



Prescription for Excellence

**A Vision and Action Plan for the right
pharmaceutical care through integrated
partnerships and innovation**

**September 2013
Scottish Government**

Prescription for Excellence: A Vision and Action Plan

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Prescription for Excellence: A Vision and Action Plan

Foreword

Alex Neil MSP, Cabinet Secretary for Health and Wellbeing



Our 2020 Vision for Health and Social Care sets out our ambitions that by the year 2020 everyone in Scotland is able to live longer healthier lives at home, or in a homely setting.

It strives for a healthcare system where we have integrated health and social care, a focus on prevention, anticipation and supported self-management. When hospital treatment is required, and cannot be provided in a community setting, day case treatment will be the norm.

Whatever the setting, care will be provided to the highest standards of quality and safety, with the person at the centre of all decisions. There will be a focus on ensuring that people get back into their home or community environment as soon as appropriate, with minimal risk of re-admission.

The Vision and Action Plan set out in this document reaffirms the contribution of the pharmacist and the pharmaceutical care they provide in our future healthcare system. It builds on the direction of travel of our progressive and developing policy landscape for high quality, sustainable health and social care, and the comprehensive study on NHS pharmaceutical care undertaken by Dr Hamish Wilson and Professor Nick Barber last year.

Importantly, the Vision and Action Plan recognises that the integrated delivery of care, as set out in the 2020 Vision Route Map, will require the delivery of NHS pharmaceutical care to adapt new and innovative models to facilitate professional independence of pharmacists, working in collaborative partnerships with other health and social care professionals and the third sector to deliver the best possible health outcomes for patients from their medicines.

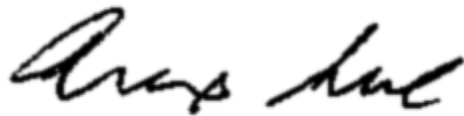
Consistent with the ambitions of the Quality Strategy and 2020 Vision, our overriding objective is that all patients, regardless of their age and setting of care, will receive high quality pharmaceutical care using the clinical skills of the pharmacist to their full potential. This Vision and Action Plan recognises the continuing and important role of pharmacists located in our communities and high streets across Scotland, and considers their future relationship with other local healthcare provision. This will be

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crucial for future service planning in remote and rural areas and in our most deprived communities.

Over the years, NHS pharmaceutical care in Scotland has attracted a well-earned UK and international reputation for innovative models of care. Our Vision and Action Plan aims to keep Scotland at the forefront of innovation and high quality pharmaceutical care, and its contribution towards our shared goal of world-leading healthcare.

I am grateful to all those who contributed to the review conducted by Dr Wilson and Professor Barber, and look forward to your continued support and engagement as we develop and implement the key actions underpinning our Vision.

A handwritten signature in black ink, appearing to read "Alex Lee". The signature is fluid and cursive, with a large initial 'A' and 'L'.

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Foreword

Professor Bill Scott, Chief Pharmaceutical Officer



This Vision and Action Plan, *Prescription for Excellence*, complements the Scottish Government's 2020 Vision Route Map and Quality Strategy Ambitions. It plays to the strengths of pharmacists as experts in the therapeutic use of medicines and their potential contribution and integration into health and social care teams.

Over the next decade and beyond, advances in health care will continue to accelerate. In particular significant changes will occur in medicine and therapeutics which will require new and innovative models of care to enable patients to obtain the maximum benefit. The patient is a critical member of the health and social care team and requires to be given enough information to enable them to make informed decisions about their care. This is key to delivering person-centred healthcare.

Pharmaceutical care is a key component of safe and effective healthcare. It involves a model of pharmacy practice which requires pharmacists to work in partnership with patients and other health and social care professionals to obtain optimal outcomes with medicines and eliminate adverse events whenever possible. Patients regardless of their setting should receive high quality pharmaceutical care. This is particularly important for patients with complex health issues including multimorbidities and those in care homes.

Dispensing doctors play an essential role in the dispensing and supply of medicines to patients in rural communities. Going forward pharmaceutical care provision should complement and support dispensing doctors' services and their patients.

These aspirations have resulted in our Vision that all pharmacists providing NHS pharmaceutical care will be NHS accredited clinical pharmacist independent prescribers working in collaborative partnerships with medical practitioners who will continue to have overall responsibility for diagnosis. An essential role of the clinical pharmacist working within the team will be to initially assess the patient for potential issues to help inform the choice of medication. In addition they will be responsible for the continual monitoring of the effects and side effects of the medicines and making adjustments to dose and therapeutic agent within agreed parameters.

The NHS continues to face increasing workplace pressures. The inclusion of the NHS accredited clinical pharmacists into the primary care team is intended to increase the clinical capacity and assist in addressing the increasing demands in primary care as our population ages and the complexity of their care increases.

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Critical to collaborative working is education and training in a multi-disciplinary context at both undergraduate and postgraduate level. Work is already underway in this area between NHS Education Scotland (NES) and the Scottish Schools of Medicine and Schools of Pharmacy at undergraduate level. This will set the agenda for future collegiate and collaborative working between the medical and pharmacy professions in Scotland.

Finally I want to turn to professionalism. 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. It is therefore fundamentally important that pharmacists, regardless of employer or environment, are able to make professional decisions for their patients at all times. New and innovative models to facilitate the professional independence of pharmacists will be explored as a priority in this Action Plan.

In order to deliver this Vision and Action Plan, I will establish a governance structure within the Scottish Government Health and Social Care Directorates to provide a detailed work plan and establish implementation groups with representatives from all the key stakeholders. This will involve cooperative working with the NHS, the pharmacy and medical professions, patients, the public and the regulatory bodies.

A handwritten signature in blue ink that reads "Bill Scott". The signature is written in a cursive style with a large initial 'B' and 'S'.

Executive Summary

Our Vision: Prescription for Excellence

All patients, regardless of their age and setting of care, receive high quality pharmaceutical care from clinical pharmacist independent prescribers. This will be delivered through collaborative partnerships with the patient, carer, GP and the other relevant health, social care, third and independent sector professionals so that every patient gets the best possible outcomes from their medicines, and avoiding waste and harm.

This Vision will significantly contribute to the following 10 of the 12 priority areas of the 2020 Route map below:

- person centred care
- safe care
- primary care
- unscheduled & emergency care
- integrated care
- care for multiple and chronic illnesses
- health inequalities
- prevention
- innovation
- efficiency and productivity

The Scottish Government Vision for healthcare is that by 2020 everyone is able to live longer healthier lives at home, or in a homely setting.

Integrated delivery of care as set out in the 2020 route map will require new and innovative approaches to pharmaceutical care¹ in Scotland. Our Vision described in the driver diagram (**Figure 1**) begins to set out how the future of NHS Pharmaceutical Care in Scotland will contribute to the 2020 Vision and Route Map. The Vision will significantly contribute to 10 of the 12 priority areas identified in the route map.

The aim is to create models of care that are safe, effective and person centred, provide long term sustainability and facilitate and design an environment for pharmacists to engage with other health and social care professionals.

In order to release capacity to deliver the clinical role, the dispensing process may benefit from better use of pharmacy technicians and be largely automated and managed by them. In addition, using technology to deliver clinical care more effectively will need to be embedded into practice.

NHS Pharmaceutical Care in the community would not be reliant solely on delivery from a high street pharmacy. Delivery through a distributed model from GP practices, the domiciliary setting or via remote consultations using telehealth are among the models that should be explored. Pharmaceutical care provision by pharmacists should also complement and support patients served by dispensing doctors. This distributed model

¹ Helper DD et al, Am J Pharm Educ 1989. 2.Hepler CD, Strand LM. March 1990. Opportunities and responsibilities in pharmaceutical care. American Journal of Hospital Pharmacy, Volume 47, pages 533-543

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Pharmaceutical care is the responsible provision of drug therapy to achieve agreed outcomes that improve an individual's quality of life. It involves cooperation with the patient, and if appropriate their carer, and other professionals in designing, implementing and monitoring a pharmaceutical care plan that will produce a specific therapeutic outcome for the patient.

should ensure that all patients have equitable access to NHS pharmaceutical care.

By 2023 all pharmacists will require to be NHS accredited clinical pharmacist² independent prescribers in order to provide clinical care to patients in the community. They will be referred to as general practice clinical pharmacists regardless of the setting in which they work. In the management of long term conditions they will work in partnership with the medical profession so that post diagnosis caseloads can be allocated to these pharmacists to optimise their complementary skills.

Clinical use of medicines continues to become increasingly complex. One reason for this results from new developments in translational genomics, for example, stratified medicine. Stratified medicine is a developing concept where using genetic analysis of patients' likelihood of benefiting from particular drugs will allow for more specific targeting of drug treatment.

Changes to the delivery of healthcare described in the **Quality Strategy**, and the advancement of therapeutics (use of medicines), places greater emphasis on the need for healthcare teams in hospital and community to work closely together. In addition, some medicines, which previously were only able to be administered in the hospital setting, are now provided to patients in their own home due to advances in technology and medicine design. It follows, therefore, that NHS pharmaceutical services should undergo significant redesign in order to enable pharmacists to play their part in delivering safe and effective care.

Advances in technology, robotic dispensing and telehealth would need to be harnessed to contribute to a health service fit for the 21st century. This will be part of the work programme to deliver the Scottish Government's Vision for innovative NHS pharmaceutical care.

*The Route Map to the 2020 Vision for Health and Social Care*³ describes the way in which the NHS and Local Authorities will work together and in partnership with the third and independent sectors, to ensure a more seamless experience for the service user and carer. This adds a further dimension to the importance of pharmaceutical care in the community and the therapeutic partnerships needed to underpin that⁴. It acknowledges the issues facing Scotland such as inequalities, an ageing population, increasing multimorbidities (e.g. two or more long term

² Clinical Pharmacy Defined, *Pharmacotherapy* 2008;28(6):816-817.

³ A Route Map to the 2020 Vision for Health and Social care, Scottish Government, 2013.

⁴ Establishing Effective Therapeutic Partnerships - A generic framework to underpin the Chronic Medication Service element of the Community Pharmacy Contract, Scottish Government, December 2009.

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conditions), and increasing expectation from new drugs, treatments and technologies.

The focus is on improving outcomes for people by providing consistency in the quality of services, ensuring people are not unnecessarily delayed in hospital, and maintaining independence by creating services that allow people to stay safely at home for longer. It encapsulates a transformation in public service working and establishes a milestone in the wider agenda of the Scottish Government's programme of reform.

At the end of each chapter we have set out the main areas considered to deliver the vision. This work will be taken forward under a governance structure in the Scottish Government Health Directorates to consider each of the areas identified for development and to provide a detailed work programme and delivery plans.

Chapter 1 The Vision

1.1 The Vision

1.1.1 Our Vision as set out in the driver diagram (**Figure 1**) identifies four key patient populations, each with specific pharmaceutical care needs: people in the community; patients receiving care at home; residents in care homes; and patients receiving care in hospital / specialist hospital care at home. It focuses not on the physical registered pharmacy premises, but rather on the clinical capability of pharmacists working in a variety of environments to meet those care needs in partnership with other medical and social care professionals.

1.1.2 **Our success in delivering the Vision will be measured through the delivery of the following main outcomes through a series of work programmes which will be delivered over the next 10 years.**

- **Pharmacists in the NHS would be recognised as clinicians responsible for the provision of NHS pharmaceutical care.**
- **Releasing capacity of pharmacists to deliver pharmaceutical care would be facilitated by full utilisation of pharmacy technicians, support staff and increased use of robotics in dispensing to improve safety and efficiency.**
- **All patients would have access to NHS pharmaceutical care by NHS accredited clinical pharmacist independent prescribers in all settings.**
- **Pharmacists in secondary care and in primary care work together in an integrated way which would be supported by a common clinical pharmacy career structure.**
- **Patients have a close relationship with an individual pharmacist, ensuring greater continuity and consistency of care for patients - introducing the concept of the named pharmacist and patient registration with NHS Board listed pharmacists which will underpin professional relationship with patients and local clinical governance systems.**
- **NHS Boards to have a direct relationship with individual pharmacists providing services in their areas regardless of setting.**
- **Pharmacists work closely with GPs, primary care, community teams and secondary care sharing information for the benefit of the patient. These pharmacists would be known as the general practice pharmacists.**
- **Pharmacists work in groups to deliver NHS Pharmaceutical care to patients in all care settings, especially for those with complex or long term conditions with allocation of caseloads.**

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- **Pharmaceutical care for specific patient groups is provided under a national framework and to nationally determined NHS standards. A national framework and NHS standards for the pharmaceutical care of residents of care homes and people receiving care and support at home would be prioritised.**
- **NHS Board Pharmaceutical Care Services Plans with needs assessments to enhance local healthcare planning which would include equitable access to services in deprived areas as well as specific public health needs driving a new contractual framework for premises and pharmaceutical care, removing any perverse incentives.**
- **The Scottish Government will work with patients, dispensing doctors and appropriate stakeholders to explore how rural communities can be further supported in terms of pharmaceutical care.**
- **Pharmacists undertake an enhanced role in preventing ill-health, co-production and minimising health inequalities.**
- **Pharmacists and the wider pharmacy workforce are trained appropriately to their enhanced role, both pre and post qualification.**
- **NHS boards would provide professional and clinical leadership for all pharmacists providing NHS pharmaceutical care services.**

Drivers for Change and Evidence

- 1.1.3 Some of the additional drivers for change are listed in Appendix 1. Alongside the Wilson and Barber Review⁵, a number of other key documents, reports and pilots have provided evidence for the development of the Vision. They are listed in Appendix 2. Appendix 3 acknowledges the achievements through *The Right Medicine*⁶.

⁵ Review of NHS Pharmaceutical Care of Patients in the Community in Scotland –Dr H Wilson and Professor N Barber, Scottish Government, August 2013.

⁶ The Right Medicine: A Strategy for Pharmaceutical Care in Scotland, Scottish Government, 2002.

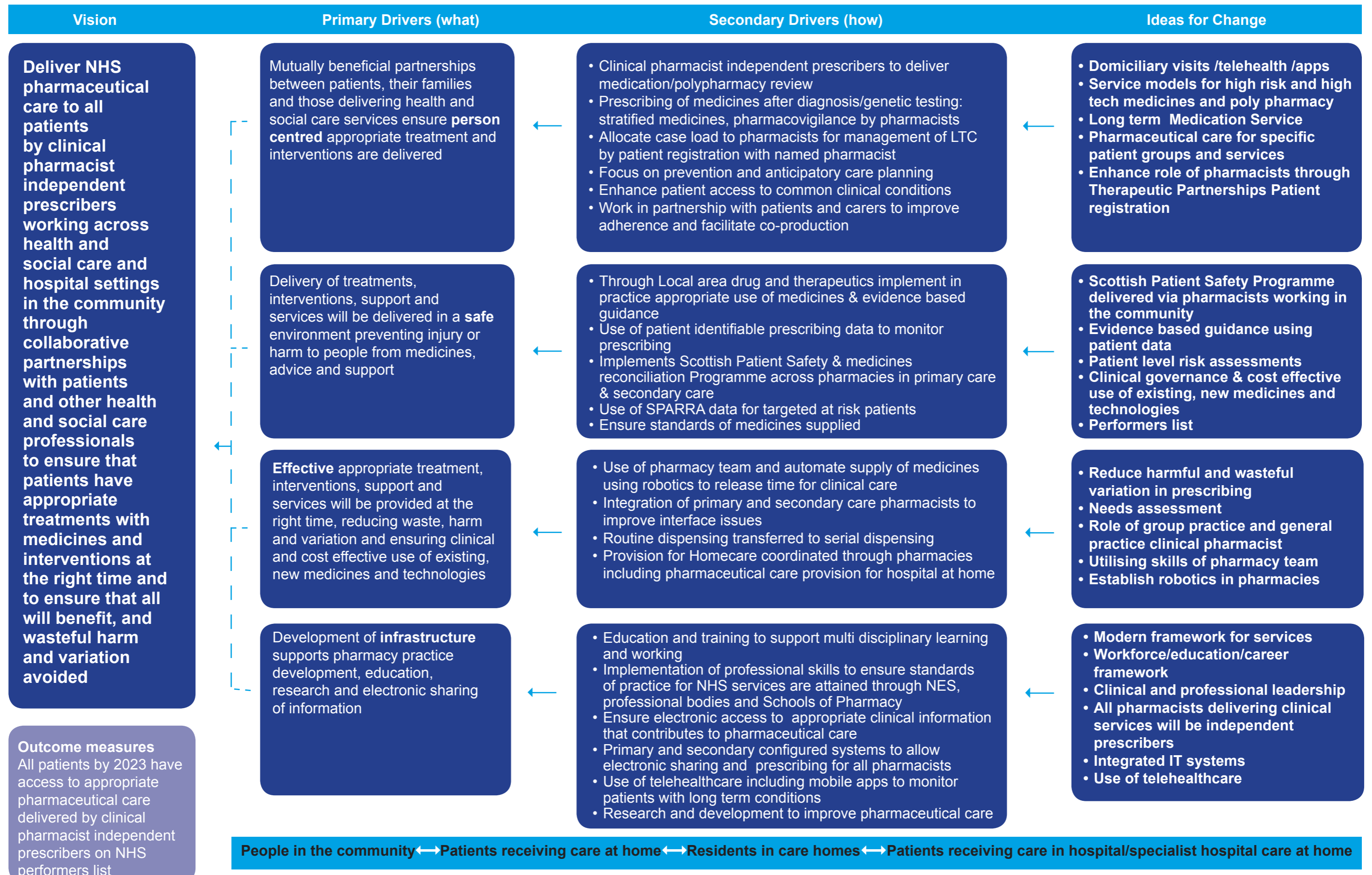
Patient Journey in 2020

For me the way I look after my health has changed over the last 5 years. Last year I went into hospital after a heart attack. I had suffered for 3 years previously with angina and also more recently had problems with my breathing which had started a couple of winters ago after a chest infection. My GP told me I had chronic obstructive airways disease (COPD) which had been caused by my years of smoking and that it could get worse if I didn't stop smoking. I had been a smoker for over 40 years and at the age of 63 I felt too old to be breaking old habits! My GP had asked me to see the pharmacist who worked closely with my GP for a review of my breathing after a chest infection. Before this I had only seen my pharmacist for advice for winter ailments as I was on a list of medications. The pharmacist gave me a self-management plan for my breathing and showed me how to monitor my treatment, I felt much more in control and knew I could ask for help when needed. After this one weekend I felt my chest was flaring up and after getting advice from the pharmacist started to take my antibiotics that she had prescribed as a standby. It was wonderful as normally I am ill for weeks afterwards as I normally wait until I am really poorly before I make an appointment to see my GP. After this the pharmacist provided me with support and prescribed treatment to help me stop smoking. It took me a while but she was very supportive and helped talk through all the issues that I had. Its six months since I quit and I am less breathless. My breathlessness score is better and I have not had so many chest infections.

Anyway, when I was admitted to hospital, the pharmacist gave the pharmacist in hospital a list of my tablets that I was taking. Just as well as in the shock of it all, I had forgotten the new one I had been started on. After my heart attack, I was put onto some additional medicines and the dose of others was increased. The pharmacist in the hospital had sent all my medication changes to my pharmacist who reviewed all my medication and then ran through the changes with me. I couldn't understand why I was taking a higher strength of my cholesterol tablets and also why I needed a new tablet for my heart as my blood pressure was fine. The pharmacist working with my GP sees me every six months to manage my COPD and heart conditions and I see the GP when I need to.

They record everything on one system so the GP and pharmacist both seem to know what's going on with my care. It seems like a great team effort.

Figure 1: VISION FOR FUTURE NHS PHARMACEUTICAL CARE OF PATIENTS IN SCOTLAND



Delivered by Pharmacist collaboratively working across Social Work Interface/GP Practice and Nursing interface/Primary Secondary care interface

1.2 The Future

1.2.1 This Action Plan provides a vehicle to deliver pharmaceutical care of NHS patients fit for the 21st century. Pharmacists are highly qualified and skilled healthcare professionals who make a significant contribution to healthcare in Scotland, however their full potential is yet to be fully utilised within NHS Scotland to help deliver the 2020 Vision for health and social care.

1.2.2 The Government's manifesto contains a commitment "*to further enhance the role of pharmacists, building on the introduction of the Chronic Medication Service, and encourage even closer joint working between GPs, pharmacists and other community services ...*"

1.2.3 This Action Plan recognises the important traditional role of the supply of medicines from registered pharmacies located in high streets across Scotland. Scottish Government Health and Social Care Directorates will continue to work with pharmacy owners and NHS Boards to ensure an efficient and cost effective pharmacy network for the supply and dispensing of NHS prescriptions and other aspects of NHS pharmaceutical services which are best delivered from registered pharmacy premises.

A Clinical pharmacist

provides patient care that optimises care and use of medicines for patients in all settings often collaborating with medical and other healthcare professionals.

Clinical pharmacists are regarded as the experts in therapeutic use of medicines

However, integrated delivery of care, as set out in the 2020 route map, will require the delivery of NHS pharmaceutical care to consider new and innovative models to facilitate professional independence of pharmacists working in partnership with other health and social care professionals and the third sector. These new and innovative models will explore, for example, the concept of clinical pharmacist group practices to complement the traditional pharmacy network.

1.2.4 In the future, pharmacists delivering NHS pharmaceutical care should be clinical pharmacist independent prescribers, who may have allocated workloads to target their clinical skills to patients who would most benefit from the continuity of care provided, by working in partnership with the medical profession to optimise the use of medication which would include monitoring and adjusting treatment.

1.2.5 The Vision also builds on the pharmacist's role in encouraging and supporting the individual patient to manage their own condition(s) which is central to the concept of *Co-production*. Co-production is the process of active dialogue and engagement between people who use services and those that provide them, putting the service user on the same level as service provider. Co-production recognises that each of us has skills and knowledge, and the ability to develop these. It also recognises that access to support from family, neighbourhood and community allows for greater independence.

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Co-production designs support and services around what people can do for themselves, rather than seeking to make them more dependent. It offers the potential to enhance both quality of life and longevity through focusing on the assets that promote the self-esteem and coping abilities of individuals and communities.

- 1.2.6 Pharmacists have a role in the healthcare team to monitor the adverse effects of medicines as well as their clinical performance to optimise their safe and effective use. This is known as pharmacovigilance. Monitoring patient outcomes when treated with new medicines presents opportunities for closer working between the medical and pharmaceutical professions and the pharmaceutical industry.
- 1.2.7 The Wilson and Barber Review⁷ highlighted that patients would generally welcome greater continuity around the pharmacist providing their pharmaceutical care. In addition, evaluation of the smoking cessation component of the community pharmacy Public Health Service⁸ found that outcomes were often better for patients when they regularly saw the same member of pharmacy staff.

Scottish Government believes that more needs to be done to provide consistency and continuity and the concept of the named pharmacist will be explored when considering the delivery of NHS pharmaceutical care.

- 1.2.8 NHS Boards are responsible and accountable for the provision of pharmaceutical services in secondary and primary care sectors. Currently in primary care, NHS Boards make arrangements with pharmacy owners for the delivery of pharmaceutical services. The pharmacist delivering these services needs to ensure that their priorities are focused on the patient above all else. Perverse incentives such as targets and bonuses based on commercial retail priorities should not be allowed to adversely affect patient care.

Scottish Government will explore new and innovative models to facilitate the professional independence of the pharmacists delivering care to patients.

- 1.2.9 For an ageing population that has increasing multiple morbidities (more than one medical condition), delivery of NHS pharmaceutical care to all patients in all settings is essential. However, it requires a step change in establishing collaborative partnerships within an integrated health and social care system in order to achieve the best possible outcomes from medicines.

⁷ Review of NHS Pharmaceutical Care of Patients in the Community in Scotland, Scottish Government, August 2013.

⁸ Review of the Community Pharmacy Public Health Service for Smoking Cessation and Emergency Hormonal Contraception, Scottish Government, November 2011.

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1.2.10 Medication is by far the most common form of healthcare intervention. Four out of five people aged over 75 years take a prescription medicine and 36 per cent are taking four or more⁹. However, it is suggested that up to 50 per cent of drugs are not taken as prescribed, many drugs in common use can cause problems and that adverse reactions to medicines are implicated in 5 - 17 per cent of hospital admissions¹⁰.

1.2.11 Research has demonstrated that patients on multiple medications are more likely to suffer drug side effects and that this is more related to the number of multiple morbidities a patient has than age. There is a clear and steady increase in the number of people admitted to hospital with drug adverse effects¹¹. Individuals admitted with one drug side effect are more than twice as likely to be admitted with another. This situation can be accentuated by altered pharmacodynamics and pharmacokinetics (changes in how the body deals with drugs) associated with either ageing or illness.

1.2.12 A top priority in pharmaceutical care is to prevent predictable side effects and optimise clinical outcomes with medication.

1.2.13 The Wilson and Barber Review highlighted particular concerns about the pharmaceutical care of both residents in care homes and those where care at home services are provided within social care arrangements.

This Action Plan prioritises these areas for early consideration with regard to new and innovative ways of service delivery. This will also include consideration of any issues which may adversely affect the care of patients in these environments.

1.2.14 The hospital sector is responsible for the provision of treatment of those patients living in their homes but still receiving specialist care by their hospital consultant. This is an expanding area of healthcare and presents opportunity to explore innovative pharmaceutical care provided through integrated working between the hospital, community pharmacists, medical practitioners and the pharmaceutical industry.

1.2.15 In some parts of rural Scotland, the NHS relies on dispensing doctors to provide dispensing services to their own patients who (through geography and demographics) are unable to secure the dispensing services of a community pharmacy. In these cases the dispensing doctor service plays a vital role in the provision of NHS medicines.

The Scottish Government will work with patients, dispensing doctors and appropriate stakeholders to explore how rural communities can be further supported in terms of pharmaceutical care.

⁹ Quality and Outwork framework, NHS Employers, 2012.

¹⁰ Co-morbidity and repeat admission to hospital for adverse drug reactions in older adults: retrospective cohort study, M Zhang et al, BMJ 2009;338:a275.

¹¹ Adverse drug reactions as cause of admission to hospital: prospective analysis of 18 820 patients M Pirmohamed et al, BMJ 2004;329:15-19.

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- 1.2.16 Central to the future development of NHS pharmaceutical care is the importance of sharing of patient information between pharmacist delivering NHS services and other health and social care professionals in secure and confidential systems. This will be explored with patients, the medical and pharmaceutical professions, the NHS and other relevant key stakeholders.
- 1.2.17 The delivery of future innovative pharmaceutical care may require novel models for clinical practice and joint working which will create new demands on undergraduate and postgraduate education. These opportunities will be explored with NES, the professional bodies and the Schools of Pharmacy and Medical Schools in Scottish Universities.
- 1.2.18 The development of innovative pharmaceutical care will take place over the next 10 years and will focus on the three key Quality Ambitions, namely: person-centred, safe and effective care.

The Vision and Action Plan will be delivered through joint working between Scottish Government, NHS Scotland, health and social care professionals, patients and other appropriate key stakeholders.

Conclusions

Our Action Plan will build on the recommendations of the Wilson and Barber Review and related health and social care policy, and will clearly position the pharmacist's contribution to delivering measureable progress in support of the 2020 Vision and Route Map.

This work will be taken forward under a governance structure with the Scottish Government Health and Social Care Directorates to consider each of the areas identified for development, and to provide a detailed work programme and delivery plans. It will also take into account any additional requirements resulting from the implementation of the 2020 Vision.

Chapters 2-5 set out the Action Plan as the three main aims of the quality ambitions, person centred, safe and effective with the underpinning of the infrastructure that will be needed for delivery. At the end of each chapter we have set out the main areas to deliver the Vision.

Chapter 2

Person-centred Pharmaceutical Care and Medicines

Mutually beneficial partnerships between patients, their families and those delivering health and social care services ensure **person centred** pharmaceutical care is delivered to ensure appropriate treatment and interventions are delivered

In this Chapter we will set out our aims and proposed work programme to deliver *person-centred* pharmaceutical care. This will focus on developing approaches to:

- Embed partnership working between the patient (and/or carer), their GP and pharmacist - therapeutic partnerships - and with other health and social care professionals.
 - Further enhance the role of Pharmacist independent prescribers who will work with GP's to deliver medication/polypharmacy review, using telehealthcare and domiciliary visits where appropriate.
 - Further develop the pharmacist's contribution to the management of common clinical conditions and develop new models of delivery of primary care services in partnership with GP's.
 - Explore making better use of pharmacist prescribing post diagnosis.
 - Introduce innovative pharmaceutical care to support the clinical application of translational genomics and stratified medicines.
 - Enhance the role of pharmacists in pharmacovigilance (monitoring) within NHS secondary and primary care.
 - Introduce and establish case loads to pharmacists to contribute to the clinical management of Long Term Conditions by developing the concept for registration with a 'named pharmacist' for all pharmaceutical care needs throughout the patient journey.
- Embed prevention, anticipatory care planning and early intervention into pharmaceutical care.
 - Utilise the application of systems for the risk assessment of patients to prioritise care – e.g. tools such as Scottish Patients At Risk of Readmission (SPARRA).
 - Develop new NHS standard specifications for services and innovative pharmaceutical care for specific patient groups developed with the professions.
 - Improve and enhance pharmacists' role in working in partnership with patients and carers to improve co-production and support self-management using mobile technology.

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2.1 Introduction

2.1.1 Person-centred pharmaceutical care and medicines is pivotal in delivering our Vision over the next 10 years. In this Chapter, we will focus on our aims and objectives to deliver mutually beneficial partnerships between patients, their families, carers and those delivering health and social care services. Importantly, it will set out our approach to help ensure patients have appropriate treatment and interventions with medicines which respect individual needs and values demonstrating compassion, continuity of care, clear communication and shared decision-making.

2.2 Scotland's Population and Medicines Use

2.2.1 The changing demography of Scotland, the associated increase in people living with complex and long term conditions (multimorbidity) and the continuing health inequalities set major challenges for the provision of pharmaceutical care in the future. The proportion of over 75s, who are high users of health and care services and for whom prescribing can be particularly complex, will increase by over 25% in the next 10 years, and the number of over 75s is likely to have increased by almost 60% in the next 20 years¹². The pattern of disease will see a continuing shift towards long term conditions, with growing numbers who will have multimorbidities. In particular the combination of physical and mental health disorders can produce additionally complex needs.

2.2.2 In a recent Scottish study¹³ an analysis of a database of over one and three quarter million patients found that nearly a quarter had multimorbidity, that the onset of multimorbidity occurred 10-15 years earlier in people living in the most deprived areas compared with the most affluent. Also, that the presence of a mental health disorder increased as the number of physical morbidities increased.

2.2.3 The study illustrates the challenges to the traditional single-disease framework to which most health care has been configured and underlines the importance of generalist clinicians providing personalised, comprehensive and continuous care.

2.3 Non-adherence to prescribed medicine regimens

2.3.1 Non-adherence (where medications are not taken as prescribed) has been estimated to be responsible for 48% of asthma deaths, an 80% increased risk of death in diabetes and a 3.8-fold increased risk of death following a heart attack¹⁴. Another manifestation of non-adherence is failure to collect prescriptions. Two small studies show that 2.9 - 5.2% of items prescribed

¹² Achieving Sustainable Quality in Scotland's Healthcare: A 20:20 Vision 2011, Scottish Government, September 2011.

¹³ Barnett K, Mercer SW, Norbury M, Watt G, et al, Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *Lancet* 2012; 380: 37-43.

¹⁴ Elliot R. Non adherence to medicines - not solved but solvable, *J Health Serv Res Policy* 2009, 14:58-61.

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were not dispensed¹⁵, although they were conducted before the introduction of free prescriptions. It is estimated that one pound in every eight of NHS spending is on medicines, however up to half of all the medicines prescribed are not used as the prescriber intended¹⁶.

2.3.2 Waste medicines result predominantly from non-adherence, changes in prescribing and changes in the patient's condition. A study¹⁷ of waste medicines in England in 2010 found that medicines worth around £300 million were wasted per year and about £150 million could be saved in cost effective ways. The proportionate equivalent for Scotland would be wastage of £30 million and potential savings of £15 million. The study concludes that 'the greatest social and economic returns are to be gained when reducing medicines waste can be effectively linked to improving care quality and health outcomes' including patient safety.

2.3.3 Pharmacists are ideally placed to work with patients to support co production in managing their medications. The European Innovation Partnership in Active and Healthy Aging has an Action Group focused on improving both prescription and adherence of medicines regimens. One of its aims is to improve integrated care through better multi-professional working and with a particular work stream utilising the role of the pharmacist.

Scottish Government will explore development of a system to improve and enhance pharmacists' role in working in partnership with patients and carers to improve co-production and support self-management using mobile technology.

2.4 Therapeutic Partnerships & New Models of Working

2.4.1 Sir Professor Lewis Ritchie's report for Scottish Government on *Establishing Effective Therapeutic Partnerships*¹⁸ discussed the importance of partnership working between GPs and Pharmacists to deliver pharmaceutical care. Key themes identified in this report such as managing long term conditions and services to care homes, are all reflected in the Wilson and Barber report, the Vision and this Action Plan. As the number of other prescribers such as nurses, midwives and allied health professionals increases, it will be important to form collaborative working relationships with these professionals as well as GPs.

¹⁵ Jones I, Britten N: Why do some patients not cash their prescriptions? *Br J Gen Pract* 1998, 48:903-90 and Beardon PHG, McGilchrist MM, McKendrick AD, McDevitt DG, MacDonald TM: Primary non-compliance with prescribed medication in primary care, *Br Med J* 1993, 307:846-848.

¹⁶ Medicines adherence: Involving patients in discussions about prescribed medicines and supporting adherence, NICE clinical guidelines, January 2009.

¹⁷ Evaluation of the scale, causes and costs of waste medicines, York Health Economics Consortium/School of Pharmacy, University of London, November 2010.

¹⁸ Establishing Effective Therapeutic Partnerships - A generic framework to underpin the Chronic Medication Service element of the Community Pharmacy Contract, Scottish Government, December 2009.

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Scottish Government will seek to further enhance therapeutic partnerships which will be essential to embedding partnership working between the patient (or carer), their GP and pharmacist and other health and social care professionals.

- 2.4.2 A recent study for the General Medical Council (GMC)¹⁹ suggests that around one in eight patients have prescribing or monitoring errors, involving around one in 20 of all prescription items. As is common with errors, the vast majority had no effect, or only a mild or moderate, effect. However, one in 550 items was associated with a serious error. Some factors that increased the probability of an error were the patient's age (<15, >64) and the number of items prescribed. Monitoring errors (failure to monitor for the adverse effects of certain medicines) tended to have more serious consequences than prescribing errors. The most frequent forms of prescribing error were 'incomplete information on the prescription' and 'dose/strength errors'. The most common monitoring error was 'failure to request monitoring' (69%). In care homes²⁰ errors were more frequent where 39% of residents had one or more prescribing errors.
- 2.4.3 Specific problems have also been identified with the transfer of information at the primary/secondary care interface.
- 2.4.4 Many of the problems associated with medicines can be addressed through effective therapeutic partnerships, including initiating medication, detecting prescribing and monitoring errors. Involving patients in decision making improves adherence and reduces waste. Pharmacists working directly with GPs can significantly contribute to addressing issues with prescribing²¹. To be effective, pharmaceutical care requires good communication and shared understanding with patients and local prescribers. Being focussed on the outcome of interventions rather than the nature of them can equally be applied to self-care, and to health promotion and prevention. In the case of self-care and self-management, the pharmacist will distinguish the complaints that require referral to a doctor and those that can be dealt with by self-medication, and provide appropriate advice and follow up.
- 2.4.5 The Audit Scotland report²² on prescribing in general practice highlighted the beneficial effect of partnership working between GPs and pharmacists and among its recommendations was to increase the access of pharmacist support to GP practices. This would be facilitated by creating clinical practice models that would support this approach.

¹⁹ Avery A, Barber N, Ghaleb M, Dean B et al, Investigating the prevalence and causes of prescribing errors in general practice: ThePRACTiCe Study, A report for the GMC, 2012.

²⁰ Barber ND, Alldred DP, Raynor DK, Dickinson R, et al. Care homes' use of medicines study: prevalence, causes and potential harm of medication errors in care homes for older people. *Quality and Safety in Health Care*. 2009;341-6.

²¹ Avery AJ, Cantrill JA, Armstrong S, Cresswell K, et al, A pharmacist-led information technology intervention for medication errors (PINCER): a multicentre, cluster randomised, controlled trial and cost-effectiveness analysis, *The Lancet*, Volume 379, Issue 9823 Pages 1310 - 1319, April 2012.

²² Audit Scotland Report on Prescribing in General Practice, 2012.

Collaborative working in 2013

“I have had the privilege of working closely with Colin, a pharmacist colleague for many years. Initially starting from a relationship where he was always available for prescribing support from within his community pharmacy, through support within the practice as a prescribing support pharmacist, to now where he is a non medical prescriber running clinics both within and out with the practice on a shared care programme, initially for patients with hypertension and more recently for chronic pain control. Over this time I have come to more fully appreciate the significant role that a pharmacist colleague can play in working with GPs practices to deliver an enhanced level of care. It feels at times that we have the benefit of an 'attached pharmacist' such that we now regard him as a fully paid up member of our primary care team.”

GP, Deep End Practice, Greater Glasgow and Clyde

- 2.4.6 A particularly important role for pharmacists working with GPs to undertake is polypharmacy and medication reviews to improve patient outcomes and reduce harm through improving patient safety and effectiveness of prescribing. Last year, the Royal College of General Practitioners and the Royal Pharmaceutical Society published a joint statement on partnership working *“Breaking down the barriers – how pharmacists and GPs can work together to improve patient care”*²³. This emphasises the complementary roles of pharmacists and GPs in patient care, the value of collaborative partnership, and the importance of professional learning together.

Scottish Government will seek to further enhance the role of NHS accredited clinical pharmacist independent prescribers to work with GPs to deliver medication/polypharmacy review, using telehealthcare and domiciliary visits where appropriate.

- 2.4.7 In order to deliver closer ways of working between GPs and pharmacists and social care providers, new models and ways of working will be required. GPs and pharmacist will work in collaboration to allocate caseloads to pharmacists for management of patients with long term conditions.
- 2.4.8 The European Active and Healthy Ageing Innovation Partnership recognises the need to increase the pharmacist’s role in improving the health of the older population through multi-disciplinary working.

²³ Breaking down the barriers – how pharmacists and GPs can work together to improve patient care, RCGP Scotland and RPS Scotland Joint Statement, 2012.

2.5 Continuity of NHS Pharmaceutical Care and the 'Named Pharmacist'

- 2.5.1 Evidence gathered from the Wilson and Barber Review found that patients wanted to know that they could develop a relationship with their pharmacist and they expressed a preference to see the same pharmacist on a regular basis.

Scottish Government will explore the utilisation of caseloads to named pharmacists to contribute to the clinical management of Long Term Conditions by developing the concept for registration with a 'named pharmacist' for all pharmaceutical care needs throughout the patient journey.

2.6 Anticipatory Care and Public Health

- 2.6.1 An Audit Scotland report on Health inequalities²⁴ found that there was a good distribution of pharmacies across deprived communities in Scotland. This will enable the further development of accessible services for substance misuse, including: drugs and alcohol, smoking cessation; sexual health as well as early intervention for prevention of cardiovascular diseases.

- 2.6.2 The Pharmore pilots²⁵ offered a convenient access to a mix of primary care service such as pharmacist led minor illness clinic and nurse-led minor injury clinics available during normal pharmacy hours and in some cases extended to include out of hours periods such as evenings and weekends and the work undertaken in England by a collaborative of pharmacies demonstrated that up to 60% of pharmacist consultations saved patients contacting a GP. The pilots have also reduced the need to access out of hours service. Recent data from NHS 24 indicates that more people are accessing pharmacy services out of hours. Using pharmacist prescribers would allow treatment of common clinical conditions such as urinary tract infections and cystitis.

Scottish Government will consider further development of the pharmacist's contribution to the management of common clinical conditions and develop new models of delivery of primary care services in partnership with GPs.

- 2.6.3 Our work programme will place increased focus on prevention, anticipatory care and early intervention. It will develop pharmaceutical care for specific patient groups and specialist services: older people, mental health, children and substance misuse.
- 2.6.4 These arrangements are pivotal to the long term strategy to move pharmacists away from a focus purely on the dispensing of medicines to the provision of person- centred care as part of the wider healthcare team.

²⁴ Health Inequalities in Scotland, Audit Scotland, December 2012

²⁵ A Study of Pharmore+: Pharmacy Walk-in Services Pilots, Scottish Government, September 2013

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2.6.5 Together these services are an important part of the pharmacist's contribution in shifting the balance of care by:

- improving access for the public as they do not need an appointment to see their pharmacist for a consultation;
- decreasing unnecessary workload on the GP therefore freeing up their time to see patients with more serious complaints;
- improving health outcomes and minimising adverse events from medicines;
- helping to address health inequalities; and
- making better use of the workforce by more fully utilising the skills of pharmacists.

2.7 National NHS Specifications and Standards for Pharmaceutical Care Services

2.7.1 As services are developed, standards and specifications will need to be developed to ensure consistency of service for patients and delivery of outcomes that are person-centred.

Scottish Government will develop with the professions new NHS standard specifications for services and innovative pharmaceutical care for specific patient groups.

2.7.2 Areas that will be considered as a priority are the pharmaceutical care that is delivered to people who are residents in care homes and those that are being supported by social work or family to live at home. A report from Reshaping care for older people²⁶ and the Royal Pharmaceutical Society's report on *Improving Pharmaceutical care for patients in care homes*²⁷ highlight areas of good practice for work in care homes across Scotland and also collaborative working with social care.

2.7.3 The polypharmacy guidance²⁸ published last year provides guidance on undertaking reviews and outcome data for reviews that have been undertaken for people taking medicines that are high risk. National tools for monitoring improvement and facilitating multi-disciplinary working will be further explored with NES, Health Improvement Scotland (HIS) and Information Services Division (ISD).

2.7.4 Hospital at home is where some medicines which previously were only able to be administered in the hospital setting are now given to patients in their own home due to advances in technology and medicine design. These are prescribed by hospital consultants and supported by hospital pharmacists. Hospital clinical pharmacists who are recognised as experts in medicines and

²⁶ Reshaping Care for Older People: A Programme for Change, Scottish Government, 2012

²⁷ Improving Pharmaceutical Care in Care Homes, Royal Pharmaceutical Society Scotland, March 2012

²⁸ Circular CEL 36 (2012), Appropriate prescribing for patients and polypharmacy guidance for review of quality, safe and effective use of long- term medication, Scottish Government, November 2012

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are an integral part of the multidisciplinary ward clinical team in hospital. These hospital pharmacists would be required to deliver pharmaceutical care in the hospital at home setting to ensure continuity of pharmaceutical care.

Scottish Government will develop new pharmaceutical care service models for hospital at home with medical, pharmaceutical professions and the pharmaceutical industry.

- 2.7.5 Some other areas where national specifications and NHS standards will be explored include smoking cessation, sexual health and drug and alcohol services. It is also well documented that people that abuse alcohol and drugs are a high risk population. They are well served in the provision of medicines to treat their problems, but expansion of pharmacist prescribing skills to review these medications is recommended.

The Expert Group Review of Opiate Replacement Therapies²⁹ (and substance misuse services) will be used to inform development of further services building on existing work already taking place in some NHS Boards.

2.8 Stratified Medicine

- 2.8.1 The landscape of therapeutics is presently undergoing revolutionary change through the introduction of biopharmaceuticals and genomic research. This rapidly developing field is producing new healthcare interventions through translational genomics. This in turn will create better drugs, improved insight into the disease process and better diagnostic methods. This whole new area of therapeutics will place new demands on pharmaceutical care. The healthcare professions and academia need to quickly become more familiar with this if patients are to fully benefit from this aspect of therapeutics. This is starting to be addressed in Scotland with the Scottish Government's Chief Scientist's Office and the contribution of innovative pharmaceutical care will need to be developed as will the education and skills of clinical pharmacists in this area.

- 2.8.2 Stratified medicine is a developing concept where genetic phenotype modelling using genetic analysis of patients' likelihood of benefiting from particular drugs will allow for more specific targeting of drug treatment.

Scottish Government will develop innovative pharmaceutical care to support the clinical application of translational genomics and stratified medicine.

²⁹Delivering Recovery-Opioid Replacement Therapies in Scotland-Independent Expert Review, Scottish Government, August 2013

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Our work programme to deliver PERSON CENTRED pharmaceutical care will explore options to :	Years 1-3	Years 3-5	Years 5-10
1. Create a model to facilitate NHS accredited clinical pharmacist independent prescribers working in partnership with patients, GPs and other prescribers	✓		
2. Introduce the utilisation of clinical case load for review and management of Long Term Conditions and prescribing through Therapeutic Partnerships e.g. polypharmacy and medication review	✓		
3. Develop models to ensure all patients have pharmaceutical care including polypharmacy/ medication reviews where appropriate	✓	✓	✓
4. Work with the rural practitioners to scope and develop the use of domiciliary visits/ telehealth/ mobile apps to respond to needs of different age groups, and different settings	✓	✓	✓
5. Work with patients, professions to develop a NHS framework for registration with a 'named pharmacist' and implement the legislative and contractual framework to underpin this innovative approach	✓	✓	✓
6. Establish a framework for anticipatory pharmaceutical care planning	✓		
7. Develop service models for those receiving high risk and high tech medicines building on risk assessment tools developed for polypharmacy and anticipatory care planning	✓	✓	✓
8. Scottish Government will develop innovative pharmaceutical care to support the clinical application of translational genomics and stratified medicine	✓	✓	

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Our work programme to deliver PERSON CENTRED pharmaceutical care will explore options to :	Years 1-3	Years 3-5	Years 5-10
<p>9. Develop national service with the professions new standard specifications for services and innovative Pharmaceutical care and pharmaceutical public health for specific patient groups of:</p> <p style="padding-left: 40px;">Cardiovascular health</p> <p style="padding-left: 40px;">Older People – in care homes and in their own home</p> <p style="padding-left: 40px;">Alcohol and Substance Misuse</p> <p style="padding-left: 40px;">Mental Health</p> <p style="padding-left: 40px;">Sexual health</p> <p style="padding-left: 40px;">Children</p>	✓	✓	
<p style="padding-left: 40px;">Cardiovascular health</p> <p style="padding-left: 40px;">Older People – in care homes and in their own home</p> <p style="padding-left: 40px;">Alcohol and Substance Misuse</p> <p style="padding-left: 40px;">Mental Health</p> <p style="padding-left: 40px;">Sexual health</p> <p style="padding-left: 40px;">Children</p>	✓	✓	
<p style="padding-left: 40px;">Cardiovascular health</p> <p style="padding-left: 40px;">Older People – in care homes and in their own home</p> <p style="padding-left: 40px;">Alcohol and Substance Misuse</p> <p style="padding-left: 40px;">Mental Health</p> <p style="padding-left: 40px;">Sexual health</p> <p style="padding-left: 40px;">Children</p>	✓	✓	
<p style="padding-left: 40px;">Cardiovascular health</p> <p style="padding-left: 40px;">Older People – in care homes and in their own home</p> <p style="padding-left: 40px;">Alcohol and Substance Misuse</p> <p style="padding-left: 40px;">Mental Health</p> <p style="padding-left: 40px;">Sexual health</p> <p style="padding-left: 40px;">Children</p>	✓	✓	
<p style="padding-left: 40px;">Cardiovascular health</p> <p style="padding-left: 40px;">Older People – in care homes and in their own home</p> <p style="padding-left: 40px;">Alcohol and Substance Misuse</p> <p style="padding-left: 40px;">Mental Health</p> <p style="padding-left: 40px;">Sexual health</p> <p style="padding-left: 40px;">Children</p>	✓	✓	
<p>10. Further develop the pharmacists contribution to the management of common clinical conditions and develop new models of delivery of primary care services in partnership with GPs</p>	✓	✓	✓

Delivery of treatments, interventions, support and services so that NHS pharmaceutical care is delivered in a **safe** environment preventing injury or harm to people from medicines, advice and support

In this Chapter we will set out our aims and related work programme to deliver *safety* in pharmaceutical care and medicines. This will focus on developing approaches to:

- Review of the governance arrangements for the safe delivery of pharmaceutical care and use of medicines in the community.
- Implementing clinical guidelines and Monitoring of the use of Medicines.
- Implementing Scottish Patient Safety & medicines reconciliation Programme across pharmacy practice in primary care & secondary care.
- Introducing patient level risk assessments.
- Introduce a framework for the use of patient identifiable prescribing data to monitor changes in prescribing.
- Extend access to patient information systems and enable the sharing of information between pharmacists, GPs and other healthcare and social care practitioners.
- Establish a Performers List for pharmacists to provide NHS Pharmaceutical Care. All pharmacists delivering clinical services will be independent prescribers.

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3.1 Introduction

- 3.1.1 Safety in pharmaceutical care and medicines is uppermost in ensuring optimum benefit from the therapy patients receive. Building on our quality ambitions, this Chapter will focus on our actions/strategy to help ensure that **there will be no avoidable injury or harm to people from medicines**, or from the **advice or support** they receive, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times.
- 3.1.2 A study undertaken for the Royal Pharmaceutical Society of Great Britain³⁰ found 3.3% dispensing errors, 5% of medicines prescribed at outpatient appointments not added to GP records (13% of consultations were not added to GP records). In hospital they also found 18-60% discrepancy in medication with 1.5-9.2% prescribing errors, and 11% discrepancy in discharge medication. Using NHS accredited clinical pharmacists in the community to support medicines reconciliation as patients move between different care settings will improve care and safety for patients.
- 3.1.3 The Public Bodies (Joint Working)(Scotland) Bill to integrate adult health and social care services is currently before Parliament and is designed to integrate health and social care. This Action Plan recognises the importance of delivering NHS pharmaceutical care to recipients of local authority community care services in a way which best meets the needs of those individuals. This is entirely consistent with the integration agenda. If passed by Parliament in its current form, the Public Bodies (Joint Working)(Scotland) Act will require Health Boards and local authorities to work together to plan the delivery of certain functions within their area and it is envisaged that this would include the delivery of pharmaceutical care services in care homes. Within care homes, consistent clinical input from suitably qualified NHS accredited pharmacist prescribers is recommended, working in partnership with GPs, nursing and social work staff, patients and their carers to ensure appropriate clinical governance in reviewing prescribing. The same would apply for patients living in their own homes with supported care. It will be essential to ensure that there is consistency of service standards for delivery.
- 3.1.4 The Vision and Action Plan proposes that it is essential that NHS Boards ensure all patients have access to NHS pharmaceutical care from a pharmacist so that where the population is served by a dispensing doctor then clinical pharmacist input is also available to the population. Pharmacists delivering this would need to be prescribers and on a NHS Board's NHS Pharmaceutical Care Performers List like other healthcare professionals in primary care to ensure standards of care.
- 3.1.5 The Vision sets out to address key issues highlighted in the Francis report³¹ such as patient safety and consistency and quality of care.

³⁰ Vincent C, Barber N, Franklin B. D, Burnett S, RPSGB, 2009

³¹ Final Report Of The Independent Inquiry Into Care Provided By Mid Staffordshire NHS Foundation Trust, February 2013

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3.2 Governance arrangements for the safe delivery of pharmaceutical care

3.2.1 The pharmacists that will be delivering the pharmaceutical care in the community will need to ensure that when they manage patients, they work with medical and nursing colleagues to implement clinical guidance and undertake the relevant monitoring where appropriate. They will need to ensure they work closely with the NHS Board's governance structure for utilisation of medicines.

Scottish Government will consider approaches to implementing clinical guidelines and monitoring of the use of medicines in all care settings.

3.2.2 The development of new medicines is essential for advancing therapeutics. This is a dynamic process which aims to improve clinical responses, whilst reducing harm and/or side effects. However, not all new medicines represent a significant improvement over existing medicines in the same therapeutic class.

3.2.3 Medicines are the most common intervention in healthcare. The Audit Scotland Report on Prescribing in General Practice suggests that NHSScotland spends close to £1.4bn a year on medicines. Of this expenditure, almost £1bn (70%) is spent on medicines dispensed in primary care. Territorial NHS Boards spend around 10% of their budgets on GP prescribed medicines. NHS clinicians have evolved processes such as Area Drug and Therapeutics Committees (ADTCs) and the Scottish Medicines Consortium (SMC) to ensure that the medicines they use represent value for money.

3.2.4 The ADTC functions support and help deliver the three quality ambitions, particularly around patient safety and provision of the most appropriate treatments at best cost. SMC accepted medicines are considered by local ADTCs for inclusion on their formularies.

Scottish Government will consider the review of the clinical governance arrangements for the safe delivery of pharmaceutical care and use of medicines in the community.

3.3 Scottish Patient Safety Programme

3.3.1 The Scottish Patient Safety Programme (SPSP) has started to be delivered in GP practices after the implementation in hospital settings. The programme of work for SPSP is now looking to extend utilising the role of pharmacists in primary care. Medicines reconciliation for patients post discharge would be an important development in this area. In addition, the review of high risk medicines is intended to complement the patient safety agenda in GP practices and will see inclusion of more high risk medicines. It is important to acknowledge that appropriate review of prescribing at medication review, which may or may not be to address polypharmacy should address many of the safety issues as highlighted in CEL 36 (2012).

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Scottish Government will develop approaches to implement Scottish Patient Safety & Medicines Reconciliation Programme across pharmacy practice in primary care & secondary care.

3.4 Patient Level Risk Assessments

- 3.4.1 Patient risk assessment tools have been developed to identify people that would most benefit from interventions to ensure safe and appropriate prescribing. This approach has been applied to target polypharmacy reviews but also in Change Fund initiatives where enhanced pharmaceutical care has resulted in improved outcomes for older people including prevention of readmission. Patient support tools can also be used to help support adherence³². This is important as discussed above it is estimated that up to 50% of drugs are not taken as prescribed.

Scottish Government will develop approaches to introducing patient level risk assessments for patients taking medication.

3.5 Patient Identifiable Prescribing Data

- 3.5.1 Patient identifiable data allows appropriate monitoring of high risk prescribing. It can be used to measure improvements in prescribing and potentially improves patient safety. Work has started with NHS Scotland Information Services Division (ISD) to build indicators that can be used by GPs and pharmacists. This data also helps improve evidence based prescribing. As part of the Vision, all pharmacists working with GP practices would be given appropriate skills to use prescribing data. Currently this role is undertaken by prescribing advisors but as the Audit Scotland report recommends, there is a need to increase the pharmacist and analytical input to practices across Scotland.

- 3.5.2 The development of data sets with time should also allow for the monitoring of treatments in different patient groups and this should be governed by Area Drug & Therapeutic Committees.

Scottish Government will develop approaches to introduce a framework for the use of patient identifiable prescribing data to monitor patterns and changes in prescribing.

3.6 Patient Information Systems

- 3.6.1 In order to deliver safe and effective care, the Vision proposes that pharmacists providing clinical care would be given access to relevant clinical data to ensure medication and care issues can be managed appropriately. Access to electronic Key Information Summary eKIS and Emergency care summaries (ECS), as well as sharing relevant information with social care and

³² Counselling and Advice on Medicines and Appliances in Community Pharmacy Practice, CRAG, 1996

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other health colleagues will be essential, as more patients with complex and changing support needs are managed at home.

- 3.6.2 Pilot work is almost complete in three NHS Boards to develop the Hospital Pharmacy Care Record (HPCR) and sharing of the existing Pharmacy Care Record (PCR) in the community as the individual moves between different care settings. This is of benefit as the information generated from the pharmacy shows what medicines the patient actually collects as opposed to what is prescribed. Sharing of information on patient discharge with pharmacists means that the rationale for changes in medication can be understood and implemented safely at this point.

Scottish Government will develop approaches to extending access to patient information systems and enable the sharing of information between pharmacists, GPs and other healthcare and social care practitioners.

3.7 NHS Pharmaceutical Care Performers List

- 3.7.1 Many primary care health professionals such as GPs and dentists have performers lists that are held with the local NHS Board. The Wilson and Barber Review recommends the introduction of a performers list (for pharmacists working in the community) that will underpin the principles of fitness to practice, professional good standing, professional standards and clinical governance which will improve safety for patients.
- 3.7.2 When designing services and introducing change, the design should allow for minimal disruption to the workflow³³, therefore, working in collaboration with GPs, pharmacist independent prescribers will be able to implement change for patients without increasing the work burden for other healthcare professionals. Pharmacists will be supported to develop their skills so that they will be able to work as independent prescribers.

Scottish Government will develop approaches to establishing a Performers List for Pharmacists who provide NHS Pharmaceutical Care.

- 3.7.3 Pharmaceutical care planning that takes place at NHS Board level should help inform workforce planning, education and training.

³³ Bohmer, R. M, Designing Care. Boston: Harvard Business Press, 2009.

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Our work programme to deliver SAFE pharmaceutical care will explore options to :	Years 1-3	Years 3-5	Years 5-10
1. Review of the governance arrangements for the safe delivery of pharmaceutical care and use of medicines in the community	✓	✓	
2. Implementing clinical guidelines and Monitoring use of Medicines	✓	✓	
3. Establish partnerships with HIS, and the professions to mainstream the aims of the Scottish Patient Safety Programme in pharmacy and medicines practice	✓	✓	✓
4. Develop and implement a framework for the appropriate use of patient identifiable prescribing data and risk assessment	✓	✓	✓
5. Work with health professionals to enhance shared clinical patient information systems to support pharmacists providing clinical care	✓	✓	✓
6. Develop with the professions NHS Pharmaceutical Care Performers list for patient registration to allow patients to have appropriate pharmaceutical care	✓		

Chapter 4 Effectiveness of pharmaceutical care and medicines

Effective

appropriate treatment, interventions, support and services is evidence based, provided at the right time reducing waste, harm and variation and ensuring clinical and cost effective use of both existing and new medicines and technologies

In this Chapter we will set out our aims and related work programme to deliver *effectiveness* of pharmaceutical care and medicines. This will focus on developing approaches to:

- Define and implement a robust framework of NHS Board Pharmaceutical Care Services Plans informed by a local needs assessment.
 - NHS Boards identifying clusters of pharmacists that could work as a group.
 - Introduce general practice clinical pharmacists working in primary care who are pharmacists delivering pharmaceutical care in the community.
 - Redesign the dispensing process to be effective and efficient, releasing pharmacists' time for clinical care through workforce planning and improved use of pharmacy team and automation using robotics.
 - Further development of models to reduce harmful and wasteful variation in prescribing.
 - Implement contracts, models and/ or service frameworks to prevent perverse incentives that compromise professionalism.
-
- Ensure clinical and cost effective use of existing, new medicines and technologies by implementing evidence based guidance through Area Drug and Therapeutics Committees.
 - Design models for provision of hospital Homecare medicines co-ordinated through integrated working between hospital and community pharmacists and pharmaceutical industry.
 - Seek to review the use of technology such as telehealthcare to enhance the patient journey.

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4.1 Introduction

4.1.1 There are a number of workforce issues including the fact that, currently, the skills of a pharmacist are underutilised in the community setting. More effective pharmaceutical care can be delivered by allowing the pharmacist to develop their professional clinical skills. Medicines arrive at the pharmacy mostly pre-packed. With the exception of the clinical check being undertaken by the pharmacist, the dispensing process could be managed by appropriately qualified technicians, thereby releasing pharmacists' time to undertake pharmaceutical care in the most appropriate setting, which may be the GP practice or the person's home.

4.1.2 NHS Board Pharmaceutical Care Services Plans will identify the pharmaceutical needs for their populations, and also the clusters of pharmacists that could work collaboratively together to deliver clinical care as a group practice.

In order to deliver effective pharmaceutical care, it is essential that the most appropriate treatments, interventions, support and services will be provided at the right time to reduce wasteful or harmful variation.

4.2 NHS Board Pharmaceutical Care Services Plans

4.2.1 This will be central to how NHS Scotland plans, provides and delivers pharmaceutical care and medicines to its communities. In the longer term it has implications for existing arrangements for service provision, where and how it is provided. These plans will need to consider population needs, which include public health and health inequalities.

4.2.2 NHS Boards are responsible and accountable for the provision of pharmaceutical services in secondary and primary care sectors. Currently in primary care, NHS Boards make arrangements with pharmacy owners for the delivery of pharmaceutical services. The pharmacist delivering these services needs to ensure that their priorities are focused on the patient above all else. Perverse incentives such as targets and bonuses based on commercial retail priorities should not be allowed to adversely affect patient care.

4.2.3 More importantly, NHS Board Pharmaceutical care planning will facilitate the clustering of pharmacists to deliver pharmaceutical care for patients without decreasing the accessibility of a pharmacy services to a community. In addition, it may be appropriate for secondary care pharmacists and those working in primary care to work collaboratively together to deliver homecare medicines or hospital at home clinical pharmacy services where complex or specialised medicines are being taken. It is recognised that this is a fundamental shift in approach which we will consult on as appropriate.

4.2.4 The provision of pharmaceutical care out of hours will be reviewed with NHS 24.

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Scottish Government will explore defining and implementing a robust framework of NHS Board Pharmaceutical Care Delivery Plans informed by a local needs assessment, and work with NHS Boards to identify clusters of pharmacists that could work as a group, and introduce contracts or service frameworks which prevent perverse incentives.

- 4.2.5 In some parts of rural Scotland, the NHS relies on dispensing doctors to provide dispensing services to their own patients who (through geography and demographics) are unable to secure the dispensing services of a community pharmacy. In these cases we will need to explore how these patients can be supported in terms of pharmaceutical care.

Scottish Government will work with patients, dispensing doctors and appropriate stakeholders to explore how rural communities can be further supported in terms of pharmaceutical care.

4.3 The General Practice Clinical Pharmacist

- 4.3.1 The vision of all patients having access to NHS pharmaceutical care from clinical pharmacist independent prescribers in all settings will be achieved through extending and developing the clinical pharmacy services currently provided by pharmacist prescribers in both community and secondary care. In order to rapidly expand the provision of pharmaceutical care in the community, the concept of the “general practice clinical pharmacist” will be considered. The skills of appropriately qualified hospital, primary care and community pharmacists can be harnessed to form the foundation of the general practice clinical pharmacist. This will begin to plug identified gaps in the provision of pharmaceutical care, and to target the most vulnerable and high risk patient groups. We will consider the advancement of pharmacists’ skills that will also be required to be developed. Examples include prescribing in clinics and polypharmacy review for the frail elderly and those in care homes, and monitoring outcomes with medicines.

Scottish Government will establish with NHS, NES and professional bodies the framework for development of general practice clinical pharmacists.

4.4 Release Time for Pharmacists to Deliver Pharmaceutical Care

- 4.4.1 In order for pharmacists to deliver the effective pharmaceutical care required, work force planning and redesign will be required to use the available skills of the workforce. In particular, the use of pharmacy technicians and pharmacy assistants should help to facilitate this.
- 4.4.2 Consideration would also need to be given to the automation of the supply of medicines using robotics and routine repeat dispensing transferred to serial dispensing. It is important to build in here a patient information system that would allow sharing of electronic data across primary and secondary care and implement a paperless integrated electronic prescribing system.

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Scottish Government will consider redesign of the dispensing process to release time for clinical care using workforce planning, improved use of pharmacy team and robotics.

4.5 Reduce Harmful and Wasteful Variation in Prescribing

- 4.5.1 The prescribing work stream of the NHS Scotland Efficiency & Productivity Framework has started to develop tools for clinicians to address harmful and wasteful variation in prescribing. The York University report into waste³⁴ identified that medication review was an appropriate way to address waste. Development of indicators to illustrate variation in prescribing with appropriate clinical guidelines is an effective way to change behaviour. The PINCER trial was a randomised controlled trial that demonstrated that pharmacists working with GPs provided better outcomes than just sharing electronic data.

Scottish government will explore extending joint working of pharmacist with all other prescribers to ensure all patients have appropriate pharmaceutical care

4.6 Integration of Primary and Secondary Care Pharmaceutical Care and Medicines

- 4.6.1 In order to deliver effective person-centred care, pharmaceutical care will need to be delivered across the interfaces of health and social care. Pharmacists will have a role in facilitating better integration of advice and use of medicines across sectors and disciplines.
- 4.6.2 Hospital at home is a developing concept where patients needing hospital care are facilitated to live at home by providing hospital care in their own homes and to be treated with medicines that would normally be given in a hospital setting. In order to deliver this effectively, pharmacists working in hospital and primary care will need to work as a team, ensuring effective sharing of information to improve patient safety.
- 4.6.3 Pharmacy Homecare is where medicines prescribed by the hospital specialists are delivered to patients in their own homes. It is proposed these medicines should be delivered through NHS pharmaceutical care services to allow capture of prescribing information for the patient and to assess suitability and compatibility with other medications. This would allow for appropriate governance and monitoring. By having a complete record of all medications that a patient is taking adequate monitoring can be provided.

Scottish Government will consider models for provision of hospital homecare medicines co-ordinated through integrated working between hospital and community pharmacists and pharmaceutical industry.

³⁴ Evaluation of the scale, causes and costs of waste medicines, York Health Economics Consortium/School of Pharmacy, University of London, November 2010.

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4.7 Technology- Telehealthcare and Mobile Apps

- 4.7.1 Effectiveness of delivery of pharmaceutical care may be enhanced by the use of technology and mobile apps. The national delivery plan for telehealth and telecare considers technology as a tool to drive improvement and to facilitate greater integration, skill mix, choice and control. Use of technology would allow pharmacists to effectively manage their case load of patients.
- 4.7.2 The European Innovation Partnership in active and healthy ageing promotes the use of mobile applications to enable people to self-manage, improve adherence to treatment and to provide decision making support for professionals. These applications for mobile technologies are best developed through collaboration between healthcare, and technology companies and patient groups so that their effectiveness can be assessed.

Scottish Government will introduce a framework to promote and increase the use mobile technology to support people manage their medications and improve adherence

- 4.7.3 The Scottish Government Health and Innovation Partnership Board would also provide strategic support for this development.

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Our work programme to deliver EFFECTIVE pharmaceutical care will explore options to :	Years 1-3	Years 3-5	Years 5-10
1. Consult on the powers of NHS Board Pharmaceutical Care Plans and its impact on existing planning arrangements including dispensing doctors	✓	✓	✓
2. Establishing with NHS, NES and professional bodies the framework for development of general practice clinical pharmacist	✓	✓	✓
3. Develop new models to enhance role of pharmacist by better use of pharmacy workforce such as pharmacy technicians and pharmacy assistants	✓	✓	✓
4. Establish a framework of joint working and information sharing between primary and secondary care pharmacist and other members of the multidisciplinary team	✓		
5. Redesign the dispensing process to release pharmacists time or clinical care through workforce planning and improved use of pharmacy team and automation using robotics	✓	✓	✓
6. Establish a public/private partnership framework to promote and increase the use of robotics	✓	✓	✓
7. Build on the work being taking forward through NHS Scotland Efficiency & Productivity programme	✓	✓	✓
8. Respond to Audit Scotland report into prescribing in general practice - in particular to extend joint working of pharmacist with all other prescribers to ensure all patients have appropriate pharmaceutical care	✓	✓	✓
9. Introduce a framework to promote and increase the use mobile technology to support people manage their medications and improve adherence	✓	✓	✓

Chapter 5

Making it Happen: Infrastructure to deliver pharmaceutical care

Development of **infrastructure** that supports pharmacy practice development, education, training, research and electronic sharing of information for the development of pharmaceutical care

In this Chapter we set out our aims and related work programme to develop the *infrastructure* that supports pharmaceutical care. This will focus on developing approaches to:

- Ensure a workforce that is fit for purpose by implementation of NHS standards of practice for pharmaceutical care are attained through working with the NHS, Schools of Pharmacy and Medicine, NES and the professional and regulatory bodies.
 - Ensure education and training meets the needs of patients and the NHS.
 - Provision of NHS Clinical and Professional Leadership.
 - Implementation of primary and secondary care configured systems to allow electronic information sharing contributing to pharmaceutical care and electronic prescribing for all prescribers including pharmacist prescribers.
 - Implement HEPMA to allow for electronic capture of prescribing data in secondary care.
 - Develop and implement a modern framework for planning NHS Pharmaceutical Care Services.
 - Ensure that pharmacy premises are suitable for the delivery of pharmaceutical care.
-
- Support the use of action research, practice research and clinical research that enables development and evaluation of pharmaceutical care.

Prescription for Excellence: A Vision and Action Plan

5.1 Introduction

- 5.1.1 In this Chapter we focus on how we will put in place the foundation blocks for making our Vision and strategy happen from pharmacy practice development, education, research and electronic sharing of information, to medicines supply and premises.
- 5.1.2 This Action Plan acknowledges the important and effective role that is played by the network of pharmacies across Scotland in the provision of medicines and access to healthcare advice.
- 5.1.3 The legislation needed to reconfigure all aspects of how we plan, contract and deliver NHS Pharmaceutical Care and Services will be considered. Particular consideration will be given to the increased focus on the clinical aspects of pharmaceutical care and how this might be delivered in the future.
- 5.1.4 Prime responsibility for delivering the Vision locally will rest with NHS Boards and their Directors of Pharmacy working with others, and will take into account any new approaches resulting from the integration of health and social care.

5.2 Workforce, Education and Training

- 5.2.1 The Vision proposes that pharmacists in 2020 would be released from routine dispensing to work as NHS accredited clinical pharmacist independent prescribers delivering pharmaceutical care. In order to achieve this, the Wilson and Barber report recommends developing a framework to ensure a workforce that is fit for purpose to deliver pharmaceutical care for the 21st century, reviewing all aspects of pharmacy workforce and associated education, training and professional attainments of standards. There is currently no central locus for pharmacy national workforce planning in Scotland. NHS Education for Scotland (NES), working with key stakeholders such as the Schools of Pharmacy and the NHS Boards, should be commissioned to undertake data collection and trend analysis to lead to better supply and demand forecasting, and capacity planning for the pharmacy workforce.
- 5.2.2 In addition, by 2020, the accredited clinical pharmacists delivering pharmaceutical care would need to be independent prescribers that would work in partnership with GPs and have case loads to manage.
- 5.2.3 The undergraduate pharmacy programmes in Scotland needs to ensure that graduates are fit for the future requirements of the NHS with the right balance of clinical, supervised practice and interdisciplinary experience, taking into account future workforce needs of the NHS and the regulatory framework.
- 5.2.4 Education and training in multidisciplinary team based practice at both undergraduate and postgraduate level would be critical to develop more collaborative methods of working. This would be led by the Scottish

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Government and NES, working in partnership with the Schools of Pharmacy and Medicine in Scotland and professional and regulatory bodies.

- 5.2.5 Work is already underway with a scoping exercise of what the educational requirements of such an approach might be. In addition, joint post-graduate training is currently being facilitated by the relevant professional bodies.
- 5.2.6 NES which currently administers and funds the Pre-registration Pharmacist Scheme (PRPS) would work with the Scottish Government, Schools of Pharmacy and the NHS to advance to a more integrated academic and clinical undergraduate programme, including a planned and co-ordinated supervised practice through undergraduate placements. In addition, consideration should be given to a NES Deanery structure for pharmacy similar to medicine to enhance educational quality assurance and appropriate training environments for the future pharmacy workforce. The quality management of the learning environment of both placement and the pre-registration year for pharmacy trainees, including formal tutor appraisal, could be assumed by NES, in line with other professional groups in the NHS.
- 5.2.7 A significant part of formal post-graduate training is focused on hospital based pharmacists, linking to potential career development. This needs to be further developed into a structured career framework for hospital and community pharmacists which introduces NHS accredited clinical pharmacist independent prescribers and also accommodates other new and innovative models of practice. Further consideration should be given to how the newly-launched Royal Pharmaceutical Society (RPS) Faculty for Professional Career Assessment could support the NHS to facilitate a robust career framework suitable for the needs of the NHS in Scotland.

Scottish Government will establish an early review of all aspects of pharmacy workforce and associated education and training involving NES, Schools of Pharmacy, Schools of Medicine, NHS Boards and the professional and regulatory bodies to develop an integrated approach to ensure a workforce that is fit for purpose and that meets the future service needs of NHSScotland.

5.3 Clinical and Professional Leadership

- 5.3.1 The provision of NHS pharmaceutical care is the responsibility of the NHS Board working with the Scottish Government. NHS Boards would take the lead in creating professional and clinical networks to support all pharmacists providing care to the NHS patients. These would need further strengthening through professional recognition and identification of professional leaders and clinical leaders within each NHS Board. This will be supported by NES, HIS and the professional and regulatory bodies. These leaders should also work with pharmacy owners and employers of pharmacists to ensure a common understanding of the importance and requirement of the professionalism of individual pharmacist and the creation of systems to support this.

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Scottish Government will work with NES, HIS and professional and regulatory bodies to develop Clinical and Professional Leadership in a multi-disciplinary environment.

5.4 eHealth and Technology

- 5.4.1 eHealth plays a vital role in enabling some of the key activities set out in this Pharmaceutical Care Action Plan.
- 5.4.2 The eHealth Strategy 2011-17 provides the strategic direction for eHealth, with the principles of service-led change, joint governance and incremental development at its heart. eHealth in NHSScotland also provides a governance framework for technology developments, ensuring that products and approaches deliver solutions that enable and support person-centred, safe and effective practice. It also ensures that investments in IT are based on the principle of convergence, are flexible and have the ability to integrate easily.
- 5.4.3 A core set of technology products and services have been widely adopted across pharmaceutical services. However, the major technology solutions that are currently in place to support pharmaceutical care across NHSScotland are not fully integrated at this time. In addition, in secondary care, Hospital Electronic Prescribing and Medications Administration (HEPMA) and related electronic decision support has only been implemented in a very small number of acute hospitals, and in those cases not to its full potential.
- 5.4.4 Evidence from the Wilson and Barber Review recommends the increased use of robotic dispensing due to benefits in reducing dispensing errors, better use of workforce and better sharing of electronic patient data.
- 5.4.5 Sharing of relevant electronic patient data, for case management, is considered to be critical to ensuring delivery of pharmaceutical care both within primary care but also across secondary care. In order to optimise patient safety and to allow for appropriate monitoring of prescribing appropriateness and safety, electronic prescribing and sharing of information between primary and secondary care would need to be in place in all NHS Boards.

Scottish Government will develop approaches to implement primary and secondary care electronic prescribing configured systems to allow electronic information sharing that contributes to pharmaceutical care for all prescribers including pharmacist prescribers.

- 5.4.6 The eHealth strategy's aims are to use information and technology in a coordinated way to:
- maximise efficient working practices, minimise wasteful variation, bring about measurable savings and ensure value for money.

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- support people to communicate with the NHS in Scotland, manage their own health and wellbeing; to become more active participants in the care and services they receive.
- contribute to care integration and to support people with long term conditions.
- improve the availability of appropriate information for healthcare workers and the tools to use and communicate that information effectively to improve quality, and develop an approach to a Single Virtual Medications Care Record.
- improve the safety of people taking medicines and their effective use including the development of medications and related standards.
- to provide clinical and other local managers across the health and social care spectrum with the timely management information they need to inform their decisions on service quality, performance and delivery.

5.4.7 Activities that underpin these six aims will have an impact on the delivery of the Pharmaceutical Care Action Plan, but the fifth aim in particular focuses on the safety and effectiveness of pharmaceutical care, irrespective of the setting.

Scottish Government will consider roll out of HEPMA to allow for electronic capture of prescribing data in secondary care.

5.5 Modern Framework for NHS Pharmaceutical Care

5.5.1 To meet rising demands, the Vision places greater emphasis on the planning, contracting and delivery of pharmaceutical care.

We will develop the new framework and requirements of the future through consultation, modelling of different methods of working and evaluating pilots.

5.5.2 The Wilson and Barber report recommends that essential to the delivery of pharmaceutical care will be the suitability of premises to ensure that patients' privacy and confidentiality is safe guarded. Pharmacy owners will need to consider how this will be achieved.

Scottish Government will work with patients and pharmacy owners to ensure that pharmacy premises are suitable for the delivery of pharmaceutical care.

5.5.3 In order to release time to allow more care it will be important to optimise the roles of the pharmacy team and automate dispensing where possible. Telehealthcare is also considered to be an important tool to help reach more patients, not just in remote and rural areas but also in urban settings.

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5.6 Action Research, Practice Research and Clinical Research

5.6.1 It is important not only that any long term healthcare plan is based on evidence where possible (or best practice where there is no evidence), but also on pioneering and innovative practice which takes into account future requirements. This includes considerations of workforce, new technology, changing demographics and increasing clinical demand. This Action Plan is built on all of these but, as Wilson and Barber concluded in their report, “it is also important that any plan for future development has built into it measures for success and methods of monitoring and evaluation, so that there is a clear and demonstrable path for progress.”

5.6.2 And so it is with this plan which demands new ways of thinking, new ways of working and new models of care. In testing these developments, therefore, it is proposed that the plan proposed will be dynamic and supported and informed by a programme of action, practice and clinical research:

- **Action research** to inform and evaluate new ways of working and logistics
- **Practice research** to examine new models of pharmaceutical care, partnership working, and patient and stakeholder satisfaction
- **Clinical research** to assess the safety and effectiveness of new services in terms of clinical outcomes.

5.6.3 This work would be undertaken in partnership with the Schools of Medicine and Pharmacy in Scotland.

Scottish Government will support the use of action based research, practice research and clinical research that enables development and evaluation of pharmaceutical care.

5.7 Making it Happen – Implementation

5.7.1 At the end of each chapter we have set out the main areas considered to deliver the vision. This work will be taken forward under a governance structure in the Scottish Government Health Directorates to consider each of the areas identified for development and to provide a detailed work programme and delivery plans.

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Our work programme will explore options to provide INFRASTRUCTURE to deliver pharmaceutical care :	Years 1-3	Years 3-5	Years 5-10
1. Establish an education and training framework to help pharmacists deliver pharmaceutical care to patients in all settings	✓	✓	✓
2. Develop and establish a framework for workforce development to ensure adequate resource to deliver the Vision of general practice pharmacists working in primary care	✓	✓	✓
3. A framework to support clinical and professional leadership	✓	✓	✓
4. Develop an integrated approach to deliver a Single Virtual Medications Care record available at each point of care	✓	✓	
5. Support the on-going development and introduction of medications standards	✓	✓	✓
6. Integrate and build on facilities already operational for the pharmacist-to-person registration service	✓	✓	
7. Develop technology for decision support in prescribing and dispensing	✓	✓	✓
8. HEPMA to allow for electronic capture of prescribing data in secondary care	✓	✓	
9. Develop, consult on, and implement a modern framework for planning, contracting and delivering NHS Pharmaceutical Care Services considering legislative changes that might be needed supported by research	✓	✓	✓

Summary of key actions

Chapter 6

Summary of key actions

PERSON CENTRED pharmaceutical care	Years 1-3	Years 3-5	Years 5-10
1. Create a model to facilitate clinical pharmacist prescribers working in partnership with patients, GPs and other prescribers	✓		
2. Introduce the utilisation of clinical case load for review and management of Long Term Conditions and prescribing through Therapeutic Partnerships e.g. polypharmacy and medication review	✓		
3. Develop models to ensure all patients have pharmaceutical care including polypharmacy/ medication reviews where appropriate	✓	✓	✓
4. Work with the rural practitioners to scope and develop the use of domiciliary visits/ telehealth/ mobile apps to respond to needs of different age groups, and different settings	✓	✓	✓
5. Work with patients, professions to develop a NHS framework for registration with a 'named pharmacist' and implement the legislative and contractual framework to underpin this innovative approach	✓	✓	✓
6. Establish a framework for anticipatory pharmaceutical care planning	✓		
7. Develop service models for those receiving high risk and high tech medicines building on risk assessment tools developed for polypharmacy and anticipatory care planning	✓	✓	✓
8. Scottish Government will develop innovative pharmaceutical care to support the clinical application of translational genomics and stratified medicine	✓	✓	

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PERSON CENTRED pharmaceutical care	Years 1-3	Years 3-5	Years 5-10
9. Develop national service with the professions new standard specifications for services and innovative Pharmaceutical care and pharmaceutical public health for specific patient groups of:			
Cardiovascular health	✓	✓	
Older People – in care homes and in their own home	✓	✓	
Alcohol and Substance Misuse	✓	✓	
Mental Health	✓	✓	
Sexual health	✓	✓	
Children	✓	✓	
10. Further develop the pharmacists contribution to the management of common clinical conditions and develop new models of delivery of primary care services in partnership with GPs	✓	✓	✓

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SAFE pharmaceutical care	Years 1-3	Years 3-5	Years 5-10
1. Review of the governance arrangements for the safe delivery of pharmaceutical care and use of medicines in the community	✓	✓	
2. Implementing clinical guidelines and Monitoring use of Medicines	✓	✓	
3. Establish partnerships with HIS, and the professions to mainstream the aims of the Scottish Patient Safety Programme in pharmacy and medicines practice	✓	✓	✓
4. Develop and implement a framework for the appropriate use of patient identifiable prescribing data and risk assessment	✓	✓	✓
5. Work with health professionals to enhance shared clinical patient information systems to support pharmacists providing clinical care	✓	✓	✓
6. Develop with the professions NHS Pharmaceutical Care Performers list for patient registration to allow patients to have appropriate pharmaceutical care	✓		

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EFFECTIVE pharmaceutical care	Years 1-3	Years 3-5	Years 5-10
1. Consult on the powers of NHS Board Pharmaceutical Care Plans and its impact on existing planning arrangements including dispensing doctors	✓	✓	✓
2. Establishing with NHS, NES and professional bodies the framework for development of general practice clinical pharmacist	✓	✓	✓
3. Develop new models to enhance role of pharmacist by better use of pharmacy workforce such as pharmacy technicians and pharmacy assistants	✓	✓	✓
4. Establish a framework of joint working and information sharing between primary and secondary care pharmacist and other members of the multidisciplinary team	✓		
5. Redesign the dispensing process to release pharmacists time or clinical care through workforce planning and improved use of pharmacy team and automation using robotics	✓	✓	✓
6. Establish a public/private partnership framework to promote and increase the use of robotics	✓	✓	✓
7. Build on the work being taking forward through NHS Scotland Efficiency & Productivity programme	✓	✓	✓
8. Respond to Audit Scotland report into prescribing in general practice - in particular to extend joint working of pharmacist with all other prescribers to ensure all patients have appropriate pharmaceutical care	✓	✓	✓
9. Introduce a framework to promote and increase the use mobile technology to support people manage their medications and improve adherence	✓	✓	✓

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INFRASTRUCTURE to deliver pharmaceutical care	Years 1-3	Years 3-5	Years 5-10
1. Establish an education and training framework to help pharmacists deliver pharmaceutical care to patients in all settings	✓	✓	✓
2. Develop and establish a framework for workforce development to ensure adequate resource to deliver the Vision of general practice pharmacists working in primary care	✓	✓	✓
3. A framework to support clinical and professional leadership	✓	✓	✓
4. Develop an integrated approach to deliver a Single Virtual Medications Care record available at each point of care	✓	✓	
5. Support the on-going development and introduction of medications standards	✓	✓	✓
6. Integrate and build on facilities already operational for the pharmacist-to-person registration service	✓	✓	
7. Develop technology for decision support in prescribing and dispensing	✓	✓	✓
8. HEPMA to allow for electronic capture of prescribing data in secondary care	✓	✓	
9. Develop, consult on, and implement a modern framework for planning, contracting and delivering NHS Pharmaceutical Care Services considering legislative changes that might be needed supported by research	✓	✓	✓

Drivers for Change

The Wilson and Barber Review was commissioned by Nicola Sturgeon MSP, Cabinet Secretary for Health, Wellbeing and Cities Strategy in October 2011. The findings from this and other reports and studies have provided the evidence to support the Vision NHS Pharmaceutical Care for the future. The main drivers for change are listed below:

- Ambitions of 20:20 Vision - Achieving Sustainable Quality in Scotland's Healthcare: A 20:20 Vision 2011, Scottish Government, September 2011.
- A Route Map to the 2020 Vision for Health and Social care, Scottish Government, March 2013.
- Healthcare Quality Strategy for NHSScotland - The Healthcare Quality Strategy for NHSScotland, Scottish Government, May 2010.
- NHS healthcare as a whole is changing and needs to evolve to meet demographic changes, the associated changes in morbidity and continuing health inequalities.
- Continuity of care was expressed as an important issue by the patient group.
- Integration of health and social care
- Desire to treat patients in their own homes/communities where possible
- Evolution of therapeutics and new types of medicines e.g. stratified medicines
- Desire for Scotland to be a leader in healthcare/patient safety/research
- Increase in multi-morbidity and co-morbidity and resulting complex needs
- Focus on adherence/non-compliance
- eHealth Person-Centred Strategy.³⁵

³⁵ Person-centred eHealth Strategy and Delivery Plan, Scottish Government, 2012

Evidence

Alongside the Wilson and Barber Review, other key documents, reports and pilots have provided evidence for the development of the Vision, as follows:-

- Breaking down the barriers – how pharmacists and GPs can work together to improve patient care, RCGP Scotland and RPS Scotland Joint Statement, 2012.
- Care homes' use of medicines study: prevalence, causes and potential harm of medication errors in care homes for older people, Barber ND, Alldred DP, Raynor DK, Dickinson R, et al. Quality and Safety in Health Care. 2009:341-6.
- Establishing Effective Therapeutic Partnerships - A generic framework to underpin the Chronic Medication Service element of the Community Pharmacy Contract, Scottish Government, December 2009.- <http://www.scotland.gov.uk/Publications/2010/01/07144120/0>
- European Innovation Programme – http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=commitment#action_plans
- The Future of Community Pharmacy: Building a Sustainable Industry, AT Kearney, September 2012 - <http://www.atkearney.com/documents/10192/649132/The+Future+of+Community+Pharmacy.pdf/1838dede-b95a-4989-8600-6b435bd00171>
- Health Inequalities in Scotland, Audit Scotland, December 2012 - http://www.audit-scotland.gov.uk/docs/health/2012/nr_121213_health_inequalities.pdf
- Improving Pharmaceutical Care in Care Homes, Royal Pharmaceutical Society Scotland, March 2012. <http://www.rpharms.com/promoting-pharmacy-pdfs/rpscarehomereportfinalmarch2012.pdf>
- Investigating the prevalence and causes of prescribing errors in general practice: ThePRACTiCe Study, A report for the GMC, Avery A, Barber N, Ghaleb M, Dean B et al, 2012.
- A National Telehealth and Telecare Delivery Plan for Scotland to 2015: Driving Improvement, Integration and Innovation, Scottish Government, December 2012. <http://www.scotland.gov.uk/Resource/0041/00411586.pdf>
- NHSScotland Information Assurance Strategy 2011-2015, NHS Scotland, 2011- http://www.sehd.scot.nhs.uk/mels/CEL2011_26.pdf

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- Person-centred eHealth Strategy and Delivery Plan, Scottish Government, 2012
- A pharmacist-led information technology intervention for medication errors (PINCER): a multicentre, cluster randomised, controlled trial and cost-effectiveness analysis, Avery AJ, Cantrill JA, Armstrong S, Cresswell K, et al, The Lancet, Volume 379, Issue 9823 Pages 1310 - 1319, April 2012.
- Study of Pharmore+ Pharmacy Walk-in Services, Scottish Government, August 2013
- Polypharmacy Guidance- Circular CEL 36 (2012), Appropriate prescribing for patients and polypharmacy guidance for review of quality, safe and effective use of long- term medication, Scottish Government, November 2012
http://www.sehd.scot.nhs.uk/mels/CEL2012_36.pdf
- Prescribing in general practice in Scotland, Audit Scotland, January 2013 -
http://www.audit-scotland.gov.uk/docs/health/2013/nr_130124_gp_prescribing.pdf
- Public Bodies (Joint Working) (Scotland) Bill – introduced to Scottish Parliament 28 May 2013
<http://www.scottish.parliament.uk/parliamentarybusiness/Bills/63845.aspx>
- Reshaping Care for Older People Programme -
<http://www.scotland.gov.uk/Topics/Health/Support-Social-Care/Support/Older-People/ReshapingCare>
- Review of NHS Pharmaceutical Care of Patients in the Community in Scotland, Dr Wilson and Professor Barber, Scottish Government, August 2013 - <http://www.scotland.gov.uk/Publications/2013/08/4406>
- Scottish Patient Safety Programme- Primary Care -
http://www.healthcareimprovementscotland.org/our_work/patient_safety/spsp/patient_safety_in_primary_care.aspx
- Stratified medicine, Health Science Scotland -
http://www.healthsciencescotland.com/126_Stratified+Medicine.html

The Right Medicine - Celebrating Our Achievements

The Right Medicine provided much needed impetus for change and modernisation of pharmaceutical care in Scotland and set the direction to introduce the new Scottish community pharmacy contract. It also firmly positioned pharmacists as real partners in the planning and delivery of healthcare in both hospital and community settings and for the long term modernisation of the services they provide.

Since its publication in 2002, much has been achieved in delivering the goals and policy intentions of **The Right Medicine**, including the following.

- The development and implementation of the new pharmaceutical care service elements of the community pharmacy contract arrangements –the Minor Ailment Service (MAS), Acute Medication Service (AMS), Public Health Service (PHS) and Chronic Medication Service (CMS)
- Improved access to NHS Pharmaceutical Services in areas of acute deprivation, rural communities and more generally.
- Use of pharmacy as the first port of call for NHS services for the treatment of common illnesses through the MAS, introduced in July 2006.
- Establishment of the Scottish Centre for Adverse Drug Reactions Reporting and the Medicines Utilisation Unit.
- Development of a Significant Event Analysis system.
- The Scottish Medicines Consortium was commissioned to provide guidance on antibiotic prescribing, followed with funding to enable the recruitment of antimicrobial pharmacists within each NHS Board.
- Supplementary prescribing rights for pharmacists were introduced in 2002 while independent prescribing rights were introduced in 2006.
- Introduction of the NHS Pre-registration Pharmacist Scheme (PRPS).
- A focus on modernising and improving community pharmacy premises. Infrastructure funding has been provided to community pharmacies since 2006 and every premises now displays the NHS Scotland logo clearly recognising community pharmacies as part of the NHS family.
- A national Patient Group Direction (PGD) issued in 2005 allows community pharmacists to supply repeat medicines out-of-hours.
- Pilot of Pharmore+ Pharmacy Walk-in Services Programme in 5 NHS Boards.
- Establishment and operation of Joint Local Formularies by NHS Boards working with local clinicians in both hospitals and in primary care.
- Establishment of prescribing workstream of the NHS Scotland Efficiency & Productivity Programme in 2010 to address more cost effective prescribing.
- Developments with the Hospital Electronic Prescribing and Medicines Administration system (HEPMA) to support medicines efficiency and safety.
- Updated guidance on joint working with the Pharmaceutical Industry – A Common Understanding –issued in 2012.



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