Information
FTE	Full-time equivalent
FtP	Fitness to practise
GB	Great Britain
GCSE	General Certificate of Secondary Education

GDC	General Dental Council
GMC	General Medical Council
GOC	General Optical Council
GP	General Practitioner
GPhC	General Pharmaceutical Council
GSL	General Sales List
HBO	Hoger Beroepsonderwijs (higher vocational education in the Netherlands)
HCPC	Health and Care Professions Council
HNC	Higher National Certificate
HND	Higher National Diploma
ICM Research	Independent Communications and Marketing Research
Ipsos MORI	Ipsos Market and Opinion Research International
KNMP	Koninklijke Nederlandse Maatschappij ter bevordering der Pharmacie - The Royal Dutch Society for the Advancement of Pharmacy
LLM	Legum Magister (Master of Laws)
MBA	Master of Business administration
MBCS	Member of the British Computer Society (Member of the British Chartered Institute for IT)
MBO	Middelbaar beroepsonderwijs (senior secondary vocational education in the Netherlands)
MCA	Medicines Counter Assistant
MEP	Medicines, Ethics and Practice
MHRA	Medicines and Healthcare products Regulatory Agency
MOD	Ministry of Defence
MP	Member of Parliament
MPC	Modernising Pharmacy Careers
MPharm	Master of Pharmacy
MPhil	Magister Philosophiae (Mater of Philosophy)
MRPharmS	Member of the Royal Pharmaceutical Society
MUR	Medicines Use Review
NB	Nota Bene
NCS	National Careers Service
NHS	National Health Service
NI	Northern Ireland
NICE	National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council

NMS	New Medicines Service
NOS	National Occupational Standards
NPA	National Pharmacy Association
NVQ	National Vocational Qualification
NWW	New Ways of Working
OSCE	Objective Structured Clinical Examination
OTC	Over-the-Counter
P Medicine	Pharmacy-only medicine
PDA	Pharmacists' Defence Association
PGD	Patient Group Direction
PGEU	Pharmaceutical Group of the European Union
PMR	Patient Medication Record
POM	Prescription Only Medicine
PSA	Professional Standards Authority
PSNC	Pharmaceutical Services Negotiating Committee
PSNI	Pharmaceutical Society of Northern Ireland
PT	Pharmacy Technician
QC	Queen's Counsel
QCF	Qualifications and Credit Framework
RCVS	Royal College of Veterinary Surgeons
RPS	Royal Pharmaceutical Society
RPSGB	Royal Pharmaceutical Society of Great Britain
RVN	Registered Veterinary Nurse
SANAC	Scottish Association for National Certificates and Diplomas
SCOTEC	Scottish Technical Educational Council
SCOTVEC	Scottish Vocational Education Council
SCR	Summary Care Records
Semta	Science, Engineering and Manufacturing Technologies Alliance
SET	Science, Engineering and Technology
SfH	Skills for Health
SOC	Standard Occupational Classification
SQA	Scottish Qualifications Authority
UEA	University of East Anglia
UK	United Kingdom
UKIPG	United Kingdom Inter-Professional Group
US / USA	United States / United States of America
VRQ	Vocationally-Related Qualification

WWHAM	Who is the patient? What are the symptoms? How long has the patient had the symptoms? Action taken already? Medicines – is the patient taking any other medication?
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About the PDA

The Pharmacists' Defence Association (PDA) is a not-for-profit organisation which is both a Defence Association and a Trades Union which aims to act upon and support the needs of individual pharmacists and, when necessary, defend their reputations. The PDA is the only organisation in pharmacy that exclusively looks after the interests of employee and locum pharmacists across all sectors of pharmacy, and currently has more than 27,000 members.

In carrying out that function, the PDA's activities naturally extend to all factors that can affect the work and the future of our members.

As a Defence Association and Trades Union, the PDA supports members in situations where they may be involved in some kind of a dispute. This could be a conflict with their employer, a professional disciplinary episode where they are being investigated by the pharmacy regulator, a civil claim for compensation from a patient who alleges that they have been harmed by the error of the pharmacist or even a criminal prosecution. In this way, the PDA supports members in more than 5,000 cases per year and this provides a rich vein of valuable and comprehensive experience and a detailed knowledge of the kind of professional and operational environments that are likely to cause problems for both pharmacists and patients alike. It is this experience that drives the thrust of PDA's policy work as the PDA seeks to foster operational and professional environments that help to keep patients safe and in so doing keeping pharmacists out of harm's way.

The primary aims of the PDA are to:

- Support pharmacists in their legal, practice and employment needs
- Provide representation for its members
- Proactively seek to influence the professional, practice and employment agenda so that members can deliver high quality care
- Lead and support initiatives designed to improve the knowledge and skills of pharmacists towards improved risk management, safer practice and high-quality patient care

- Work with like-minded organisations to deliver these aims
- Provide insurance cover to safeguard and defend the reputation of the individual pharmacist.

Foreword from the Chair of the PDA

This report is about the role of pharmacy technicians in community pharmacy and is the output of significant research and analysis carried out over a period of several years.

It has been published because, in recent years as the pressure upon the NHS has been increasing, the government has been looking at ways to improve the accessibility to healthcare in the UK, to meet the needs of the public. The government has been considering the unexploited possibilities that are available through skill mix and in community pharmacy, it has been placing emphasis on the greater utilisation of pharmacy technicians.

In response to this government led initiative, this report seeks to set a sensible vision for the future development of pharmacist and pharmacy technician practice in community pharmacy in particular and it proposes ways in which this can be done. In undertaking this project, the PDA discovered many highly relevant factors and the report reflects upon important challenges which must be overcome in order to move forward in a safe and sustainable manner. Inevitably, there will be those that do not like the challenges, nor the solutions proposed. It is hoped however, that those who care about patient safety and the successful future of pharmacy as well as the future roles of pharmacists and pharmacy technicians will consider the detail of this report and engage in a collaborative way about how progress can be made which benefits patients and all those who work in pharmacy.

As a solely pharmacist organisation, the PDA does not have pharmacy technicians in its membership. However, it fully appreciates that pharmacy technicians are valued colleagues who work alongside its members every day; they are often the friends, family and the fellow employees working together as a team. If skill mix is to work, then it is important that pharmacy technicians have rewarding jobs with career development, job security, respect at work and fair reward, just as these things are important for pharmacists. It is important to note also that the

role of pharmacy technicians in hospitals, manufacturing and primary care is both significantly more developed and very different to that of community pharmacy technicians. Those who seek to rely upon their experiences of one sector, without considering the fundamentally different realities of another should take great care when they participate in the debate about skill mix in community pharmacy. As this report will demonstrate, such a superimposition is an easy mistake to make, but it has already done much to harm this important consideration.

The PDA undertook this project as part of its work on exploring a successful long-term strategy for pharmacy in the UK. If the pharmacy workforce in community pharmacy in particular could be reconfigured and improved, then this would enable the profession to take on many new, professionally fulfilling and exciting opportunities. In many of the other sectors of pharmacy, through careful planning and proper investment, this question has already been resolved. The time has come for community pharmacy to have clarity on what the respective roles of pharmacists and pharmacy technicians could and should be.

Background

The mandatory register of pharmacy technicians in Great Britain was established by the General Pharmaceutical Council in 2011 and soon afterwards, the government established its “Rebalancing Medicines Legislation and Pharmacy Regulation programme board”. One of its main objectives was to seek ways to better exploit skill mix in pharmacy. Contained within its terms of reference was included:

“To address in parallel medicines and professional regulatory matters (e.g. supervision), which are considered to restrict full use of the skills of registered pharmacists and registered pharmacy technicians”. [1]

The PDA believes that pressure on the NHS can be managed much more effectively through the better use of pharmacists and pharmacy technicians. In the community pharmacy setting in particular, it is evident that if the further development of the pharmacist's role is to be facilitated and pharmacists are to become more patient facing in the future, an extended role and greater responsibility for pharmacy technicians is not only desirable, but ultimately it is essential. However, the development of skill mix and the role of pharmacy technicians through the establishment of the Rebalancing Medicines Legislation and Pharmacy Regulation programme board, to which members are appointed exclusively by the government, where the agenda is narrowly focussed and from which the wider pharmacy profession is largely excluded, has created suspicion among pharmacists. Through a leak to the Chemist and Druggist magazine in September 2017 of a programme board document, it became clear that it had developed proposals to allow pharmacy technicians to supervise the sale and supply of prescription only and pharmacy only medicines and pharmacy staff, in the absence of a pharmacist. This has created anxiety and concern amongst pharmacists and pharmacy organisations in the UK and overseas.

The PDA believes that the best way for the Rebalancing Board to develop policy is to take advantage of the wider expertise available within the profession to tackle some of the important thorny issues; some of which will impact upon the safety of patients. In this way pharmacists and technicians are more likely to feel engaged in the process and support the natural and successful development of skill mix in community pharmacy.

The current programme of planning for the re-engineering of community pharmacy is more radical than at any time in the last thirty years and it is vital that it is successful. The outcome must be based on an exercise that is undertaken with the greatest of care, relying on the widest consideration of all factors; both favourable and otherwise. It must also rely on transparency and the full and proper engagement of the wider profession.

This report has been developed over three years and its publication at this time is designed to assist in the instigation of a wider consideration of all factors and to enable an intelligent debate within the profession at this time of potentially great change. It includes observations which are applicable to many pharmacy technicians but concentrates particularly on the community pharmacy sector as this is an important focus of the current re-engineering exercise.

This report considers a wide range of relevant topics, many of which have thus far not been properly addressed or even considered at all. These include a consideration, from a patient safety point of view of how public protection is delivered through healthcare regulation. It considers the reasons why currently, there may be a lack of regulatory traction in relation to pharmacy technicians and it explores the important difference between a healthcare professional and a healthcare technician. The report considers the methods employed by other healthcare professions in the UK, who have successfully used skill mix and technicians to drive new services for the benefit of patients and it contrasts these approaches with the issues that emerge in community pharmacy. It looks at the issues concerned with the education and training of pharmacy technicians in the UK, not least of these is that 73% of those on the register of pharmacy technicians (as at April; 2017) were admitted onto the register through grandparenting arrangements. Of considerable concern is that the GPhC does not hold records of any assessments having been conducted as to the suitability of their qualifications relied upon during the grandparenting process.

The report considers the roles, both current and proposed as compared to their pharmacy technician colleagues who operate in different environments in other European countries.

Through significantly elevated standards of training, education, practice and professional awareness, with the support of regulation, healthcare professionals are entitled to use protected titles; such as pharmacist, doctor or dentist. This is a system, which is deemed to be so

fundamental to the protection of the public that it can rely on criminal sanctions for those who use it without justification. It must be recognised by any intelligent analysis that the creation of a mandatory public register of individuals in 2011 did not result in the overnight creation of a profession of pharmacy technicians. Despite this, there are some areas of pharmacy practice, such as that seen in hospitals, in primary care and in manufacture where pharmacy technicians operate to high standards and without their involvement, the respective services would undoubtedly suffer. This report considers the reasons why, in a general sense, the development of pharmacy technician practice in the community pharmacy setting has not occurred to anything like that seen in these other areas of practice.

Through a focus upon patient safety and public confidence, the report seeks to explore whether a more rigorous and consistent approach needs to be taken when quality kite marking groups of individuals such as pharmacy technicians with protected titles and when describing them as healthcare professionals.

Professional interests are borne out of a collective ambition and they lead to the creation of a strong representative voice. If there is no strong representative voice, then arguably, the collective ambition may not exist. The Association of Pharmacy Technicians UK (APTUK) has only 6% of the pharmacy technician register in its membership with only a minority of these being from the community pharmacy setting. Bearing in mind that the Rebalancing Board is primarily looking at the re-engineering of community pharmacy, this report challenges whether the board has sufficiently sought evidence that pharmacy technicians in community pharmacy settings are truly supportive of the roles and responsibilities being proposed and whether those views are being appropriately represented.

Finally, the report considers ways in which the successful development of the roles of both pharmacists and pharmacy technicians could be developed through a symbiotic process which

develops the roles of both groups to their mutual benefit and ultimately, to the benefit of the public. An example of such a process is one that has successfully been used in the hospital pharmacy setting since the 1980's. Furthermore, this report examines successful exemplars of service re-engineering which relied on skill mix from other parts of the NHS as they provide powerful frameworks for change which could easily be adapted for community pharmacy.

The PDA makes recommendations in respect of these things and describes a way forward which could be embraced, to:

- **Unify pharmacists and pharmacy technicians behind a common vision and purpose, based on shared interests and mutual benefit.**
- **Develop more rewarding, fulfilling roles for both groups, including enhanced clinical roles, which make more appropriate use of their respective skills.**
- **Establish a symbiotic, complementary and effective skill mix model in community pharmacy.**
- **Create rewarding career frameworks, supported by skills and salary escalators and appropriate remuneration.**
- **Enhance patient care and safety, improve governance and regulation, develop the UK healthcare infrastructure and reduce the burden both on community pharmacy and other areas of the NHS such as GP surgeries and secondary care.**

It is fully recognised that some of the issues explored in the report will be deemed emotive, but it is vital that they are considered within the scope of the wider pharmacy practice development exercise. The PDA's intention is to promote wider engagement of the profession in a thought provoking debate that considers the broader factors and encourages all stakeholders to reach a positive consensus on how to address the matters raised. Our ambition is to make pharmacy

better for patients, pharmacists and pharmacy technicians. We hope all stakeholders potentially affected will engage in the debate in this spirit.

Mark Koziol M.R.Pharm.S.

Chairman

The Pharmacists' Defence Association (PDA)

Executive summary

Chapter 1 – Professionalism: the differences between healthcare professionals and healthcare technicians

The first chapter of the report considers the definition of professionalism from various perspectives. The differences between healthcare professionals and healthcare technicians, the underpinning behaviours and characteristics of a profession and the role of a professional body in supporting professionalism are examined and described. It is of fundamental importance that the public must not be confused or misled about the respective capabilities of pharmacists and pharmacy technicians.

The development of hospital pharmacy practice in the late 1970s and 1980s involved identifying and developing the roles of pharmacists and establishing a career framework and associated skills and salary escalator. Subsequently, the roles of pharmacy technicians were developed to support the pharmacist's role. The vision for hospital pharmacy was first established and then the skill mix arrangements were subsequently developed to support that vision. The government should adopt the lessons that this provides in its approach to community pharmacy practice. This would help to ensure an appropriate interplay between the roles of pharmacists and pharmacy technicians.

Because of these historical hospital pharmacy developments, hospital pharmacy technicians are comprehensively more organised, better resourced and far more advanced in their levels of training and expertise than are their community pharmacy colleagues. Pharmacy policy makers must not use hospital pharmacy technicians as exemplars of the roles and responsibilities that can be safely undertaken by community pharmacy technicians until a much wider, planned and properly-executed re-engineering of community pharmacy practice takes place.

A table of key differences between pharmacists and pharmacy technicians (for example in relation to education, training and regulation) can be found in Appendix A.

Chapter 2 - The public protection delivered by pharmacy regulation

General Pharmaceutical Council (GPhC) fitness to practise (FtP) determinations were examined from a 50-month period between 2012 and 2016. It was found that 80% of hearings involved pharmacists and just 20% involved pharmacy technicians – in the context that there are approximately twice as many pharmacists on the register as pharmacy technicians. The research shows that 73% of pharmacy technicians invited to a FtP hearing did not attend (22% of pharmacists did not attend their FtP hearings).

Between 53% to 67.4% of pharmacy technicians work in community pharmacy (see Appendix B). However, of those pharmacy technicians invited to a FtP hearing, 23% worked in community pharmacy (87% of pharmacists called to an FtP hearing worked in community pharmacy).

Quotes from fitness to practise determinations from 2013 to 2016 are cited, where pharmacy technicians have disengaged from the FtP process. The lack of attendance could be a factor which challenges the premise that pharmacy technicians can be considered, as a group, to be professionals.

The salaries of pharmacy technicians were found to be lower, particularly in community pharmacy, than those of other healthcare technicians. For a large proportion of pharmacy technicians in community pharmacy, their salaries were around or less than the UK Living Wage and were comparable to those of general customer service occupations such as retail cashier, checkout operator and travel agent. [2] [3]

The findings in relation to pharmacy technician salaries and fitness to practice cases lead to a notable conclusion: that the GPhC cannot attain sufficient regulatory traction through the regulation of pharmacy technicians in the current circumstances. The consequences for pharmacy technicians of removal from the register are very limited. The ultimate sanction of being 'struck off' provides limited protection to the public if there is little or no loss of income or status – particularly for those with lower salaries as found in community pharmacy, since they can easily find alternative work with the same level of pay or better, and without the same responsibilities to patients.

The report recommends the creation of a structured career framework for pharmacists, and subsequently for pharmacy technicians to support the roles of pharmacists, linked to pay banding at a significantly higher level than is currently the case in community pharmacy. It also recommends that the Pharmaceutical Society of Northern Ireland (PSNI), which does not currently regulate pharmacy technicians but is considering doing so in the future, should consider the timing of its decision in the context of the issues detailed in this report and whether such regulation is likely to be effective given the current conditions which prevail in community pharmacy.

Chapter 3 - Pharmacy technicians - initial education and training

A number of fundamental governance issues with pharmacy technicians' education and training have been identified during previous research and during the development of this report. Not the least of these is that 73% (as at April 2017) of pharmacy technicians were admitted on to the register through grandparenting arrangements. The GPhC and the Royal Pharmaceutical Society (RPS) (which holds records from the RPSGB, the predecessor to the GPhC) do not hold any record of any assessment having been conducted as to the suitability of the qualifications relied upon during grandparenting to allow someone to work as a pharmacy technician. The Chairman of the

GPhC told the RPS conference in September 2014 that as a result of grandparenting, there were some very variable standards amongst pharmacy technicians. He explained that it was therefore not possible for the regulator to take a blanket view and to recommend to pharmacists what roles they should delegate to pharmacy technicians. A generic approach to the entire group was not possible. The level of public protection provided by the grandparenting clause in the present day is questionable and it would be difficult to rely upon the assurance it provides if the roles of pharmacy technicians were to evolve.

Pharmacy technicians' motives for registering with the GPhC were examined in a research study, conducted independently by JRA Research at the request of the PDA. It was found that 78% of pharmacy technicians surveyed registered with the GPhC in the first place because they were required to do so by their employer, as a condition of their continued employment. 74% reported that their salaries had remained the same since registering (93% in community, 64% in hospital). 66% overall reported having experienced no change in their job roles or responsibilities (80% in community, 63% in hospital). [4] The variation in quality of initial education and training of pharmacy technicians between the community and hospital sectors can be seen in Appendix B.

The role of the pharmacy technician remains poorly defined and there is widespread acknowledgement that there is very little to distinguish the role in community pharmacy from that of a dispensing assistant; this has long been the case. In these circumstances, the initial education and training of pharmacy technicians is likely to lead to variable outcomes, with the trained person's skillset likely to become aligned to that of a dispensing assistant. In addition, anything learned during a training course which would be beyond the role of a dispensing assistant may have never been put in to practice since qualification. For this reason, among others, it would be difficult to place any reliance in the future upon the training previously undertaken by existing pharmacy technicians, or indeed their current registration, as a basis for extending the pharmacy technician's role.

There is widespread variation in the quality and nature of the initial education and training provided to pharmacy technicians. The regulatory standards for such are open to interpretation. They have been outdated for a considerable period of time and are of questionable relevance since the pharmacy technician role is poorly defined. In addition, there has been very little – if any – involvement from the GPhC in monitoring the delivery of the course at individual training sites. For these reasons, it may be very difficult for the regulator to provide the requisite public safety assurances in respect of any more advanced roles and responsibilities even in relation to non-grandparented pharmacy technicians. If the issues with the initial education and training were addressed now for future trainees, it would not alter the difficulties in providing assurances in respect of pharmacy technicians who are already on the register and who would be trained to different, inferior standards.

Among the numerous governance issues identified with the initial education and training of pharmacy technicians was the ability for trainee pharmacy technicians to cheat, collude or plagiarise in assessments during their initial education and training, which has been highlighted in GPhC-commissioned research. [5] Further, there is substantial online evidence of such behaviour on national distance learning courses completed by many pharmacy technicians in the UK, with answers to assessment questions readily available. Further information is included in Appendix D.

The Gatsby Foundation's report on 'Technicians and intermediate roles in the healthcare sector' suggests that the intermediate level in the healthcare sector is generally associated with level 4/5 qualifications. The report said: "*It was noted that qualifications included in the healthcare frameworks in the government-supported Advanced Apprenticeship programme (level 3) were normally linked to lighter weight generic health and social support roles rather than substantial occupationally specific qualifications.*" Pharmacy technicians' qualifications, among those who are

not grandparented, are currently at NVQ level 3 – below those expected of other healthcare technicians.

A profession-wide, collaborative debate is needed to determine the future of community pharmacy practice for pharmacists and subsequently pharmacy technicians. The development of skill mix and the role of pharmacy technicians through the establishment of an exclusive Rebalancing Medicines Legislation and Pharmacy Regulation programme board, to which members are appointed by the government, where the minutes and agendas are carefully prepared and managed by civil servants and from which the wider pharmacy profession is largely excluded, has created suspicion and concern among pharmacists. Its approach has eroded the pharmacist buy-in and support that would be needed to enable the natural and successful development of skill mix in community pharmacy.

Chapter 4 - Pharmacy technicians – a European outlook

In 2004, a report was published of a comparative study on pharmacy staff groups in Denmark, the Netherlands and Sweden. It was commissioned by the Department of Health. The findings of this study were considered and the current situation in those countries was re-examined, as well as taking a look at practice in Europe more broadly.

In some European countries, those in pharmacy technician roles are trained to graduate level and there, the role is much more advanced, involving significantly more responsibility and a commensurate remuneration structure. In European countries where additional roles and responsibilities are assumed by those in comparable pharmacy technician roles, those individuals are supported by higher standards of clinical governance. For example, they are able to rely upon original pack dispensing and bar code checking to assist with dispensing accuracy; the transfer of prescriptions from surgery to pharmacy is accompanied by additional clinical information such as

the indication of the medicine, and the staffing levels in individual pharmacies are much higher than typically seen in the UK.

In mainland Europe, the majority of pharmacies are still owned by pharmacists and the extent of corporatisation is not as advanced as it is in the UK. Consequently, there is much less focus upon corporate profit objectives and a greater emphasis on professional considerations.

Developing policies regarding skill mix and the use of pharmacy technicians based upon the successful models in operation in mainland Europe or elsewhere, without seriously considering the whole system differences and deficiencies of the UK community pharmacy environment in comparison, creates a significant risk of damaging the integrity and standards of the service and a risk to public safety.

Chapter 5 - Challenges to the professional status of pharmacy technicians in the UK

The Health and Care Professions Council requires any occupational group that wishes to be recognised as a healthcare profession to demonstrate that membership of its prospective professional body accounts for at least 25% of the occupation's practitioners. The Association of Pharmacy Technicians United Kingdom (APTUK), the leadership body for pharmacy technicians, does not adequately represent the technician workforce. As at late 2016 it had 1,380 members, just 6% or less of the total UK workforce. In addition, it has previously been estimated that around two thirds of pharmacy technicians work in the community setting and the majority of the remainder are employed to work in hospital pharmacies; it was said at the APTUK launch of the 'Identifying the roles of Pharmacy Technicians in the UK' report in October 2016 that the APTUK has the opposite proportions in membership. Indeed, it is stated in the report that the APTUK's membership is "*largely derived from the hospital sector.*" [99]

Despite the APTUK's low level of membership, it is represented on many government developmental groups and treated as if it is a professional body. Great reliance has been placed upon the APTUK to be able to represent pharmacy technicians as a group when government policy is being developed, especially in community pharmacy. At present however, it cannot legitimately fulfil this representative role and its credentials conspire to undermine the validity of the government's entire Rebalancing Medicines Legislation and Pharmacy Regulation programme and other committees to which the APTUK has been appointed by civil servants.

The term *a professional* (noun) must not be used interchangeably with *being 'professional'* (adjective). The noun has been misused without sufficient justification by the government, the civil service and some pharmacy employers to refer to pharmacy technicians, which has caused confusion, misled the profession and public and put patient safety at risk.

It must be recognised by pharmacy policy makers that by any intelligent analysis the creation of a mandatory public register of individuals in 2011 did not result in the overnight creation of a profession of pharmacy technicians.

The public places a great deal of confidence in pharmacists at a national, European and global level, and it is important that this is not undermined by the inappropriate reference to pharmacy technicians as "professionals". The inappropriate use of terms such as "pharmacy professional" means that, in some contexts, it is impossible to tell whether reference is being made to pharmacists, pharmacy technicians or both, which could lead to confusion and safety risks if a patient is led to believe that they are dealing with a pharmacist when they are actually dealing with a pharmacy technician. Claiming that pharmacy technicians are professionals may suggest to the public that they can have a degree of confidence in pharmacy technicians' abilities commensurate with the term; many aspects of the report demonstrate that that is not the case.

A study conducted by JRA Research on behalf of the PDA found that half of community pharmacy technicians required assurances that it would be the pharmacist, not the pharmacy technician, that would be held responsible and liable in the event of a dispensing error. The development of increased responsibilities for the pharmacy technician's role cannot proceed in circumstances where the group is not ready to accept accountability for such.

The government's approach to the enforced delegation of tasks from pharmacists to pharmacy technicians has created considerable anxiety among pharmacists, and there is a lack of trust among many pharmacists in relation to pharmacy technicians' capabilities. This can be seen at present where pharmacists are required by their employers to delegate the final accuracy checking of dispensed prescriptions to Accuracy Checking Technicians (ACTs), who may or may not be pharmacy technicians. There is no legal or regulatory control over who may call himself or herself an ACT or around the qualifications required to become an ACT, but it is clear that the pharmacist retains overall responsibility.

The Department of Health announced proposals in 2006 which, if enacted, would lead to pharmacists supervising pharmacies remotely and the delegation of certain tasks to pharmacy technicians. It could be perceived that it has been pursuing this agenda intermittently since that time, with varying degrees of effort – for example by introducing the Responsible Pharmacist regulations in 2009. The reports of the Francis inquiries into the failures at the Mid Staffordshire NHS Foundation Trust, published in 2010 and 2013, recommended that there be senior clinical involvement in all policy decisions affecting patient safety and wellbeing and consultation with professional staff affected by the proposed changes. Despite this, the Department of Health's Rebalancing Medicines Legislation and Pharmacy Regulation programme board secretly developed proposals to allow pharmacy technicians to supervise the sale and supply of prescription only and pharmacy only medicines and pharmacy staff, in the presence or absence of a pharmacist, without consulting widely with pharmacists or pharmacy technicians at the coalface. Since the proposals

were leaked to the Chemist and Druggist in September 2017, there has been significant opposition, including from the PGEU and the Commonwealth Pharmacists' Association, as well as from pharmacists in the UK.

Chapter 6 - The need to define the responsibilities and accountabilities of pharmacy technicians

With the notable exception of the circa 6% of pharmacy technicians working in primary care, UK pharmacy technicians can be delineated broadly into two significant sectoral groups; those working in hospital and those working in community pharmacy. The differences between these two groups are significant (see Appendix B) and have been hitherto ignored during the development of regulatory and healthcare policy. Whilst those working in hospital pharmacy (the minority) have enjoyed a development framework for several decades, those in the community setting (the majority) have suffered from long term underinvestment in training, remuneration and the absence of a structured career framework. For these reasons among others, community pharmacy technicians are not yet ready to take on additional clinical roles because patient safety could not be guaranteed under the existing regulatory and professional frameworks.

There are isolated examples of pharmacy technicians working in specialist roles, particularly in the hospital sector, but this is not widespread and must not be taken as representative of the normal training or capabilities of pharmacy technicians.

This report calls for pharmacy policy makers to clearly define roles and responsibilities and identify clear lines of accountability for both pharmacists and pharmacy technicians, through discussions involving coalface practitioners, in order to help foster a symbiotic and complementary skill mix model which works optimally for the public, makes working practices more efficient, extends the practical capability of the pharmacy team and improves patient safety.

There is also a need for a consensus, reached through a wide-ranging and inclusive debate within the profession and among pharmacy technicians, on exposure to regulatory accountability and criminal sanction for pharmacists and pharmacy technicians.

Chapter 7 - Aligning the interests of pharmacists and pharmacy technicians

In order to develop successful skill mix, the interests of pharmacists, pharmacy technicians and patients must be aligned. This was achieved successfully in the hospital pharmacy sector in the 1980s, where the sector's leadership first identified what the future roles of pharmacists should be and developed a structured career framework and associated skills and salary escalator to support it. This secured the engagement and buy-in of pharmacists and led to more professionally-fulfilling roles which made better use of pharmacists' skills as experts in medicines, to the clear – and intended – benefit of the public. During the development process, the roles of pharmacy technicians were identified which could support those of pharmacists and enable pharmacists to spend more time on wards with patients, whereas previously their roles had been confined to a much greater extent to the dispensary. The relevant lessons from this development process should be applied to community pharmacy.

In contrast, the government's approach to community pharmacy has to a large extent involved developing policy through a small and exclusive Rebalancing Medicines Legislation and Pharmacy Regulation programme board – the members of which are hand-picked by the civil service and which excludes any significant representation of coalface pharmacists and pharmacy technicians. There is no professionally-led plan, developed in detail and through the engagement with coalface practitioners, which sees community pharmacists developing a structured career framework linked to a skills and salary escalator. No hierarchy has been created of new and professionally-rewarding roles for pharmacists delivered in the community pharmacy. No discernible, unifying,

strategic vision for the future of community pharmacy has been determined. The rebalancing board's proposals to allow pharmacy technicians to supervise the sale and supply of medicines and pharmacy staff, including in the absence of a pharmacist, could see pharmacists taken away from patients – who are present in their greatest numbers in the community pharmacy.

Circumstances must be created in which pharmacists can place trust and confidence in the capabilities of pharmacy technicians to take on more advanced roles, but there are few, if any signs that this will be achieved in the near future if the government's current approach persists.

Chapter 8 - How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed

A structured career framework which relies upon a skills and salary escalator should be established for both pharmacists and pharmacy technicians in order to develop new roles in the community pharmacy setting.

New roles for community pharmacists need to be fully scoped out, including clinical governance, training and funding considerations, and integrated into the Community Pharmacy Contractual Framework and NHS patient pathways and/or enhanced service specifications, before extended roles for pharmacy technicians can be considered. A suggested career structure which relies upon **practitioner, advanced practitioner, specialised practitioner and established specialised practitioner** levels, is detailed in this report – with accompanying job descriptions and training, competency and experience requirements.

The Department of Health's New Ways of Working programme, which was a success, changed the way that mental health staff work and introduced a range of new and extended roles for a range of staff grades. It provides a useful template for implementing any proposed changes to skill mix in

pharmacy. One of the important lessons from the programme was that not only would stakeholders need to sign up to it, they must become active partners in its implementation.

Additional dispensary support must be available to pharmacy teams before the role of the pharmacy technician can be safely extended. Essential precursory clinical governance improvements include greater use of automation, the integration of bar-code checking into the dispensing process, the regular availability and reliance upon clinical information and adequate staffing levels.

The status of pharmacy technicians in community pharmacy, which currently appears tenuous, must be strengthened. Many pharmacy technicians are unaware of the implications of being on a public register and they have a weak leadership body. Low salaries, low-grade qualifications and the lack of a structured career framework all contribute to a lack of regulatory traction and must all be improved if the General Pharmaceutical Council is to be able to ensure public protection from this group of individuals.

If the collective engagement and buy-in of pharmacists and subsequently pharmacy technicians is to be secured, then future developments must be linked to a clinical career framework with associated salary and skills escalator.

Summary of recommendations

Chapter 1 - Professionalism: the differences between healthcare professionals and healthcare technicians

1. The successful approach that has been adopted in hospital pharmacy, insofar as it relates to the interplay between pharmacists and pharmacy technicians, should be studied and the relevant lessons that it provides applied to community pharmacy. However, policy makers, when deciding current policy, must not use the roles, responsibilities and capabilities of hospital pharmacy technicians as exemplars of the roles and responsibilities that can **currently** be safely undertaken by community pharmacy technicians.
2. Any change to roles and responsibilities undertaken by pharmacists and pharmacy technicians in community pharmacy must be introduced as part of a planned and properly executed wholesale, integrated re-engineering of community pharmacy practice.
3. Community pharmacists' future roles must be identified (involving appropriate pilot studies to assess suitability) and established before pharmacy technicians are afforded any greater degree of autonomy. The training, roles and practice of pharmacy technicians must then be designed to complement and support the developing roles of pharmacists in the sector.
4. It is essential, when skill mix is being considered, that patient safety standards be maintained. While pharmacy technicians are a vitally important group of practitioners in the modern NHS, their roles and responsibilities must not be confused with those of pharmacists.

5. The public must never be confused or misled into thinking that they are dealing with a pharmacist, when they are actually dealing with a pharmacy technician.
6. The safety of the public in community pharmacy must not only be maintained; it must be further developed to ensure continued confidence in community pharmacy practice. The public expectation regarding community pharmacy is that a pharmacist will always be available to them if required to address their clinical medicines-related needs. [6]

Chapter 2 - The public protection delivered by pharmacy regulation

1. The existence of a register (a public list) of pharmacy technicians cannot be relied upon in isolation to protect the public. It must be underpinned by a suitably structured career framework for pharmacy technicians to support the roles of pharmacists, linked to pay banding at a significantly higher level than is currently the case in community pharmacy.
2. If regulatory traction for pharmacy technicians is to be improved, the ultimate sanction, which is designed to protect the public, must indeed represent a meaningful loss of income, career damage and loss of status or reputation.
3. Pharmacy regulatory bodies should consider whether regulation of pharmacy technicians is likely to be effective given the current conditions prevailing in community pharmacy.
4. Both pharmacists and pharmacy technicians must be treated in the same way and judged by the same standard in terms of notification by the police to the GPhC of criminal activity.

Chapter 3 - Pharmacy technicians – initial education and training

1. The initial education and training requirements of pharmacy technicians should be substantially revised after the roles of pharmacists and pharmacy technicians respectively have been reviewed and an effective skill mix model, accompanying salary escalators and clear role definitions have been established in the community sector.
2. The current variance in the training and educational standards of existing pharmacy technicians presents risks to the proper development of skill mix in community pharmacy and must be addressed.
3. The pharmacy regulator must play an active role in accrediting, reaccrediting and monitoring individual pharmacy technician education and training providers and sites - as it does for pharmacist training. Where there is a failure to meet its standards, the GPhC must take corrective action to address this, including issuing sanctions where appropriate.
4. A pharmacist, and not a pharmacy technician, must supervise the initial education and training of pharmacy technicians and act as the designated educational supervisor.
5. A pharmacist, and not a non-pharmacist employer, must determine who will act as the designated educational supervisor to a trainee pharmacy technician.

6. A minimum entry level requirement should be established of at least 5 GCSEs at grade C or above, including Maths, English and either Chemistry or Biology, for enrolment on to pharmacy technician initial education and training courses.
7. As part of the initial education and training standards for pharmacy technicians, the GPhC must provide an indicative syllabus to specify what must be covered on training courses.
8. The current level 3 qualification for pharmacy technicians is not sufficiently robust to enable skill mix to flourish. A level 4/5 educational (HNC/HND/foundation degree) standard must be achieved so as to deliver the requisite standard of pharmacy technician training and qualification.
9. A registration assessment for all pharmacy technicians should be established as a condition of formal registration. This would provide quality assurance and guarantee a minimum level of knowledge. This process should be administered by the GPhC.
10. Pharmacy technician initial education and training courses must include a component of regular day release for training and study time at a further education college (FEC). This should involve a minimum of one day per week at the FEC for two years, with an allowance for annual leave and public holidays. This must apply to both the knowledge and competency components.

11. Pharmacy technician training must include formal progress reports, carried out by the tutor every 13 weeks as for pharmacists, which must be sent to the GPhC if unsatisfactory. [7]
12. Pharmacists, as tutors to trainee pharmacy technicians, must receive better support from employers. This should be in the form of training and guidance for the role and dedicated protected time provided by the employer to act as a tutor. The GPhC should set and enforce standards in this regard.
13. To address the problems associated with the poor definition of Pharmacy Technician roles, Pharmacy technicians should be divided into a number of specific groups with a particular level of skill, similar to the model used in the dental sector. A skills escalator should be established, each level requiring a different level of additional knowledge and education (beyond that gained through initial education and training) and each level should support a specific aspect of the work and role that a pharmacy technician might undertake to support the role of a pharmacist e.g. Accuracy Checking Technician, a dispensing technician, a hospital pharmacy ward-based technician, GP surgery based pharmacy technician.
14. Significant concerns exist about the extent to which the register of pharmacy technicians is reliant upon the grandparent clause as this undermines pharmacists' confidence to delegate tasks. This should be urgently reviewed by the GPhC. The GPhC must subsequently provide a clear statement about the delegation of tasks to grandparented pharmacy technicians and offer clear guidance to pharmacists. Until this is done, pharmacists will find it very difficult to delegate more advanced tasks to pharmacy technicians.

15. The public register of pharmacy technicians should be annotated for those individuals who have been grandparented on to it and for those in possession of recent NVQ3 qualifications.
16. Any requisite training for pharmacy technicians must be directly accredited and comprehensively monitored and assured by the regulator.
17. Pharmacy technician qualifications should be achieved through different types of assessment, including assignments, objective structured clinical examination (OSCEs) and modular exams, with monitoring and enforcement of these requirements by the regulator.
18. The GPhC must investigate any potential cheating, collusion or plagiarism evident on online pharmacy forums and digital channels. It must publish its findings, take appropriate steps to assure the safety of the public and provide assurances in that regard. This may include requiring all pharmacy technicians who have undertaken the affected course(s) in the relevant time period to sit a registration exam in order to remain on the GPhC register.
19. The combined effect of the regulatory governance and quality issues set out in this report, on the ability of pharmacy technicians to perform a defined role, must be evaluated and addressed. The GPhC must then take the necessary steps to provide assurance to the public that pharmacy technicians are competent to practise in their roles in the context of these issues.

20. Consideration should be given to requiring pharmacy technicians to complete additional relevant training as preparation for transferring between sectors of pharmacy practice.

Chapter 4 - Pharmacy technicians – a European outlook

1. The successful community pharmacy skill mix models of countries in Europe and beyond could only be used as a realistic template for the UK, when whole-system improvement to the community pharmacy operation in the UK is also undertaken. This would include:
 - a. Increasing the educational standard of UK pharmacy technicians (it is recommended that it becomes a level 4 educational standard (sub degree level) in Chapter 3)
 - b. Introducing a clinical career framework for community pharmacists and pharmacy technicians, and subsequently increasing the salaries of pharmacy technicians
 - c. Ensuring that pharmacies are better staffed, with more than one pharmacist and a complement of trained, registered pharmacy technicians
 - d. Improving the clinical governance arrangements within the community pharmacy setting, enabling pharmacists to rely on clinical indications, barcode checking, original pack dispensing and access to the full electronic patient records on a read and write basis
 - e. The ability for pharmacists to work with professional autonomy even in pharmacies that are owned by large corporate multiples.

If patient safety and role development of pharmacists and pharmacy technicians is to be a serious proposition in the UK, then such measures should be introduced as soon as possible. Such improved clinical governance and wider system enhancements would provide a much more robust springboard to enhance the roles of pharmacists and

pharmacy technicians. Without this, the development of skill mix in the community pharmacy setting can only be very limited.

Chapter 5 - Challenges to the professional status of pharmacy technicians in the UK and reliance upon the capabilities of the group

1. The debate around skill mix involving pharmacists and pharmacy technicians must be led by the pharmacy profession, using a transparent process of wholesale professional engagement and not by the government, through a process involving a small and exclusive programme board, the members of which have been hand-picked by civil servants, whose activities and communications are carefully stage-managed and whose existence lacks any professional mandate.
2. The differences between the word professional as an adjective (*being* professional) and as a noun (being *a* professional) must be reflected in the narrative that is used when any debates around skill mix occur.
3. When any debates around skill mix occur, it must be recognised that the creation of a register of pharmacy technicians by a healthcare regulator did not and has not led to the automatic creation of a new healthcare profession.
4. Whether it is the APTUK or some other organisation purporting to represent the interests of pharmacy technicians, it must be credible and broadly representative not just in terms of its membership numbers, but also in respect of its ability to represent all sectors of practice. A representative mandate can only be achieved with at least 25% of pharmacy technicians on the GPhC register in membership.

5. Policy makers must recognise the serious limitations of the extent to which they can rely upon APTUK currently, when considering important policy regarding skill mix and supervision in community pharmacy. There is no organisation at present which represents a significant proportion of community-based pharmacy technicians.
6. The Pharmacy profession must agree which bodies can most appropriately represent its views in relation to any proposed changes to national government policy which has the potential to affect it.
7. A debate must be held about the extent to which the pharmacy regulators should be involved in the development of wider healthcare policies which extend beyond those designed to protect the public by ensuring adherence to the necessary pharmacy regulatory standards.
8. Policy makers must take additional steps to establish whether pharmacy technicians working at the coalface in the community pharmacy setting are currently, or will ever be, on board with any of their proposals - for example in relation to skill mix and supervision. This could be done in a number of ways:
 - a. Undertaking impact assessments and encouraging pharmacy technicians and pharmacists who will be affected by the changes being considered to submit their views based upon their coalface experiences (see recommendations of the Francis inquiries into the Mid Staffordshire NHS Foundation Trust). [8] [9]
 - b. Creating a meaningful opportunity for those who might be concerned about the changes being considered and the policy makers considering them to have a direct exchange of views with front-line pharmacists and pharmacy technicians, in order to create proposals which are then put out for public consultation (see the

recommendations of the Francis inquiries into the Mid Staffordshire NHS Foundation Trust).

- c. Undertaking direct surveys of either all registered pharmacy technicians and pharmacists, or large-scale representative samples of pharmacy technicians and pharmacists, on specific subjects, when required.

Failure to do this will create the risk that the readiness of the most senior higher-echelon pharmacy technicians to undertake new roles and responsibilities may be considered by policy makers to represent the overall state of readiness of all pharmacy technicians, whatever their level of seniority and whatever their scope and sector of practice; this is not the case. The result will be the failure to secure the support of the wider population of both pharmacists and pharmacy technicians, a failure of skill mix in community pharmacy and ultimately the diminution of public care and safety.

9. The review of CPD, peer discussion and reflective account records submitted by GPhC registrants should be conducted by pharmacists.
10. The GPhC should publish a statement explaining that its “revalidation” framework will not involve the revalidation of pharmacists or pharmacy technicians. It should revisit the framework for ensuring continuing fitness to practice applicable to both pharmacists and pharmacy technicians, with a view to creating a tailored approach appropriate for the roles and responsibilities of each registrant group. The GPhC’s revalidation framework and processes should be renamed and given a title or titles consistent with the level of public protection and assurance afforded.

Chapter 6 - The need to define the responsibilities and accountabilities of pharmacy technicians

1. Pharmacy policy makers must ensure that there is no confusion caused when using the words 'responsibility' and 'accountability'. They must clearly define roles and responsibilities and identify clear lines of accountability for both pharmacists and pharmacy technicians, through discussions involving coalface practitioners. This will help to foster a symbiotic and complementary skill mix model which works optimally for the public, makes working practices more efficient, extends the practical capability of the pharmacy team and improves patient safety.
2. The profession should, with input from pharmacy technicians, create and publish a list (similar to that used by mental health practitioners), outlining the shared capabilities for pharmacists and pharmacy technicians, alongside a separate list outlining the capabilities of pharmacists. This would help create a shared values system which clearly delineates the pharmacy team's responsibilities, whilst still allowing for discrete responsibilities.
3. A consensus must be reached through a wide-ranging and inclusive debate within the profession and among pharmacy technicians, on exposure to regulatory accountability for pharmacists and pharmacy technicians. This must be publicized and shared with relevant stakeholders.
4. An expert view must be sought on the extent of the exposure to - and apportionment of - both civil and criminal liability for pharmacists and pharmacy technicians. This must be widely discussed and deliberated upon by both pharmacists and pharmacy technicians as part of any developmental process.

5. The pharmacy regulator must ensure that decisions about delegation can be made for patient-centred reasons by pharmacists and not by non-regulated staff driven by commercial imperatives.

Chapter 7 - Aligning the interests of pharmacists and pharmacy technicians

1. Pharmacists, as the pharmacy profession, must collectively agree a unified vision for the future of community pharmacy and then determine a plan of how to turn that vision into reality. This should be led by the interests of patients, including ensuring that patient contact with and access to pharmacists' clinical expertise is maintained and enhanced.
2. Once the vision for future of the profession has been agreed, as part of that vision and in the process of bringing it to fruition, a symbiotic, complementary skill mix of pharmacists and pharmacy technicians must be developed in community pharmacy. This must be led by the profession and not the civil service.
3. The interests of pharmacists, pharmacy technicians and patients must be aligned in order to develop a successful skill mix model.
4. A successful exercise to achieve effective skill mix must provide for both pharmacists and pharmacy technicians to work at a multitude of levels in a well-defined career hierarchy and enable individual practitioners to understand and manage their career goal objectives from an early point in their careers.
5. A structured career framework, which relies upon a skills and salary escalator, should be developed by the profession for both pharmacists and pharmacy technicians, aligned to

the development of new, clearly-defined, professional, clinical and technical roles in the community pharmacy setting.

6. The differences in pharmacy technicians coming from the community and hospital pharmacy settings must be appreciated and factored into any future policy work on pharmacy skill mix.
7. In order to reflect the substantial differences between pharmacy technicians that trained and continued to work in community pharmacy and those that trained in hospital pharmacy, the GPhC should agree a process to annotate the register of pharmacy technicians to reflect the sectoral differences.
8. As part of a wholesale re-engineering of community pharmacy practice, research should be undertaken to evaluate the feasibility and impact on patient safety and care of having a pharmacy technician (trained appropriately to the standards recommended elsewhere in this report) in every pharmacy alongside a pharmacist, throughout its operating hours. This could form part of a new model of working in community pharmacy, such as that outlined in the PDA's Wider than Medicines proposals.

Chapter 8 - How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed

1. Pharmacists can only be expected to relinquish existing roles and technicians expected to take on these roles where an overarching workforce plan including suitable training and career framework are in place for both groups and opportunities exist for them to take on new roles in a planned and integrated fashion.

2. A structured career framework, linked to a skills and salary escalator, should be developed in the community pharmacy setting to help to bring about the kind of skill mix transformation and results that have been seen in hospital pharmacy practice.
3. The design of a structured career framework relying upon **practitioner, advanced practitioner, specialised practitioner** and **established specialised practitioner** roles must be planned at the same time for both community pharmacists and pharmacy technicians. This would ensure that the frameworks dovetail and produce proper operational compatibility and crossover. The planning process would need to ensure that patient care and safety are the primary concern at all times.
4. The structured career framework should be based upon a transparent qualification, suitable experience and a validation framework, alongside regulatory support through an appropriate GPhC register annotation process.
5. The lessons from the successful NWW (Department of Health, New Ways of Working) programme should be adopted by:
 - a. Horizon scanning to identify long-term changes that may require future changes to the respective roles
 - b. Identifying the benefits of skill mix for patients
 - c. Securing buy-in through clear communication with the relevant key stakeholders. Ensuring that stakeholders are not only signed up to the programme, but that they are active partners in its implementation.
 - d. Clearly defining any competency requirements for any new roles

- e. Establishing complete clarity around professional accountability and responsibility
 - f. Securing funding for the staff involved in any expanding roles (via a skills and salary escalator). Staff are unlikely to take on more responsibility unless they are paid more
 - g. Securing and disseminating evidence of what works well to all participants along the way
 - h. Expecting that the process will take up to five years.
6. Planning and leading the overall programme of change must be done by personnel who are experienced in the field and whose authority is earned by their ability to command the respect of those who will be affected.

1 Professionalism: the differences between healthcare professionals and healthcare technicians

1.1 The role of a healthcare professional

Definitions of 'profession' as a noun include:

- a. *"A calling requiring specialized knowledge and often long and intensive academic preparation; a principal calling, vocation, or employment; the whole body of persons engaged in a calling" (Merriam-Webster English Dictionary) [10]*
- b. *"A paid occupation, especially one that involves prolonged training and a formal qualification" (Oxford English Dictionary) [11]*
- c. *"Any type of work that needs special training or a particular skill, often one that is respected because it involves a high level of education" (Cambridge English Dictionary) [12]*
- d. *"A "liberal profession" [e.g. doctors, pharmacists] is one where the practitioner is widely educated and, as such, is not just a technician" (International Journal of Business Research) [13]*
- e. *"An occupation in which an individual uses an intellectual skill based on an established body of knowledge and practice to provide a specialised service in a defined area, exercising independent judgement in accordance with a code of ethics and in the public interest" (the United Kingdom Inter-Professional Group (UKIPG)). [14]*

Commenting on the role of the healthcare professional, the UKIPG said: *"The public must have confidence in professionals to follow a code of conduct, maintain their competence and only undertake professional tasks for which they are competent. There is therefore a need to have evidence of competence and for regulatory bodies to be more proactive in maintaining professional standards, rather than merely reacting to complaints."* [14]

The Health Professions Council (now the Health & Care Professions Council, HCPC) also produced a detailed definition of professionalism: *“Rather than a set of discrete skills, professionalism may be better regarded as a meta-skill, comprising situational awareness and contextual judgement, which allows individuals to draw on the communication, technical and practical skills appropriate for a given professional scenario. The true skill of professionalism may be not so much in knowing what to do, but when to do it. The role of the educator is to raise awareness of this.”* [15]

The foundations of professionalism may be laid down long before a professional enters the labour market. William Goode, an American sociologist, provided a list of what he considered “generating traits” which, if possessed by a group of workers, signify that the group has become a profession. These can be simplified and grouped into two interrelated lists:

- **A body of professional knowledge**
 - Specialist knowledge which is useful to society and recognised by it as such
 - Formal organisation
 - Autonomy
 - Ethics.
- **The service ideal**
 - Use of knowledge to determine the needs of the client
 - Enduring ideals
 - Altruistic attitude, recognised by society. [16] [17]

Personal characteristics which underpin professionalism, such as honesty and integrity, may also be learned long before a professional begins to practise. It is clear that the very fabric of professionals is important as the HCPC goes on to say, in its definition of professionalism:

“Professionalism’ is under increasing scrutiny across the health and social care professions, with many of the issues that emerge later in people’s careers being linked to a broad range of behaviours distinct from their technical ability. Fitness to practise cases heard by regulators such as the Health Professions Council (HPC) and the General Medical Council (GMC) often include components of inappropriate or unprofessional behaviour which would not be captured by competency testing.” (Emphasis added). [15]

One review of this area identified many measures and approaches to assessing professionalism, but found no clear consensus on validity. It outlined five ‘clusters of professionalism’ found in existing measures, which were:

- Adherence to ethical practice principles
- Effective interactions with patients and people who are important to those patients
- Effective interactions with people working within the health system
- Reliability
- Commitment to autonomous maintenance / improvement of competence in oneself, others and systems. [18]

This illustrates the behavioural focus of many of these approaches.

The erstwhile Chief Pharmaceutical Officer for the Scottish Government, Professor Bill Scott, recently put forward his own definition: *“Professionalism can be defined by a set of values, behaviours and relationships. It encompasses aspects such as commitment, integrity, honesty, a sense of service, accountability, independent judgement and individual responsibility and is underpinned by a culture of continuous improvement.”* [19]

Steve Acres, former president of the Association of Pharmacy Technicians United Kingdom (APTUK) and Pharmacy Service Manager at University Hospitals of Leicester, summed up what it

means to be a professional thus: *“The patient is absolutely at the centre of our care. As a registered healthcare professional, you have to take accountability and responsibility for the things you do in the workplace. Above all else it’s about behaviour and attitude and your general conduct in the workplace.”* [20]

Authorities and academics have achieved no clear, universally-applicable consensus on what distinguishes a profession from an occupation. In sociological literature, there has even been some debate as to whether pharmacists have achieved full professional status. It has been argued that mercantilism, corporatization, technology, consumerism and non-exclusivity of its social object (medicines) undermine pharmacists’ professional status. [21] [22] Based on this premise, it would be unlikely that the technical role of pharmacy technicians could be considered to have achieved professional status. This may explain why it has not been given a great deal of, if any, consideration in sociological literature.

1.2 The technician’s role

Definitions of ‘technician’ include:

- a. *“A specialist in the technical details of a subject or occupation; one who has acquired the technique of an art or other area of specialization”* (Merriam-Webster English Dictionary) [23]
- b. *“A person employed to look after technical equipment or do practical work in a laboratory; an expert in the practical application of a science; a person skilled in the technique of an art or craft”* (Oxford English Dictionary) [24]
- c. *“A worker trained with special skills, especially in science or engineering; a worker trained with special skills or knowledge, esp. in how to operate machines or equipment used in science”* (Cambridge English Dictionary) [25]

The Technician Council was established in 2010 and appears to have ceased operating in 2012. It was an initiative funded by the Department of Business, Innovation and Skills to raise the profile of technicians in the UK. Its members included those from the engineering, science, information and communications technology and health communities. [26] It defined the role of a technician thus: *“Technicians are highly productive people who apply proven techniques and procedures to the solution of practical problems. They carry supervisory or technical responsibility and competently deliver their skills and creativity in the fields of science, engineering and technology.”* [27]

Technicians are expected to be knowledgeable in the technical details of their trade, and practised in its application. There are different expectations and characteristics of technicians and professionals, reflected within the terms.

1.3 The role of employers in supporting professionalism

Employers and regulators have an important role to play in supporting and enabling professionalism to flourish and develop. The relevance and role of professionalism needs to be presented positively and proactively. [15] Professionalism may be developed through employer-led initiatives aimed at providing supportive environments in which professionals feel valued. The context-specific nature of professionalism means that further work in this area should address the development of professionalism as a dynamic judgement rather than a discrete skill set. [15]

1.4 The role of the regulator in supporting practice

Regulation involves setting standards for qualifications and practice. However, a regulator must ensure that it can describe the practice and then ensure that the qualification supports this. The regulator of pharmacy technicians in Great Britain (GB) – the General Pharmaceutical Council

(GPhC) – has not yet delivered this objective. In order to regulate the group effectively, it must have a clear definition of the role in order to understand what it is regulating. Otherwise, for example, setting suitable standards for initial education and training, or the evaluation of continuing development submissions, may be poorly guided.

It should be noted that pharmacy technicians are not regulated in Northern Ireland (NI). The professional regulator of pharmacists and pharmacies in NI is the Pharmaceutical Society of Northern Ireland (PSNI). It has previously considered the prospect of regulating pharmacy technicians and indicated an intention to do so in the future in its 2017-2022 Corporate Strategy. [28] [29]

1.5 The role of a professional body in supporting professionalism

Strong professions are generally supported by a strong professional body, whose membership base is representative and which is generally held in high regard by the public and the profession alike, enabling it to strategically influence the development of practice. However, whilst pharmacists enjoy such support, pharmacy technicians do not.

Professional bodies are similar to, but distinct from, regulatory bodies. A professional body is a group of people in a learned occupation entrusted with maintaining control or oversight of its legitimate practice. A regulatory body, on the other hand, is accountable to the public and acts in the public interest by setting minimum standards of practice for the professionals it regulates. [30] It may work with the profession to agree and set minimum standards.

Professional and regulatory bodies play three roles:

1. They are set up to safeguard the public interest. This is what gives them their legitimacy.

2. Professional bodies (but not regulatory bodies) also represent the interests of their respective professional practitioners. In this capacity they act as a professional association or trade union (including legitimating restrictive practices), or as a learned society contributing to continuous professional development.
3. The professional or regulatory body represents its own self-interest: the organisations act to maintain their own privileged and powerful position as a controlling body. This is where control, legitimated by public interest, sometimes becomes confounded by control based on self-interest. [31]

The professional leadership body for pharmacists – the Royal Pharmaceutical Society (RPS) – stated that: *“Regulation is effectively a shared responsibility between professional leadership bodies setting standards for professional activity and the enforcement role of the regulator. This approach ensures that the regulator maintains public confidence in the regulatory process and achieves a safe environment for the public to access their pharmaceutical care. The professional leadership body has the role of demonstrating to the public that pharmacy is a trusted profession whose members deliver safe pharmaceutical care.”* [32]

1.6 Hierarchies in healthcare labour

Hierarchies necessarily exist within the divisions of labour in healthcare. Sociological theory has placed medicine as the dominant healthcare profession, as a result of its autonomy and the formal control over the work of other allied professions. [33] By extension, particularly in the community pharmacy setting, the activities of pharmacy technicians are formally controlled by pharmacists; the pharmacy profession is the dominant group.

1.7 The difference between a professional and a technician

A technical role, as performed by a technician, will have a set of instructions; there will be a script to follow. If a technician identifies a problematic situation, he or she will know whether the matter will have to be handed over to someone else who knows what to do, or to seek guidance on how to proceed. As the person supporting the role of the professional, in such problematic situations, the technician will naturally turn to the professional for guidance, including in respect of the appropriate steps to be taken. Many technical procedures, such as taking blood or performing an x-ray, or assembling and labelling medicines as ordered on a prescription, require specific technical steps that rarely vary. Satisfactory delivery of the technical role relies largely upon accuracy and precision.

As an example of this in practice, the National Occupational Standards (NOS) applicable to pharmacy technicians require *adherence* to standard operating procedures at all times, whilst the responsibility for establishing, maintaining and reviewing them rests with the pharmacist. [34]

Technicians will be different from professionals. In a pharmacy context, whilst both groups will see differences between patients, pharmacists have a much broader base of skills and knowledge with which to interpret and act upon those differences. Pharmacy technicians do not have to make complex decisions based on extensive degree-level training and significant professional experience. Pharmacists, due to the nature of their training, will not only understand the need for specific questioning and tests; they will know how to interpret results, make decisions based on what they find and explain what is happening to their patients - and why. They also need to be able to practise ethical decision making and operate in 'shades of grey' where clinical situations require them to be able to critically appraise and balance the available evidence and options regarding an intervention - and use that evidence to inform decisions based on the needs of individual patients.

It is in the public interest that healthcare professionals are involved in all clinical and ethical decision-making. Pharmacists do not need to perform every task themselves, but as individuals held to account by the public for patient safety, they must be satisfied that only suitable tasks are delegated to pharmacy technicians, who in turn must be appropriately qualified and experienced. Pharmacists should usually be supervising the work of pharmacy technicians to some extent, and always be readily available for pharmacy technicians to consult when the need arises.

It is also in the public interest to ensure that both pharmacists' and pharmacy technicians' skills and competencies are used to the best effect, which requires an understanding of where the boundaries lie between their respective skills and competencies. These boundaries must be clearly linked to the underpinning qualifications, competency assessment and professional awareness, to ensure that their roles interlock effectively and safely.

A table comparing the roles and standards applicable to pharmacists and pharmacy technicians can be found in Appendix A.

1.8 Pharmacy technicians in the hospital setting

The practice of the technician should be developed in such a way that it supports the role of the respective professional. This is an important element of an effective skill mix model. In a pharmacy context, pharmacy technician practice has been developed very successfully in the hospital setting. Here, new pharmacist roles were first established in the 1980s and the pharmacy technician service was later developed to support the further development of the pharmacist's role. As such, the roles of hospital pharmacists and hospital pharmacy technicians developed symbiotically and in an organised way.

From a sociological perspective, it could be said that in the hospital sector, pharmacists have been able to delegate routine, generic activities to the lower status occupation (pharmacy technicians) to enable specialization as a means of reinforcing its professional (dominant) status.

Since the 1980s, the roles of pharmacy technicians in the hospital setting have developed significantly; this has led to the development of a structured career framework for both pharmacists and pharmacy technicians. Over time, pharmacy technicians in hospitals have been able to specialise and have been allowed greater degrees of autonomy. Hospital pharmacists have generally welcomed the development of the support roles being provided by pharmacy technicians.

It must be noted, however, that whilst some senior pharmacy technicians in the hospital setting are beginning to practise autonomously, they are not making complex clinical or ethical decisions.

1.9 Pharmacy technicians in community pharmacy

Conversely, the approach being taken by the government to community pharmacy bears no similarity to the successful approach that was taken in the hospital setting. In community pharmacy, the government appears to be trying to hastily develop the role of the pharmacy technician, without first developing the role of the pharmacist. The result of this is that pharmacists perceive 'boundary encroachment' of pharmacy technicians in to their professional roles. This has caused tension and conflict and has left pharmacists feeling suspicious of the government's pharmacy programme.

1.10 Body of knowledge

A body of knowledge could be regarded as the set of concepts, teachings, competencies, skills and methodologies which help to define a role and which are to be mastered by its practitioners. A profession or regulated group should base its practice around an established body of knowledge, in order to define and inform practice and help practice develop. Within the health professions, that body of knowledge must be constantly reviewed and expanded upon to ensure that patient safety is paramount at all times. A well-defined body of knowledge, upon which pharmacy technicians in the community setting can base their practice, is lacking. This must be addressed urgently if the role is to be clearly defined.

A body of knowledge and practical experience for community pharmacy technicians may include areas such as:

- Risk management
- Prescription stock picking errors
- Consistent accuracy of dispensing
- Generic packaging similarity issues
- The use of labelling and Patient Medication Record (PMR) systems
- High risk areas for dispensing - such as steroids, controlled drugs, paediatric medicines and medicines with a narrow therapeutic index
- The repeat dispensing process
- Interactions with patients and relevant healthcare professionals.

A table comparing the situation in the hospital and community settings in relation to pharmacy technicians can be found in Appendix B.

1.11 Conclusions

1. Professionals are those who, amongst other things, have pursued a calling as a career, work with an established body of knowledge and are supported by a representative body which sets standards for the group above and beyond those set by the regulator, to enhance public trust and confidence in its members. Professionalism involves exercising judgement, ethical reasoning and decision making and demonstrating behaviours (based on values) which result in the public bestowing its confidence in the professional. It requires autonomy of thought and action - based on experiences, intellect and reasoning - rather than the pursuit of a set of defined technical tasks. A profession can be held accountable for such practice, resulting in a greater degree of accountability than could reasonably be applied to a technical occupation.
2. Pharmacists are highly skilled, extensively trained and strictly regulated individuals whose training, attitude and standards of professional practice help to ensure public protection. Experienced pharmacy technicians are competent individuals in a technical role who work under and support the work of pharmacists, enabling pharmacists to carry out more complex and demanding tasks.
3. The successful development of skill mix in hospital pharmacy has led to complementary, symbiotic roles for pharmacists and pharmacy technicians. The roles of pharmacists and pharmacy technicians are more clearly developed and defined in hospital than in community pharmacy.
4. A review of the role of pharmacy technicians in the community pharmacy setting, as part of a broader strategic re-engineering of community pharmacy practice, has not been

properly undertaken. As such, any thoughts of autonomous practice for pharmacy technicians in the current circumstances are misplaced.

1.12 Recommendations

1. The successful approach that has been adopted in hospital pharmacy, insofar as it relates to the interplay between pharmacists and pharmacy technicians, should be studied and the relevant lessons that it provides applied to community pharmacy. However, policy makers, when deciding current policy, must not use the roles, responsibilities and capabilities of hospital pharmacy technicians as exemplars of the roles and responsibilities that can **currently** be safely undertaken by community pharmacy technicians.
2. Any change to roles and responsibilities undertaken by pharmacists and pharmacy technicians in community pharmacy must be introduced as part of a planned and properly executed wholesale, integrated re-engineering of community pharmacy practice.
3. Community pharmacists' future roles must be identified (involving appropriate pilot studies to assess suitability) and established before pharmacy technicians are afforded any greater degree of autonomy. The training, roles and practice of pharmacy technicians must then be designed to complement and support the developing roles of pharmacists in the sector.
4. It is essential, when skill mix is being considered, that patient safety standards be maintained. While pharmacy technicians are a vitally important group of practitioners in the modern NHS, their roles and responsibilities must not be confused with those of pharmacists.

5. The public must never be confused or misled into thinking that they are dealing with a pharmacist, when they are actually dealing with a pharmacy technician.

6. The safety of the public in community pharmacy must not only be maintained; it must be further developed to ensure continued confidence in community pharmacy practice. The public expectation regarding community pharmacy is that a pharmacist will always be available to them if required to address their clinical medicines-related needs. [6]

2 The public protection delivered by pharmacy regulation

2.1 Understanding how public protection is delivered

Public protection in UK healthcare is delivered to a significant extent through professional regulators – whose purpose is to maintain high standards of entry to public registers, set professional and ethical standards / codes of practice and maintain strict regulatory frameworks.

The UKIPG describes the sanctions to be applied when codes of practice are broken as an “important public safeguard”. It describes this safeguard thus: *“Few professionals, whatever actions have been taken against them by the courts, an employer or another public body, would regard being ‘struck off’ by their professional body as anything other than the ultimate sanction. As such, it cannot be used lightly. It is a system of exemplary justice ‘pour encourager les autres’.”* [14] (Underline added).

The threat of the ‘ultimate sanction’ - removal from the public register - should provide the requisite regulatory traction, ensuring registrants have due regard for the consequences of their actions and thus assume an appropriate level of responsibility for such. However, the prospect of removal from the register can only influence behaviours and standards of practice if it does indeed represent the ‘ultimate sanction’: it must be capable of bringing about significant loss of income, career damage and loss of reputation or status. Therefore, for healthcare regulation to be effective and ‘striking off’ to represent the ultimate sanction, registrants must have an income, career and reputation or status that they believe are worth protecting. If this is not the case, regulatory traction will be reduced and the protection afforded to the public diminished.

It is apposite to examine how this dynamic works in practice for pharmacy technicians.

2.2 A comparison of the salaries paid to healthcare technicians

2.2.1 Pharmacy technicians in the community pharmacy setting

Information collected by independent researcher JRA Research, on behalf of the PDA, found that 38% of pharmacy technicians questioned, who worked in the community sector and were prepared to reveal their salary, were paid £15,000 or less per annum (for full time hours). 74% of respondents were paid less than £20,000. Less than 3% of those surveyed claimed a salary of over £25,000. [4]

A GPhC-commissioned research paper published in November 2014 found that, both pre- and post-qualification, the most common full-time (≥ 35 hours per week) salary banding for pharmacy technicians in the community sector was £14,000 to £17,999 (41.7% of respondents post-qualification). 17.6% of respondents reported a full-time salary of £10,000-13,999 and 25.5% reported a salary of £18,000 to £21,999. However, examining salaries was not the principal purpose of the research. As such, the results did not distinguish between those who worked as Accuracy Checking Technicians or in management positions and those who did not; the average number of hours per week worked was not provided and the area of the country in which the pharmacy technician was working was not part of the analysis. [5]

On 3 April 2017, payscale.com showed a median average salary among all pharmacy technicians of £8.72 per hour (or £17,000 for a full-time equivalent post), with NHS salaries notably higher than those in community pharmacy. [35]

Excerpts from an online discussion forum in 2013 also suggested a rate of around £8-10/hr:

- *“I'm currently struggling through my NVQ3 and getting there, just. I had an hourly rate in mind that I thought I would get paid when I qualify and register, however*

I've just found out that my employer is planning to pay me what he considers industry standard, which apparently is about 75p/hour more than I get now. That's a lot less than I was thinking.

I work in an independent community pharmacy where I've been for 3 years (nearly 4 when I qualify) and I have about 8 years' experience."

- *"How much do you get now??? My wages went up by 35p an hour."*
- *"£8.75, and especially 35p, seems like a bit of a kick in the teeth after all the hard work/extra responsibility. From talking to a couple of registered technicians that I know, and a few pharmacists who've worked with other technicians, £10 seems to be about average for a newly qualified technician (in London)."*
- *"Zones obviously differ. City locations will be £9/10. Rural (such as Norfolk) it's about £8.40 - 50 ish qualified. Rural dispenser is about £7.90 an hour (NVQ2)"*
- *"As a dispensing assistant I earn £7.20 an hour but not got a clue how much my wage will rise after the course." [36]*

A further online discussion in July 2017 suggested that the rates for community pharmacy technicians had not materially changed from the 2013 levels:

- *"I'm a technician currently doing the ACT course with Buttercups... I'm currently on £10.10. I work in an independent."*
- *"Thats [sic] a really good wage as a technician I only get £8.72 and if I did ACT course it would only go up £1. I want to do ACT course but not for an extra £1."*
- *"£10.05 is technician hourly rate in our independent company." [37]*

Salary scales for 2017 for a large community pharmacy multiple indicated a rate of less than £9 per hour would be common for pharmacy technicians. The rate was equal to that paid for non-pharmacy-related non-managerial roles and only marginally higher than for a dispensing assistant

employed by the same company. There was a small increment for working as an Accuracy Checking Technician.

2.2.2 Pharmacy technicians in the hospital sector

In contrast to community pharmacy, pharmacy technicians working in the hospital sector are paid according to nationally-determined NHS Agenda for Change (AfC) pay bands. These take experience and qualifications into account and promote a recognised career structure. GPhC-commissioned research found that the salary bands for trainee and qualified pharmacy technicians in hospital were significantly higher than those in community. [5]

Table 1 - Pharmacy technicians working in hospital – NHS Agenda for Change pay bands and rates for 2016/17 [38] [39]

AfC Band	Job title
2 (£15,251-17,978)	Pharmacy support worker
3 (£16,800-19,655)	Pharmacy support worker - higher level
4 (£19,217-22,458)	Pharmacy technician
5 (£21,909-28,462)	Pharmacist entry level Pharmacy technician – higher level
6 (£26,302-35,225)	Pharmacy technician specialist Pharmacist
7 (£31,383-41,373)	Pharmacy technician team manager Pharmacist specialist
8 (£40,028-82,434)	Pharmacist advanced Pharmacist consultant Pharmacist team manager

	Professional manager pharmaceutical services
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2.2.3 Dental technicians

Table 2 - Dental technicians – NHS Agenda for Change pay bands and rates for 2016/17 [38] [40] [41] [42]

AfC Band	Job title
2 (£15,251-17,978)	Clinical support worker (dentistry)
3 (£16,800-19,655)	Dental nurse entry level
4 (£19,217-22,458)	Dental nurse
5 (£21,909-28,462)	Dental nurse team leader Dental nurse specialist Dental technician Oral health practitioner
6 (£26,302-35,225)	Dental technician specialist Dental nurse team manager Dental nurse tutor Oral health practitioner specialist
7 (£31,383-41,373)	Oral health practitioner advanced Dental technician advanced
8a-c (£40,028-68,484)	Dental laboratory manager

Dental technician salaries are usually at AfC band 5, between £21,909 and £28,462 per year. With experience, this can rise to over £40,000. Dental laboratory managers can earn over £68,000. [43]

Starting salaries for dental hygienists are usually at AfC band 5, between £21,909 and £28,462. With experience, this could rise to band 6, between £26,302 and £35,225, with highly experienced dental technicians earning up to £41,500. [44]

2.2.4 Dispensing opticians

Dispensing opticians make up optometrists' prescriptions, fit customers' glasses and contact lenses and advise on lens types. They can earn between £18,000 and £30,000 a year. Specialists and managers may earn up to £40,000. [45] [46]

2.2.5 Veterinary nurses

Veterinary nurses can earn between £18,000 and £24,000 a year, depending on experience. Senior veterinary nurses can earn around £26,000 a year. [47]

2.3 National average wages

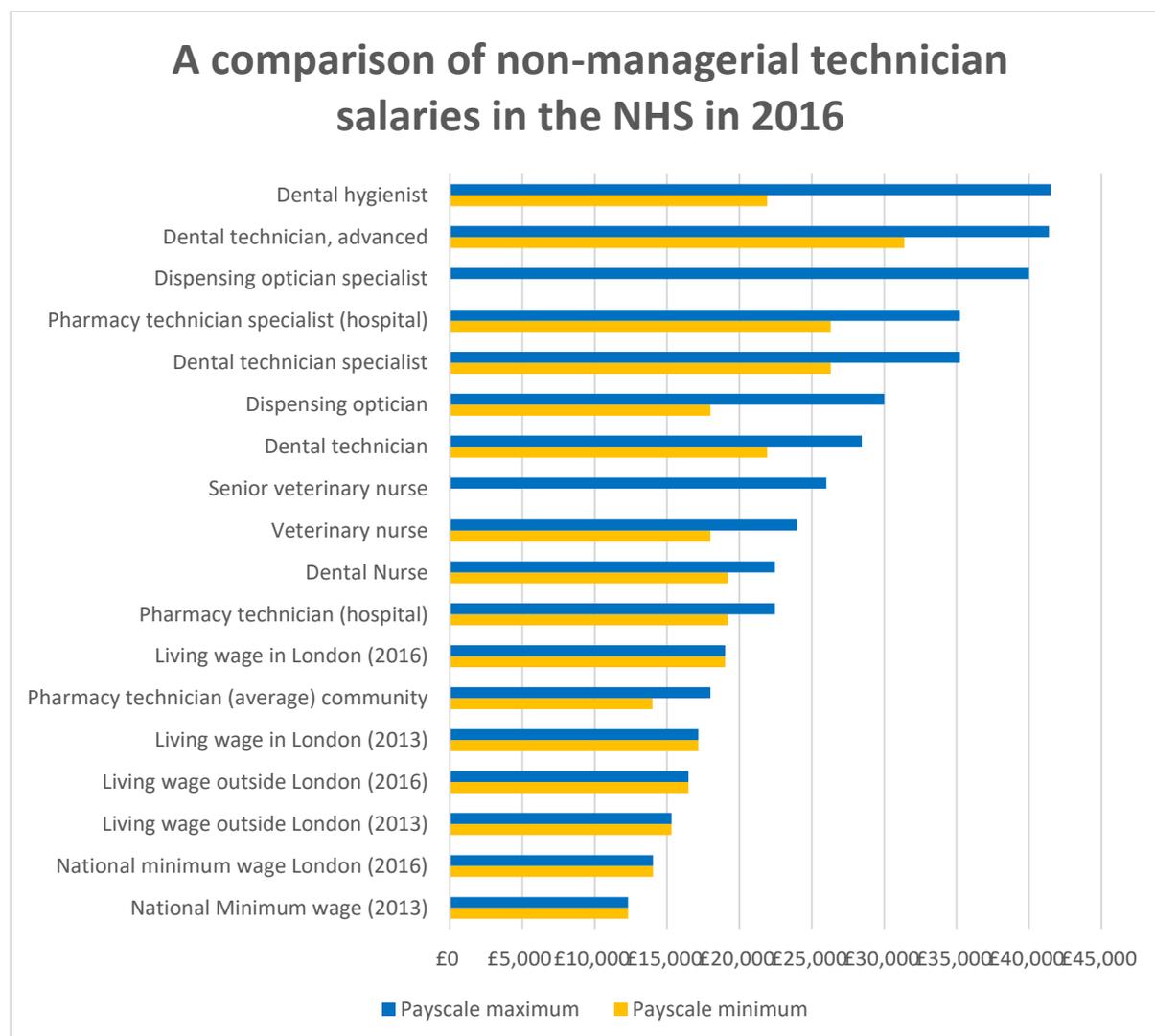
The "UK National Minimum Wage", also known as the "UK National Living Wage", is calculated based on 55% of the median income in the UK for over 25s, and for those aged 21-24, a negotiated settlement based on recommendations from businesses and trade unions. By contrast, the "Living Wage" is a calculation made according to the cost of achieving a minimum acceptable standard of living, derived from the cost of a basket of household goods and services. [48] [49]

In October 2016, the UK National Minimum Wage was set at £6.95/hour for those aged 21 and over. [50] The Living Wage in the same period was £8.45/hour and £9.75/hour in London. [51] Based on a 37.5-hour week, worked 52 weeks of the year, this equates to £16,478 per annum or £19,013 in London.

Table 3 - A comparison of non-managerial technician salaries in 2016

Occupation	Annual salary for full-time hours
Dental hygienist	£21,909 – 41,500
Dental technician, advanced	£31,383 – 41,373
Dispensing optician specialist	Up to £40,000
Dental technician specialist Pharmacy technician specialist (hospital)	£26,302 – 35,225
Dispensing optician	£18,000 – £30,000
Dental technician	£21,909 – 28,462
Senior veterinary nurse	Up to £26,000
Veterinary nurse	£18,000 – £24,000
Pharmacy technician (hospital)	£19,217 – 22,458. Highest proportion (79.2%) of hospital pharmacy technicians in £18,000-21,999 bracket (2014) [5]
Dental nurse	£19,217 – 22,458 [38] [41]
Pharmacy technician average (community)	38% paid £15,000 or less (2013) [4] Highest proportion in £14,000-17,999 bracket (2014) [5]
Living Wage	£16,478 or £19,013 in London (2016) £15,307 or £17,160 in London (2013) [51]
National Minimum Wage	£14,040 (2016) £12,304 (2013) [50]

Chart 1 - A comparison of non-managerial technician salaries in 2016



2.4 Findings – pharmacy technician salaries

Pharmacy technicians working in community pharmacy are paid, on average, significantly less than those working in the hospital sector. Their experience and expertise is not remunerated according to any national pay scale, nor is the level of remuneration linked to a structured career framework commensurate with responsibility, as it is in the hospital setting.

The pay for pharmacy technicians employed in community pharmacy was the lowest of any of the healthcare technicians examined. Additionally, the salaries of most pharmacy technicians employed in community pharmacy are only around the level of the UK Living Wage. The average annual salary for a community pharmacy technician appears to be comparable to that of a general customer service occupation such as retail cashier, checkout operator and travel agent. [2] [3]

In such circumstances, it is difficult to see how the loss of a salary, which for many community pharmacy technicians is *less* than the UK Living Wage, could represent the ultimate sanction and provide the desired and necessary regulatory traction and public protection. [50] Under such conditions, pharmacy technicians can easily find alternative work with a salary which is commensurate with - or even higher than - their pharmacy technician salary. Furthermore, such work does not need to be in any way associated with healthcare practice, and so the regulatory history from a previous GPhC fitness to practise determination need have no impact whatsoever upon a pharmacy technician's future job prospects.

2.5 Regulatory traction for pharmacy technicians

Fitness to practise determinations across a period from 2012 to 2016, published by the GPhC on its 'Determinations Search' web page, were examined. [52] The web page details the most recent decisions of the fitness to practise committees, except where the matter relates to a registrant's health or an interim order. [53] 50 months' worth of determinations were examined from that period. In six cases involving pharmacists and two involving pharmacy technicians, it was not confirmed in the determination whether or not the registrant attended. Of the remaining 183 cases, where the registrant's attendance or absence was confirmed, 37 (20%) involved pharmacy technicians and 146 involved pharmacists (80%). Of these, the pharmacy technician did not attend in 27 cases (73%). In contrast, the pharmacist did not attend in 32 cases (22%). Statistically, pharmacists are significantly more likely to attend ($p < 0.001$).

111 fitness to practise determinations published on the GPhC's website, covering a period of 26 months between 2014 and 2016, stated the registrant's sector of work at the time of the matters in question. Of the 89 cases involving a pharmacist, 77 worked in community pharmacy (87%). In stark contrast, of the 22 cases involving a pharmacy technician, just 5 worked in community pharmacy (23%), despite this being the sector in which around 53% to 67.4% of pharmacy technicians work (see Appendix A).

There are approximately half the number of registered pharmacy technicians compared to the number of registered pharmacists. [54] However, four times as many pharmacists as pharmacy technicians appeared before a fitness to practise committee. In terms of fitness to practise cases dealt with and closed by the GPhC (not all of which result in a committee hearing), in 2015, 90.5% involved pharmacists and just 9.5% involved pharmacy technicians. [55]

There will undoubtedly be several factors that affect these ratios. In 2006, the Home Office established a 'notifiable occupations scheme' which would be applied to certain occupations in the event of a criminal sanction. Under this scheme, a list of category 1 notifiable occupations was created (which included pharmacists) and was applied to professions or occupations which according to the Home Office were deemed to bear "*special trust or responsibility, in which the public interest in the disclosure of conviction and other information by the police generally outweighs the normal duty of confidentiality owed to the individual.*" It also created a list of Category 2 notifiable occupations (which included pharmacy technicians). This was described by the Home Office as a list of "*less sensitive professions or occupations where probity and integrity may nevertheless be an important factor in preventing crime... In these cases, a test of relevance should be applied before the decision to share conviction or other information is made.*" [56] The effect of these lists means that whilst the police would automatically report a pharmacist involved

in criminal activity to the GPhC, they would not report a pharmacy technician as a matter of course.

In March 2015, the Home Office introduced its Common Law Police Disclosure (CLPD) provisions. [57] The CLPD provisions are a discretionary scheme and request Chief Officers of police forces to consider disclosure to a third party (a regulator) where ‘a significant risk is identified which there is an urgent pressing social need to address’. It is feasible that in making the decision as to whether to notify a regulatory body in respect of a particular profession or occupation, police forces will consider the detailed provisions that were in place under the notifiable occupations scheme, which describe pharmacists as a category 1 occupation and pharmacy technicians as a category 2 occupation. [58]

2.6 The ultimate sanction and the lack of regulatory traction

Pharmacy technicians from the hospital setting, especially those at more advanced stages of their careers and on higher pay grades, stand to lose much more if the ultimate sanction is applied, relative to those in community pharmacy. For those on the higher grades, if they are struck off, it can result in a significant loss of income, career damage and loss of reputation or status.

The salaries of community pharmacy technicians are generally low (in many cases less than the UK Living Wage). For individuals in this group, the ultimate sanction of removal from the register (striking off) does not realistically represent anything like the ultimate sanction.

2.7 Participation in the regulatory process

The transcripts of regulatory cases reveal some of the reasons why attendance rates for pharmacy technicians at GPhC fitness to practise hearings are considerably lower than attendance rates for pharmacists. Some absentees appear willing to simply look for another job unconnected to pharmacy rather than face regulatory proceedings. In some cases, registrants have made clear that they have had no difficulty in finding alternative employment, with a similar or higher salary and far less responsibility, in non-healthcare-related work.

Table 4 - Examples of excerpts from fitness to practise determinations relating to pharmacy technicians

Fitness to Practise Determination Comments	Year
A pharmacy technician who failed to turn up to her hearing, simply told the committee via email: <i>"I walk away and move on happily and once again let you know that, whatever the dates set, I will not be attending."</i> [59]	2013
A pharmacy technician wrote to the committee: <i>"I am sorry that I am not there to voice this personally, but I really cannot afford the expense of coming to London."</i> [60]	2013
A pharmacy technician simply wrote: <i>"I do no (sic) intend going back into pharmacy. I have had to change my career."</i> [61]	2013
A determination read: <i>"We accept that there is convincing evidence that the Registrant had notice of today's hearing, and convincing evidence that she has made a deliberate decision not to attend. That is the only reasonable inference to be drawn from the manner in which she has simply disengaged from all contact with the Council since she became subject of inquiry and subject of allegations which led to a disciplinary hearing... it might be said that Miss Scott has</i>	2014

<p><i>emphatically turned her back on the Council, refusing to have anything to do with it or its regulatory processes. It might well be that Miss Scott has decided to pursue some other career, but she has not even taken the trouble to inform the Council about that.</i>" The GPhC fitness to practise committee chairman commented: <i>"I am bound to say that, in my experience, it is not infrequent for pharmacy technicians not to engage with the process, so it is difficult to categorise this case as rare and exceptional."</i> [62]</p>	
<p>A pharmacy technician sent an email via her solicitor to the committee, saying: "As far as I am concerned, all action in relation to any alleged misconduct has been completed and <i>therefore any action, including expulsion from the Society and withdrawal of my licence to practice, is irrelevant, as I am no longer a member and will not be returning to work.</i>" The chairman remarked: "It may be observed that possibly Mrs Norwood (redacted) was confusing membership of the Royal Pharmaceutical Society with registration with the General Pharmaceutical Council." [63]</p>	2014
<p>A senior GPhC case worker made notes of her telephone call with a pharmacy technician: <i>"he said he had no intention of attending the hearing as he no longer wanted to work in pharmacy, and in fact he was now a manager in a steel plant and had no intentions of practising again."</i> [64]</p>	2015
<p>An email from the pharmacy technician: <i>"I am not interested in practising and have applied for removal from the register. I don't see why there has to be an investigation when I am trying to put that part of my life behind me, without no [sic] intention or inclination of working anywhere even related to pharmacy."</i> [65]</p>	2015
<p>The determination reported emails showing "very clearly that Mrs Eassom (redacted) has made a conscious decision not to attend the hearing. She has not</p>	2015

<i>asked for an adjournment. She has not indicated to the Council that she is unable to attend today for any particular reason, other than that she has decided she does not wish to attend." [66]</i>	
<p><i>We attach particular importance to the opening statement in his e-mail today, that "I will not attend today's hearing"....</i></p> <p><i>We note that he says he has been suffering with a viral infection and a cold, and we note that he talks of being confused about the dates and about not realising that this was indeed a principal hearing. But, on the other hand, he had clearly been in receipt of all the documentation in advance of the hearing, and he has had earlier e-mail exchanges with the Council. It is reasonable to assume he broadly knew what was going on. [67]</i></p>	2016
<i>"More serious than that, since the Notice of Hearing was served on her at the beginning of March 2016, she has completely disengaged from this regulatory process." [68]</i>	2016

2.8 Conclusions

1. Pharmacy technicians, particularly those in community pharmacy, are paid at lower rates than technicians that support professions in other healthcare settings where skill mix is well developed.
2. There is a significant difference between the pay of hospital and community pharmacy technicians, with a large proportion of community pharmacy technicians paid at rates below the UK Living Wage.

3. Whilst in hospital pharmacy there is a structured career framework, where skills and experience are linked to a supportive pay banding structure, no such system exists in the community pharmacy setting.
4. A much higher proportion of pharmacists than pharmacy technicians face regulatory sanctions (up to four times as many pharmacists faced sanctions between 2012 and 2016, with only approximately twice as many on the register). In part, this may be because in the event of a criminal offence, unlike 'pharmacist', 'pharmacy technician' has never carried the status of a Category 1 notifiable occupation. Under the current Common Law Police Disclosure provisions, it may make it less likely that police forces would refer a pharmacy technician than a pharmacist involved in criminal activity to the GPhC.
5. The loss of income, career damage and loss of status or reputation that occurs when the regulator delivers the ultimate sanction of removal from the register provides a strong incentive to pharmacists to maintain high standards of professional behaviour. The prospect of the ultimate sanction modulates the behaviour of pharmacists, gives regulatory traction to the regulator and in so doing, protects the public. This regulatory traction is markedly reduced for pharmacy technicians. This is evidenced by the fact that over the five-year period studied from 2012 to 2016, 73% of pharmacy technicians facing a GPhC disciplinary hearing did not even attend when called to do so, and with little to lose, many could simply secure work elsewhere. During the same period, a much lower percentage (22%) of pharmacists failed to attend. The degree of regulatory traction is likely to be particularly low for pharmacy technicians working in the community pharmacy sector, where salaries are significantly lower. [5]
6. Whilst the pharmacy technician salary in community pharmacy means there are limited consequences for individuals removed from the register, it simultaneously reduces the

attractiveness of the vocation to those considering it. A person would have little incentive to train to become a pharmacy technician whilst there is no established career framework and the salary remains comparable to that of a general customer service occupation such as retail cashier, checkout operator and travel agent, which do not carry healthcare responsibilities. As such, a high turnover of pharmacy technicians might be expected, with candidates commencing the role having previously worked in other occupations which may lack high entry standards.

7. In the eyes of the public, healthcare registration should be seen as an act of validation and quality kitemarking. However, because of the factors described above, some of these quality indicators are called in to question. The extent to which community pharmacy technicians see the point of being registered, and the degree to which their behaviour is modulated by prospect of removal from the GPhC register, is questionable. Whilst registration ought to mean that the group is effectively regulated, the proportions facing fitness to practise hearings - and then actually attending - demonstrate that regulatory traction on pharmacy technicians as a group is far less than that pertaining to pharmacists. In particular, it is of concern that the extent of the public protection and assurance afforded by the regulation of pharmacy technicians – as relied upon by the GPhC and other stakeholders - is easily capable of being misrepresented and overestimated. As such, were the public to be made aware of these issues, public confidence and assurance in the regulation of pharmacy technicians would likely be diminished.

2.9 Recommendations

1. The existence of a register (a public list) of pharmacy technicians cannot be relied upon in isolation to protect the public, but must be underpinned by a suitably structured career

framework for pharmacy technicians to support the roles of pharmacists, linked to pay banding at a significantly higher level than is currently the case in community pharmacy.

2. If regulatory traction for pharmacy technicians is to be improved, the ultimate sanction, which is designed to protect the public, must indeed represent a meaningful loss of income, career damage and loss of status or reputation.
3. Pharmacy regulatory bodies should consider whether regulation of pharmacy technicians is likely to be effective given the current conditions prevailing in community pharmacy.
4. Both pharmacists and pharmacy technicians must be treated in the same way and judged by the same standard in terms of notification by the police to the GPhC of criminal activity.

3 Pharmacy technicians – initial education and training

3.1 Initial education and training requirements

In Great Britain, since 2011, GPhC registration has been required for anyone wishing to call himself or herself a pharmacy technician. To register, individuals must pass competency and underpinning knowledge-based qualifications approved by the GPhC. These can be studied separately, for example by taking a Qualifications and Credit Framework (QCF) level 3 National Vocational Qualification (NVQ) Diploma in Pharmacy Service Skills (competency-based), plus a level 3 Diploma in Pharmaceutical Science (knowledge based). Alternatively, single qualifications such as the NPA or Buttercups level 3 qualifications, which combine both the knowledge and competency elements, are available.

The training involves a combination of study either at an approved centre (a Further Education College (FEC), NHS hospital, health board or community pharmacy employer approved by the awarding body to deliver the course(s)) or by distance learning, plus practical work experience. The GPhC sets the amount of relevant work experience required for registration - a minimum of two years and 1,260 hours as a trainee. At present, this must be completed under the supervision, direction or guidance of a pharmacist to whom they have been directly accountable, 315 hours of which must have been completed in each of the two years, though supervision of the training by a pharmacy technician will be permitted once new courses based on the revised GPhC standards for initial education and training are introduced from September 2018. [69] [70] [71] [72] [73]

National Occupational Standards (NOS) for pharmacy, which are owned by Skills for Health (SfH), underpin these level 3 qualifications. [74] SfH is a sector skills council – an organisation which develops employer-led skills standards for healthcare. The pharmacy NOS standards were first developed by the Science, Engineering and Manufacturing Technologies Alliance (Semta) and handed over to SfH in 2005. They were reviewed in 2007-2010 but were not reviewed again until

2016, leaving a significant period of time where pharmacy technicians' qualifications had not been modernised since some time before mandatory registration requirements came into force. [75] Whilst the GPhC sets the initial *education and training* criteria for entry onto the register, responsibility for *writing and controlling* the standards of qualification for pharmacy technicians – to meet the needs of employers - rests with SfH. [76]

City & Guilds, Pearson and the Scottish Qualifications Authority (SQA) are awarding organisations that approve providers to deliver both the competency and knowledge-based qualifications. The GPhC recognises the qualifications provided by City & Guilds and Pearson, but does not directly accredit them. The GPhC does accredit the knowledge qualification provided by the SQA and the competency and knowledge courses provided by the NPA and Buttercups. Awarding organisations assume responsibility for the quality assurance of individual training providers.

City & Guilds and Pearson grade trainees based on criteria which equate to a pass, merit or distinction and the SQA grading criteria result in a pass or a fail, with the pass mark at around 60%. [5]

The pharmacy regulator in Northern Ireland, the PSNI, does not regulate pharmacy technicians and does not specify what qualifications or training a person must have to work as a pharmacy technician in the country. Though some colleges offer the same NVQ level 3 training which is recognised in Great Britain, different employers may accept different standards of qualification or training. [77] [78]

3.2 Pharmacy support staff role definitions

There are a multitude of pharmacy support role job titles – some with similar, and others with quite different, job descriptions. This can cause confusion and should be simplified. This confusion

is particularly prevalent in the community pharmacy setting. Table 5 gives examples of roles in community pharmacy and their associated descriptions.

Table 5 – Royal Pharmaceutical Society of Great Britain (RPSGB) Pharmacy Support Staff Definitions, 2004

Job title	Job description [79]
Medicines Counter Assistant (MCA) / Healthcare Assistant / Healthcare Advisor	A person who has satisfactorily completed or is undertaking an accredited programme of training for work in support of the sale of non-prescription medicines, the receipt of prescriptions, the handing out of completed dispensed items and the provision of advice on health matters over the pharmacy counter.
Dispensing Assistant / Dispenser / Pharmacy Assistant / Assistant Technical Officer	A person involved in a range of pharmacy support activities covered by RPSGB's 2005 minimum competence requirements.
Pharmacy Technician	A person who holds a Pharmacy Services Scottish/National Vocational Qualification (S/NVQ) level 3 qualification or a qualification that has previously been recognised by employers as a valid qualification for pharmacy technicians.

It is notable that the above 'definition' of a pharmacy technician does not actually define the role, other than in a circular way.

An Accuracy Checking Technician (ACT) is typically a person who has been selected by an employer to perform the final accuracy check on dispensed prescription items. The assessment for the qualification should involve correctly accuracy checking a large number of dispensed prescription items, but there is no statutory minimum and a number of failed attempts may be permitted. In practice, an ACT may or may not be a pharmacy technician registered with the GPhC.

3.3 The lack of distinction of the pharmacy technician role in Great Britain

The lack of distinction of the pharmacy technician role from that of other community pharmacy roles was exemplified by a query submitted to the RPSGB in April 2005, obtained through a Freedom of Information request, which read: *"I qualified as Pharmacy Technician in Septemebr [sic] 04, having successfully completed NVQ3 Pharmacy Services. Up until qualification, I was described by my employers as [a Medicines Counter Assistant]. I have just received my new contract of employment from 1st April 05 which now descibes [sic] me as a Dispensary Assistant."*

In 2008, at the time pharmacy technicians were starting to join the RPSGB's public register under voluntary arrangements, the UK government defined the role thus: *"Pharmacy Technicians are part of a group of workers known as the Pharmacy Support Staff, who include dispensing/pharmacy assistants and medicine counter assistants. They tend to work in hospitals, community retail outlets and for pharmaceutical companies. Pharmacy technicians assist in the preparation and assembly of medicines, and in dealing with patients and customers. Their work is conducted under the supervision of a registered Pharmacist."* [80]

In March 2011, the GPhC defined the role of a pharmacy technician in the following way: *“Under pharmacist supervision, pharmacy technicians:*

- *Supply medicines to patients, whether on prescription or over the counter*
- *Assemble medicines for prescriptions*
- *Provide information to patients and other healthcare professionals*

Pharmacy technicians also:

- *Manage areas of medicines supply such as dispensaries*
- *Supervise other pharmacy staff*
- *Produce medicines in hospitals and the pharmaceutical industry*
- *Are involved in areas such as medicines management; manufacturing; aseptic dispensing; quality control; training and development; procurement; information technology; clinical trials; medicines information.”*

The description was vague and to what extent pharmacy technicians were involved in the above activities was not specified. However, it was notably similar to the description of a dispensing assistant - also provided by the GPhC in 2011 and remaining in place in 2017 - whose training covers the following areas:

- *“Sale of over the counter medicines and the provision of information to customers on symptoms and products*
- *Prescription receipt and collection*
- *The assembly of prescribed items (including the generation of labels)*
- *Ordering, receiving and storing pharmaceutical stock*
- *The supply of pharmaceutical stock*
- *Preparation for the manufacture of pharmaceutical products (including aseptic products)*
- *Manufacture and assembly of medicinal products (including aseptic products).” [81]*

Checked in September 2017, the National Careers Service (NCS) describes the day-to-day tasks of a pharmacy technician:

- *“choosing the correct items for a prescription*
- *weighing ingredients, measuring liquids and counting tablets*
- *putting together ointments and medicines*
- *making sure prescriptions are legal and accurate*
- *creating labels to tell people how to take medicine*
- *ordering new stock using computerised systems*
- *giving advice to customers about medicines*
- *handling confidential information.”* [82]

Particularly for the community sector - where the majority of pharmacy technicians are employed - the above role definitions from the NCS remain accurate in late 2017. The 2011 GPhC definitions for pharmacy technicians and dispensing assistants include activities which take place in hospital pharmacy and in the pharmaceutical industry, but which were (and remain) rare in community pharmacy.

In community pharmacy, there is little, if any, difference between the role of a dispensing assistant (‘dispenser’) and that of a ‘registered pharmacy technician’. The GPhC identified this issue, as did Pharmacy Voice, an organisation which was set up to represent the majority of (if not all) commercial business owners in community pharmacy and which disbanded in 2017. [83] [84] [85] The same issue has also been identified by distance learning providers of pharmacy technician training courses, researchers and pharmacy technicians themselves. It caused academics to call, in 2015, for the clarification of the professional registration requirement. [86]

The call for a clearer role definition for pharmacy technicians working in community pharmacy has been made repeatedly, including following recent GPhC-commissioned research into - and a consultation regarding - the initial education and training of pharmacy technicians. [5] [86] [87] [83] [88] The role often does not change upon registration with the GPhC and in a recent research study, one pharmacy technician in training reported working primarily as a medicines counter assistant. [86]

The lack of distinction between the role of the pharmacy technician and that of a dispensing assistant is further exemplified by the fact that Standard Operating Procedures in community pharmacy often do not distinguish between pharmacy technicians and other dispensary or pharmacy team members, in terms of which role may perform the procedural steps.

3.4 The lack of distinction of the pharmacy technician role in Northern Ireland

The situation in Northern Ireland is similar to that in Great Britain, in that there is no discernible difference between the role of the pharmacy technician and that of a dispensing assistant in community pharmacy. The role of the community pharmacy technician is described by the NI government thus:

“Pharmacy technicians are part of the pharmacy team and work under the supervision of a pharmacist. They are involved in the supply of medicines and products to patients.

Community pharmacy technicians work under the supervision of registered pharmacists in retail pharmacies. They label and dispense prescribed medicines. They also provide information and advice to patients about how to use their medication.

With the guidance of the pharmacist, they are also trained to advise members of the public about over the counter medicines and management of minor ailments.

Activities can include:

- *making simple dilutions*
- *making up ointments and mixtures*
- *assisting with services to nursing homes and the supply of oxygen*
- *helping the pharmacist in a range of other duties such as stock checking and ordering*
- *keeping individual records of patients [sic] prescriptions*

Skills and training needed to be a pharmacy technician

A pharmacy technician should:

- *be able to work well as part of a team*
- *be organised*
- *have good communication skills*
- *an ability to explain things simply”.*

The NI government’s website indicates that there are no minimum entry requirements to be a pharmacy technician. In relation to career progression, it states: *“In the hospital service, there are several grades for qualified pharmacy technicians. Senior technicians can specialise in a range of pharmaceutical services while a chief technician is often responsible for managing a section of the pharmacy department. The opportunities for specialisation and increased responsibility extend with experience. There are a number of management, administration and specialist roles undertaken by pharmacy technicians.”* It is silent on career progression in community pharmacy, where, as in Great Britain, no occupational career framework exists.

The role description of the community pharmacy technician's role in Northern Ireland is, as in Great Britain, notably similar to that for a dispensing assistant, with the role of the dispensing assistant arguably sounding more advanced in some respects:

"Pharmacy / dispensing assistants work under the supervision of pharmacists. They do general duties in community pharmacies.

These duties include:

- *sale of over the counter medicines*
- *giving information to customers on symptoms and products*
- *prescription receipt and collection*
- *the assembly of prescribed items (including the generation of labels)*
- *ordering, receiving and storing pharmaceutical stock*
- *preparation for the manufacture of pharmaceutical products (including aseptic products)*
- *manufacture and assembly of medicinal products (including aseptic products)*

Skills and training needed to be a dispensing assistant

You should have:

- *good teamwork skills*
- *an ability to communicate well*
- *good organisations skills".*

The description of the hospital pharmacy technician role in NI differed:

"Hospital pharmacy technician

Hospital pharmacy technicians are involved in the procurement, manufacture, dispensing and safe administration of medicines. Technicians can also routinely perform the final accuracy check on dispensed medicines, immediately before it is released to the patient.

Pharmacy technicians are trained to make medicinal products. These can include creams, ointments and mixtures and those medicines which need to be tailor made for specific patients - for example, injections used to treat cancer.” [89]

3.5 Recruitment

An analysis was carried out in early 2017 of the job adverts for pharmacy technicians listed on the NHS jobs website - www.jobs.nhs.uk - and those listed by each of the Company Chemists' Association community pharmacy multiples (ASDA, Boots, Lloyds Pharmacy, Morrisons, Rowlands Pharmacy, Superdrug, Tesco and Well) using the search terms 'pharmacy technician', 'checking technician' and 'technician'.

At the time of the search in March 2017, 53 NHS jobs were listed which were targeted at pharmacy technicians, working in a variety of roles. Only one asked specifically for an 'Accredited Checking Technician' in the job title; none asked for an 'Accuracy Checking Technician' or similar. The adverts for roles in the hospital sector were invariably more detailed than those in community pharmacy in terms of the requirements of the applicant - specifying, for example, previous NHS hospital experience or membership of the APTUK.

Of the jobs advertised by the Company Chemists' Association (CCA) multiples (ASDA, Boots, Lloyds Pharmacy, Morrisons, Rowlands Pharmacy, Superdrug, Tesco and Well), 15 were specifically for pharmacy technicians; 13 were for either a pharmacy technician or a dispensing assistant; 114 were for an accuracy checking technician and one was for a pharmacy technician registered with

the Royal Pharmaceutical Society (RPS) (which would have had to be a pharmacist since RPS membership is restricted). 3 trainee accuracy checking technician roles were also advertised, but no trainee pharmacy technician roles could be found. This suggests that the accuracy checking of prescriptions is of high importance to community pharmacy employers in the context of any other skills a pharmacy technician might possess. In hospitals, though some of the adverts for pharmacy technicians required the ability to accuracy check prescriptions, 98% were for a 'pharmacy technician' rather than an ACT (or alternative title).

3.6 The grandparent clause

In 2002, the professional regulator for pharmacy at the time, the Royal Pharmaceutical Society of Great Britain (RPSGB), agreed to regulate pharmacy technicians. Pharmacy technicians were able to voluntarily register with the RPSGB between January 2005 and December 2007, and it was intended that registration would be mandatory thereafter for anyone wishing to use the title 'pharmacy technician'. To register with the RPSGB as a pharmacy technician during the voluntary period, support staff had to possess a Pharmacy Services S/NVQ Level 3 or equivalent qualification under the transitional 'grandparent clause' arrangements. [79]

The Section 60 Order of the Health Act 1999 (i.e. the Pharmacists and Pharmacy Technicians Order 2007) came in to force in February 2007. It required pharmacy technician registration to be made mandatory, with provision for voluntary registration to continue for a further two years, during which time unregistered pharmacy technicians could continue to use the title. [90] [91]

The Pharmacy Order 2010 came in to force in February 2010. It gave legislative effect to the replacement of the RPSGB with the GPhC later that year as the regulator of pharmacists and pharmacy technicians. It was meant to result in mandatory registration of pharmacy technicians,

but due to delays in its implementation, the voluntary pharmacy technician register continued until 30 June 2011 – 18 months later. [92]

The voluntary register and its transitional grandparenting arrangements, which were intended to run until December 2007, therefore ran between January 2005 and July 2011 - three and a half years longer than originally intended. The transitional arrangements ended on 30 June 2011, and since that time, no pharmacy technicians have been able to register via the grandparent clause. However, pharmacy technicians that registered under the grandparent clause prior to 1 July 2011 and then left the register were permitted to re-join the statutory register until 26 September 2012. [69]

Only 523 pharmacy technicians registered in the first three months when the voluntary register opened in 2005, and 3,000 had registered within 17 months. [93] [94] By January 2007, 4,642 pharmacy technicians had voluntarily registered. [95] There was an apparent rush to register shortly before the 30 June 2011 deadline. 5,600 applied to register in the final two months before the deadline, 4,000 of which waited until the final month. More than 30% of applications had missing information or documentation. [96] [97]

On 31 July 2012, there were 21,361 pharmacy technicians on Part 2 of the GPhC register (the register of pharmacy technicians). Of those on Part 2 in 2012, almost two-thirds (65.0%) had joined prior to mandatory registration on 1 July 2011. The remainder, the majority of whose applications were received prior to 1 July 2011, were processed onto the register during the year July 2011 to July 2012. [98]

A snapshot of the register of pharmacy technicians, taken in October 2015, indicated that 17,916 of the 23,064 pharmacy technicians on the GPhC register (78%) were registered via the grandparent clause (according to the GPhC's response to a Freedom of Information (FOI) request,

14 October 2015). In April 2017, a further FOI request revealed that 16,956 of the 23,318 (as at 31 March 2017) pharmacy technicians on the GPhC register (73%) were registered via the grandparent clause. [99]

3.6.1 Routes to grandparented registration

There were two routes to registration via the grandparent clause:

Route A: A straightforward application that required no screening by the RPSGB/GPhC. Those registering via this route had an RPSGB/GPhC-recognised qualification, relevant work experience and sufficient time in practice (not less than 14 hours per week in the previous four out of the past eight years, or not less than 28 hours per week in two out of the past four years).

Route B: Those applying to register via this route had to have an RPSGB-recognised qualification, but could be lacking work experience or time in practice; their applications required screening. They had to provide additional information about their work as pharmacy technicians, which was assessed by RPSGB/GPhC evaluators.

Acceptable qualifications for registration under the grandparent clause (route A) included*:

- BTEC National Certificate in Pharmaceutical Sciences
- BTEC National Certificate in Science (pharmaceutical)
- BTEC National Certificate in Applied Science (pharmaceutical)
- BTEC National Certificate in Pharmacy Services
- City & Guilds of London Institute, Dispensing Technicians Certificate
- Certificate of the Society of Apothecaries
- Boots 2-year dispenser training programme completed prior to 1993
- Boots 1-year dispensing assistants' course completed after 1993 but before 7 March 2005 plus an accredited top-up training module and assessment of competence

- Dispensing Certificate of the Royal Army Medical Corps or the Royal Air Force
- NPA 2-year Dispensing Technicians correspondence course completed prior to 1998
- National Certificate in Pharmaceutical Science, Stow College 1984-1992
- National Certificate in Pharmaceutical Science, Aberdeen 1990-1991
- National Certificate in Pharmaceutical Science, Dundee 1985-1987
- National Certificate in Pharmaceutical Science, Edinburgh Telford College 1984-1992
- National Certificate in Pharmaceutical Science, James Watt College 1991-1992
- NVQ level 3 Pharmacy Services (City & Guilds)
- NVQ level 3 Pharmacy Services (Edexcel)
- SANCAD Pharmacy Technicians Certificate (2 year)
- SCOTEC National Certificate in Pharmaceutical Science
- SCOTEC Pharmacy Technicians Certificate (2 year)
- SCOTVEC National Certificate in Pharmaceutical Science
- SQA National Certificate in Pharmaceutical Science
- SVQ level 3 Pharmacy Services (Scottish Qualifications Authority)
- University of Sunderland National Certificate in Pharmaceutical Services (BTEC) 1994-1998

* In addition to evidence of their qualification, prospective pharmacy technician registrants had to submit a brief career history, including a declaration of relevant work experience over the previous two to eight years. [100] [101] Of great concern is that although more than 17,000 pharmacy technicians registered with the GPhC via this route, the response to a Freedom of Information request, received in April 2017, revealed that the GPhC does not hold records of any assessment of any of the above qualifications as to whether they were suitable and provided sufficient justification for allowing persons holding them to register as pharmacy technicians. The GPhC suggested contacting the RPS library to find out if they held such records, who in turn passed the query to the RPS museum, since it might have been the case that the RPSGB conducted

such an assessment prior to the inception of the GPhC in September 2010. However, neither the RPS library nor the museum were able to find any record of such an assessment having been conducted.

3.6.2 Countersigning requirements

All applications for registration as a pharmacy technician under the grandparent clause had to be countersigned by a pharmacist. This was because the RPSGB stipulated that, under normal circumstances, pharmacy technicians applying to register must have had recent work experience under the supervision, direction or guidance of a pharmacist. The responsibilities of the countersigning pharmacist were defined by the RPSGB thus: *“By countersigning an application form you are confirming that you judge the technician to be competent to practise and to be a fit and proper person to be registered as a pharmacy technician. You are also confirming that, to the best of your knowledge, the information provided by the application is true and accurate.”* In judging competence to practise, reliance upon a pharmacy technician possessing a listed qualification was encouraged in the RPSGB’s guidance for countersigning pharmacists; this reliance may have been heightened by the absence of a definition of the role of the pharmacy technician in the guidance. [102]

The countersigning pharmacist should normally have been the person to whom the applicant was directly accountable - working under his or her supervision, direction or guidance. This would normally have been the pharmacy manager, line manager, superintendent pharmacist, chief pharmacist, or a pharmacist working for the same company on the same site. However, pharmacists were also able to countersign applications for pharmacy technicians who were not working under their supervision, direction or guidance in the following circumstances:

- If the applicant had work experience in one of a number of areas, such as the Ministry of Defence (MOD), as a journalist or in a hospital where not accountable to the chief pharmacist.
- If the pharmacist had a professional relationship with the applicant's supervisor and/or line manager.

If the applicant was not working under the supervision, direction or guidance of the countersigning pharmacist, the application was subject to evaluation and submitted under Route B.

PDA pharmacist members reported that they were placed under pressure by their employers to sign off pharmacy technicians as competent.

The results of a survey carried out by JRA research suggest that many pharmacy technicians are unaware even of the existence of a grandparent clause, and the reason that most of them thought they needed to register with the RPSGB/GPhC was simply to enable them to continue in their existing roles, often because their employers had required them to do so. [4] Professional, role and career enhancement appear not to have been the primary motives for pharmacy technician registration.

The survey revealed that 41% of pharmacy technicians, commenting on their reasons for joining the register, said *"I felt I had to register to continue in my job"* and a further 37% said *"I was required to do so by my employer"*. Perhaps unsurprisingly, many did not grasp the significance of registration since, for 70% (64% in hospital, 93% in community pharmacy), their pay remained the same and 66% saw no change to their roles or responsibilities (80% in hospital, 63% in community

pharmacy). 61% had an appreciation that their accountabilities and liability had increased with registration (70% in hospital, 58% in community pharmacy). [4]

3.7 The view of the regulator

During a presentation at the Royal Pharmaceutical Society's Conference in September 2014, the Chairman of the GPhC's governing council was pressed by a professor of Pharmacy Law and Ethics to explain why the GPhC had thus far failed to provide a statement to pharmacists which clarified that pharmacists should be able to confidently delegate tasks to registered pharmacy technicians. She argued that such a positive, enabling statement from the regulator would provide pharmacists with an appropriate regulatory safety net and would encourage them to delegate more tasks to pharmacy technicians. In his response, the GPhC Chairman indicated that the GPhC had created a register of pharmacy technicians, but a large proportion had joined this register through a grandparenting arrangement and as a result, there were some very variable standards amongst those on the register. He explained that it was therefore not possible for the regulator to take a blanket view and to recommend to pharmacists what roles they should delegate to pharmacy technicians. A generic approach to the group was not possible.

3.8 Other governance and public safety assurance issues with pharmacy technician training – for the pharmacy regulator

3.8.1 Length of course / training period

The GPhC requires a minimum work experience period of 2 years as a trainee prior to registration as a pharmacy technician. However, 51.8% of trainee pharmacy technicians working in community pharmacy take longer than 2 years to complete the training. [5] The GPhC's governing council

thinks it unlikely that a trainee pharmacy technician would achieve the desired outcomes in less than 2 years. [103]

A number of stakeholders have expressed views that the length of the training period ought to remain the same or be increased. This was a finding of GPhC-commissioned research involving representatives of employers, education providers and authorities and the Association of Pharmacy Technicians UK (APTUK). [86] In addition, a paper published jointly by the APTUK and the University of East Anglia said that in order to prepare pharmacy technicians for day one practice, increasing the length of training to incorporate new material and making the qualification degree level was identified as the most appropriate solution. [104] Whilst there is a need to review the suitability of pharmacy technician qualifications for the role they are to perform, this recommendation appears to have been based on a small number of comments from pharmacy technicians and emboldened and emphasized in the report because it coincides with the views of the researchers (the report states that the analysis method used allows researchers' own knowledge of the subject to be included in the interpretation of focus group data and that *"Some of the key comments have been emboldened by the researchers to highlight areas of particular need"*). Concerns with the quality of this research have been set out in Appendix C.

There appears to be strong support for increasing the minimum training period for pharmacy technicians, or at least keeping it the same. This was one of the recommendations of research commissioned by the GPhC in 2014 and 2015, alongside recommendations for a clear role definition for pharmacy technicians before the standards for their initial education and training could be revised in accordance with it. [86] [87] [88] Nevertheless, the GPhC commenced a consultation on the initial education and training standards for pharmacy technicians in December 2016, in the absence of a clear role definition. In the context of the above, and amid concerns expressed by members of its governing council, it sought views as part of that consultation on whether the two-year minimum training period could be removed. [103] [105] [88] Following the

consultation, in September 2017 it decided to update the standards, again in the absence of a role definition, but did not proceed with the proposal to remove the two-year minimum training period. It expects training courses based on the new standards to commence in September 2018.

[71] [72] [73]

3.8.2 Entry requirements

There are no mandatory minimum entry requirements to train as a pharmacy technician, though information on the NHS careers website states “Employers usually ask for at least 4 GCSEs (A-C), including English, maths and science or equivalent qualifications” [106] and the GPhC states ‘The entry requirements will vary depending on the course provider. However, as a guide, you might be expected to have the equivalent of four GCSEs at Grade C and above, including mathematics, English language, science and one other subject.’ [107] A minimum entry requirement of ‘other academic requirements or experience equivalent to national level 2 or above’ will be introduced in courses which meet its revised standards for initial education and training from September 2018.

[71] [72] [73] This will therefore have applied to those qualifying from September 2020 onwards.

3.8.3 Supervision of initial education and training

In a document published in 2010, the GPhC stated that either a pharmacist or pharmacy technician could act as the designated educational supervisor to a trainee pharmacy technician. [108] In addition, in 2014 or earlier, it recommended that the choice of supervisor be made by the employer. [109] However, somewhat confusingly, it also stated in a separate document, dated December 2013, that the two years’ relevant work-based experience in the UK must be done under the supervision, direction or guidance of a pharmacist. [69] [110]

In 2017, the GPhC formally consulted on whether pharmacy technicians should be able to supervise the initial education and training of pharmacy technicians. [105] It decided to allow this in its new standards for initial education and training, which it expects will apply to courses starting from September 2018 onwards. [71] [72] [73]

A non-pharmacist employer may apply commercial or other inappropriate criteria to the selection of a supervisor, which may not be in the best interests of the trainee and ultimately the public. Such an employer may also be poorly placed to assess the person's suitability to act as the supervisor. Pharmacists have the benefit of a much greater depth of understanding of the subjects that the pharmacy technician will study, greater knowledge of the context in which the pharmacy technician will work and more experience to call on than a pharmacy technician. In short, a pharmacist will generally have more "headroom" to act as a supervisor than a pharmacy technician. The requirement that a pharmacist must be the supervisor helps to ensure that the competencies and quality of service provision required in the long term can be achieved. Most of the existing group of pharmacy technicians have been "grandparented" on to the register; the GPhC Chairman has explained publicly that as a result, there were very variable standards among the group and it is therefore not possible for the GPhC to make a blanket recommendation to pharmacists as to what roles they should delegate to pharmacy technicians (see Chapter 3.7). For these reasons, among others, pharmacy technicians may be ill equipped to act in a supervisory role to trainees and allowing them to do so may undermine patient and public safety. The PDA raised concerns about this in its response to the GPhC's consultation on the standards for the initial education and training of pharmacy technicians, but these were not mentioned in the consultation report presented to the GPhC's governing council. [88] [71]

3.8.4 Training completion rates

An important distinction needs to be made between the course completion rate (the proportion of trainee pharmacy technicians who start the course and subsequently complete it) and the pass rate (the proportion of trainee pharmacy technicians who attempt to pass the course exams/assignments and successfully do so).

Although it has been identified that completion rates of initial education and training courses for pharmacy technicians were generally regarded as good, in one research study, a representative of a large community pharmacy multiple identified that trainees often struggled to complete the qualifications at all, even within a five- or six-year window and a representative of a different large community pharmacy multiple identified that the completion rate was less than 50%, which was lower than for medicines counter assistant courses. Interviews were conducted with those who worked closely with trainees or were in more senior positions. [5]

GPhC-commissioned research found that, generally, pharmacy technicians who do not complete their initial education and training often leave to perform a different role, because they have changed employer, or for personal reasons. [5]

3.8.5 Protected training time

Pharmacists' undergraduate training is full-time, allowing for a strong focus on the academic aspects. In contrast, many community pharmacy technicians have to complete their training in their own time. In fact, the PDA is aware of one large community pharmacy multiple providing less than 20 minutes of training time each week for all of the company's compulsory training, and trainee pharmacy technicians must sign a training contract agreeing that they will complete all of their coursework and further studies in their own time.

The cost to community pharmacy businesses has been identified as a major factor in determining whether pharmacy technicians would be released from their working day for protected education and training time. Costs may determine both the protected study time provided during working hours and the choice to use a distance learning provider rather than a further education college. [86] The costs may arise through additional staffing (if the trainee's protected time requires another person to provide cover, since the trainee would ordinarily be working) or loss of service provision and ultimately profit. However, because the negotiating process for community pharmacy funding is not conducted in the open, it is not clear what public funding has been provided for certain activities in community pharmacy.

The impact of costs was exemplified by the response from Walgreens Boots Alliance to a GPhC consultation on future standards for the initial education and training of pharmacists, pharmacy technicians and pharmacy support staff entitled 'Tomorrow's Pharmacy Team'. In relation to a question about the implementation of revised standards for pharmacy technicians, it stated: "*A lack of funding is likely to set the overall limits in terms of the number of pharmacists, pharmacy technicians and other support staff who can or will be trained.*" [83]

3.8.6 Variance in quality of training within and between sectors

Several GPhC-commissioned research studies have highlighted the fundamental and extensive differences in the training, experience and practice between pharmacy technicians working in the community and hospital pharmacy sectors. These are outlined in Appendix B. In addition, the quality of training and experience of individuals within a sector can be highly variable.

Notable comments from pharmacy technicians about the perceived lower calibre of community (relative to hospital) pharmacy technicians have been captured in research. [104] However, issues

have also been identified with the quality of training provided at Further Education Colleges (FECs), which are principally used by NHS hospitals and far less so by community pharmacies. One research study captured a total of 79 comments from pharmacy technicians who used FECs for their initial education and training. Overall, there were more negative than positive comments. Numerous comments related to the quality of the teaching standards, such as poorly taught lessons. It was also noted that at FECs, it may be difficult for trainees to fail units of the knowledge qualification because they would be coached to reach at least a pass level and they had opportunities to resubmit work or resit exams. The percentage pass rates were not published in the research paper. [5]

One research study, though not obtaining a representative sample, found that some pharmacy technicians were *“carrying out complex tasks, such as patient counselling, with no additional training”*. It also reported that *“There were also concerns expressed about the relevance and suitability of pharmacy technician training to the job they are currently performing, with over a quarter of respondents saying they did not believe that their pre-registration training adequately prepared them for day one practice.”* [104] Commentary on the limitations of that study can be found in Appendix C.

Whilst all units in the knowledge qualification are mandatory, the pharmacy service skills competency qualification requires trainees to complete 14 core modules, plus 3 modules chosen from a selection depending on the sector in which the trainee is working. [86] There is no requirement for a pharmacy technician wishing to change sectors to complete further training on the modules specific to that sector. Yet, one study found that 5.3% of pharmacy technicians migrated from community to hospital pharmacy within the first year post-qualifying and a further 1.5% moved from hospital to community pharmacy. [5]

Representatives from both community and hospital pharmacy were concerned about the lack of emphasis on professionalism in the pharmacy technician training courses. [5] Such emphasis may be unnecessary for a non-professional role, but an explanation of what it means to be on a public register should be included.

As at late 2017, with no apparent plans for change, the same GPhC standards of initial education and training apply to courses for pharmacy technicians working in the community and hospital sectors. The difference between the roles in the hospital and community sectors is substantial, and it may be difficult for pharmacy technicians to obtain the evidence required by the standards when working in one particular sector and not the other. For example, it is unclear how trainee pharmacy technicians working in community pharmacy, many of whom may now be GPhC-registered, have demonstrated the extemporaneous preparation of medicines or acquired appropriate knowledge of the preparation of aseptic products – processes which are rare or non-existent in community pharmacy. [108]

3.8.7 Multiple methods of assessment

A further governance issue for the GPhC is that the use of singular methods of assessment conflicts with the requirements set in its 'Standards for the initial education and training of pharmacy technicians', September 2010. These state "*For knowledge based qualifications, assessment must be through a number of assessment methods*". [108] However, a number of course providers are using only singular assessment methods – either exams or assignments - but not both. [5] The GPhC has a statutory duty to take appropriate steps to satisfy itself that the education and training standards for pharmacy technicians to join the register are met (article 42 (3) (b) of the Pharmacy Order 2010). [111]

3.8.8 Variance between awarding bodies

The variance between awarding bodies was described by the following quote from an awarding body representative:

“[There is an issue with] the difference in the quality between [two awarding bodies named] because, again, anecdotally I’ve been told that some of the assessments or the assignments from [one] for the pass criteria are particularly minimal and it could just be filling in a word on a table, whereas the assessment for [another] is more robust. So how do you then assure that you’ve got the same pharmacy technician on the register?” [5]

Pharmacy technicians do not currently undertake Objective Structured Clinical Examinations (OSCEs) as part of their assessments, which are a commonly used method of assessing clinical skill performance and competence. The GPhC has suggested that these may be included in the future initial education and training of pharmacy technicians, but it has not stated that these will be mandatory or for what aspects of the training they may be suitable. [105]

3.8.9 Syllabus of learning

In December 2016, the GPhC proposed renewal of the standards of initial education and training of pharmacy technicians. [105] From September 2018, initial education and training courses for pharmacy technicians will no longer include a syllabus of learning, which in the current standards sets out the detail of what must be covered on training courses. [71] [72] [73] The absence of a syllabus is cause for concern that the training courses - and by extension, the capabilities and experiences of newly-registered pharmacy technicians - will become even more variable than has already been highlighted by the GPhC council’s Chairman (see Chapter 3.7).

The GPhC has proposed to produce an evidence framework in early 2018, which will be a document providing suggestions to course providers as to how the standards of initial education

and training may be met. This document will not be formally consulted upon and will take the form of a guidance document, meaning it will not be mandatory or enforceable. [71] [72]

3.8.10 The study of ethics

The study of ethics will be removed from the initial education and training courses for pharmacy technicians from September 2018; it did feature in the syllabus set out in September 2010. [108] [112] The word 'ethics' does not appear in the GPhC's revised standards for the initial education and training of pharmacy technicians and there is no clear stipulation that the important concepts would have to be covered during the training. The ability to apply ethical reasoning – juxtaposing the law, regulation and the interests of the patient - is one of the hallmarks of professional practice. The study and application of ethics is unnecessary for a technical role and as such the removal of the study of it from the initial education and training courses for pharmacy technicians is appropriate. However, it may be beneficial for pharmacy technicians to understand the concept of ethics and that pharmacists will apply ethical reasoning in their practice.

3.8.11 Ability to plagiarize, cheat or collude on exams and assessments

The ability for trainee pharmacy technicians to cheat or collude on assessments during their initial education and training has been highlighted in research published in 2014. An awarding body highlighted the potential for internet-based research plagiarism in the completion of assignments, and a distance learning provider had seen other colleagues assisting pharmacy technicians with online assessments and helping with the answers to assessment questions, whilst the trainee's underpinning understanding and practice remained absent. [5]

Distance learning courses are completed by trainee pharmacy technicians throughout the UK. In Great Britain, initial education and training courses are accredited by the GPhC. As such, many

trainee pharmacy technicians complete the same course, often with little contact with other trainees in their workplace. Over a period of several years, an extensive range of requests for help in answering assessment questions for particular course providers, with reference to particular modules and question numbers, have appeared online. Other users often provide the answers, which in some cases may be model answers, or state what grading was achieved for a particular answer. These are published and left for others to see. Communication also appears to occur through private messaging. Examples can be found in Appendix D.

This may mean that many pharmacy technicians use the same answers to complete a given course, without fully understanding why the answer is correct, or wholly or partly incorrect. The GPhC does not appear to have addressed this apparent collusion, though it is evident on a well-known online pharmacy forum, the content of which is visible to the public. The number of pharmacy technicians in the UK currently on the register who have accessed this material to aid the completion of their training, exams and assessments is unknown. The forum threads listed in Appendix D, each of which was first started between 30 October 2011 and 7 January 2018, had been viewed a combined 61,483 times when checked on 22 March 2018.

Examples of collusion through social media and digital means in other healthcare areas have featured in the press. For example, 270 medical students at the University of Glasgow were required to re-sit their examinations after it was discovered that students had colluded online by sharing the details of the assessments they would face in an Objective Structured Clinical Examination (OSCE). The University did not know how many students had taken advantage of the online information, so the entire cohort was required to retake the assessments. [113]

A further difficulty is that in the community pharmacy setting, pharmacists are expected to supervise the exam conditions for the trainee, with no regulatory requirement that additional staffing cover be provided to enable them to do so. Similarly, the pharmacy regulator has not

specified the conditions under which the exams must be conducted. A pharmacist's first responsibility must be to the immediate needs of patients. The workplace pressure created by some employers may cause difficulties in enforcing exam conditions in the absence of any applicable regulatory requirements from the GPhC.

3.8.12 Regulatory oversight of training

For pharmacists, the GPhC directly accredits the training provided by universities; as such, the accreditation is done at the site where the training is delivered. For pharmacy technicians, the GPhC "recognises" the qualifications provided by the City & Guilds and Pearson Edexcel awarding bodies through a meeting with them, but does not directly accredit the qualifications. It does directly accredit the SQA qualifications and distance learning courses provided by the NPA and Buttercups. This involves reaccreditation after three years but does not require a monitoring visit to the provider from the GPhC. Instead, the provider visits the GPhC to provide assurances, meaning fundamental changes affecting the provision of the qualification may not be identified. Distance learning providers send an annual report to the GPhC outlining any changes to course provision.

The governance and quality assurance of individual training providers, i.e. evaluation of whether they meet minimum standards (which may themselves be subject to interpretation), is left to the awarding bodies and distance learning providers. The GPhC does not visit individual education and training sites to review the quality and nature of the training provided. It has identified that ongoing quality monitoring would be a positive thing, but that the cost of implementing it may be prohibitive. [5]

3.9 Initial education and training in other healthcare sectors - a comparison of qualifications and educational status

3.9.1 The dental sector

All dental practitioners have been registered with the General Dental Council (GDC) since 2007, in one of seven groups:

- Dentist
- Dental nurse
- Orthodontic therapist
- Dental hygienist
- Dental therapist
- Dental technician
- Clinical dental technician [114]

The dental sector provides a good exemplar of how skill mix has been developed to support the work of the dentist and to improve the service to patients. Each group has its own training requirements and the sector's career structure makes use of a skills escalator. The GDC introduced 'Scope of practice' in 2013, a document which describes the areas in which members of each registrant group have the knowledge, skills and experience to practise safely and effectively in the interests of patients. [115]

Dentists cannot practise without another member of the dental team present, typically a dental nurse, for the purposes of chaperoning and infection control. [116] [117] Until recently, every member of the dental team had to work under the direct supervision of a dentist and as a result of a dentist's prescription. However, the GDC introduced a 'direct access' policy in April 2013, which allows dental hygienists and dental therapists to carry out the full scope of their practice

without direct supervision, without prescription from a dentist and without the patient having to see a dentist first. [118]

Dental technicians (also known as dental technologists) make dentures, crowns, bridges and dental braces according to prescriptions from dentists or doctors. Dental technicians must be registered with the GDC. Qualifications include the BTEC National Diploma in Dental Technology, a foundation degree, or a BSc (Hons) degree in Dental Technology. [119] [43]

N.B. Some dental technicians and dental nurses have gained registered status through a 'grandparent clause' and may be lacking formal qualifications. [120] [121] [122] [123]

Clinical dental technicians design, create, construct, modify and fit removable dental appliances and are able to work independently of other dental team members. They are qualified and experienced dental technicians who have undertaken additional training in sciences, clinical skills and interpersonal skills. [119] [124]

Dental hygienists scale and polish teeth and apply topical fluoride and fissure sealants. Those based in hospital may also help patients having surgery or complicated orthodontic treatment, or those with particular medical conditions, to maintain a healthy mouth.

Dental hygienists must be registered with the GDC and have undertaken an approved diploma or degree course. The diploma or foundation degree course is usually two years long on a full-time basis and is offered by dental schools. The degree course takes three years on a full-time basis. Course entry requirements are five GCSEs at grades A-C and two A-levels, or a recognised dental nursing qualification. [125] [126]

Dental therapists can carry out a range of procedures, following the written instructions of a dentist, including:

- Intra- and extra- oral assessment
- Scaling and polishing
- Applying materials to teeth such as fluoride and fissure sealants
- Taking dental radiographs
- Providing dental health education on a one to one basis or in a group situation
- Undertaking routine restorations in both deciduous and permanent teeth, on children and adults
- Extracting deciduous teeth under local infiltration analgesia.

Provided that they have completed appropriate training, dental therapists can perform extended duties, including:

- Placing pre-formed crowns on deciduous teeth
- Administering inferior dental nerve block analgesia under the supervision of a dentist
- Providing emergency temporary replacement of crowns and fillings
- Taking impressions
- Treating patients under conscious sedation, provided a second appropriately-trained person remains present throughout the treatment.

Entrance requirements are five GCSE subjects at grades A-C, plus two A levels or a recognized qualification in dental nursing. Dental therapists must obtain a diploma in dental therapy offered by a number of hospitals, which requires around 27 months of full-time study, or a three-to-four year full-time degree approved by the GDC. [127] [128] [129]

Orthodontic therapists assist dentists in carrying out orthodontic treatment and provide some aspects of the treatment themselves. They also carry out treatments to assist patients in an emergency by relieving pain or making appliances safe. In order to train as such, individuals need to be qualified in dental nursing, dental hygiene, dental therapy or dental technology and also need to have a period of post-qualification experience. A number of approved training providers offer diploma courses that are equivalent to a year's full-time training. [115] [130] [131] [132] [133]

Dental nurses support the dentist in all aspects of a patient's care, which includes getting the appropriate instruments ready, mixing materials and ensuring patient comfort. They take notes from dentists' dictation, maintain the physical standard of the surgery and sterilise instruments.

Dental nurses must be registered with the GDC, and to register they must have completed a GDC-approved course. There are two ways to gain this qualification:

1. Part-time study for the National Diploma in Dental Nursing, NVQ level 3 in Dental Nursing, level 3 vocationally-related qualification (VRQ) in Dental Nursing or QCF level 3 Diploma in Dental Nursing, whilst working as a trainee dental nurse.
2. A full-time, GDC-approved course offered by a small number of universities.

No academic qualifications are required to work as a trainee dental nurse, but in order to progress, they need to study for an approved course in dental nursing. Part-time courses typically require GCSEs at grades D-G, although others may require grades A-C. Full time courses may require A-levels. [134] [135]

3.9.2 The optical sector

Optometrists are healthcare professionals who examine eyes and test sight. They prescribe and fit spectacles or contact lenses, give advice on visual problems and detect ocular diseases and abnormalities, referring the patient to a medical practitioner if necessary. Optometrists may also share the care of patients who have chronic ophthalmic conditions with a medical practitioner. Qualified optometrists can undertake further training to specialise in certain eye treatment by therapeutic drugs.

Optometrists must graduate with at least a 2:2 honours degree from one of eight General Optical Council- (GOC-) approved universities. They must then achieve the Stage 1 competencies required to enter the pre-registration period. The supervised pre-registration period includes work-based assessment and a final assessment on the Stage 2 core competencies for optometry, before registration with the GOC. [136] [137] [138]

Dispensing opticians are technicians trained to advise on, fit and supply the most appropriate spectacles after taking each patient's visual, lifestyle and vocational needs into account. They are also able to fit and provide aftercare for contact lenses after undergoing further specialist training. On completion, practitioners are placed onto a specialty register. [138]

Dispensing opticians must be registered with the GOC. To qualify, they must pass a three-year course in dispensing optics at a GOC-approved institution. There are three modes of study to choose from:

- A two-year full-time training course followed by a year's salaried work in a practice, under supervision
- A three-year day release training course, combined with suitable employment
- A three-year distance learning course, combined with suitable employment.

Trainees must then pass all parts of the qualifying examinations before they can register with the GOC. [139]

3.9.3 Veterinary medicine

Veterinary nurses provide nursing care to animals within a veterinary practice. Tasks that veterinary nurses may be called on to perform (under veterinary direction and/or supervision) include:

- Maintaining anaesthesia and performing minor surgical procedures
- Nursing sick animals and administering medication
- Taking x-rays and carrying out diagnostic tests
- Advising owners on the health and welfare of their pets
- Cleaning animal accommodation.

Veterinary nurses can become qualified either by a vocational day-release or full-time level 3 Diploma in Veterinary Nursing, or through higher education (a foundation or honours degree in veterinary nursing). Students who want to train as a veterinary nurse must be eligible to enrol with the Royal College of Veterinary Surgeons (RCVS) as a student. To be eligible, they must have at least five GCSEs at grade C or above, including English, maths and a science subject. Once qualified, veterinary nurses are eligible to join the RCVS Register of Veterinary Nurses and use the post nominals RVN. Registered veterinary nurses must undertake 45 hours of CPD over a three-year period. [140] [141]

Table 6 - Technician and intermediate roles supporting health professionals in regulated healthcare environments - training and registration compared

Job	Entry requirements for training	Qualification required	Full or part-time training	Examination required to register	Grandparent clause option
Dental nurse	Two GCSEs at grade C or above in English language and maths or a science for part-time courses, A or AS level for full-time courses [142]	National diploma, NVQ3, GDC-approved course (e.g. foundation degree) [143]	Diploma and NVQ are part-time, but university course is full-time [144]	No [145]	Yes, transitional period of two years before mandatory registration in 2008 for those who had worked full-time for at least four of the previous eight years, [146] plus a recognised qualification or certificate of competence.
Dental technician	Four GCSEs at grade C or above for BTEC National Diploma, A-levels for BSc [119]	BTEC National Diploma in Dental Technology, foundation or BSc honours degree [119]	BTEC National Diploma and foundation degree can be either full- or part-time, BSc honours degree will be full time [119]	No [145]	Yes, transitional period of two years before mandatory registration in 2008. For those who had worked full-time for at least seven of the previous ten years, plus an acceptable qualification. [119] [147]
Dispensing optician	One or more A-levels to include a science subject, plus five GCSEs at grade C or above [148]	Three-year diploma or degree course in ophthalmic dispensing [149]	Two-year's full-time, followed by a year's supervised work experience, or: three-year course of either day-release or	Yes [149]	No

Job	Entry requirements for training	Qualification required	Full or part-time training	Examination required to register	Grandparent clause option
			distance-learning, combined with suitable employment [149]		
Veterinary nurse	Five GCSEs, at grade C or above or equivalent level 2 qualification [150]	Level 3 diploma, or foundation or honours degree [151] [152]	Diploma can be vocational day-release or full-time [153]	Diploma or degree to be supplemented by at least 94 weeks' approved education, including a period of practical training practice equivalent to 1,800 hours. [151] Until September 2016, this also included a requirement of at least 700 guided learning hours. [154]	All veterinary nurses that joined the RCVS since 1 January 2003 either transferred automatically from the List to the Register when it opened in 2007, transferred voluntarily or were automatically transferred on 17 February 2015. [155]
Pharmacy technician	None but employers may require NVQ2	NVQ3 in Pharmacy Service Skills	Part-time. Coursework often completed in own	No	Yes, transitional period of six years before mandatory registration in

Job	Entry requirements for training	Qualification required	Full or part-time training	Examination required to register	Grandparent clause option
		plus NVQ3 in Pharmaceutical Science	time as a distance learning course (see Appendix B). Training in hospitals more likely to involve 1 day per week training at college over 2 years.		2011. Either working not less than 14 hours per week for 4 out of the previous 8 years or not less than 28 hours per week for 2 out of the previous 4 years, plus a recognised qualification.

3.10 An independent viewpoint on the appropriateness of technician qualifications in the UK

There is already considerable concern over the ambiguous approach and the general standard of qualification that has become acceptable in the UK, insofar as it relates to the development of technician roles. The Gatsby Foundation's report on 'Technicians and intermediate roles in the healthcare sector' found that case study evidence suggests the intermediate level in the healthcare sector is generally associated with level 4/5 qualifications. In some cases (e.g. dental technicians and pharmacy technicians) these are substantial (in terms of knowledge component and size) level 3 qualifications. In some other occupational areas (e.g. maternity, radiography and healthcare sciences), the pathway to intermediate level was variable, but these intermediate roles were often associated with the acquisition of foundation degrees (level 5).

The report reads: *"It was noted that qualifications included in the healthcare frameworks in the government-supported Advanced Apprenticeship programme (level 3) were normally linked to*

lighter weight generic health and social support roles rather than substantial occupationally specific qualifications.”

It was recommended in the report that: *“There needs to be a review of the appropriateness of the diverse range of level 3 qualifications used in the healthcare sector, and their relationship to supporting intermediate level work and career development in each occupational area.”*

It is stated in the report: *“there is ambiguity in the way technicians are positioned in relation to qualification levels. In the UK and internationally, science, engineering and technology (SET) technicians are typically associated with sub-bachelor level qualifications (e.g., HNC/D, foundation degree, qualification level 4/5), but in the UK policy literature, level 3 qualifications are also increasingly being equated to technician level.”*

Table 7 provides summary information relating to level 3 qualifications for the range of occupations considered in this research, and reveals wide differences between the content of qualifications. For pharmacy and dental technicians, inclusion of a knowledge-based qualification differentiates them from occupations where the associated level 3 qualification is competency-based. The number of “Guided Learning Hours” for each of the qualifications presented in the table provides an indication of the differences in their size and substance.

The report concluded that: *“Overall, the way in which level 3 qualifications have been developed suggests that they fall short of reflecting the educational and training requirements to undertake intermediate roles. The development of training for intermediate-level posts, which enable staff to complete tasks previously only carried out by registered staff, would seem to match more closely to sub-bachelor degree level provision such as foundation degrees.”* [156] This is an important principle to consider when considering the roles of pharmacy technicians and how they might be developed in the future.

Table 7 - Examples of level 3 health qualifications

Qualification	Optional pathways/occupations	Guided learning hours [156]
Diploma in Allied Health Profession Support	Dietetics, physiotherapy, occupational therapy, speech and language therapy, radiography	373-490
Diploma in Blood Donor Support	Blood donor support	411-483
Diploma in Clinical Healthcare Support	Healthcare assistant	373-494
Diploma in Maternity and Paediatric Support	Maternity, neo-natal, paediatrics	376-502
Diploma in Pathology Support	Pathology support	411-483
Diploma in Perioperative Support	Perioperative/theatre support	468-709
BTEC Level 3 Extended Diploma in Dental Technology	Dental technician	1,080
Diploma NVQ in Pharmacy Service Skills and Diploma in Pharmaceutical Science	Pharmacy technician	344-352 720

3.11 Conclusions

1. The qualifications required to register with the GPhC as a pharmacy technician are significantly below the standard required within other regulated healthcare roles. Whether the NVQ level 3, which is the level currently set by the GPhC, is sufficiently rigorous for a healthcare technician engaged in a demanding and often patient-facing role, is debatable. However, if there is a government desire to enable pharmacists to delegate some of their patient-facing functions to pharmacy technicians – functions which carry considerably higher levels of responsibility than those currently performed by pharmacy technicians – then it is legitimate to question whether an NVQ level 3 qualification would be adequate to ensure public safety. This would be particularly of concern were it to be proposed that pharmacy technicians could perform patient-facing functions, currently performed by pharmacists, in the absence and without the supervision of a pharmacist.
2. The majority of current pharmacy technicians (73%) registered via the grandparent clause and undertook qualifications which may be less rigorous than the current formal NVQ level 3 qualifications or exams, thus creating risks and challenges in respect of public safety, public protection and public safety assurance, which the GPhC must address. This was encapsulated and crystallized by the Chairman of the GPhC's governing council when he highlighted that grandparenting of pharmacy technicians resulted in highly variable standards among the group and prevented the regulator taking a blanket view as to what roles pharmacists could delegate to pharmacy technicians.

3. That a substantial proportion of pharmacy technicians registered shortly before the deadline for the end of the grandparenting arrangements calls into question the motivation for registration. It may suggest that significant numbers of technicians registered at the behest of their employers or because registration was required to enable them to continue in their existing jobs - rather than as a result of a desire to become a regulated occupation. Considered alongside the survey of pharmacy technicians carried out by JRA research on behalf of the PDA, it may suggest that some did not appreciate the implications of registration with the regulator.
4. The GPhC does not hold records of any assessment having ever been conducted as to whether the qualifications with which a person could be grandparented on to the register as a pharmacy technician were appropriate for that purpose. Neither does the Royal Pharmaceutical Society hold records of any such assessment having been conducted by the RPSGB, which was the regulator at the time that grandparenting was introduced.
5. There does not appear to have ever been a definition of a pharmacy technician's role which would distinguish it from that of a dispensing assistant.
6. There are fundamental issues with the training and education standards for pharmacy technicians that have been in place since June 2011 when grandparenting arrangements ceased. Not the least of these issues is that there is the potential for cheating, collusion and plagiarism and the diminution of learning across the UK due to the availability online of answers to specific questions in distance learning courses.

7. The role of the pharmacy technician remains poorly defined and it has long been the case that there is little to distinguish the role of the pharmacy technician from that of a dispensing assistant in day to day practice in community pharmacy. In these circumstances, the initial education and training of pharmacy technicians may lead to the trained person's skillset becoming aligned to that of a dispensing assistant. In addition, anything learned during a training course which would be beyond the role of a dispensing assistant may not have been put in to practice and any additional skills may not have been maintained since qualification. For this reason, among others, it would be difficult to place any reliance in the future upon the training previously undertaken by existing pharmacy technicians, or indeed their current registration, as a basis for extending the pharmacy technician's role.

8. There is widespread variation in the quality and nature of the initial education and training provided to pharmacy technicians. The regulatory standards for initial education and training are open to interpretation. They have been outdated for a considerable period of time and are of questionable relevance since the pharmacy technician role is poorly defined. In addition, there has been very little – if any - involvement from the GPhC in monitoring the delivery of the course at individual training sites. For these reasons, it may be very difficult for the regulator to provide the requisite public safety assurances in respect of any more advanced roles and responsibilities even in relation to non-grandparented pharmacy technicians. If the issues with the initial education and training were addressed now for future trainees, it would not alter the difficulties in providing assurances in respect of

pharmacy technicians who are already on the register and who would be trained to different, inferior standards.

9. Pharmacist supervision of the initial education and training of pharmacy technicians is particularly important in the community pharmacy sector, where the role of a pharmacy technician is indistinct from that of a dispensing assistant, and any underpinning scientific or clinical knowledge learned during the initial training beyond that required to dispense prescriptions may not have been put in to practice by the pharmacy technician since qualifying. Pharmacy technicians may generally have insufficient “headroom” – in terms of additional knowledge, skills and experience - to act as effective supervisors to trainees. It is important for public safety assurance purposes that a pharmacist supervise the initial education and training in all sectors of practice.

10. A pharmacist selecting who will act as the supervisor to a trainee pharmacy technician should help to ensure that the training experience results in the best possible outcome for patients and the trainee. A non-pharmacist employer may apply commercial or other criteria to the selection of a supervisor, which may not be in the best interests of the trainee - and ultimately, the public. The non-pharmacist employer may be poorly placed to assess a person’s suitability to act as the supervisor.

11. Whilst the same standards of initial education and training of pharmacy technicians are applied to trainees in both the community and hospital sectors, and no role definition exists in community pharmacy, the progress and development of the role in all sectors will be impeded. However, if the role of existing pharmacy technicians

in hospitals continues to evolve, the relevance and suitability of the training for that sector, whilst it remains aligned to community pharmacy, will be reduced.

12. A further consideration for the regulator is that the standards and regulatory oversight of training for pharmacy technicians are poorer than those for pharmacists on a number of levels, as shown in Appendix A. The consequence is that despite the fact that there is a public register, registration does not provide a sufficiently robust standard upon which to build a reliable and scalable skill mix model. Indeed, this is a concern that has been openly expressed by the GPhC's Chairman, indicating that this impacts upon regulatory considerations and, potentially, the safety of the public.

13. The pharmacy sector could learn much from the dental sector in this regard, which appears to lead the way in skill mix through the development of healthcare technicians. With all dental roles registered since 2007 and now divided into one of seven groups, each with its own training requirements and career structure, dentistry makes good use of skill mix and the skills and salary escalator to ensure all its registrants have clearly defined roles and responsibilities, with each group making optimal use of its skills and qualifications whilst maintaining patient safety. This has enabled those at the top of the skills escalator - dentists - to develop additional roles suited to their expertise, whilst ensuring all dental practitioners have a satisfying and rewarding career structure.

14. In contrast, the six years of mandatory pharmacy technician registration, which has elapsed since June 2011, has done little to encourage development of the roles of

pharmacists and pharmacy technicians. At least two-thirds of pharmacy technicians (and 80% of those working in hospitals) say their roles and responsibilities have not changed since registration. [4] A research study in community pharmacy in 2014 found that the role of the pharmacist was still dominated by the dispensing function, with little development of extended roles; it had not changed as a result of pharmacy technician registration. [157]

15. If the purpose of pharmacy technician registration was to enhance professional standing, extend the pharmacy team's role and improve patient protection, it appears to have failed in this objective. A review of pharmacy regulation could be the first step towards putting this right.

3.12 Recommendations

1. The initial education and training requirements of pharmacy technicians should be substantially revised after the roles of pharmacists and pharmacy technicians respectively have been reviewed and an effective skill mix model, accompanying salary escalators and clear role definitions have been established in the community pharmacy sector.
2. The current variance in the training and educational standards of existing pharmacy technicians presents risks to the proper development of skill mix in community pharmacy and must be addressed.
3. The pharmacy regulator must play an active role in accrediting, reaccrediting and monitoring individual pharmacy technician education and training providers and

sites, as it does for pharmacist training. Where there is a failure to meet its standards, the GPhC must take corrective action to address this, including issuing sanctions where appropriate.

4. A pharmacist, and not a pharmacy technician, must supervise the initial education and training of pharmacy technicians and act as the designated educational supervisor.
5. A pharmacist, and not a non-pharmacist employer, must determine who will act as the designated educational supervisor to a trainee pharmacy technician.
6. A minimum entry level requirement should be established of at least 5 GCSEs at grade C or above, including Maths, English and either Chemistry or Biology, for enrolment on to pharmacy technician initial education and training courses.
7. As part of the initial education and training standards for pharmacy technicians, the GPhC must provide an indicative syllabus to specify what must be covered on training courses.
8. The current level 3 qualification for pharmacy technicians is not sufficiently robust to enable skill mix to flourish. A level 4/5 educational (HNC/HND/foundation degree) standard must be achieved so as to deliver the requisite standard of pharmacy technician training and qualification.
9. A registration assessment for all pharmacy technicians should be established as a condition of formal registration. This would provide quality assurance and

guarantee a minimum level of knowledge. This process should be administered by the GPhC.

10. Pharmacy technician initial education and training courses must include a component of regular day release for training and study time at a further education college (FEC). This should involve a minimum of one day per week at the FEC for two years, with an allowance for annual leave and public holidays. This must apply to both the knowledge and competency components.
11. Pharmacy technician training must include formal progress reports, carried out by the tutor every 13 weeks as for pharmacists, which must be sent to the GPhC if unsatisfactory. [7]
12. Pharmacists, as tutors to trainee pharmacy technicians, must receive better support from employers. This should be in the form of training and guidance for the role and dedicated protected time provided by the employer to act as a tutor. The GPhC should set and enforce standards in this regard.
13. To address the problems associated with the poor definition of pharmacy technician roles, pharmacy technicians should be divided into a number of specific groups with a particular level of skill, similar to the model used in the dental sector. A scope of practice document should be developed and an associated skills and salary escalator established, outlining the additional education (beyond that gained through initial education and training), knowledge, skills and experience required to practice safely in the varying roles. Each role should support a specific aspect of the work that a pharmacy technician might undertake to support the role of a

pharmacist e.g. Accuracy Checking Technician, dispensing technician, hospital pharmacy ward-based technician, hospital pharmacy aseptic services technician, GP surgery-based pharmacy technician or clinic pharmacy technician.

14. Significant concerns exist about the extent to which the register of pharmacy technicians is reliant upon the grandparent clause as this undermines pharmacists' confidence to delegate tasks. This should be urgently reviewed by the GPhC. The GPhC must subsequently provide a clear statement about the delegation of tasks to grandparented pharmacy technicians and offer clear guidance to pharmacists. Until this is done, pharmacists will find it very difficult to delegate more advanced tasks to pharmacy technicians.
15. The public register of pharmacy technicians should be annotated for those individuals who have been grandparented on to it and for those in possession of recent NVQ3 qualifications.
16. Any requisite training for pharmacy technicians must be directly accredited and comprehensively monitored and assured by the regulator.
17. Pharmacy technician qualifications should be achieved through different types of assessment, including assignments, OSCEs and modular exams, with monitoring and enforcement of these requirements by the regulator.
18. The GPhC must investigate any potential cheating, collusion or plagiarism evident on online pharmacy forums and digital channels. It must publish its findings, take appropriate steps to assure the safety of the public and provide assurances in that

regard. This may include requiring all pharmacy technicians who have undertaken the affected course(s) in the relevant time period to sit a registration exam in order to remain on the GPhC register.

19. The combined effect of the regulatory governance and quality issues set out in this report, on the ability of pharmacy technicians to perform a defined role, must be evaluated and addressed. The GPhC must then take the necessary steps to provide assurance to the public that pharmacy technicians are competent to practise in their roles in the context of these issues.
20. Consideration should be given to requiring pharmacy technicians to complete additional relevant training as preparation for transferring between sectors of pharmacy practice.

4 Pharmacy technicians – a European outlook

4.1 Pharmacy technician practice across the European continent

In each European country, there are important differences in the roles of pharmacy staff which support the role of the pharmacist, as pharmacy technicians do in the UK. For ease of reading, the most highly-trained pharmacy support staff role supporting the role of the pharmacist in countries outside of the UK is referred to in this chapter and elsewhere in the report as a “comparable pharmacy technician role”. That is notwithstanding the difficulties in comparing the roles and the other issues outlined in this report.

Training for comparable pharmacy technician roles involves an undergraduate course in the following European countries:

- Albania (three years)
- Belgium (two years)
- Czech Republic (three years)
- Denmark (three years)
- Finland (three years)
- Germany (two years)
- Malta (two years)
- Serbia (four years)
- Spain (one year)
- Turkey (two years). [158]

Complementary support roles working under the supervision of a pharmacist, akin to those of pharmacy technicians, are present throughout Europe and worldwide. However, the systemic

conditions, such as the level of training for the role, staffing levels and the national healthcare system in operation, are variable and these must be taken into account whenever a comparison is being made.

In Europe, whilst the training and professional activities of pharmacists are standardized at a high level by the European Union (EU) Recognition of Professional Qualifications Directive, the training and activities of pharmacy technicians and comparable roles are not. Throughout the EU, since 2005, a person who has trained to become a 'pharmacist' will have training of at least five years' duration, including a four-year University degree. No similar European standards exist for pharmacy technicians or staff in comparable roles. [159]

4.2 Previous research

A comparative study on pharmacy technicians in Denmark, the Netherlands and Sweden was commissioned by the Department of Health and undertaken by researchers at the School of Pharmacy, University of Manchester. The report was published in 2004. It revealed that staff groups comparable to pharmacy technicians ('pharmacoconomists' in Denmark, 'pharmacist's assistants' in the Netherlands and 'prescriptionists' in Sweden) were, on the whole, better trained, undertook a number of additional tasks and had greater levels of responsibility than UK pharmacy technicians. [79] These staff groups undertook long periods of training, often comprising theoretical learning at a college and practice-based work placements. Indeed, 'prescriptionists' in Sweden are trained to bachelor degree level.

In terms of the higher levels of responsibility assumed relative to the UK, 'pharmacoconomists' in Denmark dispensed prescriptions without the direct supervision of the pharmacist. They had extended their roles by developing clinical specialisms, for example in asthma management, and

business skills such as quality control. Some pharmaconomists were also responsible for managing a sub-branch of a pharmacy in the absence of the pharmacist.

'Pharmacist's assistants' in the Netherlands undertook a wide range of tasks, including dispensing prescriptions without the direct supervision of a pharmacist, counselling patients and undertaking medication reviews. They had also developed the business role by gaining managerial responsibilities.

Within the community pharmacy setting, 'prescriptionists' in Sweden performed a similar range of tasks to the pharmacist. They were responsible for the daily management of the pharmacy and a prescriptionist was often employed as the 'chief pharmacist'.

A culture of developing safe systems of working within the community pharmacy sector across these three European countries enabled these comparable pharmacy technician staff groups to extend their roles. A commitment to quality control was a feature, as were underpinning safe systems of working. Prescriptions included more detail such as the clinical indication of the prescribed drug. The electronic transfer of the majority of prescriptions allowed for the incorporation of a series of internal checks on the computer system. In turn, the pharmacy computer system had been designed to specifically support such an activity. For example, original pack dispensing and barcode matching in all three comparator countries guarded against dispensing errors by the comparable pharmacy technician groups.

Unlike the UK, the tasks undertaken by these occupational groups were defined and clear. They were protocol driven, but were delivered by those who, as a group, had significantly higher educational standards than pharmacy technicians in the UK - especially as seen within the community pharmacy setting. Furthermore, these groups enjoyed salaries that were commensurate with the higher levels of responsibility. All of these factors not only allowed for

these staff groups to operate 'unsupervised', but resulted in a degree of professionalisation. Indeed, the notion of supervision did not receive the same, if any, attention by pharmacists in the three comparator countries.

Whilst it is not within the scope of this report to explore every nuance and detail of pharmacy practice in other countries, it is apposite to further explore some of the key differences between these comparator countries which have led to different models of practice.

4.3 The community pharmacy model in Denmark in 2017

In Denmark, pharmacy ownership is restricted to pharmacists as sole proprietors. A pharmacist can own a maximum of eight pharmacies, another key difference to the UK. [160] In England, 62% of community pharmacies are owned by multiple contractors who operate chains of six or more pharmacies, and 49.2% in Great Britain are in large multiple chains with 100 or more pharmacies. [161] [162] Many have non-pharmacist owners; there is no restriction on pharmacy ownership in the UK in this regard. Non-pharmacist ownership of pharmacies has been identified as a risk to public health by the European Court of Justice. [163] [164]

Pharmacies in Denmark can only sell products which are naturally and appropriately related to pharmacy. The sale of goods such as perfume, and cosmetics such as make-up and mascara, is expressly prohibited. [165] Pharmacy owners (pharmacists) are held to account by the Lægemiddelstyrelsen ('the Danish Medicines Agency') for the operation of their pharmacies. [166] For each three pharmacies and/or pharmacy branches, there should be at least one pharmacist present and he/she must be contactable by phone from the other branches. [165]

'Farmakonomer' (pharmaconomists) are the group most comparable to pharmacy technicians. Training lasts for three years, including 23 weeks at the Danish College of Pharmacy Practice with

exams after the 1st, 2nd and 3rd years alongside work in community pharmacy. In addition, 90 study days are organised during the practical training period. [167] The entry requirement is 12 years of primary and secondary schooling, which is completed at 18 years of age. [160] Other than pharmacists and pharmacoconomists, there are no other pharmacy roles involved in the dispensing and supply of prescriptions.

Pharmacoconomists are legally required to answer patient medical inquiries and are liable for any dispensing errors they make and the information they provide. The National Agency for Patients' Rights and Complaints has punitive authority in this regard. [160]

A report from the International Pharmaceutical Federation indicates that in 2015/16, there were 367 pharmacies, including supplementary units and branch pharmacies, employing 867 pharmacists (including owners) and 2,825 pharmacoconomists. This equates to an average of 2.4 pharmacists and 7.7 pharmacoconomists per pharmacy. [160] A different reference source indicates that in 2015 there were 368 pharmacies, with 720 full-time equivalent (FTE) pharmacists (including owners, 1.95 FTEs per pharmacy) and 2,400 FTE pharmacoconomists (6.5 FTEs per pharmacy). [168]

4.4 The community pharmacy model in the Netherlands in 2017

The equivalent to a UK pharmacy technician in the Netherlands – the Apothekersassistent or 'pharmacist's assistant' – spends two to three years training to diploma level, which is a level four education in the Dutch education system. This is the highest level of MBO – "middelbaar beroepsonderwijs" or senior secondary vocational education - designed for vocations with higher levels of responsibility. [169] [170] It involves a combination of practical training in a pharmacy and invariably an academic component at a regional education centre of at least one day or evening per week (though up to 80% of the training may be completed at the centre, depending

on the style of the course chosen). [171] The starting salary of a qualified pharmacist's assistant in 2017 is € 27,351.04 (£24,133 based on a March 2018 currency conversion). [172]

Pharmacists' training in the Netherlands takes six years to complete. For those who wish to pursue a career in hospital pharmacy, a further four-year period of training is required. [173] [174] [175] Those in community pharmacy may undertake an additional two-year clinical and practice-based qualification to gain the legally recognised title of 'openbaar apotheker-specialist' or 'community pharmacy specialist' with annotation in the Beroepen in de Individuele Gezondheidszorg (BIG) register (the public register for healthcare professionals). [176] [177] [178]

Beyond the role of the 'pharmacist's assistant' is the Farmaceutisch Consulent or 'pharmacy consultant' – a University bachelor's degree level six qualification, which takes a further three years of training to achieve for qualified pharmacist's assistants who are working at least 16 hours in either community or hospital pharmacy, or four years for others with a level four diploma. [179] [180] The role is intermediate between pharmacists and pharmacist's assistants – working in community, hospital, primary care, industry or public service. It specialises in pharmaceutical care and medication safety. Farmaceutisch Consulents are involved in developing, implementing and evaluating pharmacy policy, projects and research. [181]

Those with a level four diploma can alternatively study a bachelor's degree level programme to become a Farmakunde or 'pharmaceutical scientist' (a level six qualification). A farmakunde is not a healthcare professional, but works in organizations where medication and disease are central to their functions, such as hospital pharmacies, chain pharmacies (in head office roles), the pharmaceutical industry, pharmaceutical wholesaling, insurance companies, patient organisations, government and practice research.

Registration with the leadership body is voluntary for pharmacist's assistants and pharmacy consultants, but in June 2017, 9,464 out of a total of 15,697 pharmacist's assistants (60%) were registered. [182] [183]

Pharmacist's assistants work with responsibility for advising patients and dispensing prescriptions, but under the overarching responsibility of the pharmacist. Individual transactions are not directly supervised by a pharmacist, but supervision takes place through a monitoring and review process.

Another significant factor which enables this model of skill mix is that community pharmacies in the Netherlands commonly have two pharmacists on duty at the same time and they are supported by 5-10 'pharmacist's assistants' (with three years' diploma training at level four educational standard). In 2013, an average community pharmacy employed 1.5 pharmacists, 8.2 pharmacist's assistants (5.5 FTEs), and 3.9 other support staff (2.1 FTEs including general support staff, delivery drivers, cleaners and administrators) and dispensed 2,200 prescription items per week. [184] The figures for the number of FTEs remained the same in 2016. [185] This is a very different position than is found currently in the UK community pharmacy setting, where there is often only one pharmacist on duty, supported by possibly only one pharmacy technician - if at all. In the Netherlands, 'pharmacist's assistants' are often the first and the last ones to speak to the patient. They enter the prescription onto the computer, review interactions and contraindications, refer these to the pharmacist and make contact with the doctor if necessary. Pharmacists deal with the more complicated issues around medicines, discuss local medicines guidelines with doctors, handle issues with health insurers and run the pharmacy.

4.5 The community pharmacy model in Sweden in 2017

Swedish receptarie or 'prescriptionists' undertake a 3-year full-time University bachelor's degree course, including periods of practical training in the pharmacy during the course. [186] The first

three years of the course at the University of Umeå is the same as that undertaken by masters-level pharmacists, who undertake a 5-year course. [187] At the Universities of Gothenburg and Uppsala, the courses are separate from those taken by pharmacists. [188] [189] Students commence University courses from 18 years of age onwards.

A pharmacy must be supervised by either a masters-level pharmacist or a prescriptionist. The starting salary for a prescriptionist is 25,500 kronor per month – £26,772 per year in the UK, based on a currency conversion in March 2018. [190]

There is a separate role in Sweden of Apotekstekniker or ‘pharmacy technician’, which involves 18 months of full-time study at a polytechnic before practice. Lectures, group work and practical training may be delivered remotely. [191] Apotekstekniker in Sweden are not allowed to supervise the dispensing process, but can generate labels for prescriptions, pick stock and apply labels to the stock, under a pharmacist’s supervision.

Läkemedelsansvarig or ‘local quality managers’ are also appointed to all pharmacies in Sweden. [192] [193] These are masters-level pharmacists (or exceptionally, prescriptionists) who have undergone additional training and cover between 1 and 3 pharmacies each. They can work hands-on in pharmacies and the principal function of their role is to advise on safety, quality and governance and ensure pharmacies meet regulatory requirements. They are required to report problems with processes in pharmacy to the Medicines Product Agency and they support with improving competence and providing training in giving advice to patients. [194]

The Swedish pharmacy sector now faces challenges. All pharmacies in Sweden were state-owned until 2009. [195] Since that time, pharmacies have been sold to corporate organisations and over-the-counter medicines made available for sale from retail stores, resulting in pharmacies increasingly selling items other than medicines. There has been a debate in the press about how

pharmacy staff are perceived as less knowledgeable by customers and pharmacists have expressed concerns from a professional perspective over the commercialisation of community pharmacy. [196]

A national inquiry, commissioned by the Swedish government in 2015 and published in March 2017, has made the recommendation that only a pharmacist or a prescriptionist can perform all the required steps in the process of dispensing a prescription medicine, with a view to improving the quality of the supply process. The special investigator appointed to lead the inquiry stated that prescription medicines were often not being used in an appropriate manner following collection at the pharmacy and that all parts of the dispensing and supply process require pharmaceutical competence. The recommendations were subject to consultation as at June 2017. [194]

4.6 Conclusions

1. Whilst it may appear attractive to base the policy around community pharmacy skill mix and the use of the pharmacy technicians in the UK upon the successful skill mix models of those in comparable roles working in other countries in Europe and beyond, it is not possible to do so unless the wider healthcare, political, regulatory, pharmacy ownership and commercial context is also taken into consideration. The different training, qualifications, skills and experience of pharmacy technicians and those in comparable roles in other European countries, in the context of the environmental conditions, has consequences for patient care, safety and the quality of service provided.
2. In some European countries, those in roles comparable to those of pharmacy technicians are trained to graduate level and the role is much more advanced than that in UK

community pharmacy practice, involving significantly more responsibility and a commensurate remuneration structure.

3. A structured career framework for pharmacy technicians, which links remuneration to greater levels of training, competency and responsibility, would act as a positive incentive to drive standards and enable skill mix with pharmacists to operate successfully.
4. In European countries where additional roles and responsibilities are assumed by those in comparable pharmacy technician roles in community pharmacy, those individuals are supported by much higher standards of clinical governance. For example, they may be able to rely upon original pack dispensing and bar code checking to assist with dispensing accuracy. The transfer of prescriptions from surgery to pharmacy in some countries is accompanied by additional clinical information such as the indication of the medicine. Furthermore, not only is there a higher standard of staff training, but the staffing levels of both pharmacists and trained staff in individual pharmacies are much higher than typically seen in the UK.
5. In mainland Europe, the majority of pharmacies are owned by pharmacists. Consequently, there is much less focus upon and influence from corporate profit objectives and a greater emphasis on professional considerations than in the UK, where the majority of pharmacies are owned by large corporate multiples. The situation in the UK brings added risks and frequently results in commercialism clashing with professionalism.
6. In many respects, whilst the UK clearly has an ambitious programme for what it expects pharmacy to deliver, it is hampered by deficient environmental standards relative to its European counterparts in community pharmacy. The training of pharmacy technicians in

the UK is at a much lower level than for those in comparable roles in many other European countries. Pharmacy staffing levels in the UK appear considerably lower than in other European countries and have resulted in significant workload having to be endured by what is often the sole pharmacist and a much smaller, often unqualified, staff complement.

Barcode checking during dispensing was advocated by the National Patient Safety Agency in 2007 as a means to reduce errors. In 2016, the NPSA's functions transferred to NHS improvement, however its recommendations remain live on NHS websites in 2017. [197] Whilst barcode checking is used in the UK for retail sales purposes, it is rarely ever used as a safety tool in a UK community pharmacy. Barcode scanning of medicines may be introduced in the UK in 2019, as a result of the EU Falsified Medicines Directive (though the UK's exit from the European Union may affect the precise implementation of the legislation). If it is implemented as it currently stands, the additional dispensing tasks will require additional staffing levels to support. Due to deficiencies in the UK system in pharmacy, the changes may simply result in even greater pressure on staff and consequently greater risk to the public. However, with appropriate environmental conditions, there would exist an opportunity not only to identify the authenticity of the product leaving the pharmacy, but to incorporate additional safety checks to ensure the product matched the item on the prescription and on the patient's pharmacy record, during dispensing and at handout.

Access to the full NHS patient record does not occur in the UK community pharmacy setting (there may be isolated local exceptions to this). Even though partial access to Summary Care Records (SCRs) on a read-only basis has recently emerged, workloads and low staffing levels hinder the proper use of this valuable facility. Further, the SCR does not even include as standard the medical condition(s) from which the patient is suffering. [198]

7. Consequently, basing policies regarding skill mix and the use of pharmacy technicians upon the successful models in operation in mainland Europe or beyond, without seriously considering the whole system differences and deficiencies of the UK community pharmacy environment in comparison, creates a significant risk of damaging the integrity of the current standard of the service and a risk to public safety.

4.7 Recommendations

1. The successful community pharmacy skill mix models of countries in Europe and beyond could only be used as a realistic template for the UK, when whole-system improvement to the community pharmacy operation in the UK is also undertaken. This would include:
 - a. Increasing the educational standard of UK pharmacy technicians (it was previously recommended that it becomes a level 4 educational standard (sub degree level) in Chapter 3)
 - b. Introducing a clinical career framework for community pharmacists and pharmacy technicians, and subsequently increasing the salaries of pharmacy technicians
 - c. Ensuring that pharmacies are better staffed, with more than one pharmacist and a complement of trained, registered pharmacy technicians
 - d. Improving the clinical governance arrangements within the community pharmacy setting, enabling pharmacists to rely on clinical indications, barcode checking, original pack dispensing and access to the full electronic patient records on a read and write basis.
 - e. The ability for pharmacists to work with professional autonomy even in pharmacies that are owned by large corporate multiples.

If patient safety and role development of pharmacists and pharmacy technicians is to be a serious proposition in the UK, then such measures should be introduced as soon as possible. Such improved clinical governance and wider system enhancements would provide a much more robust springboard to enhance the roles of pharmacists and pharmacy technicians. Without this, the development of skill mix in the community pharmacy setting can only be very limited.

5 Challenges to the professional status of pharmacy technicians in the UK and reliance upon the capabilities of the group

5.1 Pharmacy technicians – an occupational group or a healthcare profession?

5.1.1 A Health and Care Professions Council definition

The Health and Care Professions Council (previously known as the Health Professions Council) provides a comprehensive definition of what enables an occupational group to become a healthcare profession. One of the conditions it describes is that the occupational group must have an established professional body whose membership accounts for at least 25% of the occupation's practitioners. [199] This suggests that the Health and Care Professions Council believes that professional leadership is a vital component of a healthcare profession.

5.1.2 The APTUK

As highlighted by Howe and Wilson in 2012, pharmacy technicians are lacking representative leadership. In the “Review of Post-Registration Career Development of Pharmacists and Pharmacy Technicians”, they stated: *“Strong and representative professional leadership is critical to ensure that the new profession [of pharmacy technicians] is successful in positioning and promoting itself to patients, policy makers and other professions. APTUK faces challenges as the professional leadership body, as it currently has less than 1,000 members out of a registered pharmacy technician population of about 21,000 and its members are predominantly in the secondary care sector.”* [76]

Despite membership being made free for trainee pharmacy technicians in an attempt to increase membership, only 159 trainees had joined the APTUK by November 2013. [200]

The APTUK does not adequately represent the pharmacy technician workforce. Despite being established in 1952, in late 2016 it had just 1,380 members in the UK (more recent figures could not be found at the time of writing in 2018). [104] This would represent just 6% of the total workforce in Great Britain of 23,150 (however, some of the APTUK's members may be based in Northern Ireland, meaning that it represents even less than 6% of the total UK pharmacy technician workforce). [104] In addition, it has previously been estimated that around two thirds of pharmacy technicians work in the community setting and the majority of the remainder are employed to work in hospital pharmacies; it was said at the APTUK launch of the 'Identifying the roles of Pharmacy Technicians in the UK' report in October 2016 that the APTUK has the opposite proportions in membership. Indeed, it is stated in the report that the APTUK's membership is *"largely derived from the hospital sector."* [99] [201] These issues drastically limit the APTUK's ability to provide leadership of the registrant group and constitute an inability to satisfy the healthcare profession criteria described by the Health Professions Council.

In contrast, 6,073 qualified dispensing opticians are members of the Association of British Dispensing Opticians (ABDO), which also has 519 members overseas, 420 associate members, 1,722 student members and 362 members in other categories (according to its 2017 annual report). [202] This is out of a total of 6,705 dispensing opticians registered with the General Optical Council (as at 31st March 2017). [203] The Dental Technologists Association advised the PDA in November 2018 that it had around 1,600 members out of a total registered dental technician workforce of 6,088 (as at November 2018). [204]

As at November 2018, full membership of the APTUK costs £48 per year. Membership costs £24 for fellows, £14 for 'associate members' (ex full members no longer in gainful employment) and is

free for trainee pharmacy technicians. This level of fee is unlikely to provide it with sufficient resources to lead the group with any great conviction.

Howe and Wilson said: *“The officers and executive of APTUK carry out their duties on a voluntary basis, which puts considerable pressure on them as individuals representing an emerging profession at a time of great change in healthcare education, training and service delivery.”* [76]

Whilst the APTUK appears to support the delegation of responsibilities from pharmacists to pharmacy technicians, despite the numerous risks to patient safety (which are set out in this report), paradoxically it has expressed concerns about the delegation of the activities undertaken by pharmacy technicians to dispensing assistants. [205] As mentioned earlier, it has been recognised that the roles of pharmacy technicians and dispensing assistants in community pharmacy are essentially the same.

Only relatively senior technicians are members of the APTUK executive. As at February 2017, according to the APTUK website, of its 20 officers, almost all work in mid-senior or senior pharmacy technician positions. With one exception, all were either currently working in the hospital sector or had previously done so. Three officers had current roles primarily focused on education and one had a role in medicines information. Just three were working in community pharmacy and each of these on a part-time basis, balanced with managerial responsibilities or other roles in education.

The situation was similar when re-examined in November 2017, though only 14 officers were reportedly in post. Of those, ten were currently working in the hospital sector and three who were not had previously done so; the one officer who had not worked in the hospital sector had a career in primary care. All worked in mid-senior or senior pharmacy technician positions. Just one of the officers currently worked in community pharmacy on a part-time basis, his role as a

pharmacy technician balanced with managerial responsibilities. The APTUK's website detailed three other officers with apparent previous community pharmacy experience as a pharmacy technician (in one case this was at some unspecified point since the 1970s; one officer worked in an independent pharmacy from 2014 to 2016 and another worked from 2009 to 2010 in a community pharmacy before leaving to pursue a career in hospital pharmacy). Three officers had current roles primarily focused on education and one had a role in medicines information. [206]

The APTUK's website indicates that the organisation is supported by a number of pharmaceutical companies (Special Products, Nova Laboratories Ltd, Pfizer, AAH and Sintek). [207] Whether these companies provide financial support to the APTUK, and the nature of their interest in its success, is unclear.

Despite significant challenges facing the credibility of the APTUK, the voluntary nature of its executive, its financial constraints and sectoral focus, its representatives are invited to sit on most of the relevant government developmental groups. This could give policy makers the impression that it not only represents all pharmacy technicians, but that the standard of its officials is representative of those seen among pharmacy technicians as a whole. This is not the case, as most pharmacy technicians work in community pharmacy and practise at a different level to APTUK representatives.

The president of the APTUK, Tess Fenn, contacted the PDA by email in June 2018 about the publication of this report. She said: *"Incidentally for information, I am a grand parented Pharmacy Technician with, at the time of entry onto the GPhC register (2011) 41 years' experience ranging from hospital, community, primary care and academia. I also have a number of pharmacy accreditations in accuracy checking & medicines management, leadership and management qualifications as well as a degree in my specialist area. I have trained and mentored countless pre-*

registration pharmacists and have supported many pharmacists in their early years, particularly in exercising their professional judgment.

I am not alone, by any means, and many pharmacy technicians have masters degrees as well as a myriad of post registration qualifications.

I hope this is recognised in your report.” This helps illustrate the point made above. The APTUK president and pharmacy technicians with “*masters degrees and a myriad of post-registration qualifications*” must not be taken to be representative of the vast majority of pharmacy technicians, whose education and training requirements have been examined elsewhere in this report and fall far below these standards.

Since it is the policy relating to skill mix and pharmacy technicians working in the community pharmacy setting that is currently under substantial review by the government’s Rebalancing Medicines Legislation and Pharmacy Regulation programme board, the fact that there is no meaningful representation - nor even a significant membership constituency - of community pharmacy-based members within the APTUK, is cause for concern.

Professional interests are borne out of a collective ambition and lead to the creation of a strong representative voice. If there is no strong representative voice, then, arguably, the collective ambition may not exist. Undoubtedly pharmacy technicians should organise themselves into a body, such as the APTUK, and press for developmental progress; encouraging standards and provide learning for their members. The APTUK, however, cannot currently be described as meeting the definition of a professional body, even if that is how it chooses to describe itself or what the government, keen to pursue its skill mix agenda, would prefer it to be.

Despite the fact that APTUK representatives cannot provide wide-scale grassroots input into this process or adequately represent the views of pharmacy technicians in community pharmacy, the programme board has placed great store upon the fact that its representatives have been

involved as board members from the outset. This not only conspires to further undermine the leadership and representative credentials of the APTUK, but also the validity of the government's entire Rebalancing Medicines Legislation and Pharmacy Regulation programme.

5.2 Acting professionally or being a professional?

A lack of clarity and transparency and the influence of historic employment practices has meant that there has been little debate about the roles and the professional status of pharmacy technicians in the community pharmacy setting. This has hampered the progress of skill mix development between pharmacists and pharmacy technicians.

The PDA as a pharmacist organisation does not have pharmacy technicians in its membership. However, it recognises that pharmacy technicians are the valued colleagues, who work alongside our members every day. They are often friends, family and fellow employees, working together as a team. The PDA wishes to see the development of the roles of pharmacy technicians and it recognises that there are already some areas of pharmacy practice in hospitals, primary care and in some parts of the manufacturing process where pharmacy technicians are operating in a very professional way and without their involvement, the respective service would suffer. Although it does exist, this is however, far less evident in the community pharmacy sector.

Compulsory registration of pharmacy technicians in Great Britain was introduced in July 2011. This was an attempt to improve protection for patients, by seeking to ensure that all pharmacy technicians employed in pharmacy - who play a part in the provision of pharmacy services - would be properly trained and under a duty to keep up-to-date and maintain high standards. After that date, anyone not registered - but working - as a pharmacy technician, or referring to himself/herself as such, would be breaking the law and could face prosecution. Pharmacy

technicians became accountable for their practice and were expected to understand the limits of their own responsibilities, capability, knowledge and understanding, and when to refer to others.

Evidence indicates that many pharmacy technicians do not view themselves as professionals as they do not feel that they should be held personally accountable for their own actions. For example, in a study conducted by JRA research on behalf of the PDA, the majority of those surveyed who were working in the community pharmacy setting believed that the pharmacist would still take responsibility for their actions. [4]

This is perhaps unsurprising. There is significant concern that in pharmacy, the phrases 'acting professionally' and 'being a professional' are being used almost interchangeably and are thought of as such by some. This is not at all helpful. The use of the word 'professional' as an adjective (being professional) is altogether different to its use as a noun (being a professional) and the word carries different meanings in each case. A sixteen-year-old receptionist or fast food server with no qualifications whatsoever, can, with good manners and a little organisational knowledge, seem to act professionally in a relatively simple customer transaction - but no rigorous or objective assessment could describe the person as being 'a professional' or part of a profession.

It is hoped that any staff member of a pharmacy in the UK would be able to act professionally when facing a patient or customer, but this does not mean that it would be appropriate to describe him or her as 'a professional' or the group as 'professionals'. Neither did the creation of a register of personnel on one particular day mean that all those appearing on it from that day on became 'professionals' or that the group could be described as 'a profession'.

Yet this is an issue that plagues pharmacy in the UK. In 2011, as a result of an initiative driven by civil servants, an administrative register of pharmacy technicians was created. This in itself would

not be a problem as such, but since that day, those who would wish to hasten the process of skill mix development in pharmacy and see roles delegated by pharmacists to pharmacy technicians in short order have contributed considerably to the confusion, and harmed the debate about what being a professional in pharmacy is all about. Increasingly, pharmacy technicians, without sufficient justification, are being described as professionals, 'pharmacy professionals' or members of a profession.

The register of pharmacy technicians was a policy construct of the civil service. Whilst it is fully recognised that there are a number of highly capable and competent pharmacy technicians, the collective group - being described as 'a profession' by civil servants - did not emerge through a robust and traditional process of professional consciousness being gradually built up, layer by layer over a period of time and in response to changes in healthcare delivery. It was not developed by a group that could exhibit highly specialised and distinct skills, expert knowledge and rigorous high-level training. The group is not represented by a strong leadership body who could represent and articulate its ambitions. Pharmacy technicians, therefore, should not be considered as a group whose registration confers anything like the same protection to the public as for a professional group that emerged through the more traditional route, such as pharmacists.

What exists instead is one profession, formed by pharmacists over many generations and in the traditional way, and one register of pharmacy technicians that was created recently on a particular date by government edict. Consequently, many of those on the pharmacy technician register are separated by great differences in training, experience, capability, appreciation of their accountabilities and, most importantly of all, widely differing ambitions. As has already been discussed, the majority of pharmacy technicians on the register were grandparented on to it. They did not join a profession in the common sense of the word; they came to work as usual and on one particular day, it became a requirement for their names to be entered onto a register; as such, the register 'joined them'.

This is an extremely important concept to bear in mind, especially when considering how best to develop a symbiotic and complementary skill mix in pharmacy. The debate should be about identifying the vision for the future of pharmacy practice and the respective future roles of pharmacists. Only then will it be possible to establish what roles pharmacy technicians might undertake to best provide support to pharmacists, so as to allow the development of the profession of pharmacy and drive benefits to patients. It should be about learning what makes the very best pharmacy technicians so good, then recognising and overcoming the challenges that would bring the rest up to that standard, which could then be quality-assured. It is also about recognising and understanding the significant differences between pharmacy technicians in the hospital setting who routinely work in a very professional way, where standards have been developed over many years with the support of senior hospital pharmacists, and those in the community setting, where pharmacy technician development has been held back by a lack of investment by community pharmacy employers (a situation which is likely to continue in the absence of any significant regulatory or government intervention coupled with funding support). It should also be a debate about recognising what has worked in other countries and why. Ultimately, the debate should be held by the profession and should be about how best to develop high standards amongst such a large and disparate group of pharmacy technicians, in a way that benefits patients.

5.2.1 Continuing fitness to practise (CFtP) and the renaming to “revalidation”

Those reviewing CPD records submissions from pharmacists and pharmacy technicians have, for some years, generally been checking whether all the necessary fields have been completed in the GPhC’s online CPD recording system.

The GPhC agreed in 2014 to establish a CFtP advisory group, which comprised of stakeholders from the government, pharmacy organisations and an organisation representing patients. [208] [209] [210] In 2016, the GPhC invited all of its registrant pharmacists and pharmacy technicians to participate in a study on a proposed new framework and requirements for demonstrating continuing fitness to practise.

Among the circa 23,000 registered pharmacy technicians, 301 registered to participate in the CPD pilot and 85 completed all required elements. Therefore, 28% of pharmacy technicians who registered for the pilot completed all required activities, which equates to 0.37% of all pharmacy technicians on the register. By comparison, 495 (47%) of pharmacists who registered for the pilot completed all required activities, which equates to 0.92% of all registered pharmacists. [211] [54]

Beyond the issues with pharmacy technician engagement in the process, it is of concern that the public is being led to believe that pharmacy technicians will be subject to a revalidation process. In April 2017, around three weeks before the launch of the consultation, the GPhC renamed the CFtP programme and framework to “revalidation”, in the face of opposition from key senior and experienced officials at the GPhC and without consulting the CFtP advisory group. Revalidation has very specific meaning relating to a particular method of assuring continuing fitness to practise. [212]

The CFtP Interim Evaluation Report prepared by Solutions for Public Health and shared with the CFtP advisory group in December 2016 stated: *“Given the PSA guidance on the CFtP model being proportionate to risk, the GPhC’s focus on continuing improvement in practice as opposed to formal assessment for revalidation makes sense.”* [213] Those words were removed and were not present in the final evaluation report published online by the GPhC, meaning that the information was not available to consultation respondents other than those who had received it due to their involvement in the advisory group. [211] The GPhC had said the same to the CFtP advisory group

before the consultation – that the framework did not constitute revalidation because, inter alia, it did not include a formal assessment of practice by a suitable person. However, in a statement reported on by the pharmacy media on 8 December 2017, the Chairman of the GPhC’s governing council said that the GPhC had been working towards revalidation for a number of years. [214] [215]

The GPhC may sample records from only 2.5% of registrants each year, reviewing only the previous year’s records and providing three chances to produce satisfactory records before taking punitive action. [213] [216] Under these arrangements, it will face difficulties in determining whether pharmacy technicians have appropriately developed themselves. This will be compounded by the absence of a clear role definition and with what appears to be a low level of engagement from pharmacy technicians in the process.

Much of the basis of revalidation arose from the Shipman Inquiry and it is a concept that the PDA supports. However, the framework introduced by the GPhC does not amount to revalidation – because it lacks a periodic check by another suitable person on the registrant’s fitness to practise and does not meet the definitions put forward by the Professional Standards Authority (PSA), the DoH and others. [213] [212] [217] [218] [219] [220] [221] [222] [223] [224] [225] [226]

It appears that the framework being introduced does not meet the GPhC’s own definition of revalidation. At a meeting in November 2013, the GPhC’s governing council explored a means of implementing a framework for assuring continuing fitness to practise. The meeting papers stated: *“The terms ‘revalidation’ and ‘continuing fitness to practise’ are subtly different. In the GPhC’s view ‘revalidation’ implies a fixed point assessment whereas ‘continuing fitness to practise’ suggests a review of practice viewed on a continuum. The latter better describes the thinking outlined in this proposal, so that term will be used from now on.”* [227] In 2014, a page was created on the GPhC’s website explaining why it was looking to implement a CFtP framework and

not revalidation. On that page, under the heading *“What happened to revalidation?”*, it stated: *“We have been working on the introduction of new arrangements for assuring continuing fitness to practise for some time, and initially this was called ‘revalidation’. We have decided not to use the word ‘revalidation’ anymore because it has a very specific meaning relating to a particular method of assuring continuing fitness to practise.”* [228] As at 5 February 2017, this had been changed to *“We have been working on the introduction of new arrangements for further assuring standards for safe and effective pharmacy practice for some time, and initially this was called ‘revalidation’ We have decided not to use this term anymore because it was not well understood.”* [229] The webpage has since been removed from the GPhC’s website. In the version of the evaluation report of the CFtP pilot published on the GPhC’s website in February 2017, it explains that the General Medical Council (GMC) and Nursing and Midwifery Council (NMC) revalidation models include a fixed-point assessment of the registrant’s fitness to practise. The report confirms the GPhC’s continued commitment at that point not to develop a revalidation model (which it had earlier said implies a fixed-point assessment): *“The GPhC’s direction of travel is to move away from a process of a fixed point assessment for assurance... Given the PSA guidance on the CFtP model being proportionate to risk, this makes sense.”* [211]

That the framework does not amount to revalidation was acknowledged by the GPhC and other pharmacy stakeholders at a CFtP advisory group meeting on 11 October 2017. The advisory group requested that the GPhC’s governing council be asked, at its meeting the following day, to change the name of the framework from “revalidation” to an alternative which accurately reflects its nature. The advisory group was subsequently informed by email on 1 November 2017 that the council had decided to retain the name *“because of its relative ease of understanding and they felt we needed to do more to explain the type of assurance that it provided to the public”*. There is no record in the minutes of the council’s meeting of 12 October 2017 of this being discussed, though revalidation was discussed. [73] [230] This reasoning seemingly contradicts the position the GPhC took in February 2017 - that the term ‘revalidation’ was *“not well understood”*. [229] The council’s

public position appears notably silent on the potential inaccuracy and inappropriateness of the title ‘revalidation’; this title may altogether mislead the public in respect of the level of protection afforded by the framework, each time it is used.

In essence, there are concerns about the process termed “revalidation” that will be used by the GPhC. For pharmacy technicians, when all of the other factors are taken into account, this adds further concerns about the perceived and actual quality assurance of the work of this occupational group.

5.3 Recommendations of the Francis Inquiries

The failures at the Mid Staffordshire NHS Foundation Trust between 2005 and 2009 resulted in a public outcry and led to two separate inquiries, each chaired by Sir Robert Francis QC. The reports were published in 2010 and 2013 respectively and took a panoramic look at the genesis of many of the failures. The inquiries tried to establish the fundamental causes, rather than just observing the publicly visible symptoms, and made many clear recommendations for the future.

One of the matters considered was the adverse consequences that can occur when policy is forced top-down by management or policy makers upon groups of healthcare staff working at the coalface. The reports made the case for how important it was for senior management and policy makers, particularly in the Department of Health, to make sure that any changes in policy relating to service delivery have the input of coalface practitioners. Two substantive recommendations were made in this regard:

- *“All changes in service delivery, systems, equipment, staffing and resources must be measured against the impact on the standard of service provided. Therefore, no change should be authorised or implemented without:*

- *timely, and recorded, consultation with professional staff who are to deliver or whose service will be affected by the proposed change;*
- *a proportionate, thorough and objective impact assessment, recorded in writing.”*

[8]

- *“The Department of Health should ensure that there is senior clinical involvement in all policy decisions which may impact on patient safety and well-being.”* [9]

5.4 The approach being taken by the Rebalancing Medicines Legislation and Pharmacy Regulation programme board

The Department of Health (DoH) established the Rebalancing Medicines Legislation and Pharmacy Regulation programme board (Rebalancing board) in 2013. [231] [232] It continues to operate in 2018. [232] This board seeks, through changes in pharmacy supervision arrangements and skill mix, to change the way in which pharmacists and pharmacy technicians operate, particularly in the community pharmacy setting. Potentially, this exercise could fundamentally change the roles and responsibilities of both pharmacists and pharmacy technicians.

Far from recognising the risks identified in the Francis inquiries relating to top-down policy determination - which fails to engage and secure the support of grassroots practitioners - the DoH has not encouraged wide discussion about skill mix in pharmacy. Nor has it invited many of the key national representative bodies of the groups who will be most affected by these changes - pharmacists and pharmacy technicians working in the community pharmacy sector - to discuss the issues, make their contributions and express any concerns that they may have. The Rebalancing board instead receives its input from a small and exclusive group of individuals, hand-picked by the DoH, and a stakeholder reference group that has been called upon to offer its input on only a small number of occasions since 2013.

It is apposite to consider that a recent survey of pharmacy technicians in the workplace demonstrates that it is possible to solicit views in a way that provides contemporary opinions from pharmacy technicians working at the coalface. [4]

There appears to be a great reluctance to allow the pharmacy profession to engage in and lead the debate and to develop skill mix, as it did successfully in the hospital sector in the 1980s. Instead, the civil service, having constructed a register of pharmacy technicians, now seems keen to orchestrate its own internal discussion process and impose its own preferred skill mix arrangements. The government has decreed that it will develop skill mix and the role of pharmacy technicians through the establishment of an exclusive Rebalancing board, to which members are appointed by the government, where the minutes and agendas are carefully prepared and managed by civil servants and from which the wider pharmacy profession is largely excluded.

It is therefore unsurprising that this way of working has left the pharmacy profession not only largely disengaged from the process, but also highly suspicious of the government's intentions. All of the previous examples of the successful development of skill mix, whether in pharmacy or elsewhere (for example in Mental Health Trusts as a result of the New Ways of Working programme), show that skill mix can only be developed successfully with the full engagement and active buy-in of key stakeholders. [233]

5.5 Acting professionally or being a professional, and the use of terminology

The notion that someone who can '*be* professional' (adjective) is the same as being '*a* professional' (noun) or that because pharmacy technicians now appear on a register, they can be considered to be professionals, in the absence of any of the other underpinning professional attributes, is a fallacy. Reliance upon this fallacy through the common parlance that has emerged

in government circles has not only held back the intelligent debate about skill mix and the future of pharmacy practice that should be had within the profession, but also presents risks to the public.

Though it appears that considerable effort is expended to maintain the parlance, occasional lapses - from the GPhC and the APTUK, for example - betray it. To illustrate this, the GPhC made the distinction between pharmacy professionals and pharmacy technicians in its 2015 *'fees rules and consultation analysis'*. [55] A further instance arose when the APTUK and the University of East Anglia stated in a 2016 publication that *"in parallel with developments seen within the pharmacy profession pharmacy technicians are found to be providing more patient facing services"*, making the distinction between the pharmacy profession and pharmacy technicians. The organisations also stated, in reference to pharmacy technicians, *"additionally it would provide some research training and thereby empower the profession to develop its own unique knowledge base, which has been identified as a requirement for obtaining professional status"*, thereby acknowledging that professional status had not been achieved. [104] However, due to the inappropriate use of the term 'pharmacy professional' by the regulator, the DoH, in training materials and even in academic pharmacy-related publications, in some cases it is impossible to tell whether the term is being used in reference to a pharmacist or pharmacy technician, undermining the confidence that can be invested in the term in a given context.

The use of the term "pharmacy professional" in training materials may indicate or suggest that the training has been rendered inappropriately simplistic such that it won't meet pharmacists' needs. It may undermine the confidence that pharmacists will have in that training and result in the training not being completed. Alternatively, where it has been designed to accommodate pharmacy technicians as the target audience, it may lead to knowledge gaps for pharmacists of which they may not be cognisant. As an example which illustrates the use of the term, in October 2017 the Centre for Pharmacy Postgraduate Education (CPPE) issued some learning materials

about mental health designed to be read by both GPhC-registered pharmacists and pharmacy technicians. [234] [235]

The overuse of non-professional occupational groups in healthcare has led to stark warnings in other fields of practice. A study published in 2016 of data pertaining to the period from 2009 to 2011 found that higher healthcare support worker staffing was associated with higher levels of risk-adjusted mortality in an analysis of 137 NHS trusts. Higher doctor staffing levels, on the other hand, lowered mortality rates. In a subsample of 31 trusts, higher nurse staffing levels were significantly associated with lower mortality among both medical and surgical patients in the adjusted model used. Other studies which have considered less-highly-qualified nursing staff in hospitals (licensed practical nurses and unlicensed support workers) have shown higher numbers of less trained staff or a diluted nursing skill mix to be associated with higher mortality or lower cost-effectiveness. [236]

Public officials in government bodies who influence pharmacy in the UK, pharmacy organisations, representative bodies and in particular the GPhC, must not only recognise the vagaries of the current approach, but they must consciously apply this knowledge and act in a more responsible manner to ensure that it does not diminish public safety when policy on pharmacy workforce and skill mix is being developed.

The approach currently being taken by the DoH to developing skill mix in community pharmacy represents a significant hurdle to the development of the roles of both pharmacists and pharmacy technicians in that setting. It creates suspicion and concern among pharmacists and erodes the very culture of pharmacist buy-in and support that would be needed to enable the natural and successful development of skill mix in community pharmacy.

5.6 Public trust and confidence in pharmacists

Pharmacists are regarded by the public as among the most trusted health professionals. A study by Ipsos MORI, commissioned by the GPhC and published in January 2015, found that 87% of the 1,115 respondents said they trusted health advice from a pharmacist either a great deal or a fair amount. This was similar to the result for opticians (88%), dentists (90%) and nurses (91%), though there was scope to improve the percentage who said ‘a great deal’. [237] A survey of 2,002 people, carried out by ICM research limited in March 2015, found that respondents held pharmacists as the most trusted profession among those studied (which included doctors, nurses, accountants, solicitors and police officers), with 97% generally or completely trusting the profession. [238] Additionally, at both a global and European level, pharmacists rank highly among the most trusted professions. [239] Pharmacy technicians did not feature in these studies. The public must not be misled in to thinking that they can place similar trust in the training and capabilities of pharmacy technicians as they do in that of pharmacists. It is therefore vital that public trust and confidence in pharmacists is not undermined by the inappropriate use of ‘pharmacy professional’ to refer collectively to pharmacists and pharmacy technicians.

5.7 Remote supervision

Proposals were put forward by the DoH in 2006 to enable remote supervision – where a pharmacist would supervise the pharmacy and/or its activities without being physically present. At the same time, the DoH also proposed allowing pharmacists to supervise more than one pharmacy at the same time and enabling pharmacists to delegate certain aspects of supervision to pharmacy technicians. The proposals received strong opposition in the House of Lords and from MPs on the basis of patient safety, that the quality of service and advice would be lost without the guarantee that a pharmacist would be present in the pharmacy and because the prevailing commercial reality in pharmacy would mean that “*companies with several pharmacies will simply reduce the*

number of qualified pharmacists they employ in some areas”. [240] [241] [242] [243] [244] [245] [246] [247]

The proposals were to be achieved through a change to the Medicines Act 1968, whilst a health bill (which led to the Health Act 2006) was being debated by the government. Lord Warner, Minister of State for the Department of Health, said: *“Through this power [a proposed amendment to the Medicines Act 1968] we can specify which activities pharmacists must undertake themselves and when aspects of the preparation and assembly of a medicine can be delegated to other trained and competent pharmacy staff working under the supervision of the pharmacist. This power also enables us to prescribe conditions that must be met where a pharmacist supervises these activities remotely. However, the power does not relate to our proposals to enable the responsible pharmacist to delegate certain aspects of supervision for suitably trained and registered health professionals such as pharmacy technicians...”. [248] [249] [250]*

The debate about remote supervision is ongoing and being conducted through the Department of Health’s Rebalancing Medicines Legislation and Pharmacy Regulation programme board, without the input of the wider profession of employee and locum pharmacists or their representatives, and without resolving some of the significant risks identified in this report. In a research study published in 2015, whose participants included community and hospital pharmacy employers, hospitals, education providers, awarding bodies and leadership bodies, an interviewee stated *“With the current rebalancing and changes to legislation, the role of the pharmacy technician can become really important, not just in terms of supervision but in what they can deliver to the patient in the absence of a pharmacist”*. [86]

In April 2015, the APTUK told the government, the Rebalancing board and other pharmacy bodies that pharmacy technicians should be able to make the final accuracy check on dispensed items,

hand out dispensed prescriptions and sell P medicines in the absence of a pharmacist, to allow the pharmacist to ‘pop out for half an hour’. [251]

In September 2017, a previously undisclosed document from the Rebalancing board was leaked to the *Chemist and Druggist*. The board’s supervision working group had proposed that pharmacy technicians be able to supervise the supply of pharmacy-only (P) and prescription-only medicines (POMs) and oversee the activities of other, non-regulated pharmacy staff in either the presence or absence of a pharmacist. The supervision Short Life Working group that generated this proposal was made up of two of the UK Chief Pharmaceutical Officers, the RPS President, the manager of Pharmacy Forum NI, a senior representative of the PSNI, a senior representative of (the now disbanded) Pharmacy Voice, a senior representative of the GPhC and the President of the Association of Pharmacy Technicians UK (APTUK).

Apparently cognisant of some of the shortcomings in the proposals, the board acknowledged that *“There are likely to be concerns about the competency of some registered pharmacy technicians to undertake this new function”* and said *“Those with responsibility for the overall governance [of a pharmacy] can be expected quite reasonably to ask: ‘How do I know that my registered pharmacy technician is trained and competent to undertake this new function?’* However, whilst the board received and accepted the proposals in principle on 7 April 2016, it agreed unanimously that they should not be discussed publicly by board members. The papers were marked ‘sensitive’ and ‘not for wider circulation’. [252]

In the context of the leak, some stakeholders may have anticipated insight and regret from the Rebalancing board in relation to the consequences of its decision not to involve the wider profession in developing the supervision proposals (wider involvement would have been in accordance with the recommendations of the Francis inquiries mentioned in Chapter 5.3), alongside a determination to do so from that point onwards. However, what was expressed

instead was frustration and disappointment that the proposals had been leaked. [253]

The Pharmaceutical Group of the European Union (PGEU), which represents organisations of pharmacists and pharmacy owners in 32 European countries, said in response: *“While fully appreciating the value of pharmacy technicians and other pharmacy support staff in the pharmacy team... the immediate availability of Pharmacists to deal with patient requests and to supervise other members of the pharmacy team is an indispensable element in ensuring patient safety. After all, we would not accept pilots without the highest level of qualification flying commercial planes. But Europe’s citizens are exposed to far greater risk from medicine misuse than from air traffic accidents. Other EU Governments have previously considered equivalent policies, but have ultimately rejected them because they recognise the importance of having Pharmacists available in Pharmacies to deal with the breadth and depth of patient care issues which arise... Other members of the pharmacy team, such as technicians, while playing an important role in the pharmacy do not hold the same level of education and professional training (and in some cases ethical obligation) and therefore cannot hold the responsibility to the patient.”* [254]

The Commonwealth Pharmacists’ Association, whose website says it represents over forty national professional associations, said of the proposals: *“Whilst the Commonwealth Pharmacists’ Association (CPA) fully appreciates the value of technicians in the pharmacy team, we need to consider the wider implications that such a message would send to the global community... [the proposals] would be a disaster for lower and middle-income countries trying so desperately to establish a healthcare structure with ‘quality’ at the heart of it.”* [255] [256]

5.8 GPhC involvement in supervision proposals

The GPhC was represented on the Rebalancing board and on its supervision working group - which developed the leaked proposals on pharmacy supervision in early 2016. The same is true of the

PSNI, though it does not regulate pharmacy technicians.

In December 2016, in the absence of an agreed role definition for pharmacy technicians, the GPhC consulted on changes to the standards for the initial education and training of pharmacy technicians. It may appear, in the context of the leaked supervision proposals from the Rebalancing board, that the revised standards were developed with the proposed changes to supervision in mind. The consultation document stated: *“[The standards must]... prepare pharmacy technicians of the future to take on increasing roles and responsibilities, if employers (both in the NHS and independent sectors) want this and if governments across Great Britain propose changes to legislation. This document sets out draft standards for the initial education and training (IET) of pharmacy technicians that are designed to reflect this.”* It is notable that the GPhC had set the standards based on what *employers* might want, as opposed to what *registrants and the public* might want and also what the capabilities of pharmacy technicians might make appropriate. However, in a statement on 11 September 2017 which appeared to contradict the GPhC’s statement in the December 2016 consultation, the GPhC’s Chief Executive and Registrar stated that the changes to the standards were *“completely separate from [the issue] of whether the government at some point might bring forward proposals to change the law... The education and training standards... are of course in the context of existing law, which does not provide for technicians to supervise medicines transactions.”* [257]

The standards include *“Confirm the suitability of a person’s medicines for use”* and *“Issue prescribed items safely and effectively and take action to deal with discrepancies”*, which could be interpreted very broadly indeed. The standards also include *“Carry out an accuracy check of dispensed medicines and products”*. On examination, these standards may appear to be linked to the Rebalancing board’s supervision proposals. The GPhC expects that pharmacy technicians should achieve these learning outcomes at the highest competency level on the Miller’s triangle (‘does’). [112] Due to the vague wording of these outcomes, it may even be interpreted that for

pharmacy technicians to achieve them, they would need to be able to clinically check prescriptions; this is a skill which takes pharmacists five years of full-time training and a masters level degree to accomplish. This would have serious implications for patient safety. [88]

The GPhC also consulted from July to October 2017 about plans to cease setting training requirements and assessing and approving training courses for dispensing and medicines counter assistants. At the time of writing, anyone working in a pharmacy as a Medicines Counter Assistant must have undertaken an accredited Medicines Counter Assistant course, or have commenced such training within three months. [258] [259] It is likely that many pharmacy technicians will not have undertaken this training, since it may have been unnecessary for their roles (this may be the case in community pharmacy as well as in other sectors). The GPhC's proposals would have removed an important safety mechanism. The changes it proposed would have meant that employers had much more influence in determining and controlling the level of training required to carry out the sale and supply of P medicines - where it is currently determined by the regulator. [260] [261] The GPhC said that some respondents had *"concerns about patient safety risks"* if there was *"no GPhC quality assurance of training programmes for unregistered pharmacy staff"*. [262] The GPhC decided not to proceed but indicated that it may make changes in the future, saying *"After considering the feedback to the consultation the Council decided that further work was needed to develop the future approach. The initial training requirements for unregistered members of the pharmacy team and accreditation of courses will remain the same while this work is taken forward."* [263]

5.9 Pharmacy technicians as a newly-regulated group

A review undertaken as part of the 2012 Modernising Pharmacy Careers (MPC) programme stated that pharmacy technicians have simply *"moved from essentially what was an 'occupation' to a 'professional' role"*, citing only an article in 'Hospital Pharmacist' in 2006. [76] [264] It would be

flawed to assume that registration with a healthcare regulator instantaneously resulted in the creation of a profession. It did not, nor should it have done. Consequently, the register of pharmacy technicians does not carry the same professional and patient safety connotations as does, for example, the register of pharmacists, dentists or doctors. In fact, the aforementioned article in *Hospital Pharmacist* was misquoted in the MPC report; it did not say that professional status would be achieved through statutory registration with a regulator. The themes it raised have been explored in much greater depth in this report.

Post-registration pharmacy technicians are now faced with new challenges: they have been thrust into a regulatory framework through a government initiative and now have a personal responsibility for identifying their own development needs regarding knowledge and competence and maintaining and updating their own practice. This is a process for which many of them, particularly those working in the community pharmacy setting, have little or no experience.

The MPC Review recognised these concerns and warned that *“this culture change may take some time to embed across what is a very diverse professional group in terms of education and training and scope of practice. Pharmacy technicians will require a degree of support to smooth the transition as they are socialised into new ways of working.”* [76]

Research has shown that pharmacy technicians generally have little understanding of the implications of registering with a healthcare regulator, in terms of what this means for their roles and responsibilities. Results of a survey indicated that 78% of pharmacy technicians registered with the GPhC in the first place because they were required to do so by their employer or because this was a condition of their continued employment. This lack of professional awareness has perhaps been reinforced for many by the fact there has been no change in their roles or remuneration as a result of their registration. Only a small proportion (17%) indicated that they registered because they had an ambition to pursue a career as a pharmacy technician. Added to

these issues is the concern that 69% of pharmacy technicians surveyed believed that in the event they made a dispensing error, it would be the pharmacist or superintendent who would be held most accountable by the GPhC, whereas only 30% believed it would be themselves. [4] The MPC review concluded that *“There needs to be shared agreement about responsibility and accountability between employers, pharmacists and pharmacy technicians.”* [76]

5.10 Accuracy checking technicians

The variety of roles that registered pharmacy technicians undertake, particularly in the hospital pharmacy sector when compared with the community sector, has led to a debate regarding the scope of practice, competence and responsibilities of the newly-registered group. [265] [266]

A task completed by some pharmacy technicians with additional training is the final accuracy checking of dispensed items, where the clinical check has been completed by the pharmacist.

The Royal Pharmaceutical Society (RPS) has argued that accuracy checking technicians (ACTs) *should* be registered pharmacy technicians, however, there is no legal or regulatory requirement that ACTs *must* be registered pharmacy technicians. [267] Neither are there any legal or regulatory requirements in relation to the qualifications that an ACT must undertake to perform the task. The ACT role does not have a protected title or a legal definition. This means that in theory, any person, with or without training, though they may not be able to call themselves a pharmacy technician, could claim to be an ACT and practise as such. A search in March 2017 for ACT job vacancies advertised by the CCA multiples, accompanied by a wider internet search on recruitment websites for all relevant community pharmacy vacancies, revealed some large multiple, smaller multiple and independent community pharmacy employers who specified that candidates must possess an accuracy checking certificate but not that they must be registered

with the General Pharmaceutical Council as a pharmacy technician. It is unclear whether this would have been insisted upon at a later stage in the recruitment process, but certainly no restrictions were involved at the application stage.

The “Nationally Recognised Competency Framework for Pharmacy Technicians - Final Accuracy Checking of Dispensed Items” recommends that 1,000 prescription items be checked without error for the ACT qualification. [268] The document has advisory status only. Community pharmacy employers may require this to be achieved but may allow “banking”, for example after every 200 items checked correctly, with further attempts permitted if an item is accuracy-checked incorrectly.

Buttercups provides an online course for dispensing assistants to train to complete the final accuracy check on dispensed medicines. Dispensing assistants are required to complete an accuracy check of 1,000 dispensed items, which have to be second-checked by either a pharmacist or “checking technician”. The checked items may be “banked” every 200 items; if a “serious error” is made, the set of 200 must be restarted. If a “minor error” is made, the dispensing assistant can continue the set of 200 without having to start again from the beginning of that set. Buttercups does not provide definitions of “minor error”, “serious error” or “checking technician” on its website. [269] The RPS accredited the training content, seemingly at odds with its recommendation that only pharmacy technicians should be able to work as ACTs. [269]

The GPhC has not addressed calls for clarification on the apportionment of professional responsibility, has not stipulated that accuracy checking must be restricted to registered pharmacy technicians as standard and has not commented on what (if any) training in accuracy checking is necessary. [266] Furthermore, it has stated no intention to recognise ACTs via annotation on the public register of pharmacy technicians. [266]

However, the GPhC's position in relation to the status of registered pharmacy technicians was clarified at a recent RPS Conference when the Chairman of the GPhC's governing council explained that due to very variable standards among pharmacy technicians, it was not possible for the regulator to take a blanket view and to recommend to pharmacists what roles they should delegate to pharmacy technicians (see Chapter 3.7).

In the meantime, however, some individuals practising as ACTs are registered pharmacy technicians, providing at least some degree of regulatory protection, while others are not required to be so. Many employers place great emphasis on the role of ACTs as opposed to pharmacy technicians, requiring pharmacists to pass the final checking of prescriptions over to these individuals prior to the final handout to patients. This is creating doubt and concern among pharmacists about the delegation of tasks and about the personal liabilities that they would face in the event of an error.

5.11 GPhC understanding of the accountability for the final accuracy check of dispensed medicines

The lack of understanding of accountability among senior staff at the GPhC, in respect of the final accuracy check of dispensed prescription items, was demonstrated in a paper submitted to a meeting of its governing council in September 2017, presented by the GPhC's Head of Education.

[73] It stated: *"The decision about whether a pharmacy technician has the appropriate competencies to carry out a "final" accuracy check is for the employer. They will have observed the pharmacy technician check accurately in the context in which they are working, using the standard operating procedures and other safeguards in their workplace, and they are in the appropriate position to delegate the level of responsibility of a "final accuracy check" to their staff."* [71] The statement overlooks the Responsible Pharmacist Regulations 2009, which codify that it is the pharmacist's, and not the employer's, responsibility to ensure the safe and effective running of

the pharmacy and to establish standard operating procedures, maintain them and keep them under review. [270] It also overlooks pharmacists' civil and criminal liabilities in the event of a dispensing error. Of further significance is that 49.2% of pharmacies in Great Britain are in large multiple chains with 100 or more pharmacies. [162] The owners of such pharmacies often engage non-pharmacist personnel to manage them. The directors of corporate bodies in large multiples, and many of their appointed non-pharmacist managers, are unlikely to have spent a significant amount of time observing pharmacy technicians working in practice, and with no accountability or professional credentials, may be poorly placed to make a decision underpinned by public safety considerations as to whether a pharmacy technician should conduct a final accuracy check. The decision to which the GPhC referred is for pharmacists, but the lack of understanding of pharmacy law and ethics on its part is a cause for concern.

The GPhC's lack of understanding of the nature of the final accuracy check on prescription items was further demonstrated in a draft evidence framework, intended to be used alongside its revised Standards for the Initial Education and Training of Pharmacy Technicians, introduced in October 2017 and applicable to courses from September 2018. [271] [112] The draft evidence framework was published in October 2017 and stated: "*A final accuracy check is part of a process of technical checks of medicines and other items for their accuracy, before they are dispensed.*" [272]

5.12 Conclusions

1. Pharmacy technicians need an effective leadership body if this newly-registered group is to advance its status and develop new roles at all levels. The only leadership body they have, [273] the APTUK, currently has around 6% of GPhC-registered pharmacy technicians in membership. The representative leadership bodies for dental technicians and dispensing opticians have over 30% and 90%, respectively, of registered persons in membership.

2. The APTUK is poorly resourced, its officers are not representative of pharmacy technicians as a whole and it lacks knowledge and expertise of front-line community pharmacy practice - the sector in which the majority of its potential members practice.
3. Despite its lack of professional mandate and the fact that its executive operates on a voluntary basis, the APTUK is represented on most relevant development groups in pharmacy, especially those established by the civil service. This gives it an undue degree of influence and it may provide decision makers with an inaccurate picture of the full capabilities of pharmacy technicians generally.
4. The use of the word 'professional' as an adjective (*being professional*) is altogether different to its use as a noun (*being a professional*) and the word carries different meanings in each case. There is insufficient justification for using the noun 'professional' in reference to pharmacy technicians as a group.
5. There are some very serious decisions currently being considered by the Rebalancing Medicines Legislation and Pharmacy Regulation programme board in relation to community pharmacy skill mix and supervision, which require a real understanding of the capabilities of pharmacy technicians and a proper and robust mechanism for soliciting the views of grassroots pharmacists and pharmacy technicians. Such an approach was recommended in the Francis reports following the inquiries into the Mid Staffordshire NHS Foundation Trust. Currently, no such approach is being employed. This represents a risk to public safety which must be recognised and addressed.

6. The term ‘revalidation’ in reference to the GPhC’s framework for completing CPD cycles, a peer discussion and a reflective account, may altogether mislead the public in respect of the level of protection afforded by the framework, each time it is used. This is particularly of concern in relation to pharmacy technicians, with only 85 pharmacy technicians out of circa 23,000 on the register completing the required CPD, peer discussion and reflective account entries in the pilot of the GPhC’s “continuing fitness to practise framework” in 2016. [211]

7. The function of the GPhC and the PSNI, as public authorities, is to protect the public through the regulation of its registrants and pharmacy premises by ensuring adherence to the necessary standards. The GPhC and the PSNI, through their positions on the Rebalancing Medicines Legislation and Pharmacy Regulation programme board’s supervision working group and on the board itself, were involved in the design of proposals which if enacted would change the supervision arrangements for medicines supply in the United Kingdom – and indeed the operating framework in community pharmacy – then agreeing to keep the proposals confidential and not discuss them publicly. This raises questions about the extent to which the pharmacy regulators should be involved in the development of healthcare policy beyond that which is concerned with protecting the public by ensuring adherence to the necessary regulatory standards (this is the main objective of the GPhC as specified in article 6 of the Pharmacy Order 2010). [111]

5.13 Recommendations

1. The debate around skill mix involving pharmacists and pharmacy technicians must be led by the pharmacy profession, using a transparent process of wholesale professional

engagement and not by the government, through a process involving a small and exclusive programme board, the members of which have been hand-picked by civil servants, whose activities and communications are carefully stage-managed and whose existence lacks any professional mandate.

2. Whether it is the APTUK or some other future organisation purporting to represent pharmacy technicians, it must be credible and broadly representative not just in terms of its membership numbers, but also in respect of its ability to represent all sectors of practice. A representative mandate can only be achieved with at least 25% of pharmacy technicians on the GPhC register in membership.
3. Policy makers must recognise the serious limitations of the extent to which they can rely upon APTUK currently, when considering important policy regarding skill mix and supervision in community pharmacy. There is no organisation at present which represents a significant proportion of community-based pharmacy technicians.
4. The differences between the word professional as an adjective (*being* professional) and as a noun (being *a* professional) must be reflected in the narrative that is used when any debates around skill mix occur.
5. When any debates around skill mix occur, it must be recognised that the creation of a register of pharmacy technicians by a healthcare regulator did not and has not led to the automatic creation of a new healthcare profession.

6. The pharmacy profession must agree which bodies can most appropriately represent its views in relation to any proposed changes to national government policy which have the potential to affect it.

7. A debate must be held about the extent to which the pharmacy regulators should be involved in the development of wider healthcare policies which extend beyond those designed to protect the public by ensuring adherence to the necessary pharmacy regulatory standards.

8. Policy makers must take additional steps to establish whether pharmacy technicians working at the coalface in the community pharmacy setting are currently, or will ever be, on board with any of their proposals - for example in relation to skill mix and supervision. This could be done in a number of ways:
 - a. Undertaking impact assessments and encouraging pharmacy technicians and pharmacists who will be affected by the changes being considered to submit their views based upon their coalface experiences (see recommendations of the Francis inquiries into the Mid Staffordshire NHS Foundation Trust). [8] [9]
 - b. Creating a meaningful opportunity for those who might be concerned about the changes being considered and the policy makers considering them to have a direct exchange of views with front-line pharmacists and pharmacy technicians, in order to create proposals which are then put out for public consultation (see the recommendations of the Francis inquiries into the Mid Staffordshire NHS Foundation Trust).
 - c. Undertaking direct surveys of either all registered pharmacy technicians and pharmacists, or large-scale representative samples of pharmacy technicians and pharmacists, on specific subjects, when required.

Failure to do this will create the risk that the readiness of the most senior higher-echelon pharmacy technicians to undertake new roles and responsibilities may be considered by policy makers to represent the overall state of readiness of all pharmacy technicians, whatever their level of seniority and whatever their scope and sector of practice; this is not the case. The result will be the failure to secure the support of the wider population of both pharmacists and pharmacy technicians, a failure of skill mix in community pharmacy and ultimately the diminution of public care and safety.

9. The review of CPD, peer discussion and reflective account records submitted by GPhC registrants should be conducted by pharmacists.
10. The GPhC should publish a statement explaining that its “revalidation” framework will not involve the revalidation of pharmacists or pharmacy technicians. It should revisit the framework for ensuring continuing fitness to practice applicable to both pharmacists and pharmacy technicians, with a view to creating a tailored approach appropriate for the roles and responsibilities of each registrant group. The GPhC’s revalidation framework and processes should be renamed and given a title or titles consistent with the level of public protection and assurance afforded.

6 The need to define the responsibilities and accountabilities of pharmacy technicians

The terms 'responsibility' and 'accountability' should not be used interchangeably. The following definitions should be considered:

- **Responsibility** (for) can be defined as a set of tasks or functions that an employer, professional body, court of law or some other recognised body can legitimately demand.
- **Accountability** (to) describes the relationship between the practitioner and the organisation in question. Accountability describes the mechanism by which failure to exercise responsibility may incur a sanction such as a warning, suspension, criminal prosecution or removal from a public register and the withdrawal of professional status. It may be called 'answerability'.

Employee responsibilities are defined by a contract of employment, which usually includes a job description setting out specific responsibilities in detail. These objectives should be discussed, developed and clarified with the individual's line manager, both informally and formally, as part of the performance appraisal process. It is important that the employee appreciates the link between their work objectives, those of the team and those of the organisation.

Professional responsibilities are defined by a duty of care to users, professional codes of conduct and, in some cases, state registration and regulation. For staff in training or recently qualified, this includes formal accountability to a professional line manager in a clinical supervisory role.

Professionals are required to recognise and observe the limits of their training and competence and satisfy themselves that anyone else to whom they refer is also appropriately qualified and competent.

- **Legal responsibility** (defined by statute and common law) forms part of professional responsibility and describes the obligation to comply with the law. [274]

It is important to ensure that any skill mix model does not result in a conflict in responsibilities. For example, an employer should not demand that a practitioner assumes responsibilities that they are not qualified or competent to exercise. Similarly, a practitioner should not seek to control the work of another where he or she has no formal accountability for that work.

In the community pharmacy setting, the accountabilities of one person can conflict with the responsibilities of another, particularly so in pharmacies within the large community pharmacy multiples. This is because the line manager for both the pharmacist and the pharmacy technician is often a non-pharmacist and therefore not a person with professional accountabilities or the appropriate qualifications and competence to make professional decisions. This can put great pressure upon pharmacists, as it makes the task of balancing professional and employee responsibilities, let alone professional accountabilities, more difficult to manage. For pharmacy technicians based in community pharmacy, this becomes even more difficult because they are inexperienced at exercising assertiveness – a challenge even for the established professional.

6.1 Informing pharmacy technicians' values

The values expected for healthcare roles should be informed by the needs of service users and carers. For example, NHS mental health practitioners have *The Ten Essential Shared Capabilities* to inform their practice. [275] A similar list of shared capabilities for pharmacists and pharmacy technicians would help to create a shared values system which clearly delineates the pharmacy team's responsibilities.

Panel: The ten essential shared capabilities for mental health practice

- **Working in Partnership.** Developing and maintaining constructive working relationships with service users, carers, families, colleagues, lay people and wider community networks. Working positively with any tensions created by conflicts of interest or aspirations that may arise between the partners in care.
- **Respecting Diversity.** Working in partnership with service users, carers, families and colleagues to provide care and interventions that not only make a positive difference but also do so in ways that respect and value diversity including age, race, culture, disability, gender, spirituality and sexuality.
- **Practising Ethically.** Recognising the rights and aspirations of service users and their families, acknowledging power differentials and minimising them whenever possible. Providing treatment and care that is accountable to service users and carers within the boundaries prescribed by national (professional), legal and local codes of ethical practice.
- **Challenging Inequality.** Addressing the causes and consequences of stigma, discrimination, social inequality and exclusion on service users, carers and mental health services. Creating, developing or maintaining valued social roles for people in the communities they come from.
- **Promoting Recovery.** Working in partnership to provide care and treatment that enables service users and carers to tackle mental health problems with hope and optimism and to work towards a valued lifestyle within and beyond the limits of any mental health problem.
- **Identifying People's Needs and Strengths.** Working in partnership to gather information to agree health and social care needs in the context of the preferred lifestyle and aspirations of service users, their families, carers and friends.
- **Providing Service User Centred Care.** Negotiating achievable and meaningful goals; primarily from the perspective of service users and their families. Influencing and seeking

the means to achieve these goals and clarifying the responsibilities of the people who will provide any help that is needed, including systematically evaluating outcomes and achievements.

- **Making a Difference.** Facilitating access to and delivering the best quality, evidence-based, values-based health and social care interventions to meet the needs and aspirations of service users and their families and carers.
- **Promoting Safety and Positive Risk Taking.** Empowering the person to decide the level of risk they are prepared to take with their health and safety. This includes working with the tension between promoting safety and positive risk taking, including assessing and dealing with possible risks for service users, carers, family members and the wider public.
- **Personal Development and Learning.** Keeping up-to-date with changes in practice and participating in life-long learning, personal and professional development for one's self and colleagues through supervision, appraisal and reflective practice. [276]

6.2 Delegation versus distribution of responsibility

It is important to use these terms accurately. Professional regulators may have their own descriptions, which can add to the difficulty in distinguishing between them.

6.3 Delegation

The General Medical Council stated that: *“Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience,*

knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.” [277]

This issue lies at the very heart of the quandary that many pharmacists encounter when they contemplate the delegation of tasks to pharmacy technicians. Often, pharmacists are required to do so by non-pharmacist line managers, on the grounds of controlling staffing costs. Inevitably, however, many pharmacists find it difficult to do so because they are not satisfied with the qualifications, experience, knowledge and skills of the pharmacy technician and his/her ability to provide the requisite level of care. Ultimately, pharmacists realise that they will be held accountable for the decision to delegate in the event that something goes wrong.

An even greater concern has recently emerged. The law currently permits a pharmacist to be absent from the pharmacy for up to two hours while he or she remains signed in as the Responsible Pharmacist. During this time, certain activities can be undertaken by other pharmacy staff, such as labelling and assembling prescriptions - but not handing them out. Some employers simply require pharmacists to apply this two-hour absence to a period in which they have not yet arrived to start work in the morning, in order to reduce operational costs. This leaves pharmacists accountable for the actions of pharmacy technicians in a situation where they may be dissatisfied with the pharmacy technician's qualifications and experience. Additionally, prior to arriving at the pharmacy, pharmacists have no real way of intervening in the work that the pharmacy technicians do.

Distribution is when the responsibility for different components of patient care is split between different members of the team. The members are acting in concert to provide the whole package; they are not necessarily doing this in line management relationships with one another, so they are all taking responsibility for the care they provide. One member of the team, however, would

generally be required to have overall responsibility for co-ordinating the care 'package' or for making final decisions in relation to an individual's care as appropriate.

6.4 Accountability

6.4.1 Professional / regulatory accountability

No distinction is made between pharmacists and pharmacy technicians in the GPhC standards of conduct, ethics and performance (renamed by the GPhC in 2017 to the Standards for Pharmacy Professionals). Consequently, by virtue of the GPhC's standards, registered pharmacy technicians are required in theory to behave as fully-fledged healthcare professionals and are to be held personally accountable for their actions. Currently, however, if a mistake arises in the dispensing process, there has been no assurance from the regulator that the pharmacist will not be held accountable for the failure, even if it arises in part of the process carried out by a pharmacy technician. [76] Indeed, if anything, the regulator has recently confirmed that it cannot clarify the extent to which pharmacy technicians can be held to account because there is such a wide variation in their qualifications and because such a large proportion of pharmacy technicians were registered under grandparenting arrangements (see Chapter 3.7).

6.4.2 Criminal accountability

Criminal case law exists where a dispensing assistant and a pharmacist were both convicted for their involvement in a dispensing error. In "the Prestatyn case", both a pharmacist and a dispensing assistant pleaded guilty to a section 64 Medicines Act offence.

The judge in the judicial review that sought to overturn the dispensing assistant's conviction stated: "*There is an obvious public interest in ensuring that all those whose failings have led to the selling, wrongly, of a product in this way (dispensing), should be held accountable.*" [278] He

discounted a defence argument that the pharmacist, with “*higher qualifications*”, should carry the accountability - saying the dispenser “*was plainly part of the system of supply*”. Despite the later Crown Prosecution Service guidance on such matters, criminal law still represents a current threat to all participants in the dispensing process. [279]

In July 2017, a GPhC fitness to practise determination was published involving the removal from the register of a Rowlands pharmacy technician who had deliberately replaced medicines dispensed by another person with incorrectly dispensed alternatives, which were awaiting an accuracy check from a pharmacist. This was done to exact “*revenge*” on the dispensing assistant who had initially prepared them, in the hope that the error would be identified by the pharmacist and recorded as a “*near miss*” for that person. The pharmacy technician did not attend the hearing. [280] Had one of the incorrectly dispensed medicines reached a patient, this reckless behaviour from the pharmacy technician could have led to criminal charges for both herself and the pharmacist.

In October 2018, the Department of Health (Northern Ireland) reported that a pharmacist pharmacy owner and pharmacy technician had been convicted for the illegal supply of a range of prescription medicines in the absence of a pharmacist. Peter Moore, Senior Medicines Enforcement Officer with the Department of Health (Northern Ireland) who conducted the investigation said: “*Medicines are not everyday consumer goods - and appropriately, strict legal controls apply to their sale and supply. It is with good reason that the law requires a qualified pharmacist to be present in the pharmacy dispensary when prescription medicines are being supplied to members of the public.*

When entering a pharmacy the public should have reasonable expectation that their prescription needs will be met by a qualified professional.

Pharmacists are there not only to dispense medicines but to advise or assist patients in the use of these medicines and most importantly to ensure the safe and effective running of the pharmacy.

Unfortunately this did not happen in this case and members of the public could have been endangered as a result.” [281] The comment was significant in that the government was noting the importance of a pharmacist being physically present on the premises, as it ensured a qualified professional was available to the public and that patients were kept safe.

6.4.3 Civil accountability

The position is no better in civil law or in pharmacy fitness to practise processes. Anyone who has a duty of care, who fails to discharge it adequately and who thereby causes harm to a patient, might be the subject of a claim for compensation.

So far, numerous case precedents indicate that action is taken against pharmacists; the cases of claims for compensation due to the negligence of pharmacy technicians are limited to contributory negligence and not that which is primarily attributed to the pharmacy technician.

Professor of Pharmacy Law and Ethics, Joy Wingfield, argues in a paper that was published in The Pharmaceutical Journal that: *“The position taken by both the civil courts and a professional tribunal depends heavily on what the profession itself indicates is a reasonable expectation for the accountability of each team member in a complex operation like dispensing. That said, there is no guarantee that the court or the GPhC will not take a different view in any specific case.” [265]*

Perhaps unsurprising with so much confusion surrounding the issue, but particularly worrying from a patient safety perspective, is that many pharmacy technicians do not know the extent to which they are accountable for their own dispensing errors. Anyone who believes he is not accountable for his own actions is unlikely to devote as much attention to them as someone who knows that he is accountable. Survey results show that only 73% of pharmacy technicians working in hospitals and only 70% of those in community think they are responsible to the investigative

authorities for their dispensing errors. 39% of pharmacy technicians surveyed believed that they were no more accountable for their actions post-registration than they were prior to it. [4]

6.5 Conclusions

1. There is confusion over exactly what registered pharmacy technicians are accountable for, while some individuals working as ACTs are not registered at all and therefore fall outside of the scope of the regulatory system altogether. As a group which became regulated only relatively recently, there is little or no case law to set precedents about the precise limits of pharmacy technicians' accountabilities. Pharmacy technicians themselves are confused about the limits of their responsibilities and accountabilities and fail to appreciate the significance of working as registered individuals.
2. The lack of clarity as to what pharmacy technicians are accountable for is compounded by employers, particularly large community pharmacy multiples, who seek to cut costs through the staffing structures they create and who require both their pharmacy technicians and pharmacists to work to their corporate requirements. The PDA is aware that some employers have sought to reassure their pharmacists and pharmacy technicians by explaining that they need not worry about any consequences due to civil claims for compensation because they are covering them through their indemnity insurance. This approach may seek to encourage the delegation of tasks, thereby enabling employers to reduce their costs. However, it overlooks the debate relating to the personal exposure to professional and criminal liability and accountability faced by these employees in the event that something goes wrong.

3. The worrying deficiencies in the levels of knowledge and awareness relating to responsibility and accountability among pharmacists and pharmacy technicians, and the demand by employers to continuously reduce their operational costs, creates a situation which presents risks to public safety.

6.6 Recommendations

1. Pharmacy policy makers must ensure that there is no confusion caused when using the words 'responsibility' and 'accountability'. They must clearly define roles and responsibilities and identify clear lines of accountability for both pharmacists and pharmacy technicians, through discussions involving coalface practitioners. This will help to foster a symbiotic and complementary skill mix model which works optimally for the public, makes working practices more efficient, extends the practical capability of the pharmacy team and improves patient safety.
2. The profession should, with input from pharmacy technicians, create and publish a list (similar to that used by mental health practitioners), outlining the shared capabilities for pharmacists and pharmacy technicians, alongside a separate list outlining the capabilities of pharmacists. This would help create a shared values system which clearly delineates the pharmacy team's responsibilities, whilst still allowing for discrete responsibilities.
3. A consensus must be reached through a wide-ranging and inclusive debate within the profession and among pharmacy technicians, on exposure to regulatory accountability for pharmacists and pharmacy technicians. This must be publicized and shared with relevant stakeholders.

4. An expert view must be sought on the extent of the exposure to - and apportionment of - both civil and criminal liability for pharmacists and pharmacy technicians. This must be widely discussed and deliberated upon by both pharmacists and pharmacy technicians as part of any developmental process.

5. The pharmacy regulator must ensure that decisions about delegation can be made for patient-centred reasons by pharmacists and not by non-regulated staff driven by commercial imperatives.

7 Aligning the interests of pharmacists and pharmacy technicians

7.1 The success of skill mix in hospital pharmacy

In recent years, the government has expended a considerable amount of energy on attempting to distribute the tasks of pharmacists to pharmacy technicians in the community pharmacy sector. With the government seeking to deliver more services for less investment, employers – and particularly among the large corporate multiples – have sought to reduce their costs in order to shore up their profits. However, those driving this process have failed to learn the important lessons of the successful development of skill mix in the hospital sector, which has been highly beneficial for pharmacists, pharmacy technicians and patients.

In the late 1970s and 1980s, hospital pharmacy leaders created a vision for the role of hospital pharmacists. This ambitious vision involved hospital pharmacists in much more clinical and patient-facing roles which were much more integrated with the wider healthcare team. They envisaged that in the future, hospital pharmacists would be predominantly based on wards, because this was where they would have face to face contact with patients - which would allow them to develop clinical relationships and make much greater use of their clinical skills. To achieve this, a mechanism had to be found to release them from roles which, for the majority, had hitherto been predominantly based in the dispensary and at some considerable distance from patients.

Once an attractive vision for hospital pharmacists was determined by its leaders, a plan was established to turn this vision into reality. Central to the plan was the development of a skills and salary escalator for hospital pharmacists. Higher levels of training and qualification and greater responsibility for pharmacists led to more clinical roles out on wards, improved status and remuneration. The range of new patient-facing, ward-based, clinically-orientated services being delivered by pharmacists became highly valued by other members of the healthcare team and

were highly beneficial to patients. In essence, a structured career framework was created for hospital pharmacists. It was clear that at the outset, some of the tasks that had previously been the domain of pharmacists - predominantly dispensary-based activities - would need to be delegated to pharmacy technicians. The reliance upon effective skill mix in pharmacy had well and truly arrived.

It became apparent that the prospect of success for the entire process would also benefit from the introduction of a skills and salary escalator for hospital pharmacy technicians. Consequently, a banded, structured career framework for hospital pharmacy technicians was also created. The success of this model of skill mix became directly linked to the possibility of new roles and responsibilities for both hospital pharmacists and hospital pharmacy technicians. The delegation of tasks by pharmacists to hospital pharmacy technicians created a route to clinical pharmacy practice, improved professional fulfilment and increased the status of both of these groups. In that sense, the interests of pharmacists and pharmacy technicians were aligned, to the benefit of both groups and the public. This was the basis of the successful model seen in hospital pharmacy today.

Thirty years later, senior hospital pharmacists are working at the cutting edge of clinical practice as specialists and consultants. In many instances, they are heavily relied upon by patients and senior medics for their expertise around medicines and pharmacotherapy. Hospital pharmacists are working within a banded career and remuneration structure, which enables them to plan their career trajectory and higher qualifications from an early point in their employment. Pharmacy technicians also enjoy a structured career framework, allowing those at the senior levels of the structure, with degree-level qualifications or similar, to take on much more responsibility. In many instances, they enjoy salaries that exceed those of their junior pharmacist colleagues.

There is a very substantial difference between the situation in hospital pharmacy and that in community pharmacy, insofar as it relates to pharmacy technicians. Perhaps it is unsurprising, given the genesis of hospital pharmacy technician practice, that the majority of the members of the APTUK and its Board of Officers come from a hospital pharmacy background. As several sections of this report also describe, pharmacy technicians from the hospital pharmacy setting generally have a much better-developed understanding of professionalism and accountability than their community pharmacy counterparts.

Schafheutle et al concluded in 2017 that *“Rather than differentiating a PT qualification, which is currently generalist, into one which differs between sectors, it may be more valuable to look to hospital pharmacy for skill mix models which could be implemented in community to support and effect these changes.”* [87] The skill mix model must be defined before the initial education and training - and the pharmacy technician qualification - can be developed.

7.2 The lessons from skill mix in hospital practice have not been learned by policymakers

Civil servants, policy makers and even some amongst the leadership of the pharmacy profession have not applied the learning from the hospital pharmacy experience to the development of skill mix in the community pharmacy setting. Many examples exist where the narrative of success relating to the development of pharmacy technicians' roles in the hospital setting (which employs the minority of pharmacy technicians) is simply and in an unqualified way transposed onto discussions about the future of skill mix in the community pharmacy setting (where the majority of pharmacy technicians are employed). Exemplars of widespread success in the hospital or primary care setting and also in niche, often unique roles, are used to argue for the delegation of tasks by pharmacists to pharmacy technicians in community pharmacy - where very few such exemplars exist.

Crucially, one fundamental difference between hospital and community pharmacy practice has not been properly taken into account by those seeking to allow pharmacy technicians to supervise a pharmacy where the pharmacist may be absent. Hospital pharmacists leave the dispensary and go out on the wards to enjoy their patient-facing clinical roles because that is where the patients in hospitals are to be found. In community pharmacies, pharmacists do not have to leave the pharmacy to go to find patients because in the community pharmacy setting, the patients not only present themselves at the pharmacy, but they expect a pharmacist to be available to them upon arrival. Consequently, clinical relationships are developed with patients within the community pharmacy. This is a very important reason as to why such resistance to the notion of operating a community pharmacy in the absence of a pharmacist exists among community pharmacists. Perhaps this lack of understanding has occurred because those who most strongly support the development of pharmacy technician roles in community pharmacy, and advocate the absence of pharmacists, are either pharmacy leaders who come from a hospital pharmacy background and do not have any substantial experience of working in community pharmacy or an understanding of its dynamics, or even those who are currently, or at some stage in their careers were, pharmacy technicians working in hospital pharmacy themselves.

The approach taken - particularly by civil servants - to the development of skill mix in community pharmacy does not bear any resemblance to the approach which led to its successful development in the hospital sector. There is no professionally-led plan, developed in detail and through the engagement with coalface practitioners, which sees community pharmacists developing a structured career framework linked to a skills and salary escalator. No hierarchy has been created of new and professionally-rewarding roles for pharmacists delivered in the community pharmacy. No discernible, unifying, strategic vision for the future of community pharmacy has been determined.

What prevails instead is a top-down approach, where pharmacists are being asked by civil servants to contemplate a future in which they will no longer be required in a community pharmacy, since they will be required to delegate tasks to pharmacy technicians. They may be required to supervise the whole process and the pharmacy staff remotely, in all probability as the sole pharmacist, and for which they will still be statutorily responsible and accountable for the safe and effective operation of the pharmacy in accordance with the Responsible Pharmacist regulations. All of this is to be considered by pharmacists in the context of known employer behaviour in so far as it relates to cost-cutting and the reduction of staffing levels - which for some employers may be to the furthest extent permissible in law, contract or regulatory standards.

In the current government programme of Rebalancing Medicines Legislation and Pharmacy Regulation, the interests of pharmacists and pharmacy technicians have not been aligned and the skill mix proposal has not been linked to fulfilling, rewarding career prospects or a structured career framework with associated skills and salary escalator for both groups. It has, instead, been linked to the prospect of a diminution of employment prospects for pharmacists, concerns over personal exposure to liability and the forced acceptance of significantly greater responsibilities for pharmacy technicians, for which they continue to receive comparatively meagre salaries.

Conscientious pharmacy technicians who value the future prospects of their occupation and the impact on patients ought to be dissatisfied with the approach. It is perhaps the lack of community pharmacy experience in the APTUK that has led to the lack of a satisfactory strategy and the acceptance of a future which is not in pharmacy technicians' long-term interests, but which is being championed enthusiastically by civil servants and some employers looking to cut costs.

Far from resulting in a positive and welcome force for change, as was seen in the hospital pharmacy setting, skill mix in community pharmacy has become linked to the prospect of remote

supervision. Developments are viewed with suspicion and are seen as a threat to pharmacists and patient safety.

Although the government announced the possibility of operating a pharmacy in the absence of a pharmacist in 2006, it has still not secured the support of pharmacists and is unlikely to do so whilst the current approach persists. It is also unsurprising that community pharmacists' attitudes to skill mix are currently not at all positive.

A number of studies have surveyed the current attitudes of both pharmacists and pharmacy technicians relating to the delegation of tasks by the former to the latter. These identify that there remains a significant hurdle based on a lack of trust. This lack of trust has its roots in pharmacists' lack of confidence in the training, competency and professional credentials of pharmacy technicians, the misuse of particular skill mix models by some employers to reduce costs and the wider political/professional skill mix agenda which is being enthusiastically promoted by civil servants.

Recent GPhC-commissioned research has identified the need for pharmacists to be able to have trust and confidence in pharmacy technicians:

- *“As pharmacists’ roles become increasingly clinical and new services are being developed, pharmacy technicians play an increasingly important part in the provision of pharmacy services throughout Great Britain. The public, patients, colleagues (particularly pharmacists) and employers thus need to be assured that pharmacy technicians are qualified to the required standards, and meet these standards of conduct, ethics and performance, throughout their careers.”* (2014) [5]
- *“Accountabilities of pharmacists and PTs needed to be more clearly defined.”* (2015) [86]

- *“To enable pharmacists to become increasingly patient-centered, clinical professionals, they need to work with suitably trained and competent support staff; pharmacy technicians (PTs) may be the most appropriate to take on additional roles and responsibilities. However, clarity on PT roles, particularly in community pharmacy, is lacking, and pharmacists may be reluctant to delegate due to concerns over PTs' competence.” (2017)*
[87]

The researchers involved in the studies quoted above recognised the importance of pharmacists being assured that pharmacy technicians were appropriately qualified. The GPhC commissioned three separate studies exploring the views of various stakeholders on pharmacy technician education and training. [5] [86] [282] The stakeholders included representatives of education providers and authorities, the APTUK, pharmacy technicians and community pharmacy business owners. Unfortunately, the GPhC did not ask the researchers to seek the views of employee and locum pharmacists as interested groups, through their representatives, to understand whether the current training standards met modern practice requirements. As with the approach from the Rebalancing Medicines Legislation and Pharmacy Regulation programme board, a synthesis of the collective views of front-line employee and locum pharmacists was excluded from the discussion.

7.3 The views of pharmacists and pharmacy technicians

A recent study found that both pharmacists and pharmacy technicians (from both the community and hospital settings) believe that pharmacy technicians can perform certain limited activities without a pharmacist's supervision that they cannot perform unsupervised at present.

Respondents also agreed that since pharmacy technicians are now registered with the regulator, they should accept greater accountability for the tasks they perform, though many did not believe that the pharmacy technician's role had changed since GPhC registration was introduced. [283]

[284]

Respondents were asked to assume that support staff (defined as those with an NVQ level 2 or 3 qualification, since not all pharmacies work with a pharmacy technician) were suitably trained and competent. They were asked to evaluate the safety of support staff conducting a range of named activities in community pharmacy whilst the pharmacist was not physically present on the premises for up to 2 hours, but was contactable to advise and intervene. The researchers then graded the activities as 'safe', 'borderline' or 'unsafe'.

The seven 'safe' tasks all required limited skill, knowledge and responsibility:

- Take in prescriptions
- Sell General Sales List (GSL) medicines
- Sign for deliveries of medicines (not Controlled Drugs (CDs))
- Assemble (without labelling) prescriptions (not CDs)
- Label prescription items (not CDs)
- Signposting to other services
- Provide healthy living advice.

Of these, community pharmacists did not classify 'labelling of prescription items' as safe – and were on the verge of classifying 'assemble (without labelling) prescriptions (not CDs)' as borderline. Community pharmacy technicians perceived the risks associated with the 'safe' activities to be lower than did the other groups.

Nine 'borderline' activities were identified. For each activity, community pharmacists – whose input is perhaps the most important and based on the most relevant contextualised experience of the four groups surveyed (pharmacists and pharmacy technicians working in either the community or hospital setting) – disagreed that it could be safely carried out in their absence.

Another six activities were thought to be 'unsafe' for support staff to perform:

- Provide a minor ailments service
- Provide medicines under a patient group direction
- Give advice about prescription only medicines
- Give clinical advice to patients
- Provide the New Medicine Service (NMS)
- Conduct Medicines Use Reviews (MURs).

This study identified a number of factors which affected pharmacists' confidence in pharmacy technicians' abilities to perform certain roles. A key point was that familiarity with the team reduced the perception of risk; more permanently-based and experienced pharmacists were less cautious, as were those accustomed to working with a larger support team. Locum and relief pharmacists were more cautious.

Any successful rebalancing of the roles of community pharmacists and pharmacy technicians through labour substitution would be heavily reliant upon the support and participation of pharmacists, in terms of delegating the tasks in the first place, and pharmacy technicians, in terms of taking upon themselves the additional responsibilities. Consequently, it would be important to explore further the views of both groups of practitioners.

7.4 Patient Group Directions (PGDs) as a possible role for pharmacy technicians?

In 2013, in response to a National Institute for Health and Care Excellence (NICE) consultation on the use and application of patient group directions (PGDs), the Guild of Healthcare Pharmacists

suggested that pharmacy technicians should be added to the list of healthcare professionals that should be allowed to operate PGDs. [285]

If this suggestion were to be implemented, it would probably apply across all pharmacy sectors (hospital, primary care and community), with potentially far-reaching implications for patient care. The PDA conducted a survey of its members in 2013, to determine pharmacists' views on this proposal.

7.4.1 What is a PGD?

PGDs are written instructions for the supply or administration of medicines to groups of patients, who may not be individually identified before presentation for treatment. The MHRA states: *“The supply and administration of medicines under PGDs should be reserved for those limited situations where this offers an advantage for patient care without compromising patient safety, and where it is consistent with appropriate professional relationships and accountability.”* [286]

PGDs should be drawn up by a multi-disciplinary group involving a doctor, a pharmacist and a representative of any professional group expected to supply medicines under the PGD. The MHRA also states: *“A senior person in each profession should be designated with the responsibility to ensure that only fully competent, qualified and trained professionals operate within directions.”* [286]

The qualified healthcare professionals who are currently allowed to supply or administer medicines under a PGD are: pharmacists, nurses, midwives, health visitors, optometrists, chiropodists, podiatrists, radiographers, orthoptists, physiotherapists, ambulance paramedics, dietitians, occupational therapists, speech and language therapists, prosthetists, orthoptists, dental hygienists and dental therapists. They can only do so as named individuals. [287]

7.4.2 The views of pharmacists

Only 4.5% of pharmacists responding to the PDA survey - of over 1,300 of its members - agreed with the proposal. [288] Many respondents expressed concerns with the proposal and were anxious about patient safety and pharmacy technicians' lack of knowledge and accountability. Community pharmacists were particularly opposed to the concept, with less than 2% in favour.

PGDs are designed to be administered by those who are able to work autonomously and do not require supervision. Many pharmacists were concerned that pharmacy technicians do not meet the rigorous standards of qualification, regulation and accountability required of a healthcare profession. These standards are necessary to protect the public; if they are not met, patient safety is put at risk.

7.4.2.1 Concerns over safety

Safety was a very substantial concern, with 80% of all respondents saying that pharmacy technicians would be unable to operate any and all PGDs "as safely and effectively as pharmacists", while a further 8% were "neutral" on the issue.

7.4.2.2 Lack of knowledge

Also high on pharmacists' list of concerns was pharmacy technicians' lack of knowledge, with nearly three quarters concerned that this would hinder their delivery of PGDs.

"Patient safety is paramount. From what I have witnessed of NVQ training it does not touch on the required level of clinical knowledge", said one.

Another, who claimed to be the lead pharmacist for PGDs at an NHS foundation trust, said that pharmacy technicians' *"lack of underpinning clinical knowledge and skills would make this an unsafe practice"*.

A number of pharmacists pointed out that length of service was no guarantee of standards. One pharmacist commented *"Some of them have been in the job for 10 years or more and still struggle with their current roles such as dispensing. A lot of them are not even great at WWHAM, let alone PGDs."*

N.B. WWHAM stands for *"Who is the patient? What are the symptoms? How long has the patient had the symptoms? Action taken already? Medicines – is the patient taking any other medication?"*. It is a mnemonic used commonly by community pharmacy staff in the UK to help ensure patients requesting medicines from the pharmacy counter are asked the appropriate questions. [289]

Another pharmacist warned that pharmacy technicians *"will 'dumb down' PGDs as counter assistants have dumbed down the sale of P medicines."*

7.4.2.3 Lack of accountability

In the survey, pharmacy technicians' perceived lack of accountability was cited as a concern by 58% of pharmacists in community practice and 43% of those working in NHS hospitals. Many suggested that if pharmacy technicians were to operate PGDs, they should be held liable for their actions in this area. Many respondents thought that pharmacy technicians would be unaccustomed to assuming such responsibility. Some community pharmacists suggested that the employer should be liable, rather than the pharmacist. Locums were particularly concerned about accountability, given that it would be difficult for them to be sure of an individual's competence.

Comments included:

- *“In my experience pharmacy technicians are very poor at understanding professional responsibility.”*
- *“I feel that if they were to offer PGDs they would throw all responsibility to the pharmacist supervising the activity and take no responsibility themselves.”*

Without consulting publicly or widely with front-line pharmacists or pharmacy technicians for their views, in 2016 the “Murray review” of Community Pharmacy Clinical Services, commissioned by the Chief Pharmaceutical Officer in England, made the following recommendation:

“Regulations should be amended to allow registered pharmacy technicians to work under Patient Group Directions to allow better use of skill-mix in delivering clinical pharmacy services.” [290]

The review was commissioned in April 2016 and had a broad scope, including making recommendations as to what clinical services should be provided by community pharmacy in the future and how they should be commissioned. [291] It was completed and published just eight months later in December 2016. The reviewer received advice from an advisory group, the composition of which is unclear and was not stated in the report (though the APTUK’s website indicate that it was represented). [292] Unfortunately, this provides another example of top-down policy determination which may not have involved the input of clinical practitioners and/or their representatives as recommended in the Francis inquiries in to the Mid Staffordshire NHS Foundation Trust (this was discussed in relation to the Rebalancing Medicines Legislation and Pharmacy Regulation programme board in Chapter 5).

7.5 The views of pharmacy technicians

A survey of pharmacy technicians showed that 57% of community pharmacy technicians are in favour of adopting an extended role, with 25% being against. [4] The concept is much more

popular among those in the hospital sector, with 80% of hospital pharmacy technicians saying they would be in favour and only 13% being against. Reasons for being against an expanded role included lack of remuneration, workload and training issues (see Table 8).

Table 8 - Reasons that pharmacy technicians are against adopting an extended role

Reason	% of respondents identifying
Lack of commensurate remuneration	36
Excessive workload	26
Don't know / need to look in more detail	14
Lack of training	12
Not happy / don't agree generally	10
Other	9
Concerns over increase in responsibility	7
Responsibility should lie with pharmacist / they have been to university	5
Concerns over increase in 'personal liability'	5

Note: It was possible for respondents to identify more than one reason.

When asked about taking on “more demanding roles and responsibilities”, the proportion in favour dropped to 50% for those in community pharmacy practice and 60% for those in hospital pharmacy practice. Reasons for being against taking on more demanding roles and responsibilities included comfort within current roles, workload and already being too busy (see Table 9).

Table 9 – Pharmacy technicians’ reasons for not considering taking on more demanding roles and responsibilities

Reason	% of respondents identifying
Current workload sufficient	28
Depends on the role / what it entails	22
Already very busy / no capacity to do more	19
Constraints around working environments	8
Age – too old/due to retire	8
Too much responsibility	8
Other	8

Among those pharmacy technicians who would consider taking on more demanding roles and responsibilities, there were a number of provisos. The most important of these was that they wanted more training and qualifications, followed by higher pay (see Table 10). Just 1% in community pharmacy and 7% in hospital were prepared to take on new roles in the current environment without any changes. 45% of community pharmacy technicians required pharmacists to supervise them more closely if they were to take on more demanding roles and half required assurances that it would be the pharmacist - and not the pharmacy technician - that would be held responsible and liable in the event of an error. These percentages were markedly different for pharmacy technicians working in the hospital pharmacy setting.

Table 10 - Changes required before pharmacy technicians would consider taking on more demanding roles and responsibilities

Change required	% agree (community)	% agree (hospital)
More training and qualifications	80	90
Paid more	77	76
Assurance that pharmacist, not pharmacy technician, would be responsible and held liable	50	28
Would be more closely supervised by pharmacist	45	38
Improved or stricter processes in the pharmacy and/or dispensary	34	62
Other	4	3
Nothing, happy to take on more demanding roles and responsibilities immediately	1	7

Having declared that they would consider taking on more demanding roles and responsibilities, the pharmacy technicians surveyed appeared unclear about exactly what roles they might consider. Whilst a wide range of potential services was selected, none of the services proved particularly popular (see Table 11).

Table 11 - Additional tasks that pharmacy technicians would consider taking on

Additional task	%
None / nothing	28
Don't know	9
Patient centred (e.g. offer advice / patient interaction)	15

Additional task	%
More services / service provision	9
Prescription checks	8
Help the pharmacist more / when pharmacist not available	8
Smoking cessation/stop smoking clinics	7
Patient counselling	6
MURs / medicines management / patient medicine review	9
Accredited checking technician's course	5
Healthy living/wellness advice / checks	4
Blood pressure	4
Clinical training	3
Diabetes	3
Prescription dispensing	3
Flu vaccinations	3
Controlled drugs	2

A significant number of pharmacy technicians explained that they would consider leaving the register altogether if they were expected to take on more demanding roles and responsibilities. Only half would be “very likely”, while 29% would be “quite likely” to remain registered. The survey found that 16% would be “quite” or “very” unlikely to remain on the register.

7.6 The impact of pharmacy technician support on pharmacist workload [79]

There is little evidence to suggest that under current arrangements, granting pharmacy technicians additional roles in community pharmacy would free up pharmacists' time in a way which would allow it to be usefully spent with patients.

A study was undertaken in 1995 to assess the impact of skilled dispensary help on pharmacists' work activities by comparing two similar independent community pharmacies (with respect to prescription volume) - one with and one without a pharmacy technician. The study showed that the pharmacy technician released one hour of the pharmacist's time each day. However, this time was not continuous or predictable and this meant that the pharmacist was not able to dedicate it to patients in any structured or meaningful way. [79] [293]

Preliminary findings from 2002 of a study conducted by Jones and Rutter suggest that the introduction of accuracy checking technicians reduces the time pharmacists spend dispensing. This, in turn, allows them to spend more time in direct contact with patients. [294] However, if pharmacists could be given additional time to spend with patients through the development of pharmacy technician roles, in order for the benefit to be sustainable it may have to be done in such a way that the additional time with patients was secured by law or through the NHS pharmacy contract. Otherwise, the temptation to reduce costs in order to increase profit may be too great for some employers and no meaningful patient benefit would be secured.

The authors of a study commissioned for the Department of Health suggested that implementing different models of skill mix is more feasible in larger organisations where business activities such as purchasing, for example, operate as separate departments and are performed by specialists. In contrast, it is more difficult to implement different models of skill mix in smaller organisations where pharmacy staff have to undertake a broader range of tasks. Linked to organisational size, the authors assert, is financial viability, where it is likely that the larger organisations are better resourced, in both financial and human terms, to implement skill mix models. [79] This may not apply to large corporate multiple pharmacies, whose patient-facing activities are conducted across many different premises and where the separate departments referred to above are managed and operated at a head office level.

Studies in the hospital setting that have involved pharmacy technicians performing pharmacists' duties mainly considered defined tasks, such as obtaining drug histories, drug distribution, assessing patients' drugs, preparing discharge medications and record keeping. [201] The majority of the reported work on substitution of pharmacists with pharmacy technicians has been undertaken in the hospital setting, with only a small number of studies undertaken in community pharmacy. There is limited evidence on skill mix in community pharmacy and the difficulties in comparing between organisations are apparent from the small amount of evidence that is available. For example, one of the difficulties is that the nomenclature used to describe support staff varies. These studies were mainly conducted in the USA, further complicating comparisons.

According to a 2011 research study conducted for the Centre for Workforce Intelligence:

“there are a number of concerns regarding pharmacy technicians, including whether they have sufficient training in ethical decision-making to substitute for pharmacists and whether they are equipped with the knowledge and autonomy to safely substitute for pharmacists”. [201]

This review also concluded that there is a lack of clear evidence to show that the skill mix models examined are cost effective. It recommended further research into skill mix and the training needs of pharmacy technicians.

7.7 Conclusions

1. The successful model of developing pharmacy skill mix in the hospital sector occurred because its genesis emerged from pharmacists and because it was led by the profession. It was built upon a desire to create new, ambitious and professionally-fulfilling roles for pharmacists that were of benefit to patients. The approach aligned the interests of pharmacy technicians and pharmacists in a way that involved delegation and required effective skill mix and clear role definitions as a prerequisite to success. The process was

seen as a success by both pharmacists and pharmacy technicians. First came the vision for pharmacy and then came a structured career framework, which was linked to a skills and salary escalator. The structured career framework allowed specialisation and higher levels of practice for both pharmacists and pharmacy technicians; this continues to flourish today.

2. The approach being taken to skill mix in the community pharmacy setting is not being led by the profession – and of particular importance - pharmacists working at the coalface. Neither is it in support of an agreed ambitious vision, nor linked to a structured career framework. It does not align the interests of pharmacists, pharmacy technicians and patients. It does not require investment in the training of pharmacy technicians nor the support of high standards of training. Instead, it is a top-down approach being taken by civil servants and is strongly linked to the prospect of operating a pharmacy in the absence of a pharmacist, which is perceived as a threat by pharmacists and many pharmacy technicians alike.
3. The development of hospital pharmacy practice in the 1980s was designed to ensure pharmacists' skills could be put to best use, by giving them greater contact with patients - out on hospital wards. The roles of pharmacists were developed first and the roles of pharmacy technicians were developed later to support those of pharmacists. By contrast, the proposals currently being considered by the Rebalancing Medicines Legislation and Pharmacy Regulation programme board could see pharmacists taken away from patients – such that they will not be present in the community pharmacy. The proposals from the programme board's supervision working group could mean that community pharmacies

may instead be supervised by a pharmacy technician, with the pharmacist absent from the premises. [252]

4. The approach described above has led to a lack of trust in the process of ensuring appropriate skill mix generally and the direction of the current debate around pharmacy supervision being undertaken by the Rebalancing Medicines Legislation and Pharmacy Regulation programme board, compounded by a lack of trust in pharmacy technicians' abilities. Pharmacists, faced with the requirement to delegate tasks, are anxious about patient safety and express concerns about the lack of knowledge and accountability of pharmacy technicians, and about the government's apparent attempt to inappropriately professionalize pharmacy technicians, seemingly at any cost. Since there is no alignment of interests between pharmacists and pharmacy technicians, there is no incentive for pharmacists to delegate tasks and what delegation exists is piecemeal, resulting in very limited benefits in terms of additional pharmacist availability. This lack of alignment also results in pharmacy technicians being reluctant to take on additional responsibilities. Pharmacy technicians have indicated that before they would take on any further roles, they would need to receive more training and higher pay. Those working in community pharmacy, in particular, feel that they would require an undertaking that any mistakes would be the responsibility of the pharmacist and not of the pharmacy technician. This view further undermines the current civil service parlance that community pharmacy technicians generally should be viewed and relied upon as healthcare professionals in their own right.

7.8 Recommendations

1. Pharmacists, as the pharmacy profession, must collectively agree a unified vision for the future of community pharmacy and then determine a plan of how to turn that vision into reality. This should be led by the interests of patients, including ensuring that patient contact with and access to pharmacists' clinical expertise is maintained and enhanced.
2. Once the vision for future of the profession has been agreed, as part of that vision and in the process of bringing it to fruition, a symbiotic, complementary skill mix of pharmacists and pharmacy technicians must be developed in community pharmacy. This must be led by the profession and not the civil service.
3. The interests of pharmacists, pharmacy technicians and patients must be aligned in order to develop a successful skill mix model.
4. A successful exercise to achieve effective skill mix must provide for both pharmacists and pharmacy technicians to work at a multitude of levels in a well-defined career hierarchy and enable individual practitioners to understand and manage their career goal objectives from an early point in their careers.
5. A structured career framework, which relies upon a skills and salary escalator, should be developed by the profession for both pharmacists and pharmacy technicians, aligned to the development of new, clearly-defined, professional, clinical and technical roles in the community pharmacy setting.

6. The differences in pharmacy technicians coming from the community and hospital pharmacy settings must be appreciated and factored into any future policy work on pharmacy skill mix.
7. In order to reflect the substantial differences between pharmacy technicians that trained and continued to work in community pharmacy and those that trained in hospital pharmacy, the GPhC should agree a process to annotate the register of pharmacy technicians to reflect the sectoral differences.
8. As part of a wholesale re-engineering of community pharmacy practice, research should be undertaken to evaluate the feasibility and impact on patient safety and care of having a pharmacy technician (trained appropriately to the standards recommended elsewhere in this report) in every pharmacy alongside a pharmacist, throughout its operating hours. This could form part of a new model of working in community pharmacy, such as that outlined in the PDA's Wider than Medicines proposals. [295]

8 How the roles of pharmacists and pharmacy technicians in community pharmacy could be developed

The majority of pharmacy technicians (53% to 67.4%) work in the community setting, while around 21.2% to 39% are employed to work in hospital pharmacies (see Appendix B). [296] [201] Part-time working is more common in the community than hospital sector (45% community vs. 28% of hospital pharmacy technicians work part time). Most pharmacists work with a pharmacy technician in the hospital setting, but up to 40% of community pharmacies operate without a pharmacy technician. [201]

The qualifications of pharmacy technicians, relative to those of other dispensary support staff in community pharmacy, seemingly have no bearing on the responsibilities undertaken. A number of research studies have identified a lack of distinction between the tasks undertaken by dispensing assistants and pharmacy technicians in community pharmacy, with one even identifying that survey respondents would prefer to recruit a dispensing assistant or a medicines counter assistant rather than a pharmacy technician to improve skill mix. [5] [87] [297] The results of surveys previously undertaken by the PDA also indicate that decisions concerning which particular members of the dispensary support staff are charged with performing additional tasks are often being taken by either the pharmacy manager or the pharmacy owner. These decisions appear to be based on trust, confidence and length of service rather than upon regulatory registration and/or dispensing qualifications.

Completing formal qualifications and registration with the regulator are perceived as means of gaining official status, and in some cases, receiving a salary increase. There is a perception that the job itself and the accompanying responsibility does not change on regulatory registration as a pharmacy technician or on completion of the knowledge and competency qualifications.

Anecdotally, it has emerged that many employers have explained to the pharmacy technicians

they employ, that by registering with the GPhC, they were merely codifying the knowledge they already had and which had previously underpinned their jobs. In that sense, regulatory registration is not seen as any kind of significant enabler to greater responsibility. This perhaps also helps to explain why pharmacists value the competence and experience of the dispensary support staff over GPhC registration credentials when allocating additional tasks and delegating specific areas of responsibility. [297]

8.1 Advanced pharmacy technician practice

For reasons that have already been described elsewhere in this report, a number of pharmacy technicians, largely practising in secondary care, carry out much more demanding roles, assume clinical and managerial responsibilities and work relatively autonomously. Some are educated to degree level, have undertaken a significant amount of additional training beyond their qualification and have gained considerable relevant experience. They are recognised for their additional levels of expertise and rewarded appropriately via the NHS Agenda for Change pay scales.

A report by the Royal Pharmaceutical Society, outlining the experiences of 35 hospitals that had implemented its 'Professional Standards for Hospital Pharmacy Services' over the previous year, cites a number of examples where pharmacy technicians are carrying out extended roles in hospital practice. [298] [299] Examples include medicines reconciliation and drug history taking, patient counselling on discharge, screening for high-risk drugs on admission, controlled drugs checks, inhaler technique advice and homecare service support. These types of service can safely improve patient care using advanced level pharmacy technicians' skills appropriately, but are delivered locally, according to local needs and based around specific expertise available in a

particular hospital. This type of environment, or practice, is not currently replicated in the community sector. If it could be, it could potentially form the basis of a foundation for change.

8.2 New ways of working – learning from successful exemplars in other sectors

The Department of Health's New Ways of Working (NWW) programme was an initiative to change the way that mental health staff work and involved the introduction of new and extended roles for a range of staff grades. [274] The NWW programme was focussed upon the improvement of skill mix involved in the provision of the service, through the development of new roles for various groups of staff. The initiative was led by the National Institute for Mental Health in England's National Workforce Programme and ended in March 2009 after six years of operation. During its years of operation, the NWW programme considerably developed the overall quality of the mental health service.

From the success of this programme, a number of principles were established which could be transferred to other healthcare sectors attempting to improve their skill mix and develop new roles:

1. Benefits for both users and their carers should be identified
2. A needs assessment would be required to determine whether the NWW programme would be needed to deliver the benefits identified in point 1
3. Any new roles need clearly defined competency requirements
4. Clear communication and buy-in must be secured with the relevant key stakeholders
5. Complete clarity around professional accountability and responsibility must be established.

If similar skill mix programmes were to learn from the success of the NWW programme, they would need to rely upon the following working principles:

- Horizon scanning must take place to identify strategic objectives and anticipate likely long-term changes in the landscape that may require future changes to roles
- Not only would stakeholders need to sign up to the programme, they must become active partners in its implementation
- Securing evidence of what works well and then disseminating that evidence are necessary conditions of success
- Funding must be secured for the staff involved in any expanding roles (via a skills and salary escalator). Staff are unlikely to take on more responsibilities unless they are paid more.
- The process of change could be expected to take up to five years to complete.
- The overall programme must be planned and then led by personnel who are experienced in the field and whose authority is earned by their ability to command the respect of those who will be affected by the changes.

The NWW programme aimed to enhance the capability of the whole team and took a whole-system integrated approach. It did not seek to simply create new standalone roles for specific singular groups. Therefore, new roles in mental health were considered together with the needs of the whole team. Practitioners would only relinquish their existing roles and allow them to be taken up by other staff groups with newly-acquired skills if they could take on new roles themselves. In turn, others were simultaneously prepared to relinquish the roles to which the practitioners aspired.

These learning points are highly relevant if any changes are to be proposed to skill mix in community pharmacy that enhance the roles of the pharmacist and the pharmacy technician. It is

evident that skill mix is more effective in hospital pharmacy practice than in community, precisely because of the reasons described above. Advanced roles for hospital pharmacy technicians enhance the capability of the whole team and pharmacists engage in other, more clinically-demanding roles, to which they aspire.

The corollary to this is that skill mix in community pharmacy is unlikely to succeed until the same wider conditions can be recreated. Currently, the skill mix programme being led by civil servants in the community pharmacy setting is seen as a threat by many community pharmacists. Any changes to pharmacy skill mix are more likely to be successful if they adopt the NWW principles and learn from its key bases for success. Enhanced roles for pharmacy technicians in the community pharmacy setting should not be considered in isolation, but as part of a wider programme such as that outlined in the PDA's Wider than Medicines proposals, designed to improve skill mix and encourage new ways of working for pharmacy technicians, pharmacists and ultimately GPs. [295]

8.3 Proposals for a national career structure and better skill mix

Basic entry level requirements and specific qualification thresholds for pharmacy technicians have already been recommended in this report (Chapter 3). Specific titles which would help to clarify roles, specialities and responsibilities have also been described (e.g. Accuracy Checking Technician or dispensing technician).

With these specialised – but clearly defined – titles, and subject to the entry and qualification thresholds described earlier, there is scope to further improve and develop the quality and standard of both the pharmacist and the pharmacy technician register. Taking a much wider integrated developmental approach as described above could lead to the opportunity to introduce a national career structure that would recognise additional qualifications, experience and

expertise. Titles such as ‘**practitioner**’, ‘**advanced practitioner**’, ‘**specialised practitioner**’ and ‘**established specialised practitioner**’ would encourage both pharmacists and pharmacy technicians in the community pharmacy setting to advance their practice and enhance professional recognition. As has already been described, similar systems already exist in the hospital pharmacy setting. Those practising at **specialised practitioner or established specialised practitioner** level and with the commensurate remuneration could, subject to suitable safeguards and regulatory controls, be given responsibility for certain specific clinical roles. Each level within the structure would have to be accompanied by a specific annotation on the GPhC register and each would have its own specific requirement for training and demonstrating continuing development. Using the skills escalator to develop the career structure would help to recognise enhanced practice, encourage the creation of improved pay scales and thus introduce regulatory traction and improved public protection.

8.4 How a structured career framework could support the developing roles of pharmacists and pharmacy technicians

8.4.1 Practitioner pharmacy technician

Evidence shows that community pharmacists - particularly locums - often lack confidence in the ability of the pharmacy technician(s) with whom they are working, which severely limits the potential for utilising skill mix to deliver more patient-facing roles. [284] To exemplify this at the most basic level, pharmacists must be confident that the pharmacy technicians they delegate to can deliver the fundamentally important - but often routine - dispensary duties, to a recognised standard. Subject to providing consistency of training and standards among the group and improving it at qualification level (Chapter 3), a highly-specific job description for pharmacy technicians working at the point of entry to the **practitioner** level (a level which is likely to be applicable to most pharmacy technicians working in the community sector) would provide pharmacists with the necessary assurances to enable them to delegate routine dispensary tasks to

pharmacy technicians, while they adopted more challenging patient-facing roles. One mechanism that would deliver immediate benefits would be to require all **practitioner** pharmacy technicians to have (for example) a minimum of two years' dispensary experience over and above their entry-level qualifications and regulatory registration.

The Centre for Pharmacy Workforce Studies' research on supervision in community pharmacy is another study which shows that both pharmacists and pharmacy technicians believe that the list of activities that pharmacy technicians can carry out, without direct supervision, is limited. [284] For skill mix to be effective, allowing pharmacists to develop more clinical roles, the whole pharmacy team must be confident that all pharmacy technicians can carry out routine-but-time-consuming dispensary tasks without direct supervision and be accountable and responsible for their actions. Therefore, even if the list of tasks performed by **practitioner** pharmacy technicians was specific but relatively limited, all **practitioner** pharmacy technicians would have to be capable of carrying out these duties to an extremely high degree of accuracy and consistency. This would create a solid foundation on which to build the higher-level skills sets of **advanced practitioner** and **specialised practitioner** and **established specialised practitioner** pharmacy technicians. Table 12 includes examples of tasks which could be carried out at each level of practice, which have been provided for illustrative purposes only.

As well as aligning the interests of pharmacists and pharmacy technicians, the principles established in the NWW work described earlier show that the structured framework described must also drive direct benefits to patients and other service users. To illustrate this point, one way that this could be achieved would be to ensure that pharmacy technicians could provide support to any patients who may need first aid (e.g. in the event of fainting or anaphylactic reaction) at any time while in a pharmacy; as such, all pharmacy technicians working at **practitioner** level would have a minimum level of first aid training with up-to-date evidence of capability. This

principle, if used, would help ensure that patients' right to high standards of care, in any healthcare environment, could more easily be met.

It could be determined that all pharmacy technicians working at **practitioner** level must have undertaken a dispensing accuracy assessment approved by the regulator (existing pharmacy technicians would need to revalidate). This would mean that there could at least exist a common, consistent platform that could be relied upon in terms of the accuracy of their dispensing.

Practitioner level pharmacy technicians or above would be required to revalidate periodically using a relatively straightforward practical test covering the routine - but fundamental - tasks of stock storage, selection and dispensing accuracy. From the dispensing error episodes that are handled by the PDA, it is clear that these are some of the important bedrocks upon which safe medicines supply is built. Pharmacists, other stakeholders and the public must be confident that these tasks are delivered consistently to the highest possible standard before skill mix can be relied upon to enable more patient-facing services provided by pharmacists from pharmacies.

8.4.2 Advanced practitioner pharmacy technician

Applying again the findings of the NWW experience, **advanced practitioners** would be built upon the generalist foundation of being a **practitioner** and in addition they would be trained and skilled in the roles required to meet specific local needs. This approach would be taken to the roles of both pharmacists and pharmacy technicians. For **advanced practitioner** pharmacy technicians, these advanced roles could include healthy living advice, smoking cessation services and services to care homes. **Advanced practitioners** (whether pharmacists or pharmacy technicians) would demonstrate that they were accomplished generalists and would have at least two years' experience of operating at **practitioner** level (as an example). They could select a minimum number of role-specific learning modules that would enable them to deliver a number of the services offered from their pharmacy (we propose five for illustrative purposes for pharmacy

technicians). **Advanced practitioner** pharmacy technicians could also take responsibility for some of the more mission-critical activities and specialised roles such as prescription accuracy checking. They would require up-to-date evidence of capability in each of these areas. This would ensure cost-effective allocation of resources and training. Pharmacy technicians could become more highly skilled and focused on the services they were delivering in their pharmacy to support pharmacists in their new community-pharmacy-based roles. Pharmacy technicians would not usually be trained to **advanced practitioner** level in services that they could not routinely deliver in their pharmacy, as the currency of their qualification would be rapidly lost and this in turn would result in a diminution of patient care and public protection.

8.4.3 Specialised practitioner pharmacy technician

Specialised practitioner pharmacy technicians would have a minimum of two years' experience working at the **advanced practitioner** level and would focus on just one or two areas where they could deliver either:

- a more complete service based around one of the advanced level modules
- a more specialised service that may only be offered:
 - in the secondary care setting, or
 - at a limited number of specialised community pharmacies, or
 - in the primary care interface.

Although the fundamental principles behind the skills and salary escalator would be the same for both pharmacists and pharmacy technicians, the substantial differences in their respective training, expertise and professional status (coupled with the expectations of the public) would create very significant differences in both the range and the depth of the services that would be expected to be delivered by each group. As an example, for **specialised practitioner** pharmacy technicians, these specialisms may include inhaler technique advice, aseptic dispensing and

medicines reconciliation, care home and residential home service support and even taking blood samples. Revalidation in respect of these specialisms would be required on a regular basis.

Specialised services to be delivered by **specialised practitioner** pharmacy technicians - with higher levels of qualifications and expertise - could be developed in specialised community practices, or even in GP practices or clinics according to local need. The same concept could be applied to pharmacists in the community pharmacy setting as part of their structured career framework.

Specialised practitioner pharmacy technicians could also work in support roles that could be operated in combination with a pharmacist, much in the same way that a dental nurse supports a dentist whilst a dental procedure is undertaken. Examples of this may include where a pharmacist is providing a face to face pharmaceutical care consultation with a patient and is discussing the clinical appropriateness of the medicines, simultaneously the **specialised practitioner** pharmacy technician could be supporting the process by undertaking a full medicines reconciliation service.

8.4.4 Established specialised practitioner pharmacy technician

Ultimately, just as it would for pharmacists working to a parallel structured career framework, **specialised practitioner** pharmacy technicians with at least two years' experience could be able to - and could choose to - operate at even higher levels of expertise of the salary and skills escalator for pharmacy technicians. Such individuals could be well placed to influence the development of the pharmacy technician workforce, by supporting training programmes or working in a variety of leadership roles, or to supervise pharmacy technicians locally across a group of pharmacies or within an NHS trust. Alternatively, **established specialised practitioner** pharmacy technicians may take on a further specialism involving an additional qualification – for example in project or programme management, or teaching.

8.5 The value of the structured career / skills and salary escalator

It is important to emphasize that a framework based on quality, skills, qualifications and experience and with accompanying salary scales would need to be introduced to support the development of both pharmacists and pharmacy technicians. If buy-in could be secured across both groups, this could ultimately help pave the way for a greater transfer of some of the tasks seen in the community pharmacy setting to pharmacy technicians. This was proposed in the Scottish Government's 'Prescription for Excellence' vision for pharmacy. [19] Such a framework may already exist in exceptional situations in community pharmacy, but does not exist on any scale large enough to support a national policy on transfer of roles from community pharmacists to community pharmacy technicians.

Those pharmacy technicians currently performing vitally important - but relatively routine - tasks in community pharmacy could continue to do so at **practitioner** level, but would become more effective and accountable team members, operating as part of a far more effective and transparent form of skill mix that would help free up pharmacists' time to develop clinical roles. Pharmacy technicians would also be able to enhance their skills, responsibilities and remuneration by working up to **advanced practitioner**, **specialised practitioner** and even **established specialised practitioner** levels. Pharmacy technicians at each level would be more effectively regulated and their performance would be more standardised - and therefore likely more trusted - by pharmacists. They would become more accountable and would see their skills employed in the most efficient and appropriate manner, as part of a greatly improved skill mix model that would ultimately improve patient care in a cost-effective manner.

Table 12 - Proposed career structure for pharmacy technicians (for illustrative purposes)

Career grade	Job description to include	Training, competency and experience requirements
Practitioner	<ul style="list-style-type: none"> • Relevant annotation on the GPhC register (to include sectoral designation) • Dispensing to extremely high levels of accuracy and consistency – verified via a dispensing accuracy and consistency assessment and certification approved by the regulator • Putting away and selecting stock for dispensing • A thorough appreciation of clinical governance requirements relating to dispensary practice • An understanding of the relevant legal requirements relating to prescriptions, medicines, pharmacy operations, patient confidentiality and data security • An understanding of the ethical requirements relating to patient care and pharmacy practice as described 	<ul style="list-style-type: none"> • At least 5 GCSEs at grade C and above as an entry requirement • A QCF level 4 or 5 qualification for the initial education and training • Satisfactory completion of a pre-registration year and a pass on a pre-registration exam • At least two years' pharmacy experience (to include, for community practitioners, at least six months on the medicines / healthcare counter) • Practical revalidation required periodically to ensure currency

	<p>in enhanced regulatory requirements issued by the GPhC</p> <ul style="list-style-type: none"> • A solid understanding of individual responsibilities and competencies • First aid qualifications • Knowledge of over the counter medicines, verified by assessment • Participation in the continuing development requirements of the GPhC 	
Advanced Practitioner	<ul style="list-style-type: none"> • Relevant annotation on the GPhC register (to include sectoral designation) • Accuracy checking (as long as a pharmacist's clinical check has been carried out) verified via an accuracy checking assessment and certification approved by the regulator • As for practitioner but with the completion of at least five modules relevant to their pharmacy's practice <p>Examples may include:</p> <ul style="list-style-type: none"> • Smoking cessation • Substance abuse 	<ul style="list-style-type: none"> • Completion of training and qualification in at least five modules relevant to their pharmacy's practice • At least two years' satisfactory practice experience at practitioner level • Evidence required of up-to-date ability in each of the five modules • Practical revalidation required every two years to ensure currency

	<ul style="list-style-type: none"> • Healthy living advice • Services to care homes • Compliance aids • Stock control 	
Specialised Practitioner	<ul style="list-style-type: none"> • Relevant annotation on the GPhC register (to include sectoral designation) • Specialised training, practice and experience in no more than two areas at specialised practitioner entry level, such as: <ul style="list-style-type: none"> • Blood sample taking • Supervised medicines administration • Dispensary management • Inhaler technique • Aseptic dispensing • Medicines reconciliation • Drug history taking • Patient counselling on discharge • Screening for high risk drugs on admission • Controlled drug checks and the management of drug addiction services 	<ul style="list-style-type: none"> • Completion of training and qualification in no more than two modules relevant to their specialised practice • At least two years' satisfactory practice experience at advanced practitioner level • Likely to be mainly in secondary care and highly specialised community pharmacies • Practical revalidation required on a regular basis to ensure currency

	<ul style="list-style-type: none"> • Homecare service support 	
Established Specialised Practitioner (For those at the highest levels of expertise)	<ul style="list-style-type: none"> • Management, leadership and governance roles involving the supervision of other pharmacy technicians and support staff • Strategic roles contributing to the development of the pharmacy technician workforce locally and beyond • Educational assessor / quality assurance roles 	<ul style="list-style-type: none"> • At least two years' satisfactory practice experience at specialised practitioner level • May require a management MBA, teaching qualification, governance / audit qualification or project / programme management qualification

8.6 Dovetailing the structured career framework of pharmacy technicians with one for community pharmacists

The structured career framework identifying the levels for **practitioner, advanced practitioner, specialised practitioner** and **established specialised practitioner** for pharmacy technicians would need to be simultaneously overlaid upon a similar framework for pharmacists. This has been alluded to on many occasions in this report because it is such a necessary and vital component of any successful skill mix model in community pharmacy.

A carefully considered approach to the simultaneous establishment of structured career frameworks for community pharmacists and pharmacy technicians, linked to skills and salary escalators, would provide a strong and mutually beneficial incentive for both pharmacists and

pharmacy technicians to positively engage in driving new role development through skill mix in community pharmacy. It would not only encourage pharmacists to delegate roles to pharmacy technicians - because this would be the pre-requisite for pharmacists to develop their own new roles - but would allow them to do so from a solid foundation where there was much more clarity and understanding as to the suitability of qualifications and training of pharmacy technicians. This systematic, planned and structured approach to skill mix would ensure that the care of patients and the public was developed and enhanced, with safety kept as a major focus.

8.7 Conclusions

1. A number of pharmacy technicians, mainly practising in secondary care, carry out more specialised roles and assume significant levels of responsibility; however, this level of expertise is not widespread and is rare in community pharmacy. The overall standard of the pharmacy technician register - and therefore of patient care - could be improved by introducing a national structured career framework that would be supported through GPhC register annotation. This would ensconce the additional qualifications, experience and expertise across primary and secondary care and would help to remove much of the uncertainty and caution that currently exists among community pharmacists. A structured and planned approach to the creation of a skills and salary framework for both pharmacists and pharmacy technicians - introduced simultaneously - would allow the development of skill mix on the one hand, whilst ensuring that patient safety was a central objective on the other. It would also ensure that a much-improved skill mix model was cost-effective and that both pharmacy technicians and pharmacists were able to engage with more demanding roles suited to their respective skillsets.

2. The right pre-entry levels and pre-registration and qualification exam processes for pharmacy technicians would be fundamental to the success of creating an effective skill mix model (as described in Chapter 3). Additionally, if the requisite levels of regulatory support to provide public protection were in place - via annotation of the pharmacist and pharmacy technician registers with the registrant's level of practice as well as a sectoral designation - then a structured career framework in community pharmacy for both groups would provide suitable safeguards and enablers to more advanced levels of practice.
3. The successful process adopted in hospital pharmacy, coupled with the lessons provided by the New Ways of Working model used in mental health, provides a useful template for implementing any proposed changes to skill mix in pharmacy.

8.8 Recommendations

1. Pharmacists can only be expected to relinquish existing roles and technicians expected to take on these roles where an overarching workforce plan including suitable training and career framework are in place for both groups and opportunities exist for them to take on new roles in a planned and integrated fashion.
2. A structured career framework, linked to a skills and salary escalator, should be developed in the community pharmacy setting to help to bring about the kind of skill mix transformation and results that have been seen in hospital pharmacy practice.
3. The design of a structured career framework relying upon **practitioner, advanced practitioner, specialised practitioner** and **established specialised practitioner** roles must be planned at the same time for both community pharmacists and pharmacy technicians.

This would ensure that the frameworks dovetail and produce proper operational compatibility and crossover. The planning process would need to ensure that patient care and safety are the primary concern at all times.

4. The structured career framework should be based upon a transparent qualification, suitable experience and a validation framework, alongside regulatory support through an appropriate GPhC register annotation process.
5. The lessons from the successful Department of Health New Ways of Working programme should be adopted by:
 - i. Horizon scanning to identify long-term changes that may require future changes to the respective roles
 - j. Identifying the benefits of skill mix for patients
 - k. Securing buy-in through clear communication with the relevant key stakeholders. Ensuring that stakeholders are not only signed up to the programme, but that they are active partners in its implementation.
 - l. Clearly defining any competency requirements for any new roles
 - m. Establishing complete clarity around professional accountability and responsibility
 - n. Securing funding for the staff involved in any expanding roles (via a skills and salary escalator). Staff are unlikely to take on more responsibility unless they are paid more.
 - o. Securing and disseminating evidence of what works well to all participants along the way
 - p. Expecting that the process will take up to five years.

6. Planning and leading the overall programme of change must be done by personnel who are experienced in the field and whose authority is earned by their ability to command the respect of those who will be affected by the changes.

9 Overall conclusions

This Chapter contains overarching, high-level conclusions. More detailed conclusions are made at the end of each of the Chapters 1 to 8; these should be read separately.

9.1 The differences between pharmacy technicians in the hospital and community pharmacy settings

With the notable exception of the relatively small proportion of pharmacy technicians now working in primary care pharmacy (around 6% of pharmacy technicians - see Appendix B), broadly speaking, pharmacy technicians in the UK can be delineated into two significant sectoral groups; those working in hospital and those working in community pharmacy. [296] The differences between these two groups are significant. Whilst the minority (those working in hospital pharmacy – 21.2% to 39% depending on the reference source) have enjoyed a professional development and career framework for several decades, the majority (those in the community setting – 53% to 67.4% depending on the reference source – see Appendix B) have suffered from long-term underinvestment in terms of training, remuneration and lack of a structured career framework. [296] [201] For these and other reasons, pharmacy technicians in the community pharmacy setting are not yet ready to take on more clinically-orientated responsibilities, because patient safety cannot be guaranteed under the existing regulatory and professional frameworks. Although there are good examples of highly-qualified individuals delivering cutting edge practice to high standards in the hospital sector and in a small number of cases in the community pharmacy sector, most pharmacy technicians working in the community are neither suitably qualified nor sufficiently well-regulated to enable the group to safely and effectively deliver more clinically-orientated roles, or roles with higher levels of responsibility than at present.

9.2 A lack of regulatory traction

Public protection, particularly in healthcare, is maintained in part by the fact that individuals making decisions affecting the public's health and wellbeing are members of strictly-regulated professions. Members of a profession must meet high standards of qualification, practice and continuing education. Standards are maintained by strong professional leadership and effective regulation. Regulatory traction over professionals is achieved through a range of sanctions, but the most powerful is the ultimate sanction of being 'struck off', leading to the loss of professional status and earning potential.

Despite compulsory registration since 2011, pharmacy technicians as a collective group do not meet commonly-accepted definitions of a healthcare profession, and many pharmacy technicians do not view themselves as professionals. They have a leadership body (APTUK) with only 1,380 members (6% or less of the total UK workforce). [104] The membership of the APTUK is disproportionately composed of hospital-based pharmacy technicians and the organisation has minimal representation from community pharmacy-based technicians on its Board of Officers (only 1 out of 14 appointed officers worked in community pharmacy as at November 2017). Poor pay and low levels of recognition for pharmacy technicians mean that their regulator lacks the necessary traction to provide public protection, and it is doubtful that it could gain the necessary traction whilst such conditions persist. There is further cause for concern about the effectiveness of healthcare regulation of pharmacy technicians since those subject to fitness to practise proceedings routinely demonstrate that they lack the motivation to even attend a regulatory hearing into their own alleged misconduct.

Pharmacy technicians in the hospital sector are remunerated according to national NHS Agenda for Change pay scales that recognise their qualifications and experience. Despite this, their starting pay is still way below that of other healthcare technicians and only equivalent to that of

dental nurses. The salaries of pharmacy technicians working in the community are often much lower than those of hospital pharmacy technicians, with levels comparable to those of general customer service occupations such as retail cashier, checkout operator and travel agent. There is no nationally-recognised pay scale for community pharmacy technicians.

Poor salaries and conditions suggest that pharmacy technicians are not regarded as professionals by employers - especially in the community setting - or by society generally. The result is that they have less to lose from regulatory sanctions than any other healthcare-related technicians. The traction required by a regulator to enable it to act effectively and protect the public interest is very limited when dealing with pharmacy technicians from the community sector (53% to 67.4% of the entire register of pharmacy technicians – see Appendix B). [296] [201] It could therefore be argued that public protection is compromised.

A legal case against a pharmacy technician in the US, employed by Walgreens, demonstrates how public attitudes could quickly turn against pharmacy technicians in the UK if they failed to meet higher standards. [300] The US-based multiple, which merged with Boots in 2014, was ordered to pay nearly \$26m in damages after one of its pharmacy technicians made a dispensing error.

Walgreens has been accused of adopting a “fast food” culture to enhance profits in its pharmacies. A lawyer involved in a number of dispensing error lawsuits in the US said: *“In fact, a lot of the people working in the pharmacy have about the same level of training as someone that would be working in fast food... Forgetting to put your fries in the bag isn’t going to lead to any harm, but obviously we’re dealing with something much more serious with medicine.”* [300]

A case involving a Lloydspharmacy staff member illustrates the risks inherent in using inadequately trained staff to carry out healthcare roles. [301] The same lancet was used to draw

blood from a number of patients being tested for diabetes at its Rhyl branch. This graphically illustrated a fundamental lack of understanding of basic clinical practice.

It has been recognised that the routinisation / “McDonaldisation” of work in large bureaucratic organisations, such as the large corporate multiples operating in community pharmacy, leads to reduced professional autonomy and may lead to deskilling of the workforce. [302] [303] Corporate businesses may see a profit benefit in keeping the costs of the pharmacist and pharmacy technician workforce as low as possible and either promoting, or allowing to continue, the perception that pharmacy technicians in the community sector are ready to take on new responsibilities. Yet, even the APTUK, a leadership body for pharmacy technicians, recognises that there is no clear role definition. [104] It is difficult to understand how new responsibilities can be given to pharmacy technicians without first clearly defining the role - unless that role is being promoted with a view to reducing the scope of pharmacists’ roles in order to reduce labour costs for employing organisations and ultimately for the government, irrespective of the risks to the public.

The lack of traction in the regulation of pharmacy technicians is clearly demonstrated by the fact that only 27% of pharmacy technicians called before a GPhC fitness to practise committee hearing actually attend, with many apparently attaching so little importance to their registration that they simply prefer to find another job. It may be easier and more convenient for such registrants to find other work – with the potential for higher pay and without responsibilities to patients – than to attend the hearing. In addition, the fact that only 23% of pharmacy technicians called before a hearing work in the community sector (compared to 87% of pharmacists called before a hearing) is surely cause for alarm. It suggests that regulation of community pharmacy technicians is suboptimal.

Patients should always expect to consult with a healthcare professional when important decisions are being made about their treatment, because only healthcare professionals are suitably placed to make complex decisions based on individual patient requirements. The public must be confident that the standards that healthcare professionals are continually required to meet enable them to safely assume such responsibility. If there is a failure, the public can fall back on professional regulation as a remedy. As outlined elsewhere in this report, the public can only enjoy a very limited reliance on the regulation of pharmacy technicians - a cause for considerable concern. Policy makers, insofar as they consider the rebalancing of roles and responsibilities between pharmacists and pharmacy technicians, are urged to proceed with great caution.

9.3 Acting professionally or being a professional: causing confusion through the incorrect use of terminology

The GPhC, the DoH and others have started to refer to pharmacy technicians as professionals. Having used various objective measures to inform its view, the PDA believes that this is inappropriate. The use of the word 'professional' as an adjective (being professional) is altogether different to its use as a noun (being *a* professional) and the word carries different meanings in each case.

Definitions of the noun "professional" found in English dictionaries, in sociological literature and elsewhere, and from the UKIPG and the HCPC, indicate that pharmacy technicians have not achieved professional status. An exploration of the level of training possessed by the group, the genesis of the group's development and registration with the GPhC, the group's approach to attending fitness to practise hearings, the inability of the regulator to gain traction through sanctions for misconduct (due to the relatively low salaries paid to pharmacy technicians) and the differences between pharmacy technicians and pharmacists (see Appendix B) are worrying factors. These, coupled with a lack of a properly representative body for pharmacy technicians, are among

the factors which demonstrate that reference to pharmacy technicians as professionals not only lacks justification, but has the potential to mislead the public about the extent to which the group's capabilities could be relied upon and ultimately poses a risk to patients.

Reliance upon the fallacy that the creation of a statutory list automatically bestows upon everyone on it the designation and status of a healthcare professional is a notion that has plagued pharmacy since 2011. This common parlance and the accompanying flawed philosophy that has emerged in government and pharmacy regulatory circles has held back the intelligent debate about skill mix and the future of pharmacy practice that should be had within the profession.

Public officials in government bodies who influence pharmacy in the UK, pharmacy organisations, representative bodies and in particular the GPhC, must not only recognise the vagaries of the current approach, but they must consciously apply this knowledge and act in a more responsible fashion to ensure that it does not diminish public safety when policy on pharmacy workforce and skill mix is being developed.

9.4 Qualifications and responsibilities

The initial training and qualification required to register as a pharmacy technician – NVQ level 3 – is at a low level and arguably insufficiently rigorous for a healthcare technician. It is lower than that required by healthcare technicians in other professions, and lower than that required by pharmacy technicians in many other countries. Pharmacy technicians' NVQ level 3 requirement is equivalent to that for dental nurses, whose duties include helping out on reception, tidying the surgery and sterilising instruments.

Furthermore, 73% of pharmacy technicians in the UK have not even achieved this level of qualification, since they registered via a 'grandparent clause'. Those registered via the

grandparent clause were not required to have any academic qualifications of a fixed minimum national standard to prepare them for the responsibilities of being regulated individuals. They required only those qualifications that they had previously undertaken to enable them to carry out technical aspects of work in the pharmacy (outlined in Chapter 3). Pharmacists countersigning this grandparent clause may have been under the impression that either they had little choice for fear of employer reprisal, or that its only purpose was to maintain the *status quo* in terms of simply codifying the relatively limited duties carried out by members of staff probably previously referred to as “dispensers”. The clause which was countersigned was of limited meaning in any case, given that no clear definition of the pharmacy technician role was provided to signatories. The reliance that can be placed upon the grandparenting authorisation is further undermined by the absence of any record of any assessment having been conducted, by either the RPSGB (the previous regulator) or the GPhC, that the qualifications of grandparented individuals were suitable to allow those holding them to work as pharmacy technicians.

Pharmacy staff in other countries in roles supporting the pharmacist, as pharmacy technicians do in the UK, are generally more highly qualified, often up to degree level. They will often carry out more demanding clinical roles, but where this is the case, as in Denmark, the Netherlands and Sweden, they are often supported by superior clinical governance and risk management systems. The widespread and routine use of clinical information about the patient accompanying the prescription, barcode matching as an integral part of the dispensing process and original pack dispensing, as practised in these countries, remain some way off in the UK.

Adopting a safe culture was an important prerequisite for the development of pharmacy technician roles in these European countries, and their role descriptions had been clearly defined. There are also far more staff working in these European pharmacies, making the proper deployment of staff and supervision of their activities feasible. A much greater focus on safety culture, through the use of technology, for example, and a highly-specific definition of the

pharmacy technician's role, are necessary in the UK before the pharmacy technician's role can be safely developed in the community pharmacy setting.

There is a lack of clarity about exactly what pharmacy technicians in the UK should be responsible and/or accountable for and guidelines remain vague. There is no reference to the term 'accuracy checking technician' in law, for example, and the role can currently be filled by an unregistered, and therefore unregulated, individual. There are only a limited number of precedents in civil and criminal law to suggest the level of liability that pharmacy technicians might experience if cases go to court.

To date, there is little or no evidence to suggest that granting pharmacy technicians additional roles would free up time for pharmacists to deliver patient-facing services.

9.5 Pharmacists' and pharmacy technicians' views on PGDs

Pharmacists' reaction to the suggestion that pharmacy technicians might be granted one particular extended role – that of delivering PGDs – was one of disbelief. There was strong agreement that that such a role could not be delivered without compromising patient safety. Just 1% of community pharmacist respondents to a PDA survey thought that such a proposal would improve patient safety. Pharmacists expressed concerns about pharmacy technicians' qualifications and the level of responsibility and accountability they would have and accept if such an extended role was developed.

9.6 Sectoral differences in the roles of pharmacy technicians

There are clear distinctions between hospital and community practice for pharmacy technicians, and inferences taken from one sector cannot be applied to the other. It is important to note that

hospital pharmacy technicians account for only 21.2% to 39% of the workforce, while those in community represent 53% to 67.4% (see Appendix B). [296] [201]

The majority of pharmacy technicians, mainly working in the community pharmacy sector, carry out a multitude of technical dispensing tasks. A much smaller number, mainly working in secondary care, perform more specialised roles requiring higher levels of clinical expertise.

While a recent RPS report cites numerous examples of high level pharmacy technician practice in the secondary care sector, which is to be welcomed and built upon, the Society's Professional Standards for Hospital Pharmacy Services only specifically mention pharmacy technicians once, and even then only as an example to suggest that accuracy checking pharmacy technicians may be part of the skill mix in hospitals. [298] [299] The conclusion to be drawn from this is not that the standards need to be rewritten, but rather that it suggests that this specialist practice is not yet an integral part of nationally-recognised standards, even in secondary care. Specialist practice among pharmacy technicians appears to be benefiting patient care, but is currently only carried out by highly-qualified pharmacy technicians in specialist secondary care centres, as part of services designed to meet specific local needs, or in some cases in primary care pharmacy settings.

These advanced practitioners are very different to the generalists found in most community pharmacies and hospital dispensaries. Pharmacy technicians working at this advanced level are not representative of the 24,551 registered pharmacy technicians who practise across the different sectors of pharmacy and with varying levels of expertise. [304]

Pharmacy technician practice in hospitals, in terms of training, qualifications, salary, status and structured career framework, is reasonably well developed, as well as being deeply established and well recognised. However, in the community pharmacy setting, these markers are almost

non-existent and there are very few signs that any of these will be established and recognised at any point in the near future.

9.7 The development of pharmacy technician roles in community pharmacy

An improved, enhanced career structure, as outlined in Chapter 8, would allow the more specialised and localised practice currently seen in secondary care to develop and flourish. It would also encourage higher standards in community pharmacy. This could only succeed, however, if the development of a structured career framework for pharmacy technicians arose as a consequence of a similar developmental programme, structured framework and role enhancement having been implemented for pharmacists in community pharmacy. If (and only if) this had been implemented, then specialist services using highly-skilled and qualified pharmacy technicians could be developed in specialised community pharmacy practices, according to local need. The emergence of such a framework based on quality, skills, qualifications and experience and with commensurate salary levels could ultimately help pave the way for a greater transfer of some of the tasks seen in the community pharmacy setting from pharmacists to pharmacy technicians (as proposed in the Scottish Government's 'Prescription for Excellence' vision for pharmacy, for example). [19] Such a framework may already exist in exceptional situations in community pharmacy, but does not exist on any scale large enough to support a national policy on transfer of roles from community pharmacists to community pharmacy technicians.

Those pharmacy technicians currently performing important - but relatively routine - tasks in community pharmacy could continue to do so at **practitioner** level, but the ability to enhance their skills, responsibilities and remuneration would be a viable option for pharmacy technicians via advancement to the **advanced practitioner** level. This nationally-recognised structure would apply also to community pharmacists, and as a consequence it would make the career pathways for both pharmacists and pharmacy technicians - particularly within community pharmacy practice

- more attractive, leading to an improved standard of practice, better retention of staff and ultimately higher standards of care for patients.

The higher standards and regulatory traction gained through such an improved system would enhance public protection and allow pharmacy technicians as an occupational group to develop and flourish, at the same time as maintaining high levels of patient safety. Patient care would improve as pharmacy technicians were enabled to maximise their skills and develop elements of clinical practice that were within the boundaries of their competence. Appropriate use of skill mix would further allow pharmacists to develop their roles in pursuing higher standards of patient care, and enhance the public perception and recognition of pharmacy as a whole.

10 Overall recommendations

This Chapter contains overarching, high-level recommendations. More detailed recommendations – which establish how these should be achieved – are made at the end of each of the Chapters 1 to 8; these should be read separately.

1. New roles for community pharmacists need to be fully scoped out, including clinical governance, training and funding considerations, and integrated into the Community Pharmacy Contractual Framework and NHS patient pathways and/or enhanced service specifications, before extended roles for pharmacy technicians can be considered. This is an essential prerequisite to delivering effective skill mix within community pharmacy, to make best use of the existing skills base and to develop a nationally-recognised skills escalator and career framework for the pharmacy profession. Pharmacy policy makers should take note of the lessons learned, and the examples set, by the dental profession and the New Ways of Working programme. This issue is less pressing, but still relevant, in the hospital pharmacy sector. In this sector, nationally-recognised career structures are already in place for both pharmacists and pharmacy technicians. Alongside this, the hospital pharmacy sector also benefits from the infrastructure, clinical governance measures, training and expertise already in place to allow pharmacists to safely and effectively deliver a range of extended roles, by appropriate delegation of activity to pharmacy technicians, who in turn see their roles extended.
2. Additional dispensary support must be available to support pharmacy teams before the role of the community pharmacy technician can be safely extended. Essential clinical governance improvements include the integration of bar-code checking into the dispensing process, the regular availability of and an increased degree of reliance upon clinical

information communicated with prescriptions, improved staffing levels, original pack dispensing and the proper decriminalisation of dispensing errors. These improvements could enable the benefits of the extension of the role to be realized.

3. The regulated status of pharmacy technicians, which currently appears tenuous, must be strengthened. Many pharmacy technicians are unaware of the implications of being on a public register and the group has a relatively weak leadership body. Low salaries and low-grade qualifications all contribute to a lack of regulatory traction and must all be improved if the regulator is to be able to ensure public protection for the activities of pharmacy technicians.
4. To avoid misleading the public, causing confusion and creating misplaced confidence in pharmacy service provision, the term 'professional' as a noun must not be used in reference to pharmacy technicians. Public officials in government bodies who influence pharmacy in the UK, pharmacy organisations, representative bodies and in particular the GPhC, must not only recognise the vagaries of the current approach, but they must consciously apply this knowledge and act in a more responsible fashion to ensure that it does not diminish public safety when policy on pharmacy workforce and skill mix is being developed.
5. Community pharmacy technicians would have a greater sense of belonging to the regulated group, and patients would benefit from a better skill mix, if community pharmacy technicians had a clearly-defined practice-related career structure. This would reward additional skills, qualifications and experience with extended roles and career and salary enhancements. A suggested career structure which relies upon **practitioner**, **advanced practitioner**, **specialised practitioner** and **established specialised practitioner**

levels, is recommended for both pharmacy technicians and pharmacists - as detailed in this report.

6. Lines of accountability and responsibility within the pharmacy must be more clearly defined, with clearly outlined and delineated job descriptions and individual responsibilities. The role of the 'accuracy checking technician' and 'dispensing technician' for example, must be clearly defined in regulatory policy.

7. The training and qualifications of pharmacy technicians must be improved in order to raise professional standards and help safeguard the public. It is questionable whether the current NVQ level 3 requirement to join the public register is sufficiently demanding and whether the syllabus adequately covers some of the fundamental safety, professional, clinical governance and ethical issues with which all pharmacy technicians should be familiar. Of concern is that the GPhC has agreed to remove this syllabus entirely, which will take effect in training courses from September 2018. [71] [72] [73] While 73% of pharmacy technicians remain registered under a grandparent clause, there can be no guarantee of uniformity of qualification and therefore knowledge.

8. The roles of pharmacists and pharmacy technicians must be clearly defined before suitable initial education and training requirements can be designed. However, to assure public safety, the training requirements of pharmacy technicians must be aligned to those of pharmacists in certain respects. This should include minimum level qualifications as an entry standard, formal progress reports during the training period and direct monitoring and accreditation of the training in situ by the regulator. This should be supported by

protected training time and a component of regular day release for training and study (one day per week minimum over two years). A registration exam set by the GPhC would go some considerable way towards achieving uniformity of standards and would give the regulator greater control over such standards.

9. Buy-in from both pharmacy technicians and pharmacists must be secured before any changes can be proposed to the current roles. Pharmacy technicians, on the whole, currently appear unwilling to develop their roles and unsure of what the implications might be. It is clear that the majority of those who would even consider extended roles would only be likely to do so on the basis of improved salaries, additional training and highly-specific job descriptions and lines of accountability and responsibility. Pharmacists also appear unsure of the ability of pharmacy technicians to take on more demanding work as things stand. If pharmacists remain responsible for aspects of the work of pharmacy technicians, then they must be able to be confident in their ability and the clinical governance systems supporting this work. For skill mix to develop, all members of the pharmacy team must 'buy in' to new models of working.
10. A national and sustainable funding model for pre-registration pharmacy technician training must be developed. No developments to skill mix can be considered without a solid foundation in sufficient numbers of well-trained pharmacy technicians to take on new roles.
11. The development of the roles of pharmacists and pharmacy technicians must be led by the profession and not by civil service edict which lacks the clinical and professional mandate for change. This is in line with the recommendations of the Francis inquiries in to the Mid

Staffordshire NHS Foundation Trust. [8] [9] Policy makers must establish whether community pharmacy technicians are - or will ever be - supportive of their proposals, by engaging with those working at the coalface.

11 Appendices

11.1 Appendix A: Differences between pharmacy professionals and pharmacy technicians

	Pharmacists	Pharmacy Technicians
Minimum age (effective)	23	18
Entry requirements for initial education and training course	GPhC guide: A-B grade A-levels in chemistry and two further A-levels in either biology, mathematics, or physics. Mandatory GCSEs in mathematics and English language at grade C as a minimum. [305]	GPhC guide: equivalent of four GCSEs at Grade C and above, including mathematics, English language, science and one other subject. None mandatory. Determined by employer. [107] Minimum of a level 2 qualification to be introduced in training courses from September 2018, effective to those who will join the register from September 2020. [71] [72] [73]
Registration with a regulator in the UK	Registered with the GPhC in England, Scotland and Wales and by the PSNI in Northern Ireland	Registered with the GPhC in England, Scotland and Wales Not registered in Northern Ireland

	Pharmacists	Pharmacy Technicians
Mandatory registration introduced	1852 [306]	2011 [92]
Number of registrants (GB)	56,555 as at February 2017 [304]	24,551 as at February 2017 [304]
Registration fee (annual renewal)	£250 [307] based on the cost of regulation	£118 [308] based on the cost of regulation
Postnominals	MPharm on completion of degree	No post-nominals
% Grandparented	None	73% (as at April 2017)
Regulatory traction	22% do not attend fitness to practise hearing	73% do not attend fitness to practise hearing
Regulatory traction	90.5% of fitness to practise cases closed [55]	9.5% of fitness to practise cases closed [55]
Regulatory traction	80% of determinations in fitness to practise cases	20% of determinations in fitness to practise cases
Average salary	£37,880 median in 2016 (varies by role and location) [3]	In community, highest proportion (41.7%) in the £14,000-£17,999 band. In hospital, highest proportion (79.2%) in the £18,000-£21,999 band. [5]

	Pharmacists	Pharmacy Technicians
Distinction of role	Role is distinguished in medicines law and in SOPs in community pharmacy	Role not distinguished from that of a dispensing assistant in Medicines Act or in many community pharmacy SOPs and job adverts. ACT role not legally defined.
Specialism of role	Role can be highly specialized	Role rarely specialized and if so, at a lower level
Transferability of role	Role transferable between sectors immediately post-qualification	Role not easily transferable post-qualification due to nature of experience
Professional leadership body / leadership body	Established professional leadership body	No credible representative leadership body The APTUK represents 6% of the group [104]
Notification of regulator in the event of a criminal offence	Category 1 notifiable profession (until 10 March 2015 when notifiable occupations scheme discontinued)	Was a Category 2 notifiable occupation (until 10 March 2015 when notifiable occupations scheme discontinued)
Training	Four-year full-time master's degree (QCF level 7)	Minimum two-year part-time NVQ3

	Pharmacists	Pharmacy Technicians
		Mostly done in own time (distance learning / community) or 1 day per week (FEC / hospital)
Training	Modular exams and assessments	May not involve any exams
Training	Exams invigilated	Some exams/assessments conducted in-pharmacy during working hours and exams/assessments may be open to on-line cheating, collusion or plagiarism [5]
Training	1-year pre-registration training with tutor supervision and competency assessment	No comparable pre-registration training period
Training	Pre-registration tutor has to be registered and practising for 3 years in that sector [309]	Designated educational supervisor may be a pharmacist or pharmacy technician with no minimum experience level (since 2010). [109] [108] GPhC recommends that supervisor is chosen by

	Pharmacists	Pharmacy Technicians
		employer, who may be a non-pharmacist. [108] [109] 2 years' work experience must be supervised by a pharmacist but GPhC will allow pharmacy technicians to supervise in courses commencing from September 2018. [110] [310] [71] [72] [73]
Training	Pre-registration trainees must have a designated tutor	Educational supervisor is only a recommendation, not a requirement [109]
Training	Objective, structured clinical examinations (OSCEs) commonly undertaken as part of initial education and training [311]	OSCEs are not currently a recommended part of pharmacy technician training
Training	Tutor assessment and signoff required at 13, 26, 39 and 49 weeks. Cannot sit exam unless signed off as satisfactory at 39 weeks.	No periodic tutor assessment in the same manner. No requirement to submit progress reports to the GPhC.

	Pharmacists	Pharmacy Technicians
	Reports sent to GPhC if assessed as unsatisfactory.	
Training	Premises approval required in order to deliver training	No premises approval required
Training	Government-funded placement	Funding sourced from employer or trainee
Training	Supernumerary placement	Training on the job, part of staff team
Training	Protected training time more likely	Many report not having protected training time, particularly in community pharmacy [5]
Training	Pre-registration exam – one 2-hour calculations exam, one 2.5 hour professional and clinical exam [312]	No pre-registration exam
Training	Standards for initial education and training include: <ul style="list-style-type: none"> • The standard itself • Criteria to meet standard • Evidence required 	Standards for initial education and training do not specify the evidence required to meet the standard and do not provide guidance on meeting it

	Pharmacists	Pharmacy Technicians
	<ul style="list-style-type: none"> Guidance on meeting standard 	
Training	Standards for initial education and training include an indicative syllabus	GPhC to remove the indicative syllabus for pharmacy technicians from courses starting from September 2018 onwards [71] [72] [73]
Training	GPhC directly accredits course provider (University) in situ	GPhC recognizes awarding body and in some cases accredits the qualification, but does not accredit course provider in situ at the training site
Training	Includes descriptions of the expectations of professionals and requires pre-registration graduate to strive to adhere to Standards of Conduct, Ethics and Performance (now called Standards for Pharmacy Professionals)	No description of the expectations of professionals and no reference to Standards of Conduct, Ethics and Performance (now called Standards for Pharmacy Professionals) specified in initial education and training standards 2010.

	Pharmacists	Pharmacy Technicians
		New standards will take effect in courses starting from September 2018 onwards. [71] [72] [73]

11.2 Appendix B: Pharmacy technicians in the hospital and community pharmacy settings – key differences

Issue	Hospital pharmacy	Community
% of workforce – sector of practice	21.2% to 39% [296] [201]	53% to 67.4% [296] [201] 73.8% of community pharmacy technicians in large multiples, 6.7% in medium-sized multiples, 3.2% in supermarkets, 3.6% in small chains and 13.7% in independents [313]
	N.B. a GPhC registrant survey in 2013 indicated that 39% of pharmacy technicians work in hospital pharmacy, 53% work in community pharmacy and 6% work in primary care, but the response rate may have varied by sector and only 62.6% of all pharmacy technicians responded. There was no apparent attempt to evaluate the response rate by sector. [296] A paper published in 2011 by the Centre for Workforce Intelligence (CfWI) stated that around 66% of pharmacy technicians work in community and around 23% work in hospital. [201] An article published in the Pharmaceutical Journal in 2012 suggested that 21.2% of pharmacy technicians work in hospital pharmacy and 67.4% work in community pharmacy, based on responses to a census in 2010. [313] However, the reference sources for the article in the Pharmaceutical Journal and the CfWI paper pre-date the final deadline for pharmacy technician registration with the GPhC (2011). [201]	
% of workforce – sector of training	21.3% trained in hospital [5]	75.9% trained in community. [5]
Salary	Significantly higher than in community as a trainee and when qualified [5]	Significantly lower than in hospital as a trainee and when qualified [5]

Issue	Hospital pharmacy	Community
	Highest proportion (79.2%) in the £18,000-£21,999 band [5]	Highest proportion (41.7%) in the £14,000-£17,999 band [5]
Academic ability	Trainees perceived as more academically capable [86] / higher calibre [104]. Individuals may be university qualified, e.g. in pharmacology [5]	Trainees perceived as less academically capable [86] / lower calibre [104]
Age	Those who trained in hospital were younger, with an average age of 30 and the majority (68.5%) under 30 [5]	The average age of those training in community was 37, with the majority (62.4%) being aged above 30 [5]
Distinction of role from other support staff	Greater job opportunities in hospitals [5]	Similar to or the same as a dispensing assistant [5]
Nature of role	More varied and more extensive [86] [104] [5]	Less varied and less extensive [5] [86] [104]
Role definition	Significantly more likely than those in community to believe that they have a clearly defined role [5]	Significantly less likely than those in hospital to believe that they have a clearly defined role [5]
Interaction with patients and the public	In the dispensary or on hospital wards with more advanced practice	In the dispensary or in some cases providing basic pharmacy services e.g. smoking cessation
Interaction with healthcare professionals	Trainees work alongside pharmacists and other healthcare professionals in hospitals [5]	Trainees work alongside pharmacists but don't tend to work alongside other healthcare professionals
Sector migration	Migration in first year post-qualifying from community to hospital (5.3%) may be due to higher pay, clearer job description and wider range of activities [5]	Migration in first year post-qualifying from community to hospital (5.3%) may be due to higher pay, clearer job description and wider range of activities [5]
Engagement with research	Higher in some cases [104]	Lower in some cases [104]
Membership of leadership body	The majority of the APTUK members (total membership 1380) are from the hospital sector, [104] estimated at two thirds of membership	The minority of the APTUK members (total membership 1380) are from the community sector, [104] estimated at one third of membership
Career framework	Development route based on role specialism across Agenda for Change bands 4 to 7	No defined route based on the role - management route only

Issue	Hospital pharmacy	Community
Initial Education and Training – length of course	Based on the responses from a survey of trainees, 97.7% completed knowledge qualification in two years or less; 2.3% took longer than two years. 99.2% completed the competence qualification in two years or less. [5] A separate study found that 86% who trained in hospital pharmacy had completed their training within two years [282]	Based on the responses from a survey of trainees, 48.2% completed knowledge qualification in two years or less; 51.8% took longer than two years. 51.8% also took more than two years to complete the competence qualification. [5] A separate study found that 41% who trained in community pharmacy had completed their training within two years [282]
Initial Education and Training – training contracts	Fixed term contracts for training so stricter boundaries on completing within two years May mean lack of performance management of trainees because trainees held to account by the fact that the contract would terminate if they didn't complete the course [5]	No fixed term contracts [5]
Initial Education and Training – induction	73% received an induction to their training programme (of some form). 16% did not receive an induction and 11% were unsure. [282]	43% received an induction to their training programme (of some form). 30% did not receive an induction and 27% were unsure. [282]
Initial Education and Training – course completion rate	Completion rates considered high	Large community pharmacy employers may report very low completion rates even within five or six years. It may be less than 50% completion rate and worse than for dispensing assistants or medicines counter assistants. Completion rates were considered to be high by most community pharmacies [5] though distinction needs to be made in future research between completion rates and pass rates
Initial education and training – course provider	Mostly Further Education Colleges (FECs) (78% for the knowledge qualification with 5.6% using a distance learning provider; 85.5% using an FEC or NHS hospital / NVQ	Almost all use distance learning providers – 92.9% for the knowledge qualification, with 5.6% using an FEC; 92.8% for the competency qualification with 6.5% using an FEC or NHS

Issue	Hospital pharmacy	Community
	<p>provider for the competency qualification with 13.7% using a distance learning provider). Almost half of NHS organisations were approved centres for the delivery of competence qualifications. Some used distance learning providers for one or both of the knowledge and competence qualifications. The majority of trainees in hospital would attend an FEC for a full day of study per week during term time over a period of two years. [5]</p>	<p>hospital / NVQ provider. The majority of trainees in hospital used an FEC to complete the knowledge qualification.</p> <p>The majority of those in community use a distance learning provider and complete their qualifications mostly in their own time [5]</p>
<p>Initial education and training – assessment of staffing levels at course provider</p>	<p>Awarding bodies assess physical resources and staffing levels when approving course centres to deliver training [5]</p>	<p>No staffing levels assessment in community pharmacy at individual sites in respect of pharmacy technician training [5]</p>
<p>Initial education and training – availability of specialist lecturers</p>	<p>FEC may have specialist lecturers in chemistry, biology and physiology, parenteral nutrition and aseptics and the actions and uses of drugs [5]</p>	<p>Distance learning does not benefit from specialist lecturers and tutors</p>
<p>Initial education and training – pharmacy technicians’ perspectives</p>	<p>Trainees using FECs or NHS hospital / NVQ providers for the competence qualification ranked significantly higher than distance learning providers in agreement that the content was relevant to their practise as a <u>trainee</u> pharmacy technician. Trainees using NHS hospital / NVQ providers for the competence qualification ranked significantly higher than distance learning providers in agreement that the content was relevant to their practise as a <u>registered</u> pharmacy technician.</p> <p>Trainees that used FECs had higher levels of agreement than distance learning providers in believing that the education provider cared about their progress and in believing that they received regular verbal feedback</p>	<p>Trainees using distance learning providers for the competence qualification ranked significantly lower than FECs or NHS hospital / NVQ providers in agreement that the content was relevant to their practise as a <u>trainee</u> pharmacy technician. Trainees using distance learning providers for the competence qualification ranked significantly lower than NHS hospital / NVQ providers in agreement that the content was relevant to their practise as a <u>registered</u> pharmacy technician.</p> <p>Trainees that used distance learning providers had higher levels of agreement than FECs in believing that there were an appropriate number of exams to complete and in believing that they received regular written feedback</p>

Issue	Hospital pharmacy	Community
	<p>from the education provider on the assessments they completed</p> <p>Pharmacy technicians that trained in hospital had significantly <u>higher</u> levels of agreement compared to respondents that trained in community to the statements:</p> <p>a I felt well supported by my employing organisation as a trainee pharmacy technician</p> <p>c I was well supported by my other colleagues in the workplace as a trainee pharmacy technician</p> <p>d My workplace had appropriate facilities (e.g. books; computers; internet access etc.) to help me complete the knowledge- and competency-based components</p> <p>e My employer cared about my progress</p> <p>g I had a good work-life balance as a trainee pharmacy technician</p> <p>Pharmacy technicians that trained in hospital had significantly lower levels of agreement compared to respondents that trained in community to the statement: "I felt isolated as a trainee pharmacy technician in my place of work" [5]</p>	<p>from the education provider on the assessments they completed</p> <p>Pharmacy technicians that trained in community had significantly <u>lower</u> levels of agreement compared to respondents that trained in hospital to the statements:</p> <p>a I felt well supported by my employing organisation as a trainee pharmacy technician</p> <p>c I was well supported by my other colleagues in the workplace as a trainee pharmacy technician</p> <p>d My workplace had appropriate facilities (e.g. books; computers; internet access etc.) to help me complete the knowledge- and competency-based components</p> <p>e My employer cared about my progress</p> <p>g I had a good work-life balance as a trainee pharmacy technician</p> <p>Pharmacy technicians that trained in community had significantly higher levels of agreement compared to respondents that trained in hospital to the statement: "I felt isolated as a trainee pharmacy technician in my place of work" [5]</p>
<p>Initial education and training – general support</p>	<p>FECs report conducting mock exams, holding ten-weekly reviews which have to be signed by the employer, extensive inductions (e.g. three weeks) about the job and hospital department, quarterly trainee appraisals, operating formal buddy and mentoring systems (where trainees were</p>	<p>Trainees have access to the British National Formulary (BNF), Drug Tariff and over-the-counter (OTC) sales booklets which are already available as standard in the dispensary. Computer access may be restricted to that already available for business use e.g. the dispensary computer. Internet access may be</p>

Issue	Hospital pharmacy	Community
	mentored by a pharmacy technician) and 'Trainee in Difficulty' policies where support is provided if a trainee hasn't got or met his/her supervisor. Trainees may have access to learning centres with books and computers, laboratory facilities, a hospital library and medicines information, role play, dispensary equipment for practice use. One FEC reported having to respond to emails within 24 hours. Trainees who had trained in hospital had significantly <u>higher</u> levels of agreement in believing their workplace had appropriate facilities than those who had trained in community. [5]	restricted to company-approved websites and its intranet, plus access via the trainee's smartphone. Trainees who had trained in community had significantly <u>lower</u> levels of agreement in believing their workplace had appropriate facilities than those who had trained in hospital. [5]
Initial education and training – trainee isolation	Teams larger, less isolation [86]	Teams smaller, greater isolation [86]
Initial education and training – work with other trainees and pharmacy technicians	Perception that trainees typically work alongside other trainees, pharmacy technicians and senior pharmacy technicians in hospitals [86] and may learn alongside them at FECs. [5] A separate survey of recently qualified trainees found that 74% in hospital reported that there were other pharmacy technicians training at the same workplace during their training period. [282]	A trainee is usually the only trainee, with rare exceptions, and does not work or learn alongside other pharmacy technicians. A lack of peer support was reported on distance learning courses compared to learning at FECs. [86] [5] A separate survey of recently qualified trainees found that 21% in community reported that there were other pharmacy technicians training at the same workplace during their training period. [282]
Initial education and training – trainee effort to succeed and retain job	Perceived greater effort to succeed and train job [86]	Perceived lower effort to succeed and retain job [86]
Initial education and training – funding of training	Training mostly funded by employer. Hospital trainees were significantly less likely to pay for their knowledge and competency qualifications than community trainees. [5]	Training mostly funded by employer but community trainees were significantly more likely to pay for their knowledge and competency qualifications than hospital trainees [5]
Initial education and training – protected training time for	Easier to establish protected time. Trainees in all NHS organisations could expect study	Challenging to establish protected time – may

Issue	Hospital pharmacy	Community
learning and networking	<p>time and this was often contracted, e.g. half a day per week. Trainees were supernumerary to other staff and treated separately for the purposes of annual leave. [86]</p> <p>12% received no study time. It was most common to receive more than 2 hours and up to 4 hours (48.9% of trainees). [5]</p>	<p>not have any at all. [86] Study time can be secondary to business needs and less likely during periods of annual leave. Usually not regular study time and less time than in hospital.</p> <p>33.2% of trainees received no study time at all at work, and it was most common to receive up to two hours per week (35.7%). [5]</p> <p>Independent pharmacies were more likely to provide protected training time than multiple pharmacies, with large multiples being the least likely. [282]</p>
Initial education and training – examination and assessment scope for cheating, collusion or plagiarism	<p>There is potential for lack of understanding on assignments where answers can be learned by rote and regurgitated, or copied [5]</p>	<p>Distance learning provider reported seeing colleagues assist the trainee during online examinations. [5] There is potential for lack of understanding on assignments where answers can be learned by rote and regurgitated, or copied. [5] Answers to national distance learning provider courses are available online</p>
Initial education and training – assessors	<p>Trainees using FECs for the competence qualification were significantly more likely to have a named assessor (96.8% had a named assessor; 3.2% said they didn't know) than those using a distance learning provider (75.3% had a named assessor; 19.2% said they did not). 90.8% of trainees using an NHS hospital / NVQ provider said they did have a named assessor. Assessors in FEC and NHS hospital / NVQ providers were significantly more likely to be pharmacy technicians than in distance learning providers.</p> <p>Trainees that used FECs and NHS hospital / NVQ providers had higher levels of agreement than those that used distance</p>	<p>Trainees using distance learning providers for the competence qualification were significantly less likely to have a named assessor (75.3% had a named assessor; 19.2% said they did not) than those using an FEC (96.8% had a named assessor; 3.2% said they didn't know). Assessors in distance learning providers were significantly more likely to be pharmacists than in FEC and NHS hospital / NVQ providers.</p> <p>Trainees that used distance learning providers had lower levels of agreement than those that used FECs and NHS hospital / NVQ providers that they had a good relationship with their</p>

Issue	Hospital pharmacy	Community
	<p>providers that they had a good relationship with their assessor(s), could ask questions to their assessor(s) when they required assistance and received regular verbal feedback from their assessor(s) on the assessments they completed.</p> <p>Trainees that used FECs had higher levels of agreement than those that used distance learning providers that the feedback they received helped to improve their competence</p> <p>Trainees who used FECs were more satisfied, overall, with assessors than those who used distance learning providers</p>	<p>assessor(s), could ask questions to their assessor(s) when they required assistance and received regular verbal feedback from their assessor(s) on the assessments they completed. 45.6% of trainees disagreed that they received regular verbal feedback from their assessor(s).</p> <p>Trainees that used distance learning providers had lower levels of agreement than those that used FECs that the feedback they received helped to improve their competence</p> <p>Trainees who used distance learning providers were less satisfied, overall, with assessors than those who used FECs</p> <p>Assessors working for distance learning providers did not typically have close contact with the trainees they assessed for both the knowledge and competence qualifications. Many trainees do not know the job title of their assessor and most had contact with their assessor(s) that was at a distance. [5]</p>
Initial education and training – supervisor training	Trainees work alongside qualified assessors in hospitals [5]	Supervisors may be untrained or may have completed an e-learning module on their role. The level of support that supervising pharmacists receive from their employers or education providers may be lacking in community. [5]
Initial education and training – time with supervisor	Pharmacists may have more time to allocate to trainees due to lesser staffing constraints [86]	Pharmacists may have insufficient time to allocate to trainees due to staffing constraints [86]
Initial education and training – work with assessor / supervisor	Qualified assessor would work alongside trainees in FECs. May accept witness testimonies from colleagues, relating to a	Assessment from a distance with distance learning providers, typically with no face to face contact with qualified assessor except for

Issue	Hospital pharmacy	Community
	task mapping to a competency. Testimonial could come from line manager or a colleague (e.g. a pharmacist or pharmacy technician). [5]	smaller providers. Some in large multiples had access to an assessor employed by the company, who could visit the pharmacy. Supervisor would work alongside trainee where distance learning provider used. Observations and testimonials relating to a task mapping to a competency could come from line manager or a colleague (e.g. a pharmacist or pharmacy technician) [5]
Initial education and training – examinations	Invigilated at FECs, sometimes by a lecturer. Verbal and written feedback from formative mock assessments for exam preparation. [5]	Distance learning done in pharmacy, supervised by a pharmacist, often during working hours. Online mock assessments may be done with automatic feedback. [5]
Initial education and training – employer / learning provider relationships	FECs appear to have closer relationships with individual NHS hospitals but relationships were less strong with community. NHS hospital relationships with distance learning providers were not as strong. This included holding regular partnership or educational group meetings. [5]	Distance learning providers have a close working relationship with employers. Larger distance learning providers would have more contact with employers – typically larger multiples – dealing with training leads rather than individual training sites, supervisors or trainees. Smaller distance learning providers, working with independents and smaller chains, worked more closely with individual sites and supervisors. [5]
Initial education and training – views on content	Hospital pharmacy technicians felt that initial education and training lacked clinical detail [87] and was not relevant to some ward-based roles. Training providers reported adding in additional modules to account for this. [5]	Community pharmacy technicians felt that initial education and training requirements were more advanced than was required. [87]
Initial education and training – overall satisfaction with experience in the workplace as a trainee	Significantly higher than in community [5]	Significantly lower than in hospital [5]

Issue	Hospital pharmacy	Community
Application of knowledge and competency learned during training	Less likely to be an issue than in community [86]	Trainees in community may just use a fraction of what they were learning and not understand why they were learning all the units in the qualifications. Not all components of learnt skills in knowledge-based training are effectively used in practice. Greater concern that less likely to retain required knowledge due to distance learning. [86] [104]
Financial / cost considerations	FECs preferred though more expensive [86]	Distance learning preferred due to lower cost. [86] FECs avoided due to higher cost of releasing a member of staff for training, though independents and smaller chains may opt for an FEC. [5]
Recruitment	May be easier due to higher pay [86]	May be more difficult due to lower pay [86]

N.B. FEC = Further Education College

11.3 Appendix C: Issues with the “Identifying the roles of pharmacy technicians” research study by the APTUK and the University of East Anglia

The “Identifying the roles of pharmacy technicians” study has been cited a number of times within this report. [104] Whilst it is recognised that there is a lack of research in this field, the PDA has reservations about the strength of conclusions which can be drawn from the study and the extent to which it can be used to support arguments about the future working of pharmacy technicians.

The research was conducted by the University of East Anglia (UEA) in collaboration with the Association of Pharmacy Technicians United Kingdom (APTUK) and published jointly by the two organisations. Three of the seven listed authors are UEA employees and one was the president of the APTUK.

Research scope

The research focused on what some pharmacy technicians wanted for the role, their perceptions of the duties they were performing, the role they would like to do in the future and the training they believe should be available to support it. The report featured proposals made on that basis in relation to the education and training available to support pharmacy technicians in a “wide variety” of roles.

Funding of the research

The report contains the following statement regarding the funding of the research: “*The research on which this report is based was commissioned and funded by the University of East Anglia*”. The University of East Anglia provides a range of accredited education and work-based learning programmes that underpin medicines management and the extended roles of pharmacy technicians.

Approach to the handling of quantitative and qualitative data

On page 14 of the report, it is stated that “*Equal priority was given to the qualitative and quantitative data*” – thus opinions from individuals potentially received equal weighting to the questionnaire returns from 393 respondents.

Sampling and the generalisability of data

The original aim of the study was to recruit up to 500 pharmacy technicians, including an even range of pharmacy technicians from a variety of pharmacy roles e.g. accredited checking, medicines management, from different pharmacy settings including community pharmacy, secondary care, pharmaceutical industry and pharmacy technician background, e.g. place of training, age, and sex. This sample size would have represented 2.2% of all pharmacy technicians.

In practice, 393 usable questionnaire responses were received.

Respondents were members of APTUK, which has a significantly greater proportion of hospital pharmacy membership than the overall UK pharmacy technician workforce. Two thirds of the APTUK’s membership are employed in the hospital setting, whereas around 21.2% to 39% of all UK pharmacy technicians work in the hospital setting – see Appendix B.

Almost two-thirds of usable responses came from hospital-based pharmacy technicians, 18% of responses came from pharmacy technicians working in community pharmacy and smaller numbers from primary care, general practice, education and training and ‘other settings’.

The development of research instruments

The methods section contains little information about how the questionnaire was developed. Rather than employing standard research practice of using previously validated questions from

earlier research, this report states: *“The questions in the questionnaire were devised in consultation with the board members of the APTUK”*.

The authors state that the questionnaire was piloted on 6 pharmacy technicians. The report states *“The responses to the questionnaires for the pilot study were not used in the main study because some changes were made to the questionnaire as a result.”* No further details of the pilot study, the original questionnaire or the changes made for the actual study are provided.

The wording of the answer options to two of the questions in the final questionnaire (which was included as an appendix to the report) is such that interpretations between respondents may have differed significantly.

Focus group administration and analysis

The authors intended to stage between four and six focus groups with six to eight participants in each group. Ultimately, four focus groups were staged with four, five, four and two participants respectively. 14 of the 15 focus group participants were hospital pharmacy technicians and one was a community pharmacy technician.

The focus group methodology and theme plan description is described as follows: *“A broad list of topics to be covered in the focus groups was developed.”* There is no information about the process used for identifying and considering potential topics for discussion or where they were drawn from.

The study used the technique of Interpretative Phenomenological Analysis – where the interpretation of the data is influenced by the researcher. [314] [315] [316]

Presentation of results

The presentation of the results included use of terms such as ‘some’ and ‘others’ and quoting of selected comments without supporting information to enable readers to gauge whether the comments were individual or came from a significant number of participants. This method of presentation – reporting specific quotes without providing quantification within the sample, is repeated throughout the results section (Sections 5.1.4.2, 5.2.2.3, 5.2.4.2, 5.2.6, 5.3.2.3, 5.3.4.2 and 5.3.5).

The report provides a number of tables (Tables 10, 12, 21, 22, 31, 32, 41, 51 and 61) comprising lists of examples of activities undertaken by pharmacy technicians. The tables do not provide numbers to enable readers to gauge whether these are core activities undertaken by most pharmacy technicians or comparatively niche activities undertaken by a small number of pharmacy technicians.

It appears that certain recommendations and comments from pharmacy technicians have been emboldened and emphasized in the report because they coincide with the views of the researchers; in addition to the use of Interpretative Phenomenological Analysis (which the report states allows researchers’ own knowledge of the subject to be included in the interpretation of focus group data, see above), the report states *“Some of the key comments have been emboldened by the researchers to highlight areas of particular need.”*

The wording on pages 43 and 44 suggests that responses were received from several community pharmacy-based pharmacy technicians during the focus groups. We understand one community pharmacy-based pharmacy technician took part in the focus groups.

Discussion

While each individual’s opinion is of course valued, due to the small and unrepresentative sample size, we feel it unwise to draw any firm conclusions from the results of the discussion.

11.4 Appendix D – Examples of potential cheating, collusion or plagiarism to pass pharmacy technician assessments

GPhC-commissioned research, published in 2014, included comments relating to the potential for cheating, collusion and plagiarism on pharmacy technicians' initial education and training courses. A representative from one of the awarding bodies of the qualifications commented: *"In terms of the quality of the output I now feel that it's a better quality because the learners have to learn, they have to revise and they sit this controlled assessment and they have to learn the information that they've been taught. Whereas with an assignment it could be internet research plagiarism from cut and paste and what have you, and I'm not quite sure of the depths of that learning."* [5]

A distance provider commented: *"If you've got an online test to do, then the pharmacist could be there, or somebody else could be there supporting, and maybe helping with the answers, and not realising...and because obviously they're not trained assessors, they're not trained in teaching, but they know the job, so they assume... that their member of staff understands something, and they actually don't. I have seen that before as well, where they're kind of almost given the answers, but their explanation isn't really that great. Also, when somebody's doing an assignment, and they're just writing it up and getting it sent off, again it could be something that they've kind of almost learnt by rote, and they're regurgitating an answer, but the understanding and practice isn't there."* [5]

Since 2011, trainee pharmacy technicians have asked a series of questions on pharmacy-forum.co.uk relating to online distance learning courses. A small number of such courses are undertaken by many trainee pharmacy technicians in the UK. There is an extensive set of responses to the assessment questions, all of which are publicly visible and indexed on online

search engines. This means that trainee pharmacy technicians completing the distance learning courses can find answers to these questions and could potentially plagiarize them word-for-word to help them pass their assessments, without having conducted their own research or developing their own understanding. Some of the suggested responses to exam questions indicate what grading was obtained for that response. Communication also appears to occur through private messaging.

In one example, it is clear that support is being given with a functional mock exam. Whilst the assistance given in this case might not affect the final exam grading, it could well undermine the quality of learning for other trainees and provide the educational supervisor with a false sense of the trainee's competence.

All forum posts were checked on 22 March 2018 and were publicly accessible at this time. On this date, the forum threads listed in this Appendix had been viewed a combined 61,483 times when checked on 22 March 2018.

11.4.1 List of additional abbreviations appearing in this appendix

AC	Aqueous Cream
ASAP	As soon as possible
BP	British Pharmacopoeia
BPC	British Pharmaceutical Codex
COSHH	Control of Substances Hazardous to Health
EDC	Emergency Drug Cupboard
GUM	Genitourinary Medicine
ILP	Individual Learning Profile
m-RNA	Messenger Ribonucleic Acid
OMG	Oh my god (slang, expression of surprise)
OP	Original Poster
PPA	Prescription Pricing Authority
PPI	Proton Pump Inhibitor

SMART	Specific, Measurable, Achievable, Realistic, Timed
SP	Specials (a prescription pricing endorsement for Unlicensed Specials and Imports)
UAC	m-RNA codon for tyrosine (amino acid)
UAU	m-RNA codon for tyrosine (amino acid)
WSP	White Soft Paraffin

nvq 3 npa qcf module 5 section 3 question 11. [317]	
30th, October 2011, 02:49 PM FM1	have done most of my module today.could someone define what legal classification of a controlled drug fentanyl patch is? i know it is a cd and that is a schedule 3.what is the definition of legal classification?have not got mep in hand.can i log on to mep site but dont belong to rpsg so is there a student log on number.cheers.lilo
1st, November 2011, 01:11 PM FM1	fentanyl cd class 2.but diazepam schedule 4.thought they were looking for different answer the word classification confused me,hope this helps others.
21st, April 2017, 09:09 AM FM2	Looking for help! I too am doing my progression assessment and stuck on module 5 section 3 question 13.... Staring at it for ages now and can't see any prescribing problems?
7th, January 2018, 02:26 PM FM102	I'm on this question too, so basically the schedule of the medications??

Module 6 NPA [318]	
23rd, April 2012, 08:32 PM FM3	Hi all, I'm new to this site and am really struggling with module 6. It's due in next week and am getting no help from my pharmacist at all. I would be very grateful if a technician currently working through their NVQ3 or has done it would be kind help me through it. Thanks in advance (:
23rd, April 2012, 09:07 PM FM4	Hi 😊 what do u want to know?what question? I just finish module 6.I will try answer up question.
23rd, April 2012, 09:13 PM FM3	may i private message you?
23rd, April 2012, 09:14 PM FM4	Yeah Sure 😊
23rd, April 2012, 09:39 PM FM5	Hi FM3. Which bit are you struggling with? X
23rd, April 2012, 09:59 PM FM3	Hi FM5 ive just private messaged you 😊
23rd, April 2012, 10:20 PM FM6	hi ive just completed the 1 st year of the course so if you need any help and need someone to point you in the right direction then im happy to help
24th, April 2012, 08:30 PM FM7	Hi everyone, I don't understand case study 1 question 1,2+3 complete slides below with a description of 3 key aspects of each role ie pharm tech, disp assist, medicines counter assist. What do they want is it a list of duties?? Can anyone help me I thank you very much in advance 😊
24th, April 2012, 08:44 PM FM8	1 Last edited by FM8; 3rd, November 2012, 07:43 PM

30th, April 2012, 08:27 PM FM9	Hi all I am new to this but could someone please help me on module 6 case study 1 as my pharmacist does not really help me at all thank you very much
5th, May 2012, 05:51 PM FM10	Hi all..! I am currently working on module 6 and would really like a buddy that is at the same place as me so we can bounce ideas etc and help when stuck.. I am getting myself behind as I get little time at work and my pharmacist is newly qualified and not too sure on most things.. 😞 please help!!!
5th, May 2012, 06:08 PM FM11	Originally posted by FM10 View Post Hi all..! I am currently working on module 6 and would really like a buddy that is at the same place as me so we can bounce ideas etc and help when stuck.. I am getting myself behind as I get little time at work and my pharmacist is newly qualified and not too sure on most things.. please help!!! Hi, I'm on level 6 just now. Trying to finish off my assessment this weekend. Nice way to spend a bank holiday!! It would be great to have someone to bounce off, as I'm in the same boat with a newly qualified pharmacist. So please feel free to bounce as much as you like lol! Caroline xx
6 th , May 2012, 08:48 AM FM10	I sent u a pm XXXXXXXXXX! 😊 i need to bounce already! Lol...
6th, May 2012, 08:28 PM FM10	I am on module 6 and happy to share ideas/thoughts with everyone.. If you are stuck PM me and we can help each other
7th, May 2012, 06:36 PM FM11	Can anyone help the CPD thing? Need to do a pretend one. Is there any examples online anywhere?
17th, June 2016, 08:11 PM FM12	I'm stuck on the 4 main categories of effective questioning and 5 factors that can inhibit Sarah's learning :-{

Factors that can affect stability of medicines [319]	
9th, June 2012, 04:53 PM FM13	Hi ! I am currently doing module 12 of my nvq3. One of the questions is "Explain three factors that can affect the stability of medicines when dispensing from bulk packs". Is this referring to factors such as light, heat, oxygen e.t.c. ??? Any help would be gratefully received, really struggling with this module for some reason 😞. XXXXX
9th, June 2012, 07:21 PM FM13	Yes. FM13
3rd, July 2012, 10:15 PM FM14	I'm working through this module as well and unit 3 and struggling how are you getting on ? I'm way behind as well lol
4th, July 2012, 01:26 PM FM15	Originally posted by FM13 View Post Hi ! I am currently doing module 12 of my nvq3. One of the questions is "Explain three factors that can affect the stability of medicines when dispensing from bulk packs". Is this referring to factors such as light, heat, oxygen e.t.c. ??? Any help would be gratefully received, really struggling with this module for some reason . XXXXX Are you not taking this course under the supervision of a pharmacist? You are supposed to get this sort of information from/discuss these problems with them....
12th, December 2012, 10:08 PM FM16	Yeah, pretty much. Humidity and so on can cause hygroscopic drugs to adsorb moisture from the air e.g. dispersible aspirin.

27th, August 2015, 07:32 AM FM17	Main factors with some examples- 1-Light when affect photosensitive substances like Zantac . 2-Temperature when affect heat sensitive or protein substances like Insulin 3-Humidity when affect dry substances like most of drugs when absorbed
27th, August 2015, 12:44 PM FM18	4-Germs

nvq3 module5, question 3. [320]	
22nd, March 2013, 10:36 AM FM19	Can anyone help me please. How do I compare the products listed on the black list, acbs and sls ? I know what they all are, but not sure how to compare. Thanks in advance.
22nd, March 2013, 10:54 AM FM13	Black List....not allowed on NHS acbs... Advisory Committe on Borderline Substances.....usually used on foods. SLS... Sorry, I have forgotten.....required when product not normally allowed but prescribed where good medical reason.....usually Viagra etc. As you are rich. my usual fee is two guineas. FM13
22nd, March 2013, 11:15 AM FM19	<i>Originally posted by FM13 View Post</i> Black List....not allowed on NHS acbs... Advisory Committe on Borderline Substances.....usually used on foods. SLS... Sorry, I have forgotten.....required when product not normally allowed but prescribed where good medical reason.....usually Viagra etc. As you are rich. my usual fee is two guineas. FM13 defo not rich..lol. Sls selected list scheme. I thought this would be the answer, shouldn't doubt myself.....thank u
24th, March 2013, 03:38 PM FM20	Hi FM19 The following link gives you a comprehensive breakdown and will answer your question nicely. Allowed / Disallowed Items · Funding & Drug Tariff · PSNC FM20
28th, March 2013, 10:25 AM FM19	<i>Originally posted by FM20 View Post</i> Hi FM19 The following link gives you a comprehensive breakdown and will answer your question nicely. Allowed / Disallowed Items · Funding & Drug Tariff · PSNC FM20 thanks so much ppl.
28th, September 2013, 06:58 PM FM21	Hi can anyone advise help on module 5
29th, September 2013, 09:20 PM FM19	FM21, I have sent u a message

nvq3 module 14 [321]	
29th, March 2013, 10:11 PM FM22	hi all How u all get it on with module 14? I'm stuck with clobetasone and white soft paraffin questions,how to dispensed etc. Please pm. thanks

30th, March 2013, 01:45 PM FM13	Asked several times before. Search the forum. FM13
30th, March 2013, 09:54 PM FM22	I can only find on how to endorsed. But i don't know how to dispensed this rx? In my pharmacy we order this item as a special. I'm confuse ,Should i tell them how i order this item?? FM22
31st, March 2013, 08:15 AM FM13	https://www.pharmacy-forum.co.uk/newbie-questions/7398-help-how-endorse-prescription.html What did you search on? FM13
31st, March 2013, 10:32 AM FM22	clobetasone , (it's only how to endorsed ,not how to make) I still don't know how to make this item FM22
31st, March 2013, 11:28 AM FM13	OK. Principle is known as levigation. You first of all find a slab (Plastic, ceramic or glass, could use a large tile). Will also need suitable spatula. Take the smaller quantity, ie the weighed clobetasone ointment and add an approximate equal quantity of WSP or whatever diluent being used. Use the spatula to make smearing movements across the slab and then to scrape up the film and repeat. If a solid ingredient being incorporated then the smearing is a form of milling. Very important if adding Zinc Oxide or Dithranol where lumps to be removed. Then add another equal quantity of WSP and repeat until all thoroughly mixed. Take a clean dry glass pot and press the ointment into the base and sides of the pot to prevent unsightly air bubbles. Fill the pot and lastly rotate with the spatula touching the surface to leave a smooth finish. Wipe away any ointment clinging to the threads and outside and apply lid. Polish with soft cloth and label neatly. Add an expiry date.....usually month for ointments. Icing a cake nearest domestic equivalent. FM13
31st, March 2013, 01:21 PM FM22	thank you FM13 FM22
31st, March 2013, 05:17 PM FM23	The question has stumped me as well! It says that we have to include calculations, weighing and dispensing procedures! Same as FM22 I would have to order this from the specials company! X
31st, March 2013, 05:30 PM FM22	how did u include weighing FM23?? Shall we pm.x
31st, March 2013, 05:31 PM FM24	Hi FM23, yes I would have to order it too, we did have similar question back in module 12, just write out how you would dispense it without ordering it as a special, how are you getting on x
31st, March 2013, 05:33 PM FM22	hi XXXX. how did u do weighing? I mean how to describe this.
31st, March 2013, 06:38 PM FM24	Have you done module 12? In there you it tells you of the requirements, that have to be followed to extemporaneously dispense in the pharmacy, and you had to do an activity on this. When I wrote mine out for mod 14, I put in about making sure the scales were clean, dry, pointer could move freely, the paper on the one side of the scale, counter balancing with the weights, weighing out each item, what equipment I used etc, hope this helps, look back in mod 12 section 4 if you can if not I could try to help you more x
31st, March 2013, 06:51 PM FM22	I'm just looking in module 12; thanks for direction.x
31st, March 2013, 06:53 PM FM24	not a problem we are all here to help each other. 😊
1st, April 2013, 07:19 AM FM13	<i>the paper on the one side of the scale, counter balancing with the weights</i> We just used same size paper each side. FM13

12th, April 2013, 10:03 AM FM23	<p>Sorry I have been absent! Things have been a bit manic! I am still trying to complete my units and also my module! I am stuck in this question big time and today have finally taken the jump to get it done!!</p> <p>Just one question! What did you guys attach for the documentation bit on 1 b?! I am so stuck as to what to attach.</p> <p>Thanks in advance! E x</p>
14th, April 2013, 06:20 PM FM22	hi just pm u
18th, February 2014, 07:52 PM FM25	<p>Hi there i've just starting the case study for module 14, i have written how to make the item but i can't remember what records are required. Can someone please shed some light.</p> <p>cheers</p> <p>FM25</p>
18th, February 2014, 08:00 PM FM25	i've found the information needed but is there anywhere i can download a blank worksheet ? we don't have an extemp book in the pharmacy.
18th, February 2014, 08:22 PM FM8	<p><i>Originally posted by FM25 View Post</i></p> <p><i>i've found the information needed but is there anywhere i can download a blank worksheet ? we don't have an extemp book in the pharmacy.</i></p> <p>You could create your own worksheet by taking the information from the BPC and arranging it to suit. Get your pharmacist to validate it and add a message for the assessor that you don't have an extemp book in your pharmacy so you have created a document for this task.</p>
18th, February 2014, 08:57 PM FM25	Ok thanks for your help thats great 😊
2nd, November 2014, 04:37 PM FM25	hi, did you get this module done? i'm currently struggling with it 😞
2nd, November 2014, 07:33 PM FM26	What are you struggling with FM27?
3rd, November 2014, 08:35 AM FM27	I have messaged you 😊

NVQ3 Module 20 [322]	
8th, May 2013, 11:06 AM FM13	<p>Hi,</p> <p>i am currently doing my module 20 assessment, I am already late handing it in and now I'm stressing over one of the questions. The question is "Explain in detail the stages that you would go through during the demonstration when showing your colleague how to dispense the product on the prescription." (The product is Betnovate cream 1 part and Aqueous cream 4 parts, supply 50g.)</p> <p>i don't have a clue where to start having never done extemp prep !! Any help to point me in the right direction would be much appreciated, thank you !</p>

<p>8th, May 2013, 07:50 PM FM28</p>	<p>Ok let me see if I can help</p> <p>You have to explain the stages of how to dispense a extemporanus preparation.... There are various stages that you need to mention, it doesn't matter that you would never do them in your pharmacy.</p> <p>PREPARATION Ensure area is thourly clean and tidy before use, ensuring that the dispensing area and equipment are cleaned to the highest standard--- this reduces the risk of contamination during the preparation..</p> <p>SOURCES OF CONTAMINATION.. During the preparation. Could include skin and hair, cough and sneezes Unclean work area and equipment Airborne particles in the environment</p> <p>MINIMISE CONTAMINATION wear gloves, coat, hair covering Ensure work areas and equipment are cleaned prior to preparation, following the health and safety and COSHH procedures at all times. The ingredients of the product may cause risk to the person preparing the product, an assessment of these risks should be done prior to handling the ingredients to see if any pose a risk and if so what precautions need to be taken.</p> <p>LABELING REQUIREMENTS : name of person supplied :name address of pharmacy :date of dispensing :name and quantity of the product : directions for use :cautionary and warning labels : keep out of reach and sight of children. ** it is good practice to put on route of administration if it's non oral product and for external use only** Before labelling the container ensure it is clean and dry, then place the label in the most appropriate place</p> <p>THE PROCESS/ METHOD Equipment and ingredients :scales 😊 archment paper squares :mortar :spatula :glass slab : 50g glass jar : betnovate cream :aqueous cream</p> <p>THE PROCESS 1g ex 30g betnovate cream</p>
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	<p>49g ex 100g aqueous cream</p> <p>Select the correct formula checking it matches the prescription</p> <p>Weigh 1g betnovate cream... Use parchment paper to place on the scales</p> <p>Place the 1g of betnovate on the glass mortar</p> <p>Weigh 49g of aqueous cream on to parchment paper, mix a small amount with the betnovate, transfer the mixture onto a glass slab, gradually adding more aqueous a little at a time, using a spatula mix the products until all ingredients are mixed, transfer the finished product to the labeled glass jar, place in a basket with the Rx and any packaging from the products used.</p> <p>Complete the dispensing work sheet clearly and accurately ensuring the product is endorsed appropriately then have the product checked by the pharmacist</p> <p>Wash, clean and tidy away all items used leaving the area spotless and equipment ready for use.</p> <p>EXPIRY DATES</p> <p>There are two definitions used for official preparations</p> <p>Freshly prepared... Those which must be made less than 24 hours prior to issue</p> <p>Recently prepared.... Those which will deteriorate if stored for more than 4 weeks, however if the preparation is water based or does not contain a preservative then the expiry date may be reduced to 7-14 days as there is a great risk of microbial growth.</p> <p>RECORDING REQUIREMENTS</p> <p>: name and quantity of product required</p> <p>:date of preparation</p> <p>:formula</p> <p>:calculation</p> <p>:method</p> <p>:sample label</p> <p>A copy of the label is attached to the extemporaneous record sheet</p> <p>Identity of the person preparing the product and of the pharmacist taking responsibility.</p> <p>I managed to cover element 4.1 pc 123456789 10 11 12 scope of standard a f k39 k40 k41 k42 k43 k44 k45 k46 k47</p> <p>Element 1.3 pc 123456789 scope of standard d k32 k37 k43</p> <p>Hope this helps</p> <p>XXXXXXX</p>
<p>8th, May 2013, 09:44 PM</p> <p>FM28</p>	<p>your work colleague you will need to plan a time and date</p> <p>OBJECTIVES ----- the dispensing assistant will be able to prepare and dispense such preparations</p> <p>Preparation – keep it short and simple</p> <p>Ensure all the tools needed for the demonstration are available and clean</p> <p>Lay out items in logical order</p> <p>Scales, creams , slab, spatula, 50g glass jar, tube of betnovate cream and tube of aqueous cream</p> <p>Weighing paper, apron, gloves</p> <p>Pen and paper for notes.</p> <p>Demonstrate the whole process with another member of staff first</p>

	<p>Ensure the area is clean and tidy before starting</p> <p>Select formula and complete calculations, have these checked</p> <p>Look up information regarding the handling of ingredients and the appropriate method of manufacturer</p> <p>Make labels and select a suitable container for the product</p> <p>Clean and assemble the equipment including protective clothing/ equipment</p> <p>Make the product</p> <p>Do not leave the ingredients uncovered or unlabelled on the bench</p> <p>Tidy up and complete necessary documentation</p> <p>Forward the product for checking</p>
9th, May 2013, 06:52 PM FM29	<p>Just cheking yours and mine calculations and probably a learning point for my self as usually I get these wrong first time, but if it is 1 part betnovate to 4 parts AC that would be 5 parts in total. $50 / 5 = 10$, therefore 1 part betnovate would be 10g and 4 parts AC would be 40g, not 1g and 49g as that would be 1 part and 49 parts.</p> <p>As I said I am probably wrong and would like to use this as a learning point for myself as well.</p>
10th, May 2013, 08:17 PM FM28	<p>Thank you David That's exactly why we should always get the calculations checked</p>
14th, May 2013, 01:02 PM FM30	<p>Buttercups have a really good demonstration video on their site if you are enrolled on their course.</p>
14th, May 2013, 01:47 PM FM13	<p>Hi FM30,</p> <p>Thank you for that, unfortunately I am enrolled on the NPA course</p>
13th, August 2013, 04:27 PM FM31	<p>Sooooooo glad I found this!!! I am so late in handing the Module in, got to this question and froze! I didnt have a clue, im glad I'm not the only one!</p> <p>All the information in this thread is greatly appreciated!!</p>
13th, November 2013, 11:46 PM FM32	<p>Hey Amanda I was hoping I could get some help from yourself please x</p>
14th, November 2013, 06:40 PM FM32	<p>would anyone be able to help me with module 20 please thank you</p>
14th, November 2013, 07:06 PM FM33	<p>What part of it do you need help with?</p>
27th, August 2014, 10:06 PM Isabella23	<p>Hi, could some one please help me. I'm currently on module 20 and I have just noticed in the workbook exercise 3 question d- describe how you would use your communication skills to explain to the relative how the patches should be used and disposed of after use?? Th prescription is for buprenorphine sublingual tabs not patches, am I missing something here or is this an error? Thanks xxxx</p>

NVQ 3 Module 20 Assessment (again!!!!!!) [323]

13th, May 2013, 03:56 PM FM13	<p>I am answering a question which is regarding prescription collection and delivery services. The question is "describe the paperwork that you would need to complete with the lady if she wanted to start using the service and why this is necessary".</p> <p>In our pharmacy we have a form for patients to fill out (name, address etc) and a section to sign giving us permission to drop off and pick up their prescriptions.</p> <p>is this the only paperwork needed ? Also what are the reasons for why it is necessary ?? I'm guessing so that we have proof of their consent ?</p> <p>Any help would be much appreciated :-)</p>
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	XXXXX
13th, May 2013, 08:58 PM FM28	The customer would need to complete and sign the repeat prescription collection service consent form... By completing and signing the form the customer is confirming that you are authorised to ask for their medications on their behalf, they will also be giving consent for your pharmacy to use the information as described in the form..... On delivering the medication the patient would need to complete the back of the prescription and sign a note book to indicate that they have received all the medication and a verifiable audit trail is maintained from the point the prescription leaves the pharmacy until it is with the patient

Just started nvq3 [324]	
18th, May 2013, 10:15 PM FM34	Hello there! So I have started the nvq3 the beginning of may and was just curious if anyone else has just started too 😊 I have almost completed the first workbook, hoping to get it sent off for marking at the end of this week. Hopefully there is a few of you in the same position as myself would like to see how people are finding it 😊
24th, May 2013, 03:45 PM FM35	I'm surprised that you haven't had a response as there's usually quite a few nvq3 students posting on here. This forum is a good place for support whether you're stuck on a particular module or just want to have a moan about how hard it all is 😊 Anyway, can I be the first to welcome you to the forum.
10th, June 2013, 09:25 PM FM36	Welcome FM34. It is a long hard slog but really interesting when you get time to sit back and look at it. I'm just starting Module 16 and trying to keep all the evidence units up to date. If I can be of any assistance? I won't answer a straight question but I would be more than happy to point you in the right direction. Good luck with it. It is much harder than I thought it would be, but very worthwhile.xx
26th, March 2014, 07:10 PM FM37	Hi, Could you please help me finding the answers for module 5 progression section 2 internal and external customers...thanks
29th, March 2014, 06:42 AM FM28	Internal customers are a department or individual person who you work with, they are people who provide you with products and services that you need to do your job so you can satisfy the external customer..... The wholesaler who provides you with ethical and over the counter products and surgeries who are involved with the repeat prescription collection service are both internal customers External customers are organisations or individuals who purchase products and services they are people who provide you with income Like members of the general public who purchase products and maybe a company who pays for all their staff to have a flu jab Hope that helps XXXXX
10th, April 2014, 06:23 PM FM38	Hi, I'm new to this forum, so still finding me feet. I've just finished module 14, can't say I'm looking forward to pharmaceutical science 2, I hate calculations I'm struggling with the units 💎💎💎.i
12th, April 2014, 05:46 AM FM28	Tell me what your stuck on with the units and I'll try to help
17th, April 2014, 12:56 PM FM39	Evidence Units are evil and should be banned.
18th, April 2014, 02:43 PM FM40	<i>Originally posted by FM39 View Post</i> <i>Evidence Units are evil and should be banned.</i> Should we start a petition, FM39? 😊

26th, May 2014, 05:23 PM FM41	Started in dec 13 on module 7 just started reading and writing units up at the same time units are the worst thing ever
4th, June 2014, 11:46 AM FM42	I've been given the coursework, and I'm just looking through it at the moment. So far it's just reading and 'testing yourself'.
1st, September 2014, 06:22 PM FM43	I've just signed up to start the dispensary assistant course. Does anyone remember how long it takes for the course to be sent out? I'm keen to get started!
2nd, September 2014, 06:30 AM FM37	Hi XXXXXX, Can you please help me in giving me the answer for the following: What is meant by treatment and maintenance dose on regards to PPI therapy Thanks
2nd, September 2014, 06:31 AM FM37	Hi every one , Can any one help me ... Stuck on module 9.... What is maintenance dose and treatment dose in regards to PPI therapy Thanks
2nd, September 2014, 06:42 PM FM39	<i>Originally posted by FM37 View Post</i> Hi every one , <i>Can any one help me ... Stuck on module 9.... What is maintenance dose and treatment dose in regards to PPI therapy</i> Thanks Hey, allow me to help! In regards to PPI therapy you have two types of doses. A treatment dose, also sometimes referred to a healing dose which, is a higher dose used for a short period of time to heal an ulcer or a bad case of heartburn. An example of this could be Lansoprazole 30mg. After this, some patients will require a continuous dose as a preventative from symptoms recurring. In this case the doctor will reduce the dose of the dose of the PPI to a lower strength, such as Lansoprazole 15mg. We call this a maintenance dose. The reason a patient should not be on a long term high dose of a PPI is that it can cause hypomagnesaemia, or low magnesium levels. A good thing to look out for in patients would be the continuous usage of a PPI treatment dose, especially if they have not had a medicine review for a while. It is a good item to point out for your pharmacist to conduct an MUR on. Also patients who are taking anti-inflammatory analgesics such as ibuprofen/naproxen/diclofenac on a long term basis should be taking a PPI to prevent the stomach from ulceration. As you have learnt previously, NSAIDs can cause stomach ulcers and the current guidelines for prescribing is to protect the stomach. Another good item to highlight with your pharmacist for MUR! Message me if you need any further help, I'm happy to oblige.
2nd, September 2014, 06:44 PM FM39	<i>Originally posted by FM43 View Post</i> <i>I've just signed up to start the dispensary assistant course. Does anyone remember how long it takes for the course to be sent out? I'm keen to get started!</i> When I did mine it was out very quickly, within two weeks typically. If you need any help, feel free to message me about any questions you may have!

8th, January 2015, 08:13 AM FM42	I have to study the 'national standard' and give an explanation on one of them in my area. But 'national standard' is very generic and I haven't a clue! https://www.pharmacy-forum.co.uk/forum/general-information/pharmacy-support-staff/9189-just-started-nvq3/page2
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Nvq3 unit 25 [325]	
10th, November 2013, 11:29 AM FM22	Hello everyone; I'm doing unit 25 -process prescriptions for payment, and i'm not sure what to write to cover a.c 3.1- explain the importance of following the end of month submission proceures(sop,protocols,regulations). i have to cover twice.I just wonder if someone can help please. thanks FM22
10th, November 2013, 12:19 PM FM13	You need to sdeparate into charged and no charged, then by Dr in alphabetical order. Resubmissions and n/c scrips also separate. Others will fill in the details I'm sure. FM13
10th, November 2013, 12:44 PM FM40	You can cover this by mentioning PPA protocols, as FM13 as said. They require that certain groups of scrips are seperated (SP; expensive, etc). Also your own pharmacy protocols, SOPs, for end of day procedures involving counting and filling. You could also mention doing a resub.
10th, November 2013, 09:03 PM FM30	Also, very obvious but removing staples etc from scrips so as not to delay processing, getting stuck in machine etc. and correct endorsing to avoid delay in payment
1st, June 2014, 04:56 PM FM32	don't don't see how this covers the criteria ? as it says explain the importance my understanding is why do we need to do such? Why does the ppa make us do this what is the benefit out of this
1st, June 2014, 05:50 PM FM13	If you do not comply, then you will not get paid. FM13
1st, June 2014, 06:09 PM FM32	Could anyone tell me as I don't have a drug tarrif to hand if I wanted to check if pro d3 is allowed on rx would it be stated as colicalciferol in the drug tarrif

Nvq3 unit 9 prepare extemporaneous medicines [326]	
7th, January 2014, 07:27 PM FM22	any idea how to prepare extemporaneous sodium bicarbonate ear drops 1%BP 10ml? Any help would be great. thanks FM22
7th, January 2014, 07:50 PM FM22	And also paed simple linctus B.P 100ml
7th, January 2014, 07:53 PM FM44	Order from specials?
7th, January 2014, 08:00 PM FM22	I would order from special 🤖 but i need to write activity report to show them i prepare this products in my pharmacy.
7th, January 2014, 08:09 PM FM44	I agree but does anyone actually prepare specials for the £ 3 fee? Then clean up after?
7th, January 2014, 08:55 PM FM22	Probably not but i still need to write report
8th, January 2014, 05:36 AM FM40	You need a formula to start you off and this can be found in the the british pharmacopoeia. If you don't have this reference in your pharmacy a quick google search should give you the information that you need.

17th, January 2014, 04:51 PM FM32	hi, i just wanted to ask as you are futher down the units could somene just help me on unit 18 3.3 apply knowledge of different classes of medicines please a example of what you may have used thank you
12th, February 2014, 08:53 PM FM45	FM22 did u find the answer as i am currently trying to find something for this one.
13th, February 2014, 04:29 PM FM46	This is my very last unit to send off, about to do the simulations for the paediatric simple linctus and the diluted sodium bicarb ear drops. The thing I found with the simple linctus is making up the Syrup BP to dilute the simple linctus, so there's that extra step. Worth it though because it's a good one to cover lots of criteria.
13th, February 2014, 04:57 PM FM45	Where did you find an answer of how you would make these? <i>Originally posted by FM46 View Post</i> <i>This is my very last unit to send off, about to do the simulations for the paediatric simple linctus and the diluted sodium bicarb ear drops. The thing I found with the simple linctus is making up the Syrup BP to dilute the simple linctus, so there's that extra step. Worth it though because it's a good one to cover lots of criteria.</i>
13th, February 2014, 05:01 PM FM46	You need to look up the formula in the British Pharmacopoeia. If your pharmacist doesn't have access to it I would suggest finding somebody who does. I asked an old colleague but if you ring around a few pharmacies I'm sure you'll find one who doesn't mind letting you borrow theirs.
11th, April 2014, 06:45 AM FM47	for ear drops you have answer in one of the modules book 😊 as for linctus the formula for dilution is 75ml sirup and 25ml linctus to make 100ml. Note: my unit was just sent back form the marker-although I covered everything she still didn't accept it as 3 of them were simulation+one real life example of making erythromycin solution.WTF?
11th, April 2014, 01:13 PM FM13	We always made our own simple syrup in a sauce pan over a gas ring. Useful ingredient for rum punch, cocktails and home made liqueurs. FM13
31st, July 2014, 01:47 PM FM32	hi i wanted to ask did you mix this by shaking ? how was this made the simple linctus? <i>Originally posted by FM47 View Post</i> <i>for ear drops you have answer in one of the modules book 😊 as for linctus the formula for dilution is 75ml sirup and 25ml linctus to make 100ml. Note: my unit was just sent back form the marker-although I covered everything she still didn't accept it as 3 of them were simulation+one real life example of making erythromycin solution.WTF?</i>
28th, January 2015, 05:16 PM FM41	Hi how to you find the formula for this as this is my last unit to do I can't seem to find the master formulas n e where and no one has a bp at all any help would be gratefully received for the simulations I need to make
2nd, February 2015, 03:37 PM FM48	Hello all I've fineshed my nvq3, received my certificates today, got a distinction. So hang in there everyone it's worth it In the end 😊😊 if anyone wants any support feel free to pm me.. 😊
9th, February 2015, 12:14 PM FM49	Hi I have just had this unit returned asking me to actually these items up in store. Did you make yours up?
9th, February 2015, 08:16 PM FM26	I've also completed my nvq3 although still waiting on certificate. This unit does require you to make these up... It's not something that's really done these days but you still need to do it so your assessor knows you can deal with it if it arises in your branch. You don't need to use the examples in the book, these are purely suggestions. Have a chat with your pharmacist and choose some cheap ingredients to use. My assessor allowed me to use either a zineryt or anti biotic mixture as one example (I did both just to make

	sure all criteria was covered) then I did an additional two which I organised with my pharmacist. Hope this helps. :-)
9th, February 2015, 08:23 PM FM49	Thanks for the info. Did u supply photos? Which other two items did you make up?
9th, February 2015, 08:43 PM FM26	No I didn't send in photos. That's just an option for evidence but if your pharmacist writes a good enough witness report you won't need them. I made up an ointment and a sodium chloride solution.
7th, March 2015, 03:30 PM FM50	Hello, I have to make up Codeine Linctus 5mg/5ml for NVQ3 Unit 9, we only have 15mg/5ml, what do I dilute it with?
7th, March 2015, 08:22 PM FM51	Usually something like Syrup BP.
23rd, August 2015, 06:14 PM FM37	Hi, how are you have you finished all your units in NVQ3
23rd, August 2015, 06:18 PM FM37	Hi, How are you I have finished all my modules and I collect the evidences for most of the units but I am having a starting problem. I a=have to submit all my units with in one month which I will If I once start them, if you can help me in doing this that would be great. I lookj forward to hearing from you Thanks XXXX

Please help NVQ3 module 18 [327]	
2nd, February 2014, 10:09 AM FM52	Please help me! My mind has gone blank, the question is 'a customer hands in a prescription for temazepam 10mg tabs x 100 you suspect it is a forgery, list three things that would make you suspect this is a forgery' i know that one would be the amount of tablets prescribed but I can't think of anything else.
2nd, February 2014, 01:11 PM FM51	See the MEP. Can you recognise the signature as being that of the prescriber ? Can you tell who the prescriber is or is it someone unknown ? Is the patient a regular or someone you've never seen before or dispensed prescriptions to before ?
2nd, February 2014, 05:09 PM FM52	That's the thing there is not a copy of the actual prescription just the question
2nd, February 2014, 09:49 PM FM40	It's just one of those broad theoretical questions. Think about what kind of drug it is (subject to abuse?) How do you think the patient will be acting? What if the quantity had been ammended by hand? Different coloured inks, etc. What factors would alert you to suspect a forgery?
3rd, February 2014, 08:15 AM FM35	Is the quantity appropriate?
3rd, February 2014, 05:22 PM FM53	1. Quantity 2. Almost certainly not a Local GP 3. Distracting tactic. "Got these in stock, would prefer blister but loose will do, got a cab waiting," etc
3rd, February 2014, 08:17 PM FM8	Somewhere in the coursework which you have been given there will be information on how to identify a fraudulent script. Read the relevant section and the answer will be there.

NVQ 3 unit 10 and unit 25 [328]

20th, February 2014, 06:25 PM FM22	Hi guys 😊 I'm doing unit 25 and unit 10 at the moment, and I'm struggling to cover ac 5.2 in unit 10 :explain the importance of following SOPs when ordering stock and also how you maintained confidentiality when ordering stock? and in unit 25 ac 3.1 why is important to follow SOPs when submitting prescription at the end of the month? any ideas and help please. thanks FM22
5th, March 2014, 09:04 AM FM54	With module 10 maybe you have one person who order expensive item to make sure you won't double order. This same with fridge line. Maybe you have special system which tell other staff member that actually stock has been ordered. About confidentiality when u order something for patient don't leave the prescription lying around or when u order special make sure is safe fax etc With the prescription in the end of the month is it mortar to make sure everything is sorted correctly otherwise that will delay the payment for your chemist. Hopefully that will help you.
9th, March 2014, 03:01 PM FM22	Thank you
26th, March 2014, 07:05 PM FM37	Hi, Is anyone doing NVQ3 module 5 progression assessment...I am stuck in some questions like internal and external customers.. please help me in getting through..Thanks
29th, March 2014, 06:48 AM FM28	Internal customers are a department or individual person who you work with, they are people who provide you with products and services that you need to do your job so you can satisfy the external customer..... The wholesaler who provides you with ethical and over the counter products and surgeries who are involved with the repeat prescription collection service are both internal customers External customers are organisations or individuals who purchase products and services they are people who provide you with income Like members of the general public who purchase products and maybe a company who pays for all their staff to have a flu jab Hope that helps XXXXXX

nvq3 module 6 help [329]	
7th, June 2014, 11:27 AM FM55	Hi I need to contact a hospital pharmacy technician is there any here that I can ask about your role in hospital please
8th, June 2014, 10:53 PM FM8	I'm a hospital tech. I trained in a hospital and have been qualified almost two years now. I also worked in an Asda pharmacy for a year before starting to train as a tech. Let me see the question that you need to answer and I'll see what I can do.
2nd, July 2014, 01:34 PM FM55	Hi sorry took so long to reply... the activity just asks to contact a pharmacy technician working in a hospital if possible and find out about their role
2nd, July 2014, 06:45 PM FM8	Okay. When I get home I will write something out about what we do in my hospital.
5th, July 2014, 07:51 PM FM8	Sorry to take so long but it's been a busy week. A day in the life of a hospital pharmacy technician! We meet in the dispensary each morning to see if anything interesting has been happening overnight. If the on

call pharmacist was called out we hear about it!

We wait for the computers to boot up and then print off the ward list of patients on our respective wards. We generally have two or three wards to look after. We compare the list with the previous day to see if there have been any admissions or transfers.

If we have new patients then we have to contact the GP to request a medication and allergy summary. The information is entered into RiO so that all staff has access to it. If there is anything that needs to be highlighted we do so and possibly contact the ward if it is urgent. We also check to see if there are any other medication records for that patient on RiO. Then we read the recent RiO notes and see if there is anything relevant to pharmacy and as we are a Mental trust we also need to check if the patient is likely to be volatile. If the patient is a transfer then we just need to check that RiO is up to date.

If there is any outstanding work needed in the dispensary then we do that. Then we go to our wards.

On the ward we check in with the nurses and ask if the new patients are available to talk to and if any discharges or leaves are planned. If we can talk to the new patients we just check if the medication summaries are correct and we know everything that they are taking, including OTC and illegal substances. Then we get the drug keys and the Kardexes and go through looking for any changes to medication. Next we check the patient's tins to see if they have all the medication needed and if not then we record the new information and take it back to the dispensary to be dispensed later and sent to the ward with the porters. If the pharmacist needs to validate any new medication then we have to photocopy the kardex and take it back to the dispensary for dispensing.

Either the pharmacist, the doctor or the techs can write out the leave scripts because it is simply transcribing the information on the kardexes as long as it has been validated by a pharmacist previously.

The ATOs order the patient's tin stock every two weeks so we need to make sure that the patients have sufficient medication in their tins to last until the next order comes in. Techs order the depot drugs and Clozapine as ATOs are not allowed to order them. If there are any ward stock items that have been used techs order them in between top-ups and we also keep an eye on any build up of returns or unused leave or discharge medication.

Back at the dispensary we have a time stamp machine which records the time that we bring in the orders. If there is anything that needs validating by the pharmacist we attach the order to the photocopy of the kardex and put it in the validation tray. The pharmacist then does a clinical check on it and validates it ready for dispensing. It's better for me if the pharmacist has been on the ward before me so that I don't need to photocopy the kardex. Save the rain forest, you know!

Once it's validated it goes into one of the dispensing trays. Depending on the urgency of the order we will select the appropriate tray to put the order in. So anything that needs to be completed by the time the porters come at three gets done first and stuff that isn't so urgent is left until the priority stuff is finished.

Then we have lunch!

After lunch we do the dispensing and make sure that everything is ready for the porter at three. Once everything has gone we do the RiO work. So if we've spoken to a new patient we record the information. If

	<p>there is anything the doctors need to be aware of then I highlight that in the information. If there are any other jobs that need doing then we get on with them. One of the jobs that I had to do was to cross reference the computer formulary with the paper record to make sure they were both the same and highlight any discrepancies.</p> <p>Once everything is done then we get on with any dispensing for the next day.</p> <p>I hope this helps!</p>
7th, July 2014, 10:29 AM FM55	That helps alot thankyou so much :-D
7th, July 2014, 11:32 AM FM13	<p>The job in hospital appears to be 10 x as good as that in retail. More pay, promotion, holidays, sickness allowance, and a good pension. Every dispenser I know who has finally made it to registered technician anxious to quit retail for hospital ASAP. Only downside is perhaps retail more convenient and close to home.</p> <p>FM13</p>
8th, July 2014, 11:28 PM FM8	<p>It is certainly different to community, that's for sure, XXXX</p> <p>One of the major differences is that there is a clear separation between what is a tech's job and what is a pharmacist's. That's good I think. Though sometimes the pharmacists miss the dispensing. One of our pharmacist said at lunch that she missed dispensing so we told her she was welcome to come and dispense, and she happily stood that afternoon doing a dosette! A change is as good as a rest, I suppose.</p> <p>I don't really know any techs in the community or what they do. But I guess they are more limited depending on who their pharmacist is and how much he allows them to do.</p>
21st, July 2014, 09:50 AM FM56	<p>Thanks FM8, I am also doing this unit and found your description really interesting. It certainly beats working in a pharmacy within a large store when customers frequently approach you and expect you to know all about makeup, electrical appliances etc etc, whereas they wouldn't dream of asking a make up consultant about what to put on their piles (although of course conversely Anusol is great for bags under eyes)</p>
21st, July 2014, 05:36 PM FM13	<p>I had a girl of middle east origin who wanted to get rid of the dark patches under her eyes. I directed her to the make up counter. Useful to look up what is available before going unto the Veil etc.</p> <p>FM13</p>
21st, July 2014, 11:50 PM FM8	<p><i>Originally posted by FM56 View Post</i></p> <p><i>Thanks FM8, I am also doing this unit and found your description really interesting. It certainly beats working in a pharmacy within a large store when customers frequently approach you and expect you to know all about makeup, electrical appliances etc etc, whereas they wouldn't dream of asking a make up consultant about what to put on their piles (although of course conversely Anusol is great for bags under eyes)</i></p> <p>I was just going to send it as a pm, but realised that other students would be in the same position so I posted it here. Of course that is just how my hospital works and other hospitals might work differently and so the tech role would change as well.</p> <p>It will be changing for me as well, soon, as we will be moving into a new hospital and changing from patients having their own stock in tins, to ward based stock. Our new pharmacy will not have any stock at all except for the Emergency Drug Cupboard (EDC), which will stand in the lobby leading to the pharmacy and will be accessible by any of the wards. This 'cupboard' is actually an Omnicell dispenser. This one looks the closest to what we've got. But I've only seen it once, when it was wrapped up! And then for a short time when I was</p>

	<p>trained on it.</p> <p><u>Controlled Substance Inventory Log & Database Omnicell</u></p> <p>We are not too impressed by the new pharmacy either. We have three large floor to ceiling windows, all of which are completely frosted so you can't see out. Apparently we overlook the patient's bedrooms and so we got frosted windows in case we were tempted to spend all day gazing at the patients! I understand the central panel being frosted, but why they would frost a window about six foot from the ground beggars belief. You would have to stand on a chair to look out! But we would have been able to see the sky at least if they had left it clear. And as the drug cupboards on the wards have no windows we are effectively under artificial light all day, every day.</p> <p>Anyway, all the wards will have their own Omnicell and all the ward's dispensing will take place on the ward rather than in the pharmacy. That's why we won't have any pharmacy stock. We are going to be on a Hub and Spoke sort of system and the orders from our hospital will go to the Hub hospital. Apparently we will have two deliveries a day from the hub, one which the ward pharmacy staff will put away and one which the ward nursing staff will put away. We'll see how that works!</p> <p>We're a bit unhappy about the new system as we are losing the pharmacy team to some extent and will be working in a much more isolated sort of way. But we have all agreed to meet in the pharmacy each morning before dispersing to the wards so hopefully things won't be too bad. I'm excited about the new hospital but a bit on the fence about how the new system will work. But there is a glimmer of light if it does go all wrong. They are planning to build another set of wards and hopefully we will get a proper pharmacy in it with windows that you can look out of!</p> <p>I will update this when we move and I see how it all works in the real world!</p>
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Nvq3 module 12.....help!!! [330]	
18th, June 2014, 04:43 PM FM57	Question is 'all medicines have an expiry date. Outline SIX reasons for this' I don't recall reading much about expiry dates in the workbook. A small section covering also storage etc I have a few obvious answers but I'm struggling with Six! Can anyone who has done the module help me out? Thanks
19th, June 2014, 06:15 PM FM29	What are your answers so far? Have a think about what would happens to a product when it goes past the expiry date - is it still sterile, is it a food item (eg gluten free fresh bread), does it start to break down and be less effective, could it be dangerous to take / use a product after the expiry date. Hope this helps.

NVQ3 NPA Unit 5 Risk Assessment [331]	
4th, July 2014, 09:19 AM FM56	Hi everyone! This is my first posting, so please be kind.... I am studying the above, and just could do with a nod in the right direction about the question on completing a risk assessment in the pharmacy. Is this looking for specific pharmacy issues such as needle exchange, customer returns etc or should it include things like reducing physical stress for those standing for long periods?

	<p>Also, I am just slightly behind at this point, and could do with not starting the assessment units til maybe later in the year, whilst carrying on with the books. Does it matter what start date you put on the ILP?</p> <p>Thanks in advance for any advice you can give.</p>
4th, July 2014, 01:44 PM FM13	<p>4th, July 2014, 01:44 PM</p> <p>This has been raised a few times before. Do a search using 'risk assessment' in the search box. Eg boxes on the stairs, trailing power leads, care when handling hot water in kettles etc, ensure the safety leaflet on display, knowledge of fire procedures etc etc.</p> <p>FM13</p>
7th, July 2014, 08:31 PM FM56	<p>7th, July 2014, 08:31 PM</p> <p>Thanks FM13, have now had a go and it doesn't look too bad, appreciate your help.</p> <p>FM56</p>

nvq3 module 16. [332]	
29th, September 2014, 11:14 AM FM58	<p>A 10yo has a salbutamol and a beclometasone on a script and the question is... If lisa's medicines are to be administered at the same time, outline the order in which they should be used and explain why?</p> <p>Not sure about this question, any help would be greatly appreciated .</p> <p>Is it that the salbutamol would be taken first because it's a reliever and and her asthma must not be under control with her current regime?</p> <p>Thanks in advance for any help 😊</p> <p>FM51: Salbutamol first to allow effective bronchodilation and therefore better absorption of corticosteroid.</p> <p>FM58: Thank u</p>
29th, September 2014, 12:07 PM FM51	Salbutamol first to allow effective bronchodilation and therefore better absorption of corticosteroid.
29th, September 2014, 03:38 PM FM58	Thank u 🙏
9th, October 2014, 03:42 PM FM59	<p>Originally posted by FM58 View Post</p> <p>Thank u 💎💎</p> <p>Just as FM51 said. It's an old practice which has remained the norm. Perhaps most important for patients with early morning wheeze (bronchospasm). It might be worth leaving 5 mins between using the salbutamol and beclometasone, if they have time. It takes a few mins for salbutamol to start working properly.</p>

Npa nvq3 unit 4 reflect on and develop your practice [333]	
16th, October 2014, 02:19 PM FM32	<p>So this is my last unit and im finding it really hard there is certain criteria i dont understand how to work or how to include.</p> <p>2.3 identify supervision and support required</p> <p>3.2 prioritise aspects of practice that need to be enhanced</p> <p>3.3 prepare smart objectives using available resources</p> <p>if someone could help me or give me guidance on this as when i call npa the assessor i speak to just confuses me and i really just dont understand.</p>

	Could someone be kind enough to help, my course is going to expire and if i dont complete this in time iv literally lost it all
16th, November 2014, 09:48 AM FM60	<p>I've completed my NVQ 3 but I remember this one fairly well. Here's what I did: I used the patient safety review we have to do at the end of every month that is based on the near miss log. I identified the most common error and made a focus plan for all dispensers to see. Quantity was the main issue, so this was the focus. I discussed this with the pharmacist who supported me on the focus plan.</p> <p>On a separate activity form, I drew up a plan (I copied the one we get in our book), and planned how I was going to complete the unit. I explained what SMART is - specific, measurable etc.</p> <p>Use any feed back - such as performance review or the safety review from the previous month.</p> <p>You can even review yourself - such as 'I felt I needed more practice/more information on completing the end of month process.' Make sure you identify then say how you followed it through.</p> <p>Hope this helps!</p>

Stuck on NVQ3 module 8 question [334]	
2nd, November 2014, 06:04 PM FM55	<p>Please can I ask for help on this question ...</p> <p>Describe four aims in the management of disease and for each provide an example of a drug that fulfils these aims</p> <p>thankyou</p>
2nd, November 2014, 06:31 PM FM13	<p>ie Restoration of normal function. I take Metformin which helps in keeping my Blood sugar within target level.</p> <p>FM13</p>
3rd, November 2014, 11:17 AM FM27	Cure? ie. antibiotics for an infection?
4th, November 2014, 10:39 AM FM55	<p>Think I have it now can I just run it by you</p> <p>I</p> <p>prevention ... Anti malarials (malarone)</p> <p>cure ... antibiotics (amoxicillin)</p> <p>control of disease ...calcium channel blocker (amlodipine)</p> <p>relief of symptoms ... analgesics (paracetamol)</p>
4th, November 2014, 10:48 AM FM27	Yes thats what I would say x
4th, November 2014, 11:12 AM FM55	Thankyou

NVQ 3 unit 5 help! [335]	
12th, December 2014, 12:40 PM FM61	<p>Hi,</p> <p>I'm doing the NVQ3 through the NPA and I am currently doing unit 5 and I'm a little stumped as to what it means by a pharmacy receipt! Does that mean an FP57 receipt or some sort of number/slip we attach to their prescription when the patient hands it in to us so that their medications are kept in order?</p> <p>I would ask my assessor but she is completely useless and I can never get a hold of her when I need her!</p> <p>Many thanks!</p> <p>I covered it by saying what I would issue, ie an FP57. I'm in Scotland so we have no charges but I mentioned how these would be filled in and issued if required.</p> <p>Thanks I'll try that kind of line thought :-)</p>

12th, December 2014, 07:05 PM FM26	I covered it by saying what I would issue, ie an FP57. I'm in Scotland so we have no charges but I mentioned how these would be filled in and issued if required.
16th, December 2014, 02:04 PM FM61	Thanks I'll try that kind of line thought :-)

Completing nvq3. [336]	
16th, May 2015, 04:26 PM FM62	<p>Hello. Just wondering..... I am close to completing my nvq 3 with the npa. All bar sending off my last couple of completed units and one resit paper. Just wondering once you've sent all the work off, what happens next? How long does it take until you can become registered etc and what's the next steps once all the work is marked?</p> <p>Thank you.</p>
16th, May 2015, 11:39 PM FM26	Once you have completed the course you have to wait for your certificates to arrive. Once they do, you can register. It's listed in module 20 what it entails. Birth certificate/marriage certificate to be verified by a solicitor, plus passport style photo to be verified also etc. I completed my course in Nov last year, certificates arrived in Feb but I've not registered yet. Will be doing it soon though. Have everything ready so just need to get organised.
19th, May 2015, 09:40 PM FM63	hello , i'm struggle with some calculation from module 12 nvq3, if theres is someone to help 😊
19th, May 2015, 09:45 PM FM102	What are u stuck on FM63?
19th, May 2015, 10:29 PM FM63	hi FM102 😊 question 8 module 12 "you are presented with a prescription from a 14 years old boy weighing 49kg and 163cm tall,who has been diagnosed with Nephrotic Syndrome.he has a body surface area of 1,5m'. the directions on the prescription read: Prednisolone Soluble tablet 5mg,initially 60mg/m' once daily for 4 weeks and then on alternate days for 6 weeks.calculate the total numbers of tablet that will be required to fulfil this prescription.don't know where to start,.... 😞
9th, January 2016, 05:31 AM FM64	Did the npa require you to send them all completed workbooks or do I keep hold of them for future reference. Thanks
9th, January 2016, 05:33 AM FM64	<p>Originally posted by FM26 View Post</p> <p>Once you have completed the course you have to wait for your certificates to arrive. Once they do, you can register. It's listed in module 20 what it entails. Birth certificate/marriage certificate to be verified by a solicitor, plus passport style photo to be verified also etc. I completed my course in Nov last year, certificates arrived in Feb but I've not registered yet. Will be doing it soon though. Have everything ready so just need to get organised.</p> <p>Do the npa require you to send off your completed workbooks or do you keep hold of them for future reference. thanks.</p>
9th, January 2016, 05:33 AM FM65	<p>I don't want to mislead, but 'Verification by a solicitor' might only cost a fiver. When we rebuilt the Welsh Highland Railway there were endless affidavits and such which I had to swear in the presence of a solicitor. The fee for this has not changed in a very long time, might almost be a century. Pharmacy is not the only profession to suffer at the hands of government.</p> <p>Bob Gartside</p>
18th, January 2016, 09:33 PM FM42	<i>Originally posted by FM63 View Post</i>

	<p>hi FM102 😊 question 8 module 12 "you are presented with a prescription from a 14 years old boy weighing 49kg and 163cm tall, who has been diagnosed with Nephrotic Syndrome. he has a body surface area of 1,5m'. the directions on the prescription read: Prednisolone Solube tablet 5mg, initially 60mg/m' once daily for 4 weeks and then on alternate days for 6 weeks. calculate the total numbers of tablet that will be required to fulfil this prescription. don't know where to start,.... 😞</p> <p>588?</p>
<p>19th, January 2016, 01:23 PM FM66</p>	<p>Assuming I've understood it right and it is ten weeks I get 90 mg per day which is 18 tablets once a day making the first phase 504 tablets. Second phase is the same as the first but for 21 instead of 42 days coming to 378 tablets. Added together get 882.</p> <p>That is unless the weight and height or some other unknown scaling factor come into account that you know about and hasn't been stated.</p>
<p>19th, January 2016, 05:39 PM FM8</p>	<p><i>Originally posted by FM63 View Post</i></p> <p>hi FM102 😊 question 8 module 12 "you are presented with a prescription from a 14 years old boy weighing 49kg and 163cm tall, who has been diagnosed with Nephrotic Syndrome. he has a body surface area of 1,5m'. the directions on the prescription read: Prednisolone Solube tablet 5mg, initially 60mg/m' once daily for 4 weeks and then on alternate days for 6 weeks. calculate the total numbers of tablet that will be required to fulfil this prescription. don't know where to start,.... 😞</p> <p>I would start by working out for how many days medication is being given.</p> <p>So you have daily for 4 weeks ($4 \times 7 = 28$ days), then alternate days for 6 weeks $6 \times 7 / 2 = 21$ days) $28 + 21 = 49$ days. He only needs one dose per day, so we stick with 49. If he had multiple doses then you would multiply the number of days by the number of daily doses.</p> <p>Now we need to work out how many tablets he needs for his size. We are told he has a surface body area of 1.5m, and the daily dose is 60mg/m. So we need $60 \text{mg} \times 1.5 = 90 \text{mg}$ as he is 1.5m giving a total daily dose of 90mg. The tablets contain 5mg each so then we need to work out how many 5mg there are in 90mg. Obviously there are 18. He needs 18 tablets each day, poor little bugger.</p> <p>To find out how many we are going to dispense you simply need to multiply 18 (the number of tablets each day) by 49 (the number of days he will be taking them for). Now I would normally do a mental check sum here by rounding the 18 up to 20 and multiplying it by 49 which gives me 980. That is going to be more than I need. My second mental check sum would be to round the 18 down to 10 and multiply by 49 to give a minimum number of 490. I would then know that the answer that I'm looking for falls between 490 and 980, and is towards the higher of those two numbers.</p> <p>So, someone suggested 588 as an answer, and I know that is wrong because it is closer to the maximum number than it is to the minimum. So I'm going to check my sums again if that was my answer because I know that I've gone wrong somewhere. Using paper or a calculator to multiply 49×18 the correct answer is 882.</p>
<p>19th, January 2016, 05:56 PM FM67</p>	<p><i>Originally posted by FM8 View Post</i></p> <p>I would start by working out for how many days medication is being given.</p> <p>So you have daily for 4 weeks ($4 \times 7 = 28$ days), then alternate days for 6 weeks $6 \times 7 / 2 = 21$ days) $28 + 21 = 49$ days.</p>

	<p><i>He only needs one dose per day, so we stick with 49. If he had multiple doses then you would multiply the number of days by the number of daily doses.</i></p> <p><i>Now we need to work out how many tablets he needs for his size. We are told he has a surface body area of 1.5m, and the daily dose is 60mg/m. So we need 60mg + 30mg as he is 1.5m giving a total daily dose of 90mg. The tablets contain 5mg each so then we need to work out how many 5mg there are in 90mg. Obviously there are 18. He needs 18 tablets each day, poor little bugger.</i></p> <p><i>To find out how many we are going to dispense you simply need to multiply 18 (the number of tablets each day) by 49 (the number of days he will be taking them for). Now I would normally do a mental check sum here by rounding the 18 up to 20 and multiplying it by 49 which gives me 980. That is going to be more than I need. My second mental check sum would be to round the 18 down to 10 and multiply by 49 to give a minimum number of 490. I would then know that the answer that I'm looking for falls between 490 and 980, and is towards the higher of those two numbers.</i></p> <p><i>So, someone suggested 588 as an answer, and I know that is wrong because it is closer to the minimum number than it is to the maximum. So I'm going to check my sums again if that was my answer because I know that I've gone wrong somewhere. Using paper or a calculator to multiply 49x18 the correct answer is 882.</i></p> <p>textbook answer FM8 :-) I guess the other piece of advice I would give is ignore the words and just work out what numbers are important. Its a maths problem pure and simple but the context makes it confusing</p>
23rd, January 2016, 10:47 PM FM8	<p>I was checking at the hospital last week and one of the scripts was for two weeks at one dose and a reducing dose for the rest of the period. I worked out the answer and was surprised to see that although I thought there should be eleven bottles, the dispenser had only given me seven. Went back and redid the calculation and still got eleven bottles. Something must be wrong here. When I looked more closely I realised that the dispenser hadn't added the dose for the first two weeks to the remainder of the days and that was why the number of bottles was incorrect. So my advice would be to sort out the number of days first and use that total throughout the rest of the calculations.</p> <p>It's been interesting checking the past couple of weeks. We had two pre regs dispensing and oh, my goodness, the mistakes that were coming through. I was getting embarrassed at having to keep sending stuff back saying, can you redo this? I thought they must be thinking that I was a right mardy, picky cow, but I did try to be nice!</p>

nvq3 module 19 please help!! [337]	
4th, November 2015, 01:16 PM FM68	<p>Hi everyone</p> <p>I feel really bad asking for advice a second time in 2 weeks, but my head is hurting with this one,</p> <p>If you were asked to prepare a product state two resources where you might find information on product formulation and explain how this information will help you.</p> <p>Just cant tell if this answer is really hard or im just not seeing it!!</p> <p>Hope you can help, any advise would really be appreciated.</p> <p>FM68 🙄</p>
4th, November 2015, 03:58 PM FM13	Look in BP, BPC, Martindale. Put '(active ingredient) formulation' into google.
5th, November 2015, 05:18 PM FM68	<p>Thankyou FM13</p> <p>I have brought home the Martindale from work today, it a bit old but I hope it will help.</p> <p>Thanks again.</p>

5th, November 2015, 07:56 PM FM68	No none at all, thats why im a bit confused because the question is just as I wrote it in first thead. Not really sure what it is im looking for, because I dont really know what they are looking for in my answer. Maby im not reading it right. FM68
6th, November 2015, 05:54 AM FM13	OK. There are rules. Eg if an oil soluble ingredient then use WSP as a base or oily cream.If a water soluble then aqueous then cream. Otherwise, use a formulation for the active ingredient as given in Martindale. I think you may have read too much into the question. Could you give the exact wording as not come up before. FM13
6th, November 2015, 06:26 AM FM68	Hi FM13 The question is about manufacturing units, dont know if that makes a difference or not, This is the question in full. If you were asked to prepare a product, state two resources were you might find information on product formulation and explain how this information will help you. Thanks FM13. FM68.
6th, November 2015, 10:59 AM FM8	Originally posted by FM68 View Post Hi FM13 The question is about manufacturing units, dont know if that makes a difference or not, This is the question in full. If you were asked to prepare a product, state two resources were you might find information on product formulation and explain how this information will help you. Thanks FM13. FM68. It seems to me that this is just a non specific question which is asking you where you would find information to prepare ANY product. So your response would need to identify a resource and then explain why you would use it, ie what information is in that resource and how would you use it to help you to produce the product.
6th, November 2015, 04:35 PM FM13	Answers: Martindale, Internet, B.P, B.P.C. FM13
6th, November 2015, 04:57 PM FM68	Thankyou all for you help, really appreciate it. FM68.

NVQ 3 "effective questioning" [338]	
25th, January 2016, 07:53 PM FM69	Hi there! I'm currently doing my NVQ 3 in pharmacy services, and I am stuck on what should be a simple question. The question is "describe the four main categories of effective questioning and for each category provide an example of questions you have used in your pharmacy in the last week" I can't find any difinative answers anywhere and it's getting me really stressed. I would appreciate any help, thank you.
25th, January 2016, 08:32 PM FM13	What Rudyard Kipling called his little men: Who What Where When. google these and see what comes up. FM13

25th, January 2016, 09:01 PM FM69	Thanks for the reply. I'm still not fully understanding. I think I may be overthinking it. I was thinking things like open questions and closed questions, although who, what, when and how does seem logical.
26th, January 2016, 08:54 PM FM13	Open questions are the way to go. I was taught about this when a rep, but after 20 years forgotten most of it. Google 'agreement staircase' FM13
26th, January 2016, 09:18 PM FM67	<i>Originally posted by FM69 View Post</i> Thanks for the reply. I'm still not fully understanding. I think I may be overthinking it. I was thinking things like open questions and closed questions, although who, what, when and how does seem logical. To get information always ask open questions. (What are the symptoms, how long have you had them etc) To get confirmation of understanding closed questions are best (Did the pain start 2 weeks ago?) BOTH are useful for effective questioning. You could look at www.communicationskillsforpharmacy.com
26th, January 2016, 09:48 PM FM8	You need to re-read your course guide for that section as I'm positive that everything that you need to know is in there.
26th, January 2016, 10:32 PM FM69	Thanks for the help everyone. I can't find anything in my module book about it at all. That's why I'm finding it so frustrating I think. I decided I couldn't sit on it any longer and used open, closed, leading and I can't remember the last one now. Ah well. It's always the questions that seem simple that get me!
11th, May 2016, 12:02 AM FM70	Out of interest, did you get any feedback on your answer? (I'm struggling with the same question and opted for a similar answer!)
11th, May 2016, 05:51 AM FM13	WHAM is the standard 4 Forgotten the exact words. Believe WWhat is wrong H.....How long have you suffered A.....Any action taken M.....? like you I have no idea now after so many years away from the counter. FM13
11th, May 2016, 08:05 AM FM71	M - are you taking any other medication?
11th, May 2016, 12:59 PM FM67	<i>Originally posted by FM13 View Post</i> WHAM is the standard 4 Forgotten the exact words. Believe WWhat is wrong H.....How long have you suffered A.....Any action taken M.....? like you I have no idea now after so many years away from the counter. FM13 You forgot the first W - who is the medicine for.
11th, May 2016, 01:00 PM FM67	<i>Originally posted by FM69 View Post</i> It's always the questions that seem simple that get me!

	Who said communication was simple? Its not. Its probably one of the most complex things we do both as professionals and as human beings - and horribly easy to get wrong
11th, May 2016, 01:06 PM FM72	Like the OP, my issue is whether or not the question is referring to WWHAM or if it is referring to open, closed, leading questions etc. That's why I was wondering if they have had any feedback relating to that module yet.
15th, May 2016, 05:23 PM FM27	It will be in your modules. Sometimes it may be just a small section. I spent many a time re-reading modules.
15th, May 2016, 06:14 PM FM72	I have actually gone through through the module a hundred times looking for anything related to effective questioning, but have yet to find it! I don't expect to be spoon-fed - would just like some clarification of what direction they want me to go in!
9th, June 2016, 11:34 AM FM12	Has anyone found out an answer? Im stuck on the same thing, and it is most definitely not in the work book. Please help!
9th, June 2016, 02:08 PM FM73	Did you have any luck with this in the end? Cannot find anything at all
12th, June 2016, 07:31 PM FM12	No luck :-{ it's worth 12 marks so I don't just want to wing it
12th, June 2016, 07:35 PM FM73	I know thats what was worrying me i have sent mine off now but left that question and just asked for more info and i will re submit was wasting too much time on it... i will let you know when i receive it.
12th, June 2016, 08:56 PM FM12	Oh thank you, good luck! That's what happened with my module 5, luckily got a B on the re-sub
12th, June 2016, 10:56 PM FM8	Some resources that might help. http://faculty.ksu.edu.sa/hisham/Doc.../A02473-02.pdf https://www.mindtools.com/pages/article/newTMC_88.htm https://www.cppe.ac.uk/wizard/files/...-02_taster.pdf
12th, July 2016, 08:11 AM FM74	Hi, I have been reading my module 6 section 5 over and over and it definately doesnt actually state the 4 categories of effective questioning. At the start of the section all the other sub headings listed are covered for example proving information on storage etc. has anyone had any luck with theirs? Thanks - I hope you are getting on ok with it all, I'm struggling :-{
15th, July 2016, 11:06 AM FM12	Well I've just got mine back today, I used the open, closed, probing and hyperthetical questions, which got me 6 marks out of 12 :-/ but passed the module so I'm relieved! Yea slowly getting through the modules but haven't even touched the competency units, done a few case studies but nowhere near completing my first units. How are you getting on?
20th, July 2016, 03:52 PM FM75	Guys, there is a large part of the text missing from the work book. I called the NPA with the same problem and they sent me the missing part. If anyone needs a copy of the missing part I have it saved on my laptop
26th, July 2016, 10:21 AM FM74	OMG! would be great if you could forward that to me if you don't mind or if you could let me know which pages to ask the NPA for. Thanks
1st, November 2016, 09:18 AM FM76	<i>Originally posted by FM75 View Post</i> <i>Guys, there is a large part of the text missing from the work book. I called the NPA with the same problem and they sent me the missing part. If anyone needs a copy of the missing part I have it saved on my laptop</i> Hi FM75, I was having the same issue, I have called NPA however the person who would deal with it is off. Could you email/ forward me a copy of the missing part, if you still have it please?

	Thanks.
25th, October 2017, 11:31 PM FM77	Hello FM75, could you please send me the missing text?

NVQ3 Unit 16 HELP [339]	
21st, February 2017, 03:55 PM FM78	<p>I am finding it difficult to get going with these units. I am looking at what I still need to cover for Unit 16 (my first unit attempt) and this includes the part which asks you to list different sources of information suitable for customers. Has anyone completed this who could give me some idea's. Other than telling patients about more information on NHS choices I cant think of anything that would be relevant to any of my written activity reports. I'm assuming it must be relevant to an OTC sale and I cant just write a list at the end as it sounds like in the course guide book????</p> <p>Thank you any help will be much appreciated.</p>
23rd, February 2017, 08:11 AM FM79	<p>patient.co.uk, NHS 111, local referrals (eg. GUM clinic) I'm sure there's a number of others but these 3 could definitely be linked into OTC sales.</p> <p>1 comment FM78 commented 23rd, February 2017, 08:53 PM Thank you that gives me more to think about.</p>
27th, February 2017, 10:21 AM FM80	<p>I used PIL's, NHS choices for finding Dental services (pt presenting with dental pain wanting excess pain killers every few days), local Walk in Centre for out of area patient if condition didn't improve after selling OTC meds. Hope that helps.</p> <p>1 comment FM78 commented 7th, March 2017, 08:09 PM Thank you that is helpful. I am overthinking it I think I am making it all harder than it needs to be for myself.</p>

NPA Module 8 Assessment [340]	
30th, March 2017, 08:28 PM FM78	<p>Could anyone help me with question 1b please? It is asking for an example of a drug interaction resulting from enzyme Inhibition and one from Enzyme Induction. Do they just want me to check the BNF and give an example of a drug interacting with another which then results in this?? I'm a bit confused with this one.</p> <p>Thank you</p>
30th, March 2017, 09:30 PM FM71	<p>Yes I think thy just want the classic liver enzyme inducing reactions such as carbamazepine and enzyme inhibiting ones like clarithromycin. They just want you to understand the inducing drugs can quicken up the metabolism of other drugs (making them be excreted quicker) and the inhibiting slow down metabolism causing them to possibly accumulate in the body.</p>
4th, April 2017, 07:09 PM FM78	Thank you

Functional maths mock test [341]	
23rd, April 2017, 05:23 PM FM81	<p>Hey</p> <p>I was wondering if anyone on here has had to do the Buttercups functional maths mock test? I have been stuck</p>

	<p>on the same 3 questions and nothing that I seem to do is the correct answer.</p> <p>Please help x</p>
23rd, April 2017, 08:16 PM FM13	<p>Give us the questions and we can try to help you.</p> <p>FM13</p>
23rd, April 2017, 09:07 PM FM81	<p>ok thank you had to post them as an attachment</p> <p>thank you again</p>
24th, April 2017, 09:20 AM FM13	<p>Rather a large file which uses expensive bandwidth. Best to save to a cloud storage such as photobucket and then post the link.</p> <p>The questions are about conversion of units. Either convert litres to gallons first or , first work in litres and convert at the end.</p> <p>Do the question both ways as a check.</p> <p>FM13</p>
24th, April 2017, 10:50 AM FM53	<p>Question 1</p> <p>Tank = 46 litres</p> <p>Journey = 141 miles</p> <p>4.54609 Litres = 1 Gallon</p> <p>The 141 mile journey uses half a tank = 23 litres</p> <p>There are 4.54609 litres in 1 gallon</p> <p>Therefore, to calculate miles per GALLON</p> <p>(141 x 4.54609) divided by 23</p> <p>The answer is 27.86950</p> <p>Correct to 1 decimal place would be 27.9</p> <p>Does this make sense? If not, I can try again.</p>
24th, April 2017, 12:31 PM FM82	<p><i>Originally posted by FM81 View Post</i></p> <p>Hey</p> <p><i>I was wondering if anyone on here has had to do the Buttercups functional maths mock test? I have been stuck on the same 3 questions and nothing that I seem to do is the correct answer.</i></p> <p><i>Please help x</i></p> <p>Hello</p> <p>If you're still needing a helping hand with your Functional Skills Maths, please call or email and we can arrange for one of our Functional Skills tutors to provide further assistance. We are available on 0115 9374936 or via training@Buttercups.co.uk</p>
25th, April 2017, 01:15 PM FM42	<p><i>Originally posted by FM53 View Post</i></p> <p><i>Question 1</i></p> <p><i>Tank = 46 litres</i></p> <p><i>Journey = 141 miles</i></p> <p><i>4.54609 Litres = 1 Gallon</i></p> <p><i>The 141 mile journey uses half a tank = 23 litres</i></p>

	<p><i>There are 4.54609 litres in 1 gallon</i></p> <p><i>Therefore, to calculate miles per GALLON</i></p> <p><i>(141 x 4.54609) divided by 23</i></p> <p><i>The answer is 27.86950</i></p> <p><i>Correct to 1 decimal place would be 27.9</i></p> <p><i>Does this make sense? If not, I can try again.</i></p> <p><i>Don't give the answer!!!</i></p> <p><i>I struggled with my maths and even took an adult class to pass. I suggest the OP do the same if he or she is struggling and not rely on members here to 'help' them.</i></p>
<p>25th, April 2017, 05:30 PM</p> <p>FM83</p>	<p><i>OMG these people vote! The original question (even though you didn't state it it is obvious!)</i></p> <p><i>If you think you have a RIGHT to vote explain to me why root 2 is irrational. Simple.</i></p> <p><i>Queenbeewhatever - accept that you are a moron.</i></p> <p><i>Troll - what troll?</i></p> <p><i>1 comment</i></p> <p><i>FM71 commented</i></p> <p><i>25th, April 2017, 09:25 PM</i></p> <p><i>I don't think calling anyone a moron is particularly helpful. Why not try to increase their confidence by helping instead of throwing out insults?</i></p>
<p>30th, April 2017, 01:37 PM</p> <p>FM66</p>	<p><i>Originally posted by FM83 View Post</i></p> <p><i>OMG these people vote! The original question (even though you didn't state it it is obvious!)</i></p> <p><i>If you think you have a RIGHT to vote explain to me why root 2 is irrational. Simple.</i></p> <p><i>Queenbeewhatever - accept that you are a moron.</i></p> <p><i>Troll - what troll?</i></p> <p><i>I didn't learn why</i></p> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> <p>v2</p> </div> <p><i>is irrational until 2nd/3rd/4th year abstract algebra modules. Not properly anyway. Knew it was, could construct a proof, but not the same thing as why.</i></p> <p><i>If someone wants to do this course then great.</i></p>

<p>Help! [342]</p>	
<p>13th, June 2017, 02:19 PM</p> <p>FM84</p>	<p>What different types of people use pharmacy and why are they different?</p>

13th, June 2017, 02:53 PM FM13	In the UK they would be of all complexions and religions, why are you different from another person? FM13 2 comments FM84 commented 13th, June 2017, 03:10 PM what about this one. Outline different styles of interactions between team members, both positive and negative. FM71 commented 13th, June 2017, 08:05 PM Loads of interactions both good and bad between team members - pharmacist/ dispenser, dispenser/counter assistant, everyone/apprentice etc etc etc
17th, June 2017, 07:56 AM FM85	Different types of people who use the pharmacy I work in ranges from drug addicts to nurses buying botox on private Rx, elderly people, young families, people who pay, people who don't pay, teenagers using the free condom scheme, people who want their blood pressure checked. They all have one thing in common though, they are all as entitled to pharmacy services as the next person.
19 th , June 2017, 08:44 PM FM86	We can not answer your course questions for you! That is not how you learn. Ask your colleagues. Being scared to ask them is a sign of poor relationship in a team. Interact with your patients and other staff.

Nvq 3 Module 9 gastro intestinal system [343]	
3rd, August 2017, 06:21 PM FM87	Hi, Firat time poster. i was wondering if anyone would be able to give me a helping hand with a question please as I am a little confused. I have a question which is asking me: Ranitidine interacts with warfarin; describe this type of drug interaction. so I have looked in the BNF and checked the appendix 1 but can not find a interaction. Am I missing something here? I put it in on the PMR but still no interaction has come up. Would somebody be able to guide me on the right lines please as I feel I'm missing something.
3rd, August 2017, 07:45 PM FM13	Warfarin interacts with many meds. You may have a copy of Stockley in the pharmacy. That will give you an answer. FM13
3rd, August 2017, 07:59 PM FM88	Hi FM87 martindale states there is one study that shows a reduction in the clearance of warfarin with ranitidine, therefore, increased levels in the blood, so that is a pharmacokinetic interaction this is the reference Baciewicz AM, Morgan PJ. Ranitidine-warfarin interaction. Ann Intern Med 1990; 112: 76–7. PubMed
3rd, August 2017, 08:24 PM FM87	Thank you both for your reply, unfortunately we do not have a stockleys book, i think you are correct with the pharmacokinetics thank you so much for your help.

3rd, August 2017, 10:38 PM FM89	I don't have a Stockley's to hand but it isn't showing up on the interaction checker so I imagine the impact isn't clinically significant , which would be unusual for warfarin. Given all the clinically important warfarin interactions it is a strange choice to ask a question about.
4th, August 2017, 08:35 AM FM13	AS I have said several times. the NPA training not really fit for purpose. Buttercups vastly superior.
4th, August 2017, 05:06 PM FM87	Thank you again for taking the time to reply, I am going to write that there are no interactions as referenced but if cimetidine was then this would cause a interaction. But in a bit more detail. Unfortunately we don't have a choice of the Buttercups or npa. But I do understand what you mean. There seems to be a lot more support with the Buttercups.
8th, August 2017, 12:39 PM FM90	Totally agree about Buttercups. I find them very supportive. Pity you didn't have the option to study with them.

Buttercups biological principle question [344]

15th, August 2017, 08:04 PM FM91	<p>Looking for help please! Based on the information shown in the table (picture attached), I need to explain this statement: "some mutations do not have an effect on the body". I have been given 4 answers to choose from: 1. One amino acid can take the place of another without any effect; 2. One amino acid is coded for by more than one codon; 3. The same codon can code for more than one amino acid; 4. This statement is not explained by the information in the table.</p> <p>Anybody have any ideas? Thanks in advance!</p> <table border="1"> <thead> <tr> <th>Codon</th> <th>Amino acid</th> <th>Amino acid three letter code</th> </tr> </thead> <tbody> <tr><td>UAU</td><td>Tyrosine</td><td>Tyr</td></tr> <tr><td>UAC</td><td>Tyrosine</td><td>Tyr</td></tr> <tr><td>UAA</td><td>STOP</td><td>-</td></tr> <tr><td>UAG</td><td>STOP</td><td>-</td></tr> <tr><td>UGU</td><td>Cysteine</td><td>Cys</td></tr> <tr><td>UGC</td><td>Cysteine</td><td>Cys</td></tr> <tr><td>UGA</td><td>STOP</td><td>-</td></tr> <tr><td>UGG</td><td>Tryptophan</td><td>Trp</td></tr> <tr><td>AUU</td><td>Isoleucine</td><td>Ile</td></tr> <tr><td>AUC</td><td>Isoleucine</td><td>Ile</td></tr> <tr><td>AUA</td><td>Isoleucine</td><td>Ile</td></tr> <tr><td>AUG</td><td>Methionine</td><td>Met</td></tr> <tr><td>AAU</td><td>Asparagine</td><td>Asn</td></tr> <tr><td>AAC</td><td>Asparagine</td><td>Asn</td></tr> <tr><td>AAA</td><td>Lysine</td><td>Lys</td></tr> <tr><td>AAG</td><td>Lysine</td><td>Lys</td></tr> <tr><td>CCU</td><td>Proline</td><td>Pro</td></tr> <tr><td>CCC</td><td>Proline</td><td>Pro</td></tr> <tr><td>CCA</td><td>Proline</td><td>Pro</td></tr> <tr><td>CCG</td><td>Proline</td><td>Pro</td></tr> <tr><td>CAU</td><td>Histidine</td><td>His</td></tr> <tr><td>CAC</td><td>Histidine</td><td>His</td></tr> <tr><td>CAA</td><td>Glutamine</td><td>Gln</td></tr> <tr><td>CAG</td><td>Glutamine</td><td>Gln</td></tr> <tr><td>GUU</td><td>Valine</td><td>Val</td></tr> <tr><td>GUC</td><td>Valine</td><td>Val</td></tr> <tr><td>GUA</td><td>Valine</td><td>Val</td></tr> <tr><td>GUG</td><td>Valine</td><td>Val</td></tr> </tbody> </table>	Codon	Amino acid	Amino acid three letter code	UAU	Tyrosine	Tyr	UAC	Tyrosine	Tyr	UAA	STOP	-	UAG	STOP	-	UGU	Cysteine	Cys	UGC	Cysteine	Cys	UGA	STOP	-	UGG	Tryptophan	Trp	AUU	Isoleucine	Ile	AUC	Isoleucine	Ile	AUA	Isoleucine	Ile	AUG	Methionine	Met	AAU	Asparagine	Asn	AAC	Asparagine	Asn	AAA	Lysine	Lys	AAG	Lysine	Lys	CCU	Proline	Pro	CCC	Proline	Pro	CCA	Proline	Pro	CCG	Proline	Pro	CAU	Histidine	His	CAC	Histidine	His	CAA	Glutamine	Gln	CAG	Glutamine	Gln	GUU	Valine	Val	GUC	Valine	Val	GUA	Valine	Val	GUG	Valine	Val
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15th, August 2017, 10:18 PM FM92	<p>For a start, not 1 or 3.</p> <p>Not 1 because protein's building blocks are amino acids and if you start changing the amino acids, you change the protein, and hence the function. Think building a car, with the amino acids equivalent to major car components. You can't replace the wheels with four car seats and expect it to have no effect.</p> <p>Not 3 because each codon only codes for one particular amino acid - as proved by the table - there are no double entries of exact letters. ie UAC only results in tyrosine...it doesn't result in anything else further down the list.</p>																																																																																							

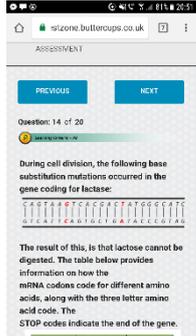
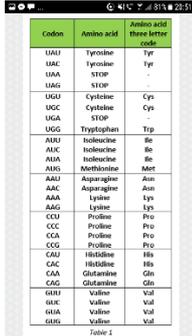
So, is 2 correct? If it wasn't, then that table would be very short (meaning each amino acid can only be coded by one codon...which is not the case). Thus, you can have a mutation where a single nucleotide in the m-RNA mutates, such as UAU mutates to UAC and the end result is the same amino acid, Tyrosine.

Hence the answer is 2.

Good luck.

4th, January 2018, 09:16 AM
FM105

Hi sorry to jump on your post. I'm on my final for this test and have a similar question. Please can anyone help me?


Bcups nvq3 Pharmacy Ser Skills 05. Health and Safety Testimony question [345]

3rd, November 2017, 09:12 PM
FM93

Hi everyone, I've had some feedback regarding an nvq assessment I submitted: 'We need a little more information however on how you ensure personal presentation protects the health and safety of you or others in line with instructions.' I've mentioned that I dress in the correct uniform for work, other than that I cant think of any other ideas that personal presentation has to do with health and safety?

5th, November 2017, 02:46 PM
FM90

What does the question ask for exactly?

FM90
5th, November 2017, 05:11 PM

Have you considered things like wearing correct shoes (not high heels) so that you don't pose any tripping up hazards, good personal hygiene, having any visible pricings or tattoos covered up and wearing protective clothing ect when dealing with things such as destroying drugs? Not sure if this is what they mean but call them if you are not sure. I am going this too and I find their help invaluable

1 comment
FM94 commented
14th, November 2017, 11:46 PM
Hi please help me to find out these evidences and examples

Issuing a prescription receipt FP57 refund form
issue a prescription receipt following local SOPs

FM93
6th, November 2017, 10:49 AM

thanks for your reply. I am going to give them a call as I've mentioned most of those things already. I am very flummoxed lol I honestly have no idea how my personal presentation protects the health and safety of myself and others?!?

<p>FM94 9th, November 2017, 10:30 AM</p>	<p>Hi there I am doing the same like Hazard at work place for you for everyone? how do we explain this with examples ? Any Help.. XXXX</p>
<p>FM13 9th, November 2017, 02:24 PM</p>	<p>When I was working in the office, we had to caution one of the very pretty girls regarding "Hot pants and low cut tops" . Took the men's mind off their work. Yes, I know this is sexist , but you would not expect the men to wear ballet tights to work. FM13 1 comment FM94 FM94 commented 12th, November 2017, 10:35 AM Many thanks</p>
<p>FM95 11th, November 2017, 10:26 PM</p>	<p>Hair tied up off your shoulders in clinical areas bare below the elbow No false nails or nail varnish (not even clear varnish) Keep natural nails trimmed don't wear uniforms outside of work</p>
<p>FM94 12th, November 2017, 11:08 AM</p>	<p>Hi Do you know any evidence of this question, Referring a customer because you are unable to help Describe how you dealt with a customer's issue/concern in a prompt, polite and professional manner. Describe how you asked appropriate questions to check your understanding of the customer's issues/concerns Please help Amal 1 comment FM94 FM94 commented 14th, November 2017, 11:29 PM Hi can you help me to find out the answer of this question Alternative delivery services and completing dispensary records What alternative delivery services does your pharmacy offer? Detail an occasion when you've offered an alternative delivery service to a customer. Ensure that your account includes how you completed any dispensary records. What record did you make and why is it important to do so?</p>

	<p>please help</p> <p>Thanks</p>
<p>FM13</p> <p>12th, November 2017, 11:58 AM</p>	<p>RudyardKiplings little friends.</p> <p>FM13</p> <p>1 comment</p> <p>FM94</p> <p>FM94 commented</p> <p>12th, November 2017, 12:02 PM</p> <p>Hi John</p> <p>Can you please make more clear,like any examples dealing conflict /angry customer.pl help</p> <p>XXXX</p>
<p>FM90</p> <p>13th, November 2017, 10:45 PM</p>	<p>What about travel vaccines and a customer asks for your help. Ask things like where they are going, when they are going and any medical conditions. Explain why you have to refer as you need help as you aren't sure if you can answer their questions.</p> <p>Put yourself in their shoes</p> <p>How would you like to be treated if this was you?</p>
<p>FM94</p> <p>14th, November 2017, 11:30 PM</p>	<p>Hi</p> <p>can you help me to find out the answer of this question</p> <p>Alternative delivery services and completing dispensary records</p> <p>What alternative delivery services does your pharmacy offer? Detail an occasion when you've offered an alternative delivery service to a customer.</p> <p>Ensure that your account includes how you completed any dispensary records. What record did you make and why is it important to do so?</p> <p>please help</p> <p>Thanks</p>

Pointing out the obvious [346]	
<p>24th, July 2017, 06:44 PM</p> <p>FM96</p>	<p>Headline in today's Times 24/07/17: Boots Pharmacist takes aim at pill policy (concerning price they charge for post-coital contraception):</p> <p>NN' who works at Boots in XX wrote on the company's facebook page:</p> <p>"all the training to be able to provide this service and give a 'professional consultation ' has been given in my own time, from training packages at home to meetings attended with no payment or time back.</p> <p>Accessing this training was my choice as a professional and nothing to do with my employer so I don't understand how Boots can accept credit for the professional service offered."</p>

	<p>Come to think of it, neither does FM96.</p> <p>But let's extrapolate this somewhat further: why should anyone accumulate a debt of ~£60,000 in order to be permitted to drudge for this bunch of *rsehole retailers? There must be better educational investments.</p> <p>Name and location not revealed but you can find it in the Times.</p>
24th, July 2017, 10:36 PM FM97	<p>What will gphc do regarding this unethical compony and their action</p> <p>1 comment</p> <p>Guest commented</p> <p>25th, July 2017, 11:53 AM</p> <p>The GPhC looks after the GPhC. End of.</p>
24th, July 2017, 10:57 PM FM66	<p>Sadly I've seen many examples of moral hazard in both pharmacy and retail generally.</p>
26th, July 2017, 11:11 PM FM98	<p>I lambasted Boots on Twitter: "#Boots has reviewed and amended previous #statement because it was public relations & marketing #disaster not because you care for customers"</p> <p>The strength of public feeling was shown by 6,414 impressions (times people saw tweet on Twitter) and 171 engagements (times people interacted with the tweet) over 4 days and its still continuing.</p>
27th, July 2017, 07:28 AM FM99	<p>As posted elsewhere, Boots has 'form' with regard to the non-supply of 'family planning requisites'!</p>
27th, July 2017, 02:19 PM FM100	<p>Yes, When I started, no contraceptives sold. Supposed to be that Lady Trent said staff might use them and wash them out for resale. When she died, the libraries were closed down (to make room for handbags!).</p> <p>FM13</p>
14th, November 2017, 11:41 PM FM94	<p>Hi</p> <p>I am in the middle of completing the NVQ Level 3 Pharmacy tech,Any one know any evidence of this question ,Confirming that a medicine is suitable for dispensing .please help</p> <p>XXXX</p>
14th, November 2017, 11:42 PM FM94	<p>Hi</p> <p>I am in the middle of completing the NVQ Level 3 Pharmacy tech,Any one know any evidence of this question ,Confirming that a medicine is suitable for dispensing .please help</p> <p>At the dispensing stage of processing a prescription describe how you did the following:</p> <ul style="list-style-type: none"> -confirmed that the medicine or product: matched the prescription/requisition including strength AND form - confirmed that the medicine or product: will remain in date for the course of the treatment - confirmed that the medicine or product: is fit for purpose. What did you look for that indicated that the medicine was fit for purpose and suitable to give to a patient? <p>XXXX</p>
15th, November 2017, 05:07 PM FM101	<p>Originally posted by FM94 View Post</p> <p>Hi</p>

	<p>I am in the middle of completing the NVQ Level 3 Pharmacy tech,Any one know any evidence of this question ,Confirming that a medicine is suitable for dispensing .please help</p> <p>At the dispensing stage of processing a prescription describe how you did the following:</p> <ul style="list-style-type: none"> -confirmed that the medicine or product: matched the prescription/requisition including strength AND form - confirmed that the medicine or product: will remain in date for the course of the treatment - confirmed that the medicine or product: is fit for purpose. What did you look for that indicated that the medicine was fit for purpose and suitable to give to a patient? <p>XXXX</p> <p>Don't be shy - have a go ...</p> <p>Don't overthink the questions.</p> <p>For example the one about remaining in date : clue expiry date printed on box, 28 tablets in box, dose 1 tablet daily for 28 days? Product must have at least 28 days expiry; though we would give at least three months leeway and tell patient which box to consume first.</p>
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Buttercups module 15 assessment help!! [347]	
2nd, December 2017, 04:40 PM FM90	Just bouncing ideas. When working within parameters of my job role limitations by providing advice and info to others could cover this include the use of information sources such as the BNF and information leaflets? Otherwise asking for assistance from someone such as the pharmacist and other person such as a GP would probably also account for this to?
3rd, December 2017, 07:59 AM FM85	Yes, it's basically checking that you are going to refer if you are unsure at all. So if a patient calls and asks a query about the dose, strength or interactions etc you refer. If they want to know if they can place an order, when is their Rx due or when is their stock due in you can answer it yourself. I say this because even though as technicians we may 'know' the answer to a dosage query, you could miss something that a pharmacist wouldn't which could result in serious harm. What happened in my pharmacy once was a pre reg answered a dose query where the patient asked if the dose was really 2.5ml, they checked the pmr and told them it was. It had been labelled incorrectly and should've been 0.5ml.
3rd, December 2017, 01:15 AM FM90	Observing limitations of my role as laid out in the standard operating procedures would be another factor as well, I guess!!

NVQ level 3 module 5 aaaahhhh [348]	
7th, January 2018, 02:23 PM FM102	<p>Hello,</p> <p>Ok, so I'm a pre-reg pharmacy tech. Currently doing the NVQ level 3. I'm on module 5 at the mo. I have to say I am struggling ALOT with this at the mo. I've got to 16. Dental RX for Co-Amoxiclav 250/125 1 TDS x 21</p> <p>Can this prescription be dispensed as it is currently written?</p>

	<p>I think yes because the prescriber has put the drug name which is allowed to be prescribed by a dentist (Drug tariff part XV11A), the directions and the amount required. It is also signed and in date.</p> <p>Am I missing something?</p>
7th, January 2018, 02:52 PM FM87	<p>Yes you are correct. I Think when this paper was printed there may of been another reason, but I wrote down what you have said and I didn't get any marks down or comments. So sounds good to me. If you need any help don't be affair to ask. I'm doing the second year now. It gets easier xx</p>
10th, January 2018, 01:28 PM FM103	<p>Do they specify tablets? Also, does the prescription have the practice stamp on it? If the answer to both of these is "Yes" then your good to go! Keep up the good work</p>
21st, January 2018, 03:33 PM FM104	<p>Are you doing the buttercups course?</p> <p>2 comments</p> <p>FM102 #4.1 FM102 commented 28th, January 2018, 06:31 PM It's the NPA course. I've finally finshed this module now... woohoo :-)</p> <p>FM104 #4.2 FM104 commented 28th, January 2018, 06:39 PM Aww that's great! How you finding it so far? I'm doing the buttercups but can't find anyone else on it.</p>
21st, January 2018, 04:30 PM FM8	<p>Here's a useful guide to what is needed for a legal prescription. It covers dentists as well as Doctors scripts. https://bnf.nice.org.uk/guidance/pre...n-writing.html</p> <p>This is also useful, though very expensive. You may be able to get your local library to order one in for you to loan. https://www.amazon.co.uk/Dale-Appelb...dp_ob_title_bk</p>

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