ACHIEVING EXCELLENCE IN PHARMACEUTICAL CARE
A STRATEGY FOR SCOTLAND

- Improved and increased use of community pharmacy services
- Pharmacy teams integrated into GP practices
- Transformed hospital pharmacy services
- Pharmaceutical care that supports safer use of medicines
- Improved pharmaceutical care at home or in a care home
- Enhanced access to pharmaceutical care in remote and rural communities
- Pharmacy workforce with enhanced clinical capability and capacity
- Improved service delivery through digital information and technologies
- Sustainable services that meet population needs
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Since my appointment as Chief Pharmaceutical Officer in June 2015, one of my key objectives has been to build on the impetus for change in the content, quality and way in which we deliver NHS pharmaceutical care in Scotland.

"Pharmaceutical care focuses the knowledge, responsibilities and skills of the pharmacist on the provision of drug therapy with the goal of achieving definite therapeutic outcomes toward patient health and quality of life."

The pharmacy team in NHS Scotland is an important part of the workforce with specialist skills and much needed expertise in medicines. We need to work together with the wider multidisciplinary health and social care team, to ensure that this specialist knowledge in medicines is utilised to best effect for the health and well-being of the people of Scotland.

Following engagement with a range of stakeholders over the last two years, and refreshing the Prescription for Excellence document, published in 2013, the purpose of this strategy is to present a revitalised focus on the priorities that will make improvements happen.

These priorities fall into two key areas:

1. **Improving NHS pharmaceutical care**
   - Improvements to NHS pharmaceutical care services across Scotland
   - Delivering safer use of medicines for the people of Scotland

2. **Enabling NHS pharmaceutical care transformation**
   - Ensuring capability and capacity by further developing the pharmacy workforce
   - Developing a digitally enabled infrastructure
   - Planning and delivery requirements for sustainable NHS pharmaceutical care services

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To support these priorities we have established a set of nine commitments and complementary actions. These are focused on achieving excellence in improving and integrating the provision of NHS pharmaceutical care in order to support people through their healthcare journey. We have used colour to distinguish between the two priorities: Priority 1 is in blue and Priority 2 is in pink.

Our vision is for pharmacy as an integral and enhanced part of a modern NHS in Scotland

These priorities for the future of NHS pharmaceutical care that are set out in this strategy, integrated within a modern digitally-enabled health and social care system in Scotland, have the potential to open up new and rewarding career pathways for pharmacists and pharmacy technicians in increasingly clinical roles. I am though mindful that the demands of professional practice, with its uncertainty, instability, uniqueness and value conflicts\(^3\) will bring about many future challenges and demands for individuals within the pharmacy profession.

Therefore, I will also ensure that there is a continued focus going forward on supporting the professional pharmacy practitioner, recognising the often difficult judgments and personal commitments required. This can be achieved in part through education, developing clinical capability and competence, and enabling leadership development and professionalism.

Finally, the successful delivery of these priorities for change requires a co-ordinated effort across all levels of the service. I will continue to build on the progress we are making at a national level to deliver our vision, however, it also needs to align with local priorities and delivery. In order to ensure we achieve this I will work with and through leaders at NHS Board and HSCP levels, in particular NHS Scotland Directors of Pharmacy and service planners, in order to drive improvement.

It is my ambition to place people at the centre of what we propose and build a collaborative partnership when taking forward the vision of Achieving Excellence in the delivery of NHS pharmaceutical care, both at an individual level and in the communities we serve.

Rose Marie Parr,
Chief Pharmaceutical Officer and Deputy Director,
Pharmacy and Medicines Division, Scottish Government

2. EXECUTIVE SUMMARY

Improving NHS Pharmaceutical Care

As Chief Pharmaceutical Officer for Scotland, my focus is on achieving excellence in NHS pharmaceutical care provision to ensure safe, effective and person-centred pharmaceutical care and safer use of medicines are core components of health and social care services in all care settings. Achieving Excellence in Pharmaceutical Care sets out my vision of how pharmaceutical care will evolve in Scotland and the crucial contribution of pharmacists and pharmacy technicians, working together with other health and social care practitioners, to improve the health of the population and impact on health outcomes, especially for those with multiple long term and complex conditions.

Since the publication of Prescription for Excellence in 2013, much has changed in the Scottish Government’s strategic approach to planning for, and delivering of, healthcare services. This strategy aligns what we are doing in pharmacy and the direction of policy now set out in the Health and Social Care Delivery Plan, the National Clinical Strategy, Pulling Together, the Modern Outpatient Collaborative, Realistic Medicine, the Mental Health Strategy, and the six essential actions to improve unscheduled care. Taken together these provide a clear vision for our NHS in Scotland.

Community Pharmacy
Community pharmacy already plays an important role in the provision of NHS pharmaceutical care, providing highly accessible services for people both in-hours and out-of-hours. We want more people to use their community pharmacy as a first port of call. Central to this is to ensure that services such as the Minor Ailment Service (MAS), the Chronic Medication Service (CMS) and Public Health Service (PHS), core elements of the NHS services provided in community pharmacies, are being delivered to their full potential. It is through making full use of the clinical capacity in community pharmacy that real gains in clinical care can be made. It is also where the community pharmacist’s contribution to multidisciplinary team working takes its place to open up access to primary care for everyone and reduce workload at GP practices and other local healthcare services.

GP Practice-Based Pharmacy
The last two years have seen significant Government investment in the introduction of GP practice-based pharmacists with advanced clinical skills. These pharmacists and, more recently, pharmacy technicians are working alongside GPs and other health and social care professionals. They are helping to build multidisciplinary team working and improve medication management through, for example, providing polypharmacy reviews and specialist clinics in order to get the best possible outcomes from prescribed medication – including prescribing, monitoring and adjusting treatment where appropriate.
Hospital Pharmacy
There is recognition that hospital pharmacy services need to respond to the changing environment in their service. This is particularly so with an increasingly frail elderly population, a drive to decrease the length of stay, improve flow, the move towards seven day services, and new developments to modernise outpatient services.

Safer Use of Medicines
Medicines remain the most common therapeutic intervention available to clinicians; however, the burden of harm relating to medicines is well reported. The Chief Medical Officer’s vision of Realistic Medicine challenges healthcare professionals to adopt an approach to medicines to reduce harm that can be associated with medical care and ensure that treatments are tailored to people’s preferences and deliver care that is of great value to people. To be effective, people need to be supported to understand their part in an effective healthcare partnership, to be informed and to be able to express preferences. We are committed to embedding these themes into pharmacy practice.

Care Home and Care at Home
Concerns about the variation in the quality of pharmaceutical care in some care homes have been well documented highlighting a need for high quality pharmaceutical care for this particularly vulnerable group of people whether they are adults or children in residential care. Many of the principles of pharmaceutical care in care homes also apply to services for people who require supported care at home, where the situation can be even more complex.

Remote and Rural Communities
Nearly 20% of our population live in rural Scotland. Remote and rural communities are growing at a faster rate than the rest of Scotland, and have higher levels of older people. Consideration needs to be given to how we introduce technology enabled care initiatives into mainstream practice. We want to overcome barriers to attracting, educating, and training pharmacists and pharmacy technicians to work in remote and rural communities in order to improve access to pharmaceutical care, deliver better health outcomes for people and help sustain service in remote and rural communities, including dispensing doctor practices.
Enabling NHS Pharmaceutical Care Transformation

While playing to the strengths of the pharmacy team is crucial to achieving excellence, they must also have the resilience to be able to respond and adapt to the needs and pressures facing our modern health and social care system. We have identified three key enablers as priorities for action: developing the pharmacy workforce; improving access to and use of digital information and technologies; and planning for sustainable, flexible and resilient approaches to delivery of NHS pharmaceutical care across Scotland.

Pharmacy workforce
As the balance of care shifts and pharmacists take on expanded clinical roles, it is important people are confident that they are receiving the best NHS pharmaceutical care which meets their needs and wishes. With the demand for pharmaceutical care set to increase we want to strengthen our pharmacy workforce planning. This includes ensuring pharmacists and pharmacy technicians have the necessary clinical, decision-making and digital skills needed to care for people effectively.

Digitally enabled infrastructure
Going forward, technology and data will have a crucial role in improving pharmaceutical care, underpinning our safety culture, ensuring efficiency of services, unlocking capacity within pharmacy teams and facilitating improved sharing of information between health and social care settings. We are committed to this transformative programme of work which includes automated technologies, technology enabled approaches to support people to better manage their medication and the implementation of Hospital Electronic Prescribing and Medicines Administration (HEPMA) in every NHS Board across Scotland. These developments will improve patient safety and release capacity not only in pharmacy but across a range of healthcare professional groups.

Sustainable pharmaceutical care services
Importantly, the Scottish Government will develop, consult on, and provide NHS Boards and their Health and Social Care Partnership (HSCP) partners with the tools and legislative underpinning for a new approach to pharmaceutical care service planning and contracting. This will mark a departure from the current arrangements which are largely governed by terms and conditions in regulation, the fitness for purpose of which is nearing its limits.

Conclusion
The nine commitment areas and programme of supporting actions will help to not just put in place the key foundations for Achieving Excellence in Pharmaceutical Care, but will create the conditions for the future responsiveness of NHS pharmaceutical care services and the tools to help deliver this.
ACHIEVING EXCELLENCE IN PHARMACEUTICAL CARE - SUMMARY

IMPROVING NHS PHARMACEUTICAL CARE

- Minor Ailment Service
- Chronic Medication Service
- Independent prescribing & advanced clinical skills
- Public Health Service
- Serial prescribing & dispensing
- GP Practice based pharmacy
- Transformation requirements
- Discharge process
- Quality improvement & performance measures
- Modern Outpatient Programmes
- Data measurement & monitoring
- Medicines reconciliation
- Pharmacy role awareness
- Quality improvement in community pharmacy
- Improvement approaches
- Recruitment & retention
- Availability of technology to support R&R

ENABLING NHS PHARMACEUTICAL CARE TRANSFORMATION

- Postgraduate career framework
- Pharmacy technician development
- Workforce planning
- ePharmacy support for all primary care prescribers
- HEPMA
- Future hospital requirements
- Health information access
- Technology enabled care solutions
- Clinical decision support tools
- Automation
- Contracting & funding arrangements
- Planning

ACHIEVING EXCELLENCE IN PHARMACEUTICAL CARE – SUMMARY
3. IMPROVING NHS PHARMACEUTICAL CARE

Context

Don Berwick, President Emeritus and Senior Fellow of the Institute for Healthcare Improvement (IHI), promotes seeking excellence through the eyes of the people we serve. Achieving excellence in pharmaceutical care consists of a number of components, but at its core is playing to the strengths of pharmacists, pharmacy technicians and other pharmacy support staff. Unlocking this capacity in an incremental and structured way is the fundamental objective of the priorities set out in this strategy. The National Clinical Strategy\(^4\) sets out a high level vision to guide how services will develop over the next 10-15 years, with strong primary and community health services planned around individuals and their communities, opening access to care and enhancing the quality of care, improving outcomes and ensuring we have sustainable services for all.

In primary care we need to build capacity and provide a more broadly based mix of professionals based around GP practices which will be increasingly working in clusters and working closely with social care and voluntary agencies. In secondary care we must consider the potential for developing fewer inpatient sites that will provide more highly specialised services, linked into local hospitals providing a comprehensive range of outpatient, diagnostic and day case surgery.

The community pharmacy network located at the heart of our communities, pharmacists and pharmacy technicians working in, and with, general practice and the specialist roles pharmacists and technicians bring to our hospital care are already making a significant impact on delivering improved health and social care services.


In addition, the specific contribution the entire pharmacy team can bring to improving the overall care in remote and rural communities and settings such as care homes or care at home is not only where further capacity can be unlocked, but importantly maximises the opportunities to embed the safer use of medicines at every point of healthcare.

Care is increasingly provided by multidisciplinary teams, including GPs and consultants, nurses, allied healthcare professionals, pharmacists, pharmacy technicians, social workers, social care staff, the voluntary sector and other specialists working together. This means that each member of the team needs to be aware of their own specific role(s) as well as how to play to each other’s strengths and skills. An increasing focus on improving the quality of care and achieving better health outcomes for the population, and in particular for people with multiple and complex long term conditions, requires improved pathways of care based on integrated, multidisciplinary team-based care which is preventative, anticipatory and proactive in nature. It also requires improved access to data and information through a more coordinated approach to appropriate data sharing, and ensuring that the right digital culture, skills, processes, tools and systems are in place.

The pharmacy team has a unique and specialist knowledge of medicine and there is a need to ensure services are structured so that when a member of the public or healthcare professional and/or social care organisation needs a medicine or advice and information about medicines the appropriate member of the pharmacy team is positioned to lead on ensuring this provision. Other team members will fulfill other roles but this clarity of function will improve multidisciplinary working and outcomes for people and practitioners alike.

**Primary care transformation**

The transformation of primary care establishes the planning and delivery of services through a multidisciplinary, community-based approach, centred around clusters of GP practices working collaboratively. There is an acknowledged need to increase resources in primary and community care to support this approach, including better use of the skills of pharmacists and pharmacy technicians, to ensure that care is person-centred, peer-led and values-based, so that people can be treated close to home, or in a homely setting, where it is safe to do so. Pulling Together⁶, Sir Lewis Ritchie’s review of out-of-hours services describes plans to transform out-of-hours urgent care and envisages extended roles for pharmacists in delivery of primary care out-of-hours, focusing on the need for multidisciplinary teams to work together to provide care.

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Self-management and medicines
Pharmacists and their teams are well placed to support people to self-manage their care which is a core component of providing person-centred pharmaceutical care. We know from existing evidence that personalised care planning leads to improvements in both health outcomes and a person’s capability to self-manage their condition compared to routine care. An important aspect of this includes the need to be responsive to people’s health literacy needs as described in Making it Easy\(^8\), our health literacy action plan. In addition, the impact is greater when it is embedded into routine care. Pharmacists, working across all care settings, are ideally positioned to take on an increased clinical role in delivering clinical care and ensuring informed decision making and medicines safety approaches are integral to the pharmaceutical care they provide. This needs to be further strengthened by access to and sharing of electronic health information and data. This will help ensure that pharmaceutical care is genuinely designed around the needs and wishes of each individual person, making the right decisions together with them at the right time: from ‘what is the matter with you?’ to ‘what matters to you?’

“Our focus is on achieving excellence in NHS pharmaceutical care provision to ensure safe, effective and person-centred care.”

Person-centred pharmaceutical care
The evolving focus of pharmacy practice to ensure that people have an understanding of what to expect from their medication requires an acknowledgement that people and their carers rightly wish to be active partners in treatment options. This involves balancing a person’s preferences and expectations alongside the provision of evidence-based interventions. For truly shared decision-making there needs to be a shift towards participative care meaning that there is an acceptance by professionals of a situation where people may choose something different from what has been traditionally offered. This shared approach to personalised pharmaceutical care can be challenging, but one where collaborative practice is beneficial.

In Realising Realistic Medicine\(^9\) Sir Muir Gray refers to the ‘point of optimality’ as being one of the most important concepts in healthcare. It shows how benefits to people increase rapidly with investment of resources, but then level out, even though investment increases, whereas harm rises in a straight line. In other words, the more we do the more harm we cause because the procedures we carry out have risks. Pharmacists, with their expertise in medicines, have a critical role in identifying medicines with limited or no value or that have a higher risk benefit ratio and by working in collaboration with other clinicians can reduce the burden of harm in relation to medicines at multiple points in the care pathway.

The pharmacy profession has a key role in empowering people and the carers who support them to make best use of the services on offer, enabling people to take an increased role in making decisions about their medicines and care. The success of this is also dependent on informed and engaged individuals and carers developing new relationships with care providers. People want to know what services are available: where to access them, how to use them, being clear about how their pharmacist can support them and being aware of the supported self-management approaches they can use to manage their illnesses and conditions, including self-referral to other services, such as physiotherapy, rather than only the GP.

Working in partnership with NHS Boards, HSCPs and partners including the Scottish Health Council and the Health and Social Care Alliance, we have been involving people and carers to build an understanding of their experience of pharmacy and how this can help to inform the design of NHS pharmaceutical care provision. We will continue to work in partnership with them to develop a mutual understanding of how best to achieve shared clinical decision making and person-centred pharmaceutical care.

The work, started initially through Prescription for Excellence, and now being taken forward through the priorities highlighted in this strategy, aligns what we are doing in pharmacy with recent policy developments outlined in the Health and Social Care Delivery Plan, the National Clinical Strategy, Pulling Together, the Modern Outpatient Collaborative\(^\text{10}\), Realistic Medicine, the Mental Health Strategy\(^\text{11}\) and the six essential actions to improve unscheduled care. It is helping us better understand what is required for the integration of pharmacy and pharmaceutical care into a person’s experience of health and social care.

Our focus is on ensuring safe, effective and person-centred pharmaceutical care, and safer use of medicines is a core component of health and social care services in all settings. These settings include care homes and those requiring more care at home. We need to understand the enablers to deliver this which includes identifying the clinical capability and capacity required within the pharmacy workforce, the resources needed to improve IT system interoperability and leverage digital technologies and data and modernising our planning and delivery systems for securing NHS pharmaceutical care services.

Inherent to improving service provision within particular care settings is improving the transitions between settings. This means considering how to make best use of the pharmacy resources in order to improve how we deliver services, and that people, irrespective of where they are, have access to and receive the pharmaceutical care that they require. The commitments set out in the rest of this chapter tend towards describing pharmacy services within existing structural boundaries however we recognise the need for ongoing flexibility as new ways of working are embedded as part of the transformational change across our health system required to meet people’s health and social care needs and preferences.


Community pharmacy

**Commitment 1:**
Increasing access to community pharmacy as the first port of call for managing self-limiting illnesses and supporting self-management of stable long term conditions, in-hours and out-of-hours.

Community pharmacy already plays an important role in the provision of NHS pharmaceutical care, providing highly accessible services for people both in-hours and out-of-hours. We want more people to use their community pharmacy as a first port of call, not only for the treatment of self-limiting illnesses and medicine-related matters, but for the on-going self-management support for people with long term conditions. Enhancing these services also expands the clinical role of community pharmacists. In addition to this, Pulling Together identifies the need for community pharmacy to play its part in the proposed Urgent Care Resource hubs which will be multidisciplinary and will involve a range of healthcare providers. This may be through working directly in hubs on a sessional basis, or alternatively, supporting these hubs through the services they provide in their community pharmacies via referrals to and from the hubs. Appropriate two-way sharing of information is also required to allow and support this.

Good progress is being made towards delivering the pharmacy recommendations from Pulling Together, including funding in 2017 to roll out the ‘Pharmacy First’ initiative based on work originally started in NHS Forth Valley. This enables community pharmacists to treat some additional self-limiting conditions such as uncomplicated urinary tract infections and impetigo. This is improving access for people requiring assessment and treatment, reducing pressure on GP practices and out-of-hours services and maximising the skills of pharmacists.

**ACTION:**
We will target resources to expand the number of community pharmacists undertaking independent prescribing and advanced clinical skills training. This includes exploring how resources to cover back-fill for the residential training and period of learning in practice can be provided in order to build clinical capacity to deliver an extended MAS and enhanced CMS.
**Minor Ailment Service**

The Minor Ailment Service (MAS) was introduced in 2006 and has allowed specific groups of people to access treatment for self-limiting illnesses such as fungal infections, allergies, skin conditions and infestations on the NHS without the need for an appointment with a GP. Through exploring opportunities to expand the MAS in Inverclyde we are looking to extend eligibility to more people and expand the range of conditions that can be treated. This is in line with the recommendations in Pulling Together and builds on the Pharmacy First initiative.

An extended MAS has the potential to improve access to treatment for a range of uncomplicated illnesses normally requiring a prescription. It more fully utilises the clinical skills of pharmacists and reduces demand on GP practices, out-of-hours and Emergency Department workload. This, in turn, helps address capacity issues across the wider primary care team in-hours and out-of-hours. Many community pharmacies are open at times considered to be out-of-hours by other parts of the service, in the evening and at weekends and this is a strength for the whole primary care team. It also serves to re-emphasise community pharmacy as the first port of call for healthcare advice and support, using their accessibility and ‘walk-in’ mode of delivery to its full advantage both in-hours and when GP practices are closed. As part of this work we are testing improved communications between pharmacies and GP practices in order to inform how we best underpin this going forward using appropriate work-flowed electronic processes. This will include details of what treatment has been provided.

**Inverclyde extended MAS pilot**

During 2017, an extended MAS is being piloted in Inverclyde as part of the Inverclyde New Ways of Working Programme. The pilot involves extending MAS eligibility to all individuals registered with a GP practice in Inverclyde. It also expands the range of conditions that can be treated by use of Patient Group Directions (PGDs) in the first instance to cover conditions such as impetigo, uncomplicated urinary tract infections in women, shingles, bridging contraception and exacerbations of Chronic Obstructive Pulmonary Disease (COPD) for patients with self-management plans.

The Inverclyde extended MAS pilot is focusing on utilising the clinical skills of the pharmacist, and any future expansion of the service will benefit from as many community pharmacists as possible undertaking independent prescribing and advanced clinical skills training to allow them to extend the conditions they can treat and prescribe a wider range of medicines without relying on the use of PGDs. Again, this is also aligned with recommendations within Pulling Together. The Inverclyde pilot is due to report early in 2018.

**ACTION:**

We will use the evaluation of the Inverclyde extended MAS pilot to inform any future enhancements to the national Minor Ailment Service.
“People tend to default to going to their GP for advice about medicines and are not fully aware of the expertise and services offered by their community pharmacist.”

Chronic Medication Service
We are also strengthening and refreshing the Chronic Medication Service (CMS) in order to improve how it enables community pharmacists to provide personalised care for people with stable long term conditions. As experts in medicines and their use, pharmacists play a crucial role in supporting people to use their medicines to achieve the best clinical outcomes, as part of an ongoing partnership with them to manage their healthcare. Based on feedback from people using the service we will also change the name of the service to reflect a more positive person-centred image.

The registration of people for CMS continues to increase, as does the number of people with pharmaceutical care plans. However, we know that there is much more to do. We are currently piloting the development of a pharmaceutical care bundle approach, which is a set of evidence-based interventions that when used together can significantly improve clinical outcomes. We are also working to enhance the Pharmacy Care Record (PCR) to introduce an annual pharmacist-led medication review traditionally carried out by a person’s GP. Introducing a formalised medication review will help identify people who will benefit from a more detailed pharmaceutical care plan in a more systematic way than present. It also plays to the skills and strengths of pharmacists in that there is good evidence that community pharmacy based medication reviews can reduce the risk of drug-related problems and improve the appropriateness of prescribing. In addition, a number of community pharmacists are providing additional initiatives such as condition specific clinics to support people with long term conditions.

Community pharmacist–led clinics
A community pharmacist Parkinson’s clinic in NHS Tayside offers more frequent contact with people between Parkinson’s annual review clinics. People attending typically have polypharmacy issues and the pharmacist reviews their pharmaceutical care needs and agrees an action plan, with a follow-up home visit carried out by a pharmacy technician. The pharmacist liaises with the person’s GP practice to feed back on any care issues requiring their input.
Long term condition management
Another important improvement we wish to make to CMS is enhancing pharmacists’ interventions by building on the current focus on consultation, medication review, care planning and education to include more monitoring and prescribing. This builds on the work currently being undertaken by community pharmacists providing pharmacist prescribing clinics. By playing to pharmacists’ core skills, this improvement will develop the current service where community pharmacists are limited to making recommendations to GPs about changes to medicines.

It will also help embed and mainstream community pharmacist-led prescribing clinics. This means that over time community pharmacists will be enabled to play a greater role in managing people with long term conditions, by prescribing, monitoring and adjusting medicines, working alongside pharmacists in GP practices, GPs and other members of the multidisciplinary team. Work has also commenced towards widening secure sharing of electronic information and data, where this is appropriate, to underpin best care and to facilitate informed decision making and optimal communications with other health and social care services.

In support of this enhancement to CMS we will make improvements to the PCR to improve the measurement and sharing of outcome data. This will allow us to better quantify the benefits from pharmacist interventions and their contribution to improving health outcomes as part of the multidisciplinary team.

ACTION:
We will further develop the Chronic Medication Service to incorporate a more formalised role for community pharmacists in managing people with long term conditions by building in medication review, prescribing, monitoring and dose titration. We will enhance the Pharmacy Care Record in order to record and share outcome data to improve health outcomes and benefit person-centred care.

Serial prescribing and dispensing
The serial prescribing and dispensing element of CMS has the potential to reduce workload for both GP practices and community pharmacies. However the rate of uptake of serial prescriptions remains low meaning that benefits for people with stable long term conditions, GP practices and pharmacies are not being attained. In the main this is because it requires a front-loaded investment of time to identify and transfer people from a repeat to a serial prescription. Using a quality improvement approach we are currently undertaking tests of change to explore different processes that will increase the use of serial prescriptions and help us to realise the full potential of the service. An action plan has been developed to support the embedding of serial prescribing and dispensing into every day practice and there are clear links with how it can reduce GP practice workload and help deliver on a range of GP practice sustainability commitments. There are also opportunities to align with aspects of Realistic Medicine with regards reducing harm, variation and waste, supporting person-centred care and shared decision making.
**ACTION:**
We will encourage HSCP to maximise the use of serial prescribing and dispensing to benefit people, utilise community pharmacy more effectively and ease the workload on GPs. We will support engagement between GP practices and community pharmacies and provide enablers to embed serial prescribing and dispensing into normal working practice.

**Public Health Service**
Community pharmacists are highly accessible primary care practitioners and provide a unique opportunity to improve signposting and access to information and services. This includes the most vulnerable in our communities such as people with mental health problems, homeless people and substance misusers, all of whom might have difficulty in accessing mainstream healthcare. The Public Health Service (PHS) element of the contract has made a significant contribution to areas such as smoking cessation and access to emergency hormonal contraception, demonstrating measurable impact at both individual and population level. We will continue to build on this and enhance the valuable public health role of community pharmacists as well as other members of the pharmacy team. The newly formed GP cluster groups provide an opportunity to further define local public health priorities. One of the early priorities we will take forward is a review of the existing sexual health service which allows community pharmacists to provide emergency hormonal contraception. Following on from recent guidelines we will consider the introduction of bridging contraception with the possibility of including long acting contraception at a later stage.

**ACTION:**
We will work at a national level to expand the public health role in community pharmacy with evidence-based interventions that add value. We will direct NHS Boards and HSCPs to consider opportunities to utilise community pharmacy to help meet local needs.

**Community Pharmacy gluten-free food service**
Work to co-design a Coeliac Disease Clinical Pathway has resulted in a community pharmacy Gluten-Free Food Service being embedded in the pathway. The pathway ensures people are supported to self-manage their gluten-free diet using the community pharmacy rather than the GP practice for access to the products they require. The service includes an annual Coeliac Disease health check provided by the community pharmacist.
Commitment 2:

Integrating pharmacists with advanced clinical skills and pharmacy technicians in GP practices to improve pharmaceutical care and contribute to the multidisciplinary team.

Through the Primary Care Fund, NHS Boards are being supported to build capacity around pharmacists with advanced clinical skills, or those undertaking this training, and pharmacy technicians in GP practices. These pharmacists and technicians are working directly with GP practices to free up GP time to spend with people with more complex care needs. Boards are targeting resources towards priority areas at a local level based on patient need, including areas with a greater proportion of elderly people, deprived areas, and people with multiple morbidities who receive a significant number of prescriptions and who have been identified as being more at risk of hospital admission or readmission.

The primary role of these practice-based pharmacists is to deal with the many medicine-related problems and issues that arise in every GP practice on a day-to-day basis and to support people in the management of their long term conditions. The support they provide covers, but is not limited to, improving medication management systems, including: formulary compliance, hospital outpatient requests, and repeat prescribing management. They also provide polypharmacy and medication reviews, including high risk medicines, and take on the management of people with more complex, multiple conditions where they are taking decisions with the individual on the use of their medication and monitoring and adjusting treatment prescriptions where appropriate. By taking on this role these pharmacists are improving clinical outcomes for people, reducing workload for GPs and other members of the multidisciplinary team, freeing capacity for them to focus on those with undifferentiated illness or other complex health needs.

There is also an important role for GP practice-based pharmacists, at the interfaces of the profession, working closely with hospital pharmacists, community pharmacists and care homes to ensure seamless care and reduce potential medication related problems and errors. There are good examples of how they are also working closely with community pharmacists to review people’s medicines, particularly those who have complex conditions or who take medicines with a higher element of associated risk. They can also ensure that, for people who are admitted and discharged from hospital, any medication changes are reconciled and updated. An evaluation of the GP practice-based pharmacists programme has been commissioned to capture the learning and inform any models for future practice developments.
Pharmacist-led medication review
A Dundee GP practice introduced pharmacist-led medicine reviews working in multidisciplinary teams for frail and elderly people. One person taking multiple medicines had problems with recurrent falls, urinary tract infections and anxiety. A review of their medication and blood tests led to a change in medication and dosage. This was coupled with frequent visits from the locality nurse and fortnightly follow-up calls from the pharmacist. At the end of the interventions the person has seen vast improvements in blood pressure, is less prone to falls and has seen an improvement in their overall health, including their continence.

With community pharmacists taking on an increasing role in supporting people with stable long term conditions through CMS, GP practice-based pharmacists’ focus will clearly be on people with more complex needs who may benefit from a more comprehensive polypharmacy review. They can also ensure that any pharmaceutical care issues raised as part of CMS by community pharmacists are considered as part of an integrated pharmaceutical care pathway. This integrated way of working, as illustrated in Figure one, is supplemented with hospital pharmacists focusing on areas such as in-patient care, outpatient clinics and specialist services, some of which, like Teach and Treat clinics, may occur in primary care.

Figure one – Integrated pharmaceutical care
We are committed to ensuring that every GP practice has access to a pharmacist with advanced clinical skills by 2021 as outlined in the Health and Social Care Delivery Plan. It is important to recognise that there will not always be a uniform approach to the support for all GP practices. How they utilise pharmacists’ and pharmacy technicians’ skills will be dependent on the needs of the local population, the GP practice and the skills of the pharmacy team.

The aim is to match the GP practice needs and the pharmacy support more closely as we go forward, taking into account that some practices will want and be able to deliver more complex care and consultation arrangements around polypharmacy and long term conditions management. Some will do this by utilising the skills of pharmacists prescribers while others will focus more on medication management-related safe systems-based approaches which can be managed by a pharmacy technician.

It may also be that a GP practice and pharmacist start out with routine interventions which develop over time to deliver more complex pharmaceutical care. Some of the approaches being tested include sessional input from local community pharmacists who can follow-up aspects of pharmaceutical care with people in the community pharmacy.

**Community pharmacy sessional input**

A community pharmacist working three days a week in a pharmacy and the other two days with three local GP practices is seen as a key member of the multidisciplinary healthcare team as well as being more clinically involved in providing care. This sessional role has also benefited the other local community pharmacies who receive peer feedback which helps them understand what is important to the local GPs and why certain activities are being done, ensuring everyone is working together for a common goal.

‘As a result of my work in GP practices, I enjoy my time in the community pharmacy even more. I am very focused on the pharmaceutical care of my patients and feel more confident in my clinical knowledge and carrying out polypharmacy reviews. Having worked with GP colleagues and as part of the multi disciplinary team, I find that I am making more significant interventions, I am comfortable in suggesting that people actually stop taking certain medication and I can resolve issues more easily. Feedback from the practices I work with is they find it really useful that I’m still community pharmacy based as I can advise them on things like stock supply issues and community pharmacy services such as the Minor Ailment Service and they can refer any hard-to-reach people to me as I’m much more likely to see them when they are picking up their prescriptions in the pharmacy.’

**Community pharmacist**

**NHS Greater Glasgow & Clyde**
We will use the evaluation from the pharmacists in GP practice pilots to carry out an options appraisal to help us understand in more details the impact of each of the models on service delivery, roles and responsibilities and outcomes and impact. We are keen to ensure pharmacists working across all settings, including community pharmacy, are drawn into this work in order build and maintain capacity and to make the best use of all pharmacists with advanced clinical skills.

**ACTION:**
We will deliver the commitment to ensure every GP practice in Scotland has access to a pharmacist with advanced clinical skills.

“There is an important role for GP practice-based pharmacists, at the interfaces of the profession, working closely with hospital pharmacists, community pharmacists and care homes to ensure seamless care and reduce potential medication related problems and errors.”
Hospital pharmacy

**Commitment 3:**
Creating the conditions to transform hospital pharmacy services to deliver world leading pharmaceutical care.

The hospital pharmacy team plays an invaluable role in delivering clinical services, working closely with doctors, nursing staff and others to ensure the appropriate medicines are prescribed and dispensed and that clinical outcomes are monitored to ensure best use and to avoid harm and unwarranted variation. They also have an important contribution in supporting the Realistic Medicine agenda working in collaboration with their clinical teams at multiple points in the healthcare system including pre-admission, admission, prescribing, monitoring and discharge. This is with a particular focus on where there is evidence of admissions due to adverse reactions to medicines, or people who require more pharmacist input such as the frail elderly and those with multiple and complex conditions, in order to address any concerns about inappropriate polypharmacy.

**Seven-day services**
Most hospital pharmacy departments already deliver a seven-day medicine supply service. However, currently there are gaps in terms of the availability of clinical pharmacy services across weekends. Addressing this in an equitable way and matching demand to flow will require consideration and action on a number of factors. In particular it can be argued that even during weekdays the pharmacy resource has to be targeted through a triage model focusing on high risk and complex cases in response to the available pharmacy workforce.

Traditionally the pharmacy workforce tends to target people at admission and discharge; however, as part of this commitment to promote excellence in hospital pharmacy practice we will develop a plan to support the delivery of safe, effective and productive working across seven days. This needs to take into account how the whole hospital pharmacy team adapt their working patterns and prioritise direct frontline care. It also needs to take account of the challenges presented through urgent unscheduled care, as well as scheduled care. This requires thoughtful consideration to exactly what clinical activities need to be prioritised on both weekdays and at weekends and what role remote consultations and mobile working could play in ensuring adequate pharmacy coverage. It will also need to link to wider hospital pharmacy plans to deliver seven-day services with other teams such as Allied Health Professions (AHPs) and laboratory services. This will require closer planning, integration and co-ordination of pharmacy services across all care settings at national, regional and local level, to ensure the best use of the available skill mix, expertise and digital tools.
Balancing flow and demand of people through the system against a finite hospital pharmacy workforce is challenging. Going forward it will be important to gain a better understanding of the appropriate skill mix of pharmacists and pharmacy technicians required. Ideally we want a combination of clinical pharmacist prescribers, and pharmacy technicians within clinical teams in a similar way to primary care, with roles underpinned by advanced practice frameworks for both pharmacists and pharmacy technicians. It is important to recognise the work of other pharmacy staff and to maximise the contribution of all grades of staff to the delivery of pharmaceutical care.

Part of the solution involves the effective application of digital solutions and Technology Enabled Care (TEC) to support more productive ways of working through the implementation of Hospital Electronic Prescribing and Medicines Administration (HEPMA) and the use of automation. These can enable pharmacy staff to be available on the ward assisting people to achieve the best outcomes from their medicines. In addition, improved clinical decision support tools and providing more remote Home and Mobile Health Monitoring (HMHM) and review will also deliver opportunities to improve self-management and provide step-down care in a person’s own home or homely setting.

**ACTION:**

We will commission work to transform the delivery of hospital pharmaceutical services and pharmaceutical care during weekdays and at weekends.

**Hospital discharge**

Another key area for focus is ensuring a seamless transition for people not only on admission but also at discharge. There are well-documented challenges with regards delays at discharge. A number of solutions have been tested including: not providing discharge medication if people have sufficient medicine supplies at home; the use of NHS hospital prescriptions for those for whom discharge is simple and who are able to access a community pharmacy for their medication; the use of ‘take home’ pre-labeled packs of medication in the case of simple analgesics and antibiotics; and the use of people’s own medicines on the ward. However, there are often other factors that can impact such as discharge sign-off being tied to a consultant ward round. It is also important to acknowledge the workload challenges and multiplicity of priorities for Foundation Year Doctors who have a critical role in the discharge process. There is a need to work with them to identify and deliver solutions. HEPMA brings advantages in that it allows all of a person’s medication to be pre-populated into the electronic discharge letter thereby improving the discharge process. A further improvement to explore is whether providing people with an electronic copy of the discharge letter could improve the discharge process and timelines.

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In addition, hospital discharge can be a difficult time to support people with adherence to new medication regimens. There is a role for pharmacists and pharmacy technicians in supporting this transition by taking on a greater part in managing care prior to and during discharge and with empowerment and authority to intervene to change prescriptions if necessary. There is also a need to consider the pharmaceutical input to be delivered by different sectors of the pharmacy profession depending on the care pathway and the complexity of the intervention. For example, there are opportunities to explore the role of community pharmacy in supplying both discharge medicines and outpatient medicines such as biologics and oral chemotherapy where it is considered safe and appropriate and the use of telecare devices to support adherence.

**ACTION:**

We will commission work to explore ways to improve all pharmacy-related aspects of the hospital discharge process utilising integrated models of pharmaceutical care.

**Modern Outpatient Programme**

The Modern Outpatient Programme is seeking to transform peoples’ experiences by optimising the roles of all clinicians, utilising new technologies and putting the person at the centre of their care. It is being progressed over a three-year time period, building on the direction set within the Primary Care Transformation Programme and the National Clinical Strategy.

Hospital pharmacy teams are already considering opportunities to redesign their services with a clear focus on emerging clinical roles within acute services. These include better targeting of unscheduled acute high risk groups, better use of pharmacist independent prescribers in specialist clinics both in secondary and primary care and wider access to specialist support with the wider expansion of Teach and Treat clinics in primary care. These developments will need to be underpinned by improved information sharing and referral pathways.

**Teach and Treat clinics**

The first Pharmacy Teach and Treat service started in NHS GCC in 2014. It aimed at optimising people’s treatment following a heart attack, utilising the skills of pharmacist independent prescribers (IP). It is widely recognised that best evidence based care for this patient group requires optimising doses of specific medicines. The medicines are initiated in hospital at low doses and should be increased, with supervision and monitoring, over time. Research findings however demonstrated that frequently the medications were not altered as recommended. A pharmacy team were asked if they could help address this locally. Working closely with the multidisciplinary team, the pharmacists instigated pharmacist-led clinics to follow up with people after discharge from hospital. The clinic sessions consist of a 15 minute face-to-face consultation in the out-patients department. The consultations include taking a clinical history, appropriate blood tests, blood pressure measurement and a physical examination including chest auscultation. Following assessment, the pharmacist IP optimises the medicines, issues a prescription and arranges a follow up.
Alongside this, A Plan for Scotland\textsuperscript{13} sets out the Government’s clear commitment to shifting the balance of care in order to ensure that people get the right support from the right professional as close to home as possible. This means a transformational shift in how healthcare will be funded and by 2020/2021 more of the NHS budget will be spent in the community setting rather than in hospitals. This will necessitate collaboration between primary and secondary care to develop solutions that best meet the needs of the local population and at the same time appropriately manage workload across the system, valuing the contribution of all staff.

**ACTION:**
We will work with the Modern Outpatient Programme to ensure a strategic alignment of the pharmaceutical contribution to its work.

### Continuous improvement

Measurement is central to the concept of hospital quality improvement and provides a platform to identify opportunities for improving outcomes as well as enhancing service delivery and performance. Hospital pharmacy services are an integral part of clinical service provision as well as driving productivity and efficiency improvements. Ensuring sufficient pharmacy capacity is key to delivering the optimal use of medicines and reducing unwarranted variation, wastage and harm. The use of a combination of improvement tools and performance and outcome measures has the potential to achieve a transformation in how hospital pharmacy services are provided as well as drive improved user experience and performance efficiencies across a range of areas from procurement to clinical service provision.

**ACTION:**
We will commission the development of a series of quality improvement tools and performance measures to support the transformation of hospital pharmacy services across Scotland.

Delivering safe use of medicines

Commitment 4:
Providing the focus, resources and tools to support the safer use of medicines.

Medicines remain the most common therapeutic intervention available to clinicians; however, the burden of harm relating to medicines is well reported. While every prescribing decision has the potential for a positive outcome or benefit, this must be balanced against the risk of causing harm.

The call-to-action in Realistic Medicine aims to add value and limit the harm caused by medicines by reducing: unwarranted variation and waste; over-investigation; over-diagnosis; and over-treatment. It encourages clinicians to lead with the least invasive processes first, to manage risk proportionately and to understand the limits of evidence. A key area of focus includes working in active partnership with people to build a personalised approach to their care.

Realistic Medicine challenges healthcare professionals to adopt an approach to medicines in order to reduce harm that can be associated with medical care, ensure that treatments are tailored to people’s preferences and deliver care that is of great value to people. To be effective, we also need to support people to understand their part in an effective healthcare partnership and enable them to express their preferences. These critical themes resonate strongly with the pharmacy profession. The follow-on report, Realising Realistic Medicine, includes a clear endorsement from the profession which signals their commitment to embed this in our practice.

National programmes
To support local NHS Board governance responsibilities, a number of Scotland-wide programmes are active in driving improvements in the safer use of medicines. These include the Yellow Card Centre Scotland, the Area Drug and Therapeutics Committee Collaborative, the Adverse Events Programme, the Integrated Digital Safer Medicines Programme (IDSMP) and the Scottish Patient Safety Programme (SPSP).

Importantly we need to continue to input to the wider work of the SPSP to improve the safety and reliability of healthcare and reduce harm across the six core work programmes: acute adult, primary care, maternal and children, mental health, healthcare acquired infection and medicines. In particular we are keen to build on the pharmaceutical dimension of the SPSP: Medicine programme to draw out some of the opportunities to improve the transition of care by ensuring pharmacists working in community pharmacy, GP practices and hospital pharmacy are working collectively to ensure seamless pharmaceutical care as people transfer across different settings.
**Medicines reconciliation**
The medicines reconciliation work within SPSP has potential to improve safety but has struggled to become embedded in hospital practice. To date it has been person-dependent and would benefit from becoming more widely embedded in existing and emerging systems. HEPMA will help to achieve this but as the transfer between care settings often results in poor medicines reconciliation it would also be beneficial to consider this in both a UK and international context and learn from others about what ‘good’ looks like.

**ACTION:**
We will work with SPSP: Medicine to continue to strengthen arrangements for medicines reconciliation at the interfaces of care across Scotland and ensure national guidance and local delivery are aligned. This may involve developing new recommendations for future practice.

**Measuring harm**
Whole system thinking and measurement are critical parts to an integrated approach to assessment, assurance and improvement. In addition, to underpin our understanding of medicine safety, the measurement of past harm is a critical dimension. Data on harm at a local and national level is key to informing the priorities for improvement as well as supporting shared learning.

**Measuring and monitoring medicine safety**
Multidisciplinary teams in NHS Forth Valley and Tayside are testing the application of the Health Foundation measuring and monitoring framework. This is to inform a more holistic understanding of medicines safety from the absence of harm to the presence of safety. Teams consider a number of dimensions including past harm, reliability of care and safety in the future.

**ACTION:**
We will commission Healthcare Improvement Scotland (HIS) to work with National Services Scotland (NSS) and NHS Boards to strengthen the available data on harm and establish measuring and monitoring parameters for medicines safety more broadly to consider past, present and predictable future harm.
Community pharmacy
Recent developments have included introducing continuous improvement as an ongoing element of the community pharmacy funding arrangements with the aim of applying improvement methodology into day-to-day practice. This has included the national roll-out of the patient safety climate survey across community pharmacy. The work has been supported by Quality Improvement in Pharmacy Practice Collaborative (QIPP) consisting of the Royal Pharmaceutical Society (RPS), Community Pharmacy Scotland (CPS), NHS Education for Scotland (NES), Health Improvement Scotland (HIS), The Health and Social Care Alliance Scotland (The ALLIANCE), Yellow Card Centre Scotland and NHS Boards. QIPP has provided a series of Quality Roadshows designed to raise awareness of and commitment to quality improvement across Scotland. The learning from the SPSP community pharmacy collaborative will be considered for wider translation and dissemination where appropriate.

Scottish Patient Safety Programme: community pharmacy collaborative
Community pharmacy teams in NHS Fife, Grampian, Highland and Greater Glasgow and Clyde (GG&C) have been testing a series of tools and resources to help people taking a range of high risk medicines to use them safely. Work has also been taken forward examining the safety culture within community pharmacies through the early adoption of the Patient Safety Climate Survey. Current pilots between community and hospital pharmacists in NHS Forth Valley, GG&C and Grampian are demonstrating how providing shared access to clinical data can strengthen the effective contribution of pharmacy in delivering safe clinical care and supporting medicines reconciliation. This programme was funded by the Health Foundation and has been evaluated by the Strathclyde Institute for Pharmacy and Biomedical Sciences.

ACTION:
We will make quality improvement an integral element of community pharmacy funding arrangements in a similar way to GPs and introduce a programme of continuous improvement.

Involving people and supporting meaningful participation
A baseline survey of people’s perceptions of pharmacy services and their use of medicines, conducted in association with the Scottish Health Council’s Our Voice Citizen’s Panel, tells us that people tend to default to going to their GP for advice about medicines and are not fully aware of the expertise and services offered by their local community pharmacy. For example, only 23% people were aware that they could have their medicines reviewed by a pharmacist. We need to improve awareness of what support pharmacists can provide and encourage people to go to their local community pharmacy in the first instance where appropriate.

Work is already underway to provide information to the public and people receiving care about medicines taking into account health literacy needs. HIS has produced a factsheet, ‘Medicines in Scotland: what’s the right treatment for you?’, which explains how healthcare professionals make prescribing decisions, how to find out more about medicines and what to do if side effects are experienced. But there is more work to be done to ensure we deliver person-centred pharmaceutical care. This includes considering how to make better use of tools and interventions to assist people in using their medicines effectively.

**ACTION:**

We will commission work to raise awareness of the role of pharmacists and pharmacy services. We will work with others to facilitate the co-production of tools and interventions that can be used to help support shared decision making around the use of medicines.

“Quality improvement encompasses activities which ensure we provide person-centred, safe and effective care which meets people’s needs and expectations.”
Care homes and care at home

Commitment 5:
Improving the pharmaceutical care of residents in care homes and people being cared for in their own homes.

Concerns about the variation in the quality of pharmaceutical care in some care homes have been well documented and were highlighted in the Wilson and Barber Review of NHS Pharmaceutical Care in the Community in Scotland\textsuperscript{15}. This report identified the need for high quality pharmaceutical care to meet the medication needs of the whole cohort of care home residents, many of whom have increasing dependency and multimorbidity. There is an opportunity to build on the role that community pharmacists already fulfil in terms of the supply of medicines and related advice and support for people in care homes.

More recently there have also been new models emerging with community pharmacists, GP practice-based pharmacists and pharmacy technicians providing more tailored pharmaceutical care in care homes. Opportunities exist to determine national standards for documentation and recording systems which can support integrated information exchange, including medicines reconciliation at admission, transfer and discharge for residents. Additional benefits include the introduction of national standards for the safe administration of medicines, the development and delivery of quality assured training for care home staff and regular multidisciplinary reviews of medication.

Providing pharmaceutical care to care homes
A prescribing support pharmacist working across two GP practices in north-east Glasgow carries out annual medication reviews for elderly residents in local care homes to reduce polypharmacy and rationalise medicines, including reducing the use of high risk medicines where appropriate. This involves working closely with the care home liaison nurses to improve compliance with wound formulary and attending care home meetings with GPs to review a person’s pharmaceutical care needs.

Care at home

Many of the principles which relate to pharmaceutical care in care homes are also applicable to services for people who require supported care at home. That said, the situation can be even more complex with a wide variety of formal and/or informal carers of varying capabilities and with the growing implications of self-management and self-directed support. Again opportunities arise to standardise aspects of the support provided including documentation and training, supported by digital tools for secure mobile working.

With this group, there is also a particular need to focus on reablement and the active involvement of family and carers. This includes better use of person-generated data and information, the use of tools to help identify those at greatest risk requiring more intensive support and harnessing advances in technology-enabled care including remote monitoring systems, telecare devices, video consulting and apps.

There may also be benefits in implementing a single shared assessment which addresses the use of multi-compartment compliance aids only where they are identified as appropriate for an individual’s needs. More extensive and specialised care needs to be provided to some individuals or groups of people involving healthcare professionals who may have traditionally been more hospital-based, and with whom there has to be effective communication and exchange of information.

**ACTION:**

We will work with Chief Officers of Integrated Joint Boards to identify national approaches to improve NHS pharmaceutical care for residents in care homes and people being cared for in their own homes.

“We need to ensure high quality pharmaceutical care is delivered to people in care homes and in their own homes, many of whom have increasing dependency and multiple conditions.”
Remote and rural communities

Commitment 6:
Enhancing access to pharmaceutical care in remote and rural communities.

Digitally enabled infrastructure
Rural Scotland accounts for 98% of the land mass and nearly 20% of our population live there. Rural populations continue to grow at a faster rate than the rest of Scotland and also have higher levels of older people, which increases demand for core services. This, in turn, makes the coordination and delivery of health and social care in remote and rural areas more challenging. A number of innovative ways of delivering healthcare in rural areas are being developed and tested, including solutions such as technology enabled care and urban and rural hospital networks.

NHS Highland technology enabled project
A team from NHS Highland has been awarded funding from the Health Foundation to test an innovative technology enabled project designed to help improve people’s access to pharmaceutical care in remote and rural areas across the region. The project involves pharmacists providing medication reviews and advice on taking medicines to people registered with dispensing medical practices. The pharmacists work closely with the dispensing practices but are located remotely from them. People are able to speak to the pharmacist from their own home, workplace or medical practice via a secure video link. A face-to-face version of this service, in which a pharmacist visits dispensing practices, has already been developed by NHS Highland in a pilot involving four practices.

Consideration needs to be given to how to scale up these technology enabled care initiatives so that they become mainstream practice in order to improve access to pharmaceutical care, deliver better health outcomes for people and help sustain services in remote and rural communities, including dispensing doctor practices. This also requires ensuring the digital literacy of the pharmacy workforce as well as the people they are caring for so that they are confident and competent to use technology in their daily practice.

ACTION:
We will work with the TEC Programme and NHS 24 to ensure the availability of technology enabled care solutions to support remote and rural communities.
Recruitment and retention

There can be difficulties in attracting pharmacists and pharmacy technicians to work in more remote and rural areas communities. The barriers are similar to those identified for other healthcare professionals. We are committed to improving both the recruitment and retention of staff in these areas. Improving the exposure of pharmacy undergraduate students to remote and rural working is one such way of achieving this and there are examples of innovative solutions being tested in other professions such as medicine.

Medical longitudinal integrated clerkships

NHS Highland, NHS Dumfries and Galloway and the School of Medicine at the University of Dundee are testing a medical longitudinal integrated clerkship. It is looking at delivering a significant change in medical education to promote general practice in remote and rural settings and ensure future doctors are comfortable working both in community and hospital settings. This partnership sees fourth year medical students based in general practice for five to six sessions a week and spending the rest of the week in secondary care or other community settings.

Education and training

Education has a key role to play in supporting service improvement and developing new or expanded ways of working across the whole workforce and more specifically in remote and rural communities. Providing education and training that is local, flexible and affordable is a key component to ensuring the appropriate mix of skills, competency and ability across the pharmacy workforce in remote and rural communities. NES Pharmacy recently commissioned the School of Medicine at the University of Dundee and the School of Pharmacy and Life Sciences at Robert Gordon University (RGU) to provide a three-day clinical skills training course in Shetland for pharmacist practising in Orkney, Shetland and the Western Isles. This has allowed a tailored education and training programme to be provided locally.

**ACTION:**

We will commission NES to work with remote and rural NHS Boards to explore mechanisms to attract more pharmacists and pharmacy technicians to work in remote and rural communities and ensure any associated education and training needs are flexibly met. We will test a pharmacy longitudinal clerkship.
4. ENABLING NHS PHARMACEUTICAL CARE TRANSFORMATION

Context

The Health and Social Care Delivery Plan sets out an ambitious programme of change for health and social care in Scotland. The level of planning and delivery required through health and social care integration, improving population health, implementing the National Clinical Strategy and changing how NHS organisations work together with local authorities and with other partners, requires a different approach at both regional and national levels.

We can provide better clinical outcomes and more efficient, consistent and sustainable services for staff and service users through NHS Boards, Integration Authorities and other partners working more collaboratively and effectively to plan and deliver services. Work is already underway regionally and nationally to identify areas which would benefit from being planned and delivered on that basis. This includes the preparation of regional delivery plans and a national delivery plan.

While playing to the strengths of the pharmacy team is crucial to achieving excellence, they must also have the resilience to be able to respond and adapt to the needs and pressures facing our modern health and social care system. In order to do this we have identified three key enablers as priorities for action. These are: developing the pharmacy workforce, improving access to and use of digital information and technologies, and planning for a sustainable, flexible and resilient approach to delivery of NHS pharmaceutical care across Scotland.

It is important that as we shift the balance of care and pharmacists take on expanded clinical roles that involve providing clinics and managing caseloads or undertaking other new tasks previously carried out by another healthcare professional, people are confident that they are receiving the best NHS pharmaceutical care that is safe, effective and person-centred, and which meets their needs and wishes. Building confidence and an understanding of the enhanced role of the pharmacist is as important with the multidisciplinary team as it is with the people we support, carers and the public.

Through our programme of work we are committed to ensuring pharmacists have the necessary clinical, decision-making and digital skills needed to care for people effectively. This equally applies to other
members of the pharmacy team such as pharmacy technicians, dispensers and pharmacy assistants. In addition, pharmacists will be integral members of multidisciplinary teams and will play their part in shaping local health and social care services so that they meet local needs in community health care and out-of-hours hubs.

We are already experiencing an increase in demand for pharmacists and pharmacy technicians and a number of initiatives are underway to help us understand and prepare for the expansion of the pharmacy workforce. In responding, we must ensure the stability of, and continue to improve, existing services across all community, primary care and secondary care settings. This includes recognising an increasing interest across the profession to develop a more flexible approach to their career pathway including portfolio career opportunities.

A digital infrastructure can assist pharmacists and pharmacy technicians in increasing their clinical role. For example, automated technologies being deployed in the dispensing process can release time and capacity for improving the services we provide for people. Remote and mobile working can provide the workforce with more flexibility and create improved working conditions for staff. Additionally, technology enabled approaches can support people to better manage their medication, improve adherence and support wider access to pharmaceutical care reviews for people in care homes and their own homes. Finally, improving access to electronic information and management data is critical to informed decision making and the effective delivery of services and our ambition for consistently high quality seamless care at all points of the person’s journey across the healthcare system. As part of identifying the gaps in our current technology provision we have been mapping the various technology systems and how they are utilised. From this we will be able to identify improvements which will drive our digital agenda.

Our vision for achieving excellence in pharmaceutical care also necessitates changes to the planning and delivery requirements for sustainable NHS pharmaceutical care. This will be achieved by providing NHS Boards and HSCPs with the means to take a proactive approach to planning and delivery if we are to realise an integrated role for pharmacy across all healthcare settings.

“Extending the range of training and development opportunities is an essential component to delivering a modern workforce.”
Pharmacy workforce

Commitment 7:
Building the clinical capability and capacity of the pharmacy workforce.

Workforce planning and development

With the demand for pharmaceutical care set to increase across the board we need to strengthen our pharmacy workforce planning. Currently there are approximately 4,700 whole time equivalent registered pharmacists and over 2,000 registered pharmacy technicians in Scotland, most of whom are working in community, primary and secondary care settings. The requirement to increase pharmacist capacity in GP practices has largely been met through different models of direct employment, redeployment, secondment and contractual arrangements via NHS Boards and community pharmacy. With further increases planned in order to meet this growing demand, it is critically important that we are also able to maintain and improve NHS pharmaceutical care provision across all settings.

Whilst pharmacy workforce planning data for the managed service is readily available the real gap is that there is no robust baseline data on the number of pharmacists and pharmacy technicians working in our network of community pharmacies, of which there are over 1,250. This will continue to present a challenge until we can reach a pragmatic solution with the community pharmacy sector and persuade them of the benefits that sharing such information can bring for both community pharmacy contractors and health service planners. In the future, this information could also be sourced from a Performer’s List for Pharmacists.

Extending the range of training and development opportunities is an essential component to delivering a modern workforce and ensures that extended multidisciplinary teams have the skills, confidence and capacity to work to the full range of their competencies. Our vision and current work towards integrated pharmaceutical care to support a shift in the balance of care is already increasing the demand for pharmacists and pharmacy technicians with greater clinical capability. Supporting an increased demand for care in community pharmacy, in GP practices through access to pharmacists and pharmacy technicians and in hospital pharmacy is already driving a need for pharmacists and pharmacy technicians with the right clinical skills. Combined with the appropriate digital skills, this will lead to greatly enhanced delivery of pharmaceutical care.

ACTION:
We will work in collaboration with NES and other key stakeholders to understand and address future pharmacy workforce requirements in order to inform the national workforce plan and the educational needs of the profession.
Independent prescribers and advanced clinical skills

Prescription for Excellence made a clear commitment to ensuring people had access to pharmaceutical care which was delivered by pharmacist independent prescribers across all care settings. Significant progress has already been made to build a complementary mix of skills within the pharmacy team, including independent prescribing, communication skills, history taking and advanced clinical assessment skills. Since 2013 there has been an increase in the number of pharmacists with independent prescribing and advanced clinical skills and just over a quarter of all pharmacists practicing in Scotland are currently qualified as independent prescribers. In addition to this, NES has developed and is delivering a comprehensive education and training programme, focused on providing enhanced clinical skills training for pharmacists and technicians. A further drive to recruit more pharmacists to undertake these programmes, along with an increase in training places and additional financial resources, will be needed to support the planned capacity increase in pharmacists with advanced clinical skills to meet the needs of the service.

NES Advanced Clinical Skills Programme

The award winning NES Advanced Clinical Skills Programme for Pharmacist Independent Prescribers course represents a unique collaboration between NES Pharmacy, three Scottish Schools of Medicine, Glasgow Caledonian University and the two Schools of Pharmacy in Scotland. The course comprises a mix of mandatory and elective modules covering core clinical skills such as consultation, physical examination and assessment skills as well as a range of condition specific modules including diabetes, coronary heart disease, respiratory, musculoskeletal and common clinical conditions. The course has been developed and delivered through a multi-disciplinary team of clinicians, including doctors, nurses, physiotherapists and pharmacists.

Undergraduate education

We have already indicated our intention to strengthen pharmacy undergraduate education with a commitment to move to a five-year integrated initial education programme for pharmacists in Scotland. This will also help to ensure that the university curriculum is aligned to prepare newly qualified pharmacists for the changing roles we have described by ensuring those graduating from the new five year integrated programme will have all the digital skills and underpinning knowledge and clinical skills for taking on a prescribing role. We will also continue to encourage a focus on interprofessional education, building on the work undertaken by the School of Medicine at the University of Dundee and the School of Pharmacy and Life Sciences at Robert Gordon University, in order to support future collaborative practice.
Postgraduate education and continuing professional development

New vocational training programmes have recently been launched to better prepare pharmacists for more clinical roles at both the early and developing stages of their careers. Foundation Training aims to equip pharmacists early in their career with a broad range of general skills and provide them with a foundation on which they can develop further. Expert Professional Practice modules aim to equip them with a range of specialist skills, after they have completed their Foundation Training. There is also a General Practice Clinical Pharmacist Competency and Capability Framework which characterises core roles and responsibilities and identifies any learning and professional development requirements to support pharmacists working as advanced practitioners.

The expertise, experience and professional judgement of advanced clinical pharmacy practitioners is demonstrated through the depth of their knowledge in areas such as diagnostics and therapeutics, their enhanced skills in consultation, critical thinking and clinical decision-making, research outputs and their leadership role within their teams. However there is currently no corresponding advanced pharmacy practice programme.

As a result we have recently commissioned NES Pharmacy to review postgraduate programmes to help align to the future needs of the workforce with a view to developing a Postgraduate Career Framework for pharmacy in Scotland. To take this forward NES will establish an expert educational group to provide advice on the future options to develop this Framework. This will include areas such as support for early level careers, advanced practice level careers, consultant level careers and clinical and professional leadership. It will also need to be able to sustain a flexible and capable workforce which will allow recognition for career advancement of current professionals as well as provide supportive professional development and recognition of the future pharmacy profession in early careers, advanced and specialist practice and consultant pharmacist level.

The Career Framework will need to be applicable at all levels of development, to all specialties (clinical and non-clinical, generalist and specialist), all sectors of care and will need to allow for recognition and transferability across all UK nations. It will also need to take cognisance of any other frameworks currently in use across GB, such as the Royal Pharmaceutical Society (RPS) Foundation and Advanced Pharmacy Framework (APF) and the guidance for NHS consultant pharmacists. It will need to encompass the future digital skills requirements of pharmacists, technicians and others.

**ACTION:**

We will introduce a Postgraduate Career Framework for pharmacy in Scotland which will include a consultant pharmacist role.
Pharmacy Technicians
With the increasing prominence of the role of pharmacy technicians it is also important that their education and training needs are reviewed in light of this. Whether working on our hospital wards, providing supported discharge processes into the community setting or working in community pharmacies, pharmacy technicians have an important role in improving safety, addressing compliance problems and reducing waste. One example of this is the East Renfrewshire HSCP Medication Support Service which employs the services of pharmacy technicians who provide personalised support regarding people’s medication as part of the local discharge programme. Their role is invaluable to other members of the health and social care team.

**ACTION:**
We will commission NES to develop a work programme with the Further Education Colleges in Scotland in line with the General Pharmaceutical Council’s regulatory requirements to consider the future education and training requirements for pharmacy technicians.

Mentorship
Consideration will be given to the opportunities to develop GP mentorship for pharmacists undertaking new roles in GP practices by creating capacity to support this as part of their role for developing the wider multidisciplinary team through their leadership and development role. The implementation and further expansion of independent prescribing to other professional groups across recent years offers opportunities for pharmacists, with their expertise in the safer use of medicines, to also provide support and mentorship to the growing number of new prescribers. Partnerships like this also provide possibilities to explore future collaborative practice models.

Leadership development
Leadership, whether individual or team-related, at all levels, is fundamental to the delivery of high quality, safe and person-centred healthcare. We know that leadership is most effective when it is appreciative, supportive and sustained, enabling teams and individuals to deliver high quality care. The Kings Fund describes the leadership task as ensuring direction, alignment and commitment within teams and organisations. This requires leaders who continually nurture a culture that ensures that safe, high quality compassionate care is the top priority. Key to this are leaders who promote a shared sense of purpose, foster an enabling culture and help others achieve their full potential. We have benefited over the years from having an integrated approach to pharmacy leadership within our NHS Boards, with Directors of Pharmacy having a direct responsibility for the managed service and an indirect one for the local community pharmacy network. This has served the public, the local health and social
care system and the profession well and we will continue to encourage and strengthen this leadership role. We have been investing in professionalism and leadership development across the profession over a number of years and will continue to make this a focus of our Postgraduate Career Framework for Pharmacy.

In addition the NHS is investing in a comprehensive programme to consider leadership and talent management development within NHS Scotland to ensure that both current and future leaders are equipped to drive the changes needed in health and social care and identify the next cohort of future leaders of NHS Scotland. This provides an opportunity for pharmacists with wider leadership ambitions to come forward and enroll on this interdisciplinary programme.

“NES has developed and is delivering a comprehensive education and training programme.”
Digital information and technologies

Commitment 8:
Optimising the use of digital information, data and technologies for improved service delivery.

HEPMA
Hospital Electronic Prescribing and Administration (HEPMA) systems, when fully implemented, make hospitals safer places to take medicines. Three NHS Boards in Scotland (Ayrshire and Arran, Forth Valley, and Dumfries and Galloway) have already implemented HEPMA. This has shown benefits in improving the quality of prescribing, reducing medicine information errors between primary and secondary care and reducing missed doses of medicines. It can also offer the opportunity of much better insight into prescribing and other medicine related activities through data analytics at different levels. All NHS Boards in Scotland are now developing plans to implement HEPMA to improve clinical care and service efficiencies.

ACTION:
We will work with NHS Boards to ensure that HEPMA is the uniform standard in hospitals across Scotland. We will ensure that pharmacy contributes fully to the multidisciplinary transformation of care that will be delivered through HEPMA.

ePharmacy
The ePharmacy Programme, which provides the technology infrastructure that underpins services such as MAS and CMS in community pharmacy, is well established and continues to introduce improvements to working practices in community pharmacy. For example, a recent pilot project to support the sharing of pharmaceutical care plans between hospital and community pharmacy at admission and discharge has been tested in NHS Forth Valley, NHS Grampian and NHS Greater Glasgow and Clyde through the Pharmacy Care Record (PCR) held within community pharmacies. Work is underway on a full set of requirements to inform a national roll-out.
The Universal Claim Framework will allow all the community pharmacy services, such as smoking cessation, the supply of medicines under the unscheduled care Patient Group Direction (PGD) and the Gluten Free Food Service, to be delivered harnessing the benefits of electronic support, meaning that pharmacists will no longer have to handwrite any associated prescriptions, and eventually won’t need to print a paper form at all. It will also support better electronic information sharing between community pharmacists and GP practices. The transformation of primary care and the further development of services such as MAS and CMS will require enhanced information exchange between community pharmacists and other members of the multidisciplinary team, in particular GP practices and secondary care.

**Electronic prescribing**

There are a number of clear benefits from the introduction of further enhancements to the electronic transfer of prescriptions (ETP) in primary care. The ePharmacy Programme has thus far concentrated on underpinning GP prescribing activity. Whilst this represents the vast majority of all prescribing activity, there are growing numbers of new prescribers in primary who would benefit from being enabled to use the ePharmacy infrastructure to support their prescribing activities. In addition, there may be further benefits to be gained from an incremental move towards paperless prescribing across primary care. This has the potential to improve productivity and efficiency by reducing the time consuming physical printing and signing of prescriptions by GPs. It also removes the need for community pharmacists to endorse and claim both electronically and on paper. A fully paperless service, relying on technology only, is also less susceptible to most elements of fraud. Paper prescription forms, however, are currently central to a number of established processes involved in providing medication to people and a move to paperless prescribing will necessitate process changes across the board, including the use of Advanced Electronic Signatures (AES), robust systems for the clinical check on the appropriateness of the prescription request, adjustments to community pharmacy workflow and changes to NSS payment processing. Some of these require legislation changes and new IT functionality.

**ACTION:**

We will extend ePharmacy support to all key prescribers in primary care. We will commission the ePharmacy Programme to scope and test an incremental move to paperless prescribing across primary care.

**Access to healthcare information**

The current limitations surrounding community pharmacist access to electronic information and records such as the Emergency Care Summary, the Key Information Summary and Anticipatory Care Plans still require to be resolved. A Short-Life Working Group (SLWG) has been convened, with membership including the Information Commission Offices (ICO), Information Governance specialists, Caldicott Guardians, the Scottish Government, the BMA and RCGP with GMC and public representation invited. This SLWG will work together to create a Scottish Code of Practice between Health Boards and GP practices to promote the safe sharing of information across boundaries in healthcare and within the multidisciplinary team, in accordance with the Data Protection Act (DPA).
ACTION:
We will consider how the pharmacy profession can safely access and share appropriate health information in light of the guidance contained in the future Scottish Code of Practice.

Robotics
Automation and robotics are also being increasingly used within hospital and community pharmacy services in Scotland to dispense and distribute medicines freeing time for pharmacists and pharmacy technicians to provide pharmaceutical care and reducing the risk of error. In addition, other initiatives such as semi-automated medicines cabinets are beginning to be used in hospital wards and departments, often targeted in areas such as Acute Receiving Units and theatre wards. Benefits seen from this include releasing time for nurses to care for people and quicker access to medicines. These cabinets also provide automatic ordering of required medication and allow keyless but secure access to stored medication through fingerprint identification which also enables greater accountability and tracing of medication. We will continue to encourage hospitals to invest in these technologies.

More recently, we have invested in deploying automation in a number of community pharmacies. Testing of robotics and scanning technologies is now underway to help us understand more about the economic impact of the technology as well as how it can enable innovative workforce development in community pharmacy by releasing time for clinical care. This work is being evaluated in order that the outcomes can be used to shape future service and policy direction.

Automation in hospital pharmacy
Within NHS Greater Glasgow and Clyde (NHS GG&C) the largest hospital pharmacy robotic installation in the world exists within a Pharmacy Distribution Centre and distributes nine million packs of medicines to 4000 destination points from the eastern boundary of Glasgow to Argyll in the west Highlands. The main hospitals within NHS GG&C also have dispensing robots which dispense medicines for individual people. The use of this technology has enabled a very much smaller pharmacy to be built in the new Queen Elizabeth University Hospital than would otherwise have been required and has enabled pharmacy staff working in that hospital, freed from dispensing, to be available at the bedside to assist people to achieve the best outcomes from their treatment with medicines. In addition, semi-automated medicines cabinets are being installed within hospital wards and departments. The Golden Jubilee has recently invested in this technology for the whole hospital and the benefits include releasing time for nurses to care for people and quicker access to stored medicines meaning that people can receive for example pain relief as required more quickly. Typically wards can store 20% less medication through use of these cabinets while still providing medicines to meet the people’s needs.
ACTION:
We will explore further options to increase the use of automation in areas where medicines are used in order to release pharmacist and pharmacy technician time to provide pharmaceutical care.

Digital integration
In parallel with this, the Integrated Digital Safer Medicines Programme (IDSMP) has been formed to enable better information sharing for medicines information and medication-related processes between hospital, primary care and community pharmacy, as envisaged by the Closing the Loop report. The focus for this work is the development of a single, virtual electronic medicines record for every patient in Scotland, readily available to the patient and accessible to those clinicians who need it. As well as facilitating implementation of HEPMA, the programme seeks to support accurate medicines reconciliation at all transition points, improved quality of medication information, and improved patient knowledge and understanding.

ACTION:
We will commission the Integrated Digital Safer Medicines Programme to scope future requirements for hospital pharmacy transformation and medicines management. We will actively contribute to the development and implementation of the Scottish Government’s Digital Health and Care Strategy to ensure pharmacy’s needs are covered.

Technology enabled care
The Scottish Centre for Telehealth and Telecare (SCTT), within NHS 24, supports the development and expansion of technology-enabled health and social care services in Scotland. They have a number of key programmes of work, many of which are relevant to pharmacy, including supported self-management, video consulting and home and mobile health monitoring. The development and use of technology enabled care will enable a greater reach into our local communities when delivering NHS pharmaceutical care, specifically to vulnerable people such as those who are housebound or the frail elderly. Access to pharmacy services and advice will be widened as a result, providing more equitable access to NHS pharmaceutical care and delivering improved outcomes for people from the use of medicines.
NHS Highland Technology Enabled Support
The delivery of care close to the person’s own home presents particular challenges for NHS Highland. Remote delivery of care, using information and communication technologies, was seen as a solution that could enable sustainable pharmaceutical care to be provided to these remote and rural communities. As a result NHS Highland has established a remote, primary care, clinical pharmacy service to GP practices in Lochaber using a technology-enabled care solution. The pharmacy service involves remote medication review clinics to care home residents; videoconference attendance at multidisciplinary team meetings and virtual wards; remote clinical pharmacy support to GP practices, the integrated care team, and the wider health and social care team; and collaborative videoconferencing clinics with other healthcare groups.

More innovative ways of providing existing and new services through technology enabled care will continue to be developed, where due consideration will be given to health literacy and person-centredness in the approaches taken. The SCTT will continue to play a key role in supporting future developments, and ensure the use of these technologies brings efficiencies for care providers and delivers an enhanced experience for people receiving care.

**ACTION:**
We will ensure the availability of technology-enabled care solutions to support the delivery of pharmaceutical care.

**Decision support tools**
In addition to a skilled workforce and evolving practice models, is the need for modern-day decision support tools. Realistic Medicine calls for practitioners to reduce harm, manage risk better and reduce unnecessary variation in practice and outcomes. Using the wealth of routinely collected health and social care data to understand better how the Scottish population use and respond to treatments is key to developing the clinical decision support tools that clinicians and the people they care for need to make the right treatment choices. This also includes the opportunities afforded through health and social care apps.

There are already examples of how pharmacists in collaboration with academic and NHS colleagues are driving innovations in how medicines are personalised to maximise health gain and minimise any unintended consequences from treatment. One such example is where pharmacists are using predictive analytic methods to quantify the association between exposure to different types of antimicrobials and the risk of developing a healthcare-associated infection (HAI) to populate a clinical decision support tool.
While translating analytics into decision support algorithms is an emergent form of decision support, another more tried-and-tested approach with a strong body of evidence for benefit is translation of existing evidence-based guidance into formats that support quick and easy decision-making at point of care. This is most effective when the guidance is converted into evidence-based algorithms that process patient-specific data and offer recommendations or options specific to that individual patient. This type of decision support is already being used in the antimicrobial-prescribing app developed for the Scottish Antimicrobial Prescribing Group (SAPG) as part of the decision support roadmap, and is also being used to support shared decision-making in the polypharmacy app.

**ACTION:**

We will ask the Digital Decision Support Programme to define a roadmap for pharmacy decision support tools that will deliver highest impact in achieving personalised care, shared decision-making and the other priorities outlined in this strategy.

“The development and use of technology enabled care will enable a greater reach in to our local communities.”
Sustainable pharmaceutical care services

**Commitment 9:**
Improving the planning and delivery of pharmaceutical care.

**Pharmaceutical Care Service Planning**
To realise an integrated role for pharmacy and to embed NHS pharmaceutical care in health services in all settings, NHS Boards must be provided with the means to take a proactive approach to the planning and delivery of NHS pharmaceutical care. At the centre of this new approach will be a statutory planning framework for NHS pharmaceutical care. This will build on pharmaceutical care service planning already conducted by NHS Boards and will enable them going forward to more systematically target available pharmacy resources to the needs of local populations.

**ACTION:**
We will develop and implement a new planning framework to help NHS Boards better characterise the pharmaceutical care needs of their local populations.

**Modern Contractual Framework**
In order to deliver the full potential an improved planning process offers, NHS Boards must have the flexibility to enter into arrangements based upon the local population care needs identified by the planning process. We will therefore introduce a new contracting framework for the provision of NHS pharmaceutical care that will give NHS Boards the power to enter into contracts for the provision of NHS pharmaceutical care services. This will provide NHS Boards with the flexibility to ensure the provision of NHS pharmaceutical care services is appropriate and responsive to the local need identified by their planning processes. A new funding arrangement will also support the realisation of the direct care and clinical care outcomes of those services.
**NHS Pharmaceutical Care Service Performers List**

In addition, and in support of the new planning and contracting framework, we will introduce a Performers List for Pharmacy as already exists for GPs and other contractors. The main function of the Performers List is to provide governance for services delivered by contracts, safeguarding the quality of the services being delivered. It also has the potential to benefit workforce planning in the future.

**ACTION:**

We will develop and implement a new contracting framework for community pharmacy NHS pharmaceutical care services, underpinned by a new funding arrangement and a Performers List for Pharmacy.

“In order to deliver the full potential an improved planning process offers, NHS Boards must have the flexibility to enter into arrangement based upon the local population care needs.”
5. NEXT STEPS

A summary of the key commitments and actions which will form the basis of our programme work going forward are detailed at the end of the strategy.

We are fully committed to realising our vision and the commitments and associated actions outlined in this strategy. We have identified the following components which will be key factors required to underpin the implementation of our commitments and actions:

Supporting the work programme
We will evolve existing established groups and, where appropriate, establish specific short-life task and finish groups to advise on the design, testing and implementation of our programme of work and ensure it aligns with other Ministerial and service priorities. In addition, the ePharmacy Programme Board will continue to provide direction for the technology support required to underpin the community pharmacy contractual arrangements. It will also host the work programme for the Evaluation of Automated Technology (EAT) pilots. The Integrated Digital Safer Medicines Programme which sits under the Digital Safer Medicines Group aims to improve the capture, management, sharing and use of medicines-related information across all care settings with a core focus on HEPMA. We are also contributing to the National Health and Social Care Workforce Plan to ensure pharmacy workforce issues are addressed as part of the wider national workforce planning iterative process.

Communications and engagement
In order to ensure that there is genuine public and service user involvement we will commission the Valuing Medicines Group, which is made up of key stakeholders with a shared interest in medicines and NHS pharmaceutical care provision, to identify opportunities to co-ordinate public and professional participation. This will ensure that, in delivering our commitments as described, we continue to focus on the importance of solutions that are person-centred and add value to the pharmaceutical care pathway. By using a range of health and social care evidence, professional consultation and the recent Citizens’ Panel survey results we will create a range of activities to share knowledge, embed improvements and engage with key stakeholders, including services users and the public.
Research, evaluation and monitoring
Evidence from robust research is an essential part of future decision making. As we take forward this programme of work we will work in partnership with a range of stakeholders, including the two Scottish Schools of Pharmacy, to monitor and evaluate our work programme. This has already commenced with three research commissions:

- Pharmacists in GP practices: Strathclyde Institute for Pharmacy and Biomedical Sciences (SIPBS) and the School of Pharmacy and Life Sciences at Robert Gordon University (RGU) have been commissioned by NES to undertake an evaluation of the pharmacists in GP practices work programme. This is due to report in 2018.

- Evaluation of Automated Technology (EAT): the Scottish Centre for Employment Research at Strathclyde Business School has been commissioned to evaluate the EAT pilots in community pharmacy. This is due to report in 2019.

- Inverclyde extended MAS evaluation: NHS Greater Glasgow & Clyde are undertaking a local evaluation which will include quantitative and qualitative analysis. This is due to report in 2018.

Consultation
We will be consulting on a new framework for pharmaceutical care and any legislative changes that will be required to modernise planning and contractual arrangements.

Supporting delivery
A great deal of what is proposed in this document builds on existing Scottish Government policy and strategy. We will ensure that we align with the appropriate existing programmes of work to maximise the synergies from co-designing the pharmaceutical care contribution.

There are a number of commitments linked to service redesign and improvement, most notably in hospital pharmacy, care homes and care at home. In order to take these forward we will invest in a number of Pharmacy Clinical Fellowships which will provide a unique opportunity to spend 12-18 months working with the Scottish Government Pharmacy and Medicines Division and in partnership with the service and other stakeholders to develop service redesign frameworks in these areas as well as develop their individual personal skills in leadership, management, strategy and project management. We will also explore the role of Pharmacy Clinical Mentors to support aspects of workforce development, such as the Foundation programme and the longitudinal clerkship initiatives.
Human factors and ergonomics (HF/E) is about ‘understanding the interactions between people and all the other elements within a system and design in light of this understanding’.16 The ultimate aim of HF/E is to optimise both human well-being and overall system performance. NHS Scotland has to appreciate the potential that utilising HF/E principles and methodologies can provide to increase the pace and scale of patient safety and quality improvement efforts. There are a number of areas within this document which could benefit from the application of HF/E expertise to drive and expand upon improvements in pharmaceutical care. We will explore secondment opportunities to draw on HF/E expertise to take forward shorter term pieces of work.

Finally, we will harness the expertise and enthusiasm of pharmacists and others who have completed the Scottish Patient Safety Programme Improvement Fellowship. These Improvement Fellows can help build our clinical leadership capacity and improvement capability and assist us to achieve our visions for excellence in pharmaceutical care throughout the NHS in Scotland.

“We will ensure that we align the commitments and actions set out in this strategy with the appropriate existing programmes of work to maximise the synergies from co-designing the pharmaceutical care contribution.”

6. SUMMARY OF COMMITMENTS AND ACTIONS

Commitment 1:
Increasing access to community pharmacy as the first port of call for managing self-limiting illnesses and supporting self-management of stable long term conditions, in-hours and out-of-hours.

ACTIONS:

- Independent prescribing & advanced clinical skills
  We will target resources to expand the number of community pharmacists undertaking independent prescribing and advanced clinical skills training. This includes exploring how resources to cover back-fill for the residential training and period of learning in practice can be provided in order to build clinical capacity to deliver an extended MAS and enhanced CMS.

- Minor Ailment Service
  We will use the evaluation of the Inverclyde extended MAS pilot to inform any future enhancements to the national Minor Ailment Service.

- Chronic Medication Service
  We will further develop the Chronic Medication Service to incorporate a more formalised role for community pharmacists in managing people with long term conditions by building in medication review, prescribing, monitoring and dose titration. We will enhance the Pharmacy Care Record in order to record and share outcome data to improve health outcomes and benefit person-centred care.

- Serial prescribing & dispensing
  We will encourage HSCP to maximise the use of serial prescribing and dispensing to benefit people, utilise community pharmacy more effectively and ease the workload on GPs. We will support engagement between GP practices and community pharmacies and provide enablers to embed serial prescribing and dispensing into normal working practice.

- Public Health Service
  We will work at a national level to expand the public health role in community pharmacy with evidence-based interventions that add value. We will direct NHS Boards and HSCPs to consider opportunities to utilise community pharmacy to help meet local needs.
Commitment 2:
Integrating pharmacists with advanced clinical skills and pharmacy technicians in GP practices to improve pharmaceutical care and contribute to the multidisciplinary team.

**ACTIONS:**
- **GP Practice based pharmacy**
  We will deliver the commitment to ensure every GP practice in Scotland has access to a pharmacist with advanced clinical skills.

Commitment 3:
Creating the conditions to transform hospital pharmacy services to deliver world leading pharmaceutical care.

**ACTIONS:**
- **Transformation requirements**
  We will commission work to transform the delivery of hospital pharmaceutical services and pharmaceutical care during weekdays and at weekends.
- **Discharge process**
  We will commission work to explore ways to improve all pharmacy-related aspects of the hospital discharge process utilising integrated models of pharmaceutical care.
- **Modern Outpatient Programme**
  We will work with the Modern Outpatient Programme to ensure a strategic alignment of the pharmaceutical contribution to its work.
- **Quality improvement & performance measures**
  We will commission the development of a series of quality improvement tools and performance measures to support the transformation of hospital pharmacy services across Scotland.
Commitment 4:
Providing the focus, resources and tools to support the safer use of medicines.

**ACTIONS:**

**Medicines reconciliation**

We will work with SPSP: Medicine to continue to strengthen arrangements for medicines reconciliation at the interfaces of care across Scotland and ensure national guidance and local delivery are aligned. This may involve developing new recommendations for future practice.

**Data measurement & monitoring**

We will commission Healthcare Improvement Scotland (HIS) to work with National Services Scotland (NSS) and NHS Boards to strengthen the available data on harm and establish measuring and monitoring parameters for medicines safety more broadly to consider past, present and predictable future harm.

**Quality improvement in community pharmacy**

We will make quality improvement an integral element of community pharmacy funding arrangements in a similar way to GPs and introduce a programme of continuous improvement.

**Pharmacy role awareness**

We will commission work to raise awareness of the role of pharmacists and pharmacy services. We will work with others to facilitate the co-production of tools and interventions that can be used to help support shared decision making around the use of medicines.

Commitment 5:
Improving the pharmaceutical care of residents in care homes and people being cared for in their own homes.

**ACTIONS:**

**Improvement approaches**

We will work with Chief Officers of Integrated Joint Boards to identify national approaches to improve NHS pharmaceutical care for residents in care homes and people being cared for in their own homes.
Commitment 6: 
Enhancing access to pharmaceutical care in remote and rural communities.

**ACTIONS:**

**Availability of technology to support R&R**
We will work with the TEC Programme and NHS 24 to ensure the availability of technology enabled care solutions to support remote and rural communities.

**Recruitment & retention**
We will commission NES to work with remote and rural NHS Boards to explore mechanisms to attract more pharmacists and pharmacy technicians to work in remote and rural communities and ensure any associated education and training needs are flexibly met. We will test a pharmacy longitudinal clerkship.

Commitment 7: 
Building the clinical capability and capacity of the pharmacy workforce.

**ACTIONS:**

**Workforce planning**
We will work in collaboration with NES and other key stakeholders to understand and address future pharmacy workforce requirements in order to inform the national workforce plan and the educational needs of the profession.

**Postgraduate career framework**
We will introduce a Postgraduate Career Framework for pharmacy in Scotland which will include a consultant pharmacist role.

**Pharmacy technician development**
We will commission NES to develop a work programme with the Further Education Colleges in Scotland in line with the General Pharmaceutical Council’s regulatory requirements to consider the future education and training requirements for pharmacy technicians.
Commitment 8:
Optimising the use of digital information, data and technologies for improved service delivery.

**ACTIONS:**

**HEPMA**
We will work with NHS Boards to ensure that HEPMA is the uniform standard in hospitals across Scotland. We will ensure that pharmacy contributes fully to the multidisciplinary transformation of care that will be delivered through HEPMA.

**ePharmacy support for primary care prescribers**
We will extend ePharmacy support to all key prescribers in primary care. We will commission the ePharmacy Programme to scope and test an incremental move to paperless prescribing across primary care.

**Health information access**
We will consider how the pharmacy profession can safely access and share appropriate health information in light of the guidance contained in the future Scottish Code of Practice.

**Automation**
We will explore further options to increase the use of automation in areas where medicines are used in order to release pharmacist and pharmacy technician time to provide pharmaceutical care.

**Future hospital requirements**
We will commission the Integrated Digital Safer Medicines Programme to scope future requirements for hospital pharmacy transformation and medicines management. We will actively contribute to the development and implementation of the Scottish Government Digital Health and Care Strategy to ensure pharmacy’s needs are covered.

**Technology enabled care solutions**
We will ensure the availability of technology enabled care solutions to support the delivery of pharmaceutical care.

**Clinical decision support tools**
We will ask the Digital Decision Support Programme to define a roadmap for pharmacy decision support tools that will deliver highest impact in achieving personalised care, shared decision-making and the other priorities outlined in this strategy.
Commitment 9: Planning for sustainable pharmaceutical care across Scotland.

**ACTIONS:**

**Planning**
We will develop and implement a new planning framework to help NHS Boards better characterise the pharmaceutical care needs of their local populations.

**Contracting & funding arrangements**
We will develop and implement a new contracting framework for community pharmacy NHS pharmaceutical care services, underpinned by a new funding arrangement and a Performer’s List for Pharmacy.
“Our focus is on achieving excellence in NHS pharmaceutical care provision to ensure safe, effective and person-centred care.”
SUSTAINABLE SERVICES THAT MEET POPULATION NEEDS

- Improved and increased use of community pharmacy services
- Pharmacy teams integrated into GP practices
- Transformed hospital pharmacy services

- Pharmaceutical care that supports safer use of medicines
- Improved pharmaceutical care at home or in a care home
- Enhanced access to pharmaceutical care in remote and rural communities

- Pharmacy workforce with enhanced clinical capability and capacity
- Improved service delivery through digital information and technologies
- Sustainable services that meet population needs