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Pharmacy 2030: a professional vision for general practice pharmacy

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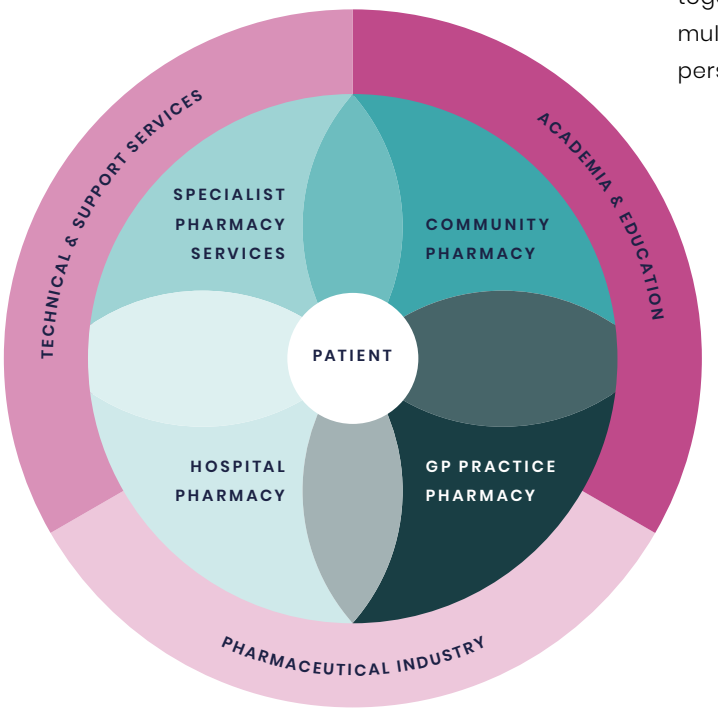
INTRODUCTION

Every health and care profession, every health service provider and every Government is currently looking at how to recover and rebuild following the Covid-19 pandemic. In response, the Royal Pharmaceutical Society is seeking to create a new vision for pharmacy in Scotland.

This vision will be created iteratively during 2021. The reason for this is simple: it is vital that practising pharmacists across Scotland are involved in the creation of the vision so it accurately reflects Pharmacists' views. The RPS is the only pharmacy organisation with pharmacist members across all sectors of pharmacy, enabling it to create a single vision for the whole profession. The vision was created in collaboration with the National Pharmacy Technician Group Scotland, and many other groups were consulted with.



The first step is to understand the views of Pharmacists and pharmacy technicians working in four key patient-facing areas: community pharmacy, general practice pharmacy, hospital pharmacy and specialist settings. Focused visions for each of these four sectors will be written, clearly aligned to national strategic priorities. These focused visions will then be widely consulted on to seek views across the pharmacy professions, other health and care professions, and importantly with patients.

Each focused-vision will consider how pharmacy will:

- Improve the safe and effective use of medicines for patients
- Address health inequalities and wellbeing for patients

They will also consider the underpinning infrastructure required to deliver this, to:

- Ensure patients receive high quality services
- Maximise innovations including digital and technology developments
- Develop the pharmacy workforce

Alongside these four patient-facing areas, the RPS will engage with pharmacists working in non-patient facing roles such as academia, education and the pharmaceutical industry. In the autumn of 2021, all of this scoping work will be brought together into a single new vision for pharmacy – Pharmacy 2030 – which will demonstrate how pharmacy can work together as a whole profession, and with the wider multidisciplinary team, to deliver seamless, person-centred care for patients.

Pharmacy 2030: general practice pharmacy

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CONTEXT

This is a professional vision for general practice pharmacy. The contractual arrangements are out with the scope of this vision.

This vision was developed with pharmacy teams across Scotland. All RPS members were invited to join a short life working group by email, and social media was used to reach non-members. All group members were sent a survey to collate views. Responses were also received via individual emails, messages and phone calls. Focus group discussions took place and key stakeholders were consulted, including the RPS Scottish Pharmacy Board, the Scottish Practice Pharmacist and Prescribing Advisers' Association, National Pharmacy Technician Group Scotland and other NHS pharmacists. All of their views were brought together into this vision.

EXPERTS IN MEDICINES WITH CLINICAL, PATIENT-FACING ROLES

KEY ROLES

CLINICAL LEAD FOR SAFE AND EFFECTIVE PRESCRIBING

Experts in medicines and polypharmacy
Receiving referrals for medicines issues
Leading education and improvement activities

OPTIMISING THE USE OF MEDICINES

Monitoring and adjusting medicines
Prescribing and deprescribing medicines
Improving medicines safety & managing risk

MANAGING LONG TERM CONDITIONS

Monitoring and review of repeat medicines
Managing serial prescribing
Polypharmacy reviews

DELIVERING PERSON-CENTRED HOLISTIC CARE

Consulting with patients
Focused on patient rather than condition
Ensuring shared decision making

ADDRESSING HEALTH INEQUALITIES AND WELLBEING

Providing health improvement services
Delivering services for needs of local population
Reducing harm, waste and variation

LEADING PRESCRIBING PROCESSES

Ensuring robust standardised processes
Good governance
High quality evidence-based prescribing

UNDERPINNED BY

- **General practice pharmacists will have patient-facing expert generalist roles.**
- **Better skill mix, IT systems and consistent implementation of lean processes will maximise the whole pharmacy team's roles so together they will work more efficiently with more time for clinical care.**
- **Pharmacists will optimise medicines to ensure safe, effective and appropriate prescribing.**
- **Pharmacy technicians will lead the operational aspects of medicines management in practices, manage services and help patients with medicines.**

BETTER USE OF DATA

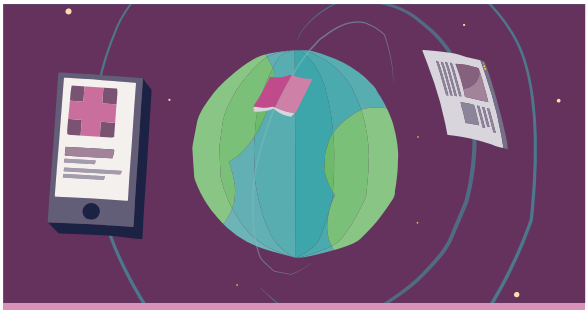
Using clinical outcomes data linked with prescribing data to plan and evaluate services

Using data to make treatment decisions and deliver personalised medicine

MULTIDISCIPLINARY TEAM WORKING

All pharmacy professionals from all sectors working together as one pharmacy profession to deliver seamless care for patients

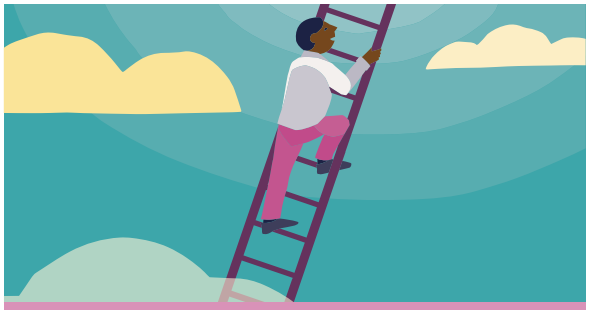
Pharmacy integrated with other health and care services, with clear referral pathways



DIGITAL INFRASTRUCTURE

Single shared electronic patient record with read/write access for all and electronic transfer of prescriptions: removing the need for technical processing of medicines reconciliation

Using patient-facing digital services including digital consultations and remote monitoring



WORKFORCE INFRASTRUCTURE

Independent prescribing for all pharmacists, with advanced clinical assessment and consultation skills

Clear career pathways with credentialling of career stages to enable professional fulfilment

Work culture of protected professional development, mentorship and peer networks for learning and research activities

Section 1 Professional roles

1.1 Improving the safe and effective use of medicines

Many general practice pharmacists already have a predominantly clinical, patient-facing role and this will be universal long before 2030 . They will be recognised for their expertise on medicines and polypharmacy. They will be the clinical lead for safe and effective prescribing within general practices, recognised as a trusted resource by other professions. General practice pharmacists will spend their days consulting with patients: reviewing and prescribing medicines for both long term and acute conditions, with all care being provided in a holistic rather than condition-specific approach.

Medicines will continue to be initiated by a wide spectrum of health professionals in primary and secondary care (including by pharmacists). But by 2030, when a medicine is added to a repeat prescription, its ongoing monitoring, adjustment and continuation will be the responsibility of the general practice pharmacy team. As such, they will play an essential role in the management of long term conditions in primary care.

The general practice pharmacy team, including pharmacists, pharmacy technicians and pharmacy support workers, will oversee and direct the prescribing processes with the practice. Together, supported by practice administration staff, they will ensure good governance so that prescribing is high quality, safe, effective, appropriate, realistic and cost-effective. Appropriate skill mix and improved IT systems will ensure that all team members have a fulfilling role.

1.1.1 Experts in medicines

The key role of pharmacists, that distinguishes them from other health care professions, is expertise in medicines. Pharmacists working in general practice are expert generalists, and by 2030 generalism will be recognised as a specialty in pharmacy. Pharmacists working in general practice will be known as “advanced generalist pharmacists” with some developing further to become “advanced pharmacist practitioners”. A few will become consultant pharmacists who will have an influence beyond individual GP practices to a broader role of leading whole system improvements in medicines management at a regional level. General practice teams will also comprise pharmacy technicians and pharmacy support workers.

In 2030, general practice pharmacists will manage caseloads of patients who take high risk medicines or who have complex therapeutic needs. They will all be active prescribers with well developed clinical assessment and decision-making skills. They will use these skills to take on responsibility for assessing, reviewing and managing patients’ medicines, and managing acute presentations.

General practice pharmacists will receive referrals from other professionals around specific medicines issues. Overall care may continue to be managed by others (eg, medical colleagues) but the pharmacist will address the medicine issue, such as managing changes to medicines following a hospital discharge. In some cases, this might result in shared care plans for high risk patients, for example active medicines management as part of a wider package to reduce the risk of frequent falls.

Their expertise in medicines will result in general practice pharmacists being recognised as a core member of the multidisciplinary team in primary care, contributing not just to individual patient care but also to overall care planning and service improvement for the population.

This vision is in line with Scotland’s National Clinical Strategy [1] which states: “The contribution of pharmacists can be considerably enhanced, with their expertise in ensuring that people with complex medication regimes have their care optimised, and the potential for side effects or harmful interactions reduced.”

1.1.2 Person-centred holistic care

By 2030, the majority of general practice pharmacists' time will be spent consulting with patients. They will be recognised as a consulting clinician by the public and by other health professionals.

Pharmacists' core role is to provide care for patients holistically, focused on the person rather than their condition. They will enable person-centred care by having positive conversations with patients and their families/carers, and they will empower patients to make decisions about their medicines and their health and wellbeing, reflecting the approach of understanding what matters to people.

These recommendations reflect the ALLIANCE's recent report on Health and Wellbeing priorities [2] for the future which states care should be "flexible, person-centred which recognises the holistic nature of individuals" and that "being involved in the decision-making process and treated as an expert in their own life circumstances and care" is of the utmost importance to people. Similarly, Scotland's *National Clinical Strategy* [1] said health care teams should "provide care that is person centred rather than condition focused".

The importance of shared decision making is stated in the Chief Medical Officer's annual report [3] which says: "Serious harm can result if we don't listen to the people we care for, and if they are not given the information and support they need to make informed decisions about their care." It is also reflected in *Achieving Excellence in Pharmaceutical Care* [4] which states: "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."

To achieve this, consultations provided by the general practice pharmacy team will be underpinned by finding out what matters to patients as part of optimising medicines, as described in the iSIMPATHY initiative [5] (*implementing Stimulating Innovation in the Management of Polypharmacy and Adherence Through the Years*). It describes how medicine reviews should include finding out what matters to patients as part of the decision making process. Therefore, the pharmacy team will universally use the *Choosing Wisely* BRAN questions (Benefits, Risks, Alternatives, Nothing) highlighted in the CMO report [3]: "By encouraging people to use the BRAN questions, we empower them to be active partners in decisions about their care, and support them to make an informed choice."

Care will also be person-centred by enabling consultations to be provided in the way patients want. General practice pharmacy teams will consult in person and virtually using technology such as digital applications, Near Me and telephone, depending on patient choice.

Some general practice pharmacists may have area-wide roles to provide care for specific specialties but this should not detract from their primary generalist role where care is provided holistically rather than in disease-specific clinics. Where specialist services are appropriate, these services should be planned by the NHS board to ensure equity of access for patients.

1.1.3 Optimising the use of medicines

In 2030, the general practice pharmacy team will optimise the use of medicines. They will ensure all patients have timely, systematic medication reviews which will include reviewing monitoring parameters, interactions, side effects and compliance. They will regularly monitor patients prescribed high risk medicines and high risk combinations, and provide specialist support for frail patients in order to reduce unnecessary polypharmacy.

General practice pharmacists will lead on managing patients' medicines for long-term conditions, working alongside nurses who lead other aspects of long-term condition management. Patients will be triaged so they see the most appropriate professional for their needs. Serial prescriptions will be the norm, initiated by pharmacists and then routinely managed by pharmacy technicians and pharmacy support workers.

A key part of the pharmacist's role will be to prescribe, and this includes reducing inappropriate prescribing and stopping medicines that are not necessary or are ineffective. This will also include encouraging the use of non-medicine approaches to health improvement including social prescribing and improving compliance. Pharmacy technicians have a key role in supporting compliance. Through these roles, general practice pharmacy teams will reduce medicines waste. Up to 50% of prescribed medicines are not taken as intended, and improving compliance or stopping medicines that are not taken will reduce this waste. It will also identify where a patient is not receiving a clinical benefit from a medicine so that alternatives can be considered. Optimising the use of medicines will be underpinned by the Scottish Polypharmacy Guidance. [6]

General practice pharmacists' essential role in optimising use of medicines will tackle the issue of patients not benefiting from medicine or coming to harm from medicines, as described in the CMO report [3]: "While medicines can bring great benefit, they can also cause significant harm. Older people tend to experience worse side effects or consequences of treatment. That is why we should strive to actively manage risk associated with polypharmacy by regularly reviewing and rationalising our patient's medications."

1.1.4 Answering medicines related queries

General practice pharmacy teams will be the first point of contact for all medicines-related queries in a practice. This will include providing information to patients and resolving queries from other members of the health care team.

General practice pharmacy teams will encourage the appropriate use of the NHS Scotland Pharmacy First service for minor illnesses, referring patients who contact the practice to their community pharmacy. Managing minor illnesses will not be a routine role of the general practice team, although this may differ in remote areas where there are no community pharmacies.

1.1.5 Leading prescribing processes

By 2030, general practice pharmacy teams will lead the prescribing processes in practices. They will ensure standardised robust work processes, good governance around the supply of medicines and high-quality evidence-based prescribing are in place. This will be underpinned by quality improvement activities, prescribing audits, and data/cost analyses. Altogether this will result in improved medicines safety and a reduction in unwarranted variation in prescribing.

1.1.6 Skill mix in general practice

By 2030, all general practice pharmacy teams will have appropriate skill mix and staffing levels. This has not yet been achieved so will be an important development in order to release clinical capacity and achieve professionally fulfilling roles. Teams will be comprised of pharmacists, pharmacy technicians and pharmacy support workers. Their roles will be:

Role of Pharmacists

- Patient facing, expert generalists who are active prescribers with clinical assessment and decision making skills
- Optimising medicines to ensure safe, effective and appropriate prescribing
- Managing long term conditions, including initiating serial prescriptions

- Managing acute conditions, with some acute requests referred from pharmacy technicians
- Leading on pharmacogenomics within the practice
- Providing patient facing complex medication reviews
- Clinical supervision work in partnership with pharmacy technicians and support of the development of the practice pharmacy team
- Liaising with the rest of the MDT including colleagues in community and acute settings

Role of Pharmacy Technicians

- Leading the operational/technical aspects of medicines management processes to ensure efficient systems, with some patient-facing roles to support patients to understand and use their medicines
- Initial screening of all incoming queries on medicines, dealing with routine queries including acute requests, and escalating to the pharmacist where needed
- Monitoring of medicines, including for high risk medicines
- Providing medication and compliance reviews with patients
- Processing medicines reconciliation for discharge letters and other clinical letters
- Following up on patients after discharge from hospital, with referral to pharmacist as needed
- Managing medicine safety alerts
- Overseeing prescribing efficiency, quality improvement and formulary compliance work assisted by pharmacy support workers
- Providing medicines management advice to other care providers
- Supporting the development of pharmacy support workers
- Liaising with colleagues in community and acute settings

Roles of pharmacy support workers:

- Providing non-clinical support around prescribing administration
- Providing non-clinical medication review and medicines reconciliation, underpinned by protocols and supervised by pharmacy technicians/pharmacists
- Managing the repeat prescribing process, including annual review of serial prescriptions with escalation to pharmacy technicians where needed
- Dealing with medicines supply issues
- Undertaking some aspects of processing repeat prescriptions, interfacing with the GP practice administration team
- Supporting pharmacy technicians with prescribing efficiency audits and other improvement work

1.1.7 Working as part of the MDT

By 2030, pharmacy team will work as one profession, removing the current barriers created by silo working in community pharmacy, GP practices, hospitals and specialist services. Instead, all pharmacists will recognise the skills of their pharmacist colleagues and work to ensure seamless transitions of care for patients as they move around the health service. In addition, pharmacists will stop being described by their location but by their skills.

Examples of seamless care will include a hospital pharmacist asking a general practice pharmacist to implement a patient's dose tapering plan post-discharge; a general practice pharmacist asking a community pharmacist to check a patient's compliance when they collect medicines; or a general practice pharmacist referring to a specialist pharmacist for specific clinical expertise. This seamless care will be underpinned by shared patient records to improve communication across sectors.

In addition to the pharmacy team, general practice pharmacists will also be embedded in the wider multidisciplinary team across health and social care in primary care, secondary care and the third sector.

They will have a lead role in use of medicines within multidisciplinary teams, participating in MDT meetings to make decisions about medicines and implementing shared care agreements involving medicines.

GP Clusters were established in Scotland in 2016 to support service improvement in localities. This has included establishing learning networks, considering clinical priorities for the population, using data, and focusing on improving wellbeing and reducing health inequalities.[7] Prescribing has been an area of focus for many GP Clusters, not least because of the availability of prescribing data and historical work by pharmacy teams on prescribing initiatives across localities. Therefore, it is logical for pharmacists working within general practices to play a key role in GP Clusters to identify unwarranted variation in prescribing, suggest areas for improvement and lead the development of quality improvement interventions.

By 2030, the general practice pharmacy team will have well established referral pathways to other services, including to other health professionals such as district nursing, allied health professionals, clinical specialists and for non-medicine interventions (eg, mental health services, social care services, link workers, third sector organisations). They will also accept referrals from across health and social care.

All of this multidisciplinary team working is in line with the *National Clinical Strategy* [1] which says: "Stronger primary care across Scotland should and will be delivered by increasingly multidisciplinary teams, with stronger integration (and where possible, co-location) with local authority (social) services, as well as independent and third sector providers."

An important part of multidisciplinary working is patients and the public. By 2030, there will be improved understanding of the pharmacy team's role among the public which will enable optimal care and shared decision making.

Patient Journeys in 2030: Working together

Iain has multiple health conditions for which he takes 13 medicines a day. The community pharmacist identifies that Iain is struggling to take all of his medicines and refers him to a general practice pharmacist for a review, noting the observations on Iain's shared patient record.

The general practice pharmacist completes a full polypharmacy review with Iain by video consultation, at which Iain is able to show his medicines to the pharmacist on screen. They agree to stop two medicines and group the rest together so he only needs to take them twice a day. Iain makes a follow up appointment to see the pharmacy technician a few weeks later.

It's happening already... pharmacy team approach

In NHS Greater Glasgow and Clyde, primary care pharmacist Lauren Hammell's role has contributed to a move towards seamless, improved patient care. She works within a GP practice team where a typical day includes managing medicines queries from patients and other professionals, dealing with high risk medicines requests (eg, DMARDs), clinical workflow such as discharge letters, polypharmacy reviews and providing training. "Being integrated as part of the GP practice team has facilitated a great working rapport with the practice administration team, GPs, practice nurses, district nurses, local community pharmacies and the local hospital," she says.

Alongside this, pharmacy technicians are already taking on enhanced roles across Scotland. Pharmacy technician-led hubs have been created in several NHS Boards. One example in NHS GGC is a hub which covers three GP practices of around 24,000 patients. Within this hub, pharmacy technicians complete medicines reconciliation for discharge and outpatient letters, deal with special request prescriptions and answer medicines related queries. Pharmacy support workers carry out non-clinical medicines administrative activities under protocols. These include triaging Medicines Care Review treatment summary reports, printing serial prescriptions if set criteria are met, and auditing patients for suitability for serial prescriptions. Linda Henderson, Lead Pharmacy Technician Primary Care at NHS GGC, said: "This hub model has enabled the most suitable professional group to deliver the level of work suited to their knowledge and skills. Due to this, Pharmacy technicians have gained a higher level of clinical knowledge leading to a pilot medication review service for antidepressants."

1.2 Addressing health inequalities and wellbeing

Health inequalities have always been present in Scotland, but they have been exacerbated by the Covid-19 pandemic. A key role for all pharmacy teams in 2030 will be to reduce health inequalities and improve wellbeing for patients.

1.2.1 Ensuring equity of access to services

By 2030, general practice pharmacy teams will be even more aware of how important it is for services to be accessible, and they will proactively offer services in a way that improves access. This will deliver equity of access to services. Pharmacy teams will identify vulnerable patients who need specific support, such as those with lower health literacy and numeracy, language barriers or hearing impairment. In addition, they will adapt services for those who are housebound, live in remote and rural areas, or who have cultural barriers to accessing services.

Approaches taken will include using alternative formats for information provision, creating psychologically informed environments to reduce stigma/enable consultations, providing outreach services and using technology to make care more accessible. Technology options will include remote consulting using Near Me and remote home monitoring – this is covered in the digital section later. Importantly, pharmacy teams will co-produce services with people with lived experience and will undertake training to better understand the human factors that influence health behaviours.

This will help deliver on the health literacy challenge identified in the ALLIANCE report [2] that: "Confusing, limited and interrupted communication was frequently shared by respondents as negatively impacting their health and wellbeing, and ability to access services."

Equity of access also includes making population-based, as well as individual patient, decisions. By 2030, the population across Scotland will have equitable access to general practice pharmacy services. However, services will not necessarily be identical in each location: data must be used to plan services and prioritise pharmacy resources in response to local needs such as deprivation and rurality.

1.2.2 Ensuring appropriate use of medicines

General practice pharmacy teams will be essential for ensuring medicines are used appropriately. Health inequalities arise when patients have poor access to services, resulting in under-prescribing and conditions being unmanaged. But inequalities can also result from situations where patients have a lack of information about how to manage their condition through lifestyle interventions or how to take medicines safely, and where patients have not been enabled to make decisions about which medicines to take. These inequalities can result in over-prescribing. For example, a patient with type 2 diabetes may be able to reduce their medicines by losing weight but continuing to be overweight can result in additional medicines being required to control blood glucose levels.

In 2030, through their role in leading safe and effective prescribing in general practices, pharmacists will address these health inequalities. Realistic Medicine [3] will underpin their approach to prescribing. This means ensuring:

- Shared decision making
- Education patients about medicines to enable informed decisions
- Taking a personalised approach to care
- Reducing harm and waste
- Reducing unwarranted variation
- Managing risk better

General practice pharmacists will use the *Scottish Polypharmacy Guidance: Realistic Prescribing* [6] in everyday practice. Its 7-step approach to medication review ensures medicines are prescribed safely and appropriately, taking a shared decision making approach.

With their focus on medicines, general practice pharmacy teams will provide particular support for high risk patients and groups with therapeutic medicines needs. This will include people who are frail, take multiple medicines, take high risk medicines and those who need palliative care (both adults and children).

1.2.3 Shared decision making

In all consultations with patients, the general practice pharmacy team will enable patients to make informed decisions about their medicines, encouraging them to take responsibility for their health and to decide which medicines are right for them. This means finding out what matters to patients and providing the right information in the right way to empower patients to make informed choices. As stated previously, using the *Choosing Wisely* BRAN questions will be key in enabling the Benefits, Risks, Alternatives and doing Nothing options when making decisions about what medicines to prescribe.

The *Scottish Polypharmacy guidance* [6] includes the question "Is the patient willing and able to take the drug therapy as intended?" in its seven steps. This question is essential not just in polypharmacy reviews but in all prescribing decisions.

Low health literacy is a significant barrier to shared decision making. The pharmacy team will be aware of this and take actions to reduce this barrier. This means modifying their communication to enable patient participation, such as using simple language without medical jargon. It also means ensuring conversations are meaningful, recognising that some people with low health literacy are less willing to ask questions or participate in decisions because of beliefs that the health professional "knows best". Pharmacists will ensure this imbalance is addressed so that shared decision making can take place and deliver inclusive communication standards.

1.2.4 Reducing harm

As the clinical leads for prescribing, general practice pharmacists have an important role in reducing harm from medicines and tackling medicines waste. Core to the general practice pharmacy team's role is ensuring medicines are taken safely and effectively through following up on monitoring requirements and reviewing with patients. This will tackle situations where medicines are causing harm, for example, having an impact on liver or kidney function.

Good patient-facing medication reviews also resolve situations where patients are suffering side effects from medicines because they are taking the medicine incorrectly, such as those which need to be taken with food rather than on an empty stomach. Instead of adding further medicines to treat side effects, pharmacists will address the primary cause of the side effects wherever possible, thus preventing unnecessary polypharmacy.

Pharmacy teams will also tackle inappropriate and unsafe prescribing to improve medicines safety. Effective monitoring of medicines also helps manage harm that can result from over-prescribing. Medicines can be started appropriately but, over time, the risk benefit changes. For example, a requirement for high doses of blood pressure medicines may be entirely appropriate for someone in their 50s but, by the time that patient reaches their late 70s, that dose may be too high, resulting in a risk of falls. By 2030, pharmacists' role in patient-facing medication review will tackle these unintended harms from medicines.

This will help to tackle the significant burden from harm that exists with medicines. As the *Scottish Polypharmacy guidance* [6] states: "With up to 11% of unplanned hospital admissions being attributable to harm from medicines and over 70% of these being due to elderly patients on multiple medicines, there are significant opportunities to reduce this burden by timely and effective interventions."

1.2.5 Reducing waste

Medicines waste remains a huge problem in the NHS, not just in financial terms but also in unrealised clinical benefits and environmental costs. Medicines waste can result from:

- Patients not taking the medicine as prescribed (not taking it at all, or at the incorrect dose/time)
- Medicines causing harm such as side effects, so the patient stops taking them
- Over-ordering of prescriptions, either intentionally (stockpiling) or non-intentionally due to ineffective prescription ordering processes
- Over-prescribing of medicines

General practice pharmacy teams will tackle medicines waste in a number of ways. Most importantly, they will discuss medicines with patients and used shared decision making so that medicines are only prescribed when the patient has agreed to take them. They will also identify medicines causing harm and adjust them appropriately.

Importantly, general practice pharmacy teams will play an essential role in reducing the over-ordering of prescriptions by ensuring effective processes are in place. This will include maximising the use of serial prescriptions for long-term medicines and putting in systems in practices to identify over-ordering.

Medicines waste can also arise from over-use of multidose compliance aids (dosette boxes, blister packs). General practice pharmacy teams will tackle this by educating patients and health professionals on appropriate use of a range of tools to improve compliance, and explaining that multidose compliance aids do not address forgetfulness.

1.2.6 Reducing unwarranted variation

Pharmacy teams have a long standing role in reducing variation in prescribing. General practice pharmacy teams will continue this work through prescribing efficiency audits, monitoring formulary compliance and other quality improvement activities, all undertaken with the MDT.

This work will be underpinned by prescribing data systems covered in the data section of this document and the *Scottish Atlas of Healthcare Variation* [8], all of which will be used to identify and monitor for variation in prescribing practice. Once identified, they will take actions to reduce variation including both reviews with patients and provision of education on prescribing to other health professionals.

1.2.7 Health improvement services

In 2030, general practice pharmacy teams will have essential roles in preventing ill health by taking a holistic approach to care that goes beyond medicines. This will include the provision of lifestyle advice including using a social/green prescription approach, as well as referral to other services such as link workers and third sector organisations.

Pharmacy teams working in general practices will provide tailored services built around the specific needs of the local population, in order to address health inequalities. For example, in some locations services around reducing harm from drug use may be particularly needed whereas in others the priority may be improving mental health.

Health improvement services provided by general practice pharmacy teams will include:

- **Mental health support** – advising patients on initiating new medicines, monitoring, titrating doses up and down, working with specialist teams to follow up patients after specialist appointments/inpatient stays, linking with community pharmacy teams to support patients' management
- **Women's health services** – providing advice and prescribing medicines for contraception, menstrual health and during pregnancy and breastfeeding, the menopause
- **Harm minimisation to reduce drugs deaths** – prescribing of substitution therapy under shared care agreements with specialist services; accepting referrals from other services (eg, prisons, hospital) to ensure ongoing prescription of substitution therapy following discharge/release; identifying and addressing dependence on prescribed medicines including accepting referrals from other healthcare providers to manage slow withdrawal of prescribed medicines; providing public health campaigns around dependence on prescribed and over the counter medicines; providing education on drug dependence for professionals; harm reduction services; general medication review and monitoring to ensure overall health improvement for drug users; ensuring naloxone availability in all general practices
- **Chronic Pain services** – enabling appropriate use of opioids and other medicines used for managing pain through monitoring and review, titrating doses and using lifestyle interventions as alternatives to medicines where possible. And working with specialist pain services to provide follow up prescribing, and referral to other services such as physiotherapy and mental health
- Brief interventions to reduce alcohol use, obesity and smoking
- Supporting services to improve screening for and early detection of a range of long-term conditions including heart disease, diabetes and cancer
- Medicines advice to patient groups, such as on inhaler technique to COPD groups
- Patient education on medicines management for long-term conditions

Provision of these services will enable pharmacy teams to contribute to the Scottish Government's *Programme for Government* [9] aims of tackling health inequalities in general as well as specifically women's health inequalities, chronic pain, mental health and early detection of cancer. The Government plans to publish a new Framework for Chronic Pain Service Delivery in 2021, and pharmacists should have an important role in this. These services will also help address the significant public health challenge of drug-related deaths, with the Chief Medical Officer's report [3] stating: "We are in the midst of a drugs crisis, with more drug deaths per capita in Scotland than any other country. Drug-related deaths increased by 6% in 2020." New standards for treatment were published in summer 2021. [10]

1.2.8 Sustainable pharmacy services

Pharmacy is already moving towards delivering greener services, and the requirement for this is now recognised across the NHS. The Chief Medical Officer's annual report [3] states: "NHS Scotland is a significant contributor to the climate emergency. It emits a large amount of greenhouse gasses, consumes huge amounts of resources and produces copious amounts of waste. We have a moral obligation to help tackle the greatest threat to human health by reducing our impact on the environment. Responsibility rests with us all."

By 2030, general practice pharmacy teams will be delivering more sustainable services and will be committed to moving to Scotland's net zero target. This will include understanding the environmental impact of pharmaceuticals and using this knowledge when making prescribing decisions as well as supporting greener prescribing decisions within the wider practice team. Medication reviews with patients will be used to understand patients' compliance and ensure medicines are only prescribed where there is a benefit, thus reducing medicines waste. Reducing medicines waste will also reduce the amount of pollution of water systems with pharmaceuticals, something the Alliance for Water Stewardship [11] has highlighted as a significant issue to ensure sustainability of water resources globally. Prescriptions will be entirely electronic, reducing paper use.

General practice pharmacy teams will also reduce travel for both patients and themselves through the use of remote communication such as Near Me for consultations, multidisciplinary meetings and education.

It's happening already: seamless care

Mental health services in NHS Highland have been striving to achieve a more joined up approach, with specialist services working closely with general practice pharmacists to improve patient care. For example, a patient with post-traumatic stress disorder had been prescribed multiple medicines while she waited for psychology treatment. Following successful CBT, specialist mental health pharmacist Karen Macaskill and the patient formulated a plan to reduce the medicines. A crucial element was being able to refer the patient to the general practice pharmacist who could then support the patient through the medicine reduction plan close to home. This seamless care improved the patient's experience.

It's happening already: seamless care

In NHS Highland, specialist primary care clinical pharmacists Lucy Dixon and Yvonne MacRae are embedded within integrated teams and work across care boundaries to support frail patients whether they are at home, in care homes or in community hospitals. Both have been active independent prescribers for nearly 10 years, and they hold caseloads of patients who need enhanced pharmaceutical care, for example because they are at risk of hospital admission, are recently discharged or have had a fall. They participate in joint polypharmacy clinics with the consultant geriatrician who describes them as his "force multiplier" and they also ensure decisions made at the clinic such as medication changes are followed up afterwards.

Section 2 Underpinning infrastructure

2.1 Using data to deliver high quality services

2.1.1 Clinical outcomes data

In 2030, a national data set will be used to demonstrate the effectiveness and quality of general practice pharmacy services. Data will be collected automatically by systems, which will mean the focus will be on using and responding to the data rather than manual data collection.

Clinical outcomes measures will be developed, linking patient outcomes with prescribing data. This will enable the impact of pharmacy services on improving population health to be determined, rather than collecting proxy process measures on the number of interventions provided. In short, general practice teams will move beyond using solely prescribing-focused data to looking at the use of medicines in the wider context of patient care.

This is in line with the National Clinical Strategy [1] which states NHS services must "collect and use more information on outcomes, especially those that matter most to patients, rather than clinical data such as biochemical or other surrogate markers". Furthermore, it says data should be used to identify and reduce inappropriate variation in interventions across regions.

Prescribing data have long been used by pharmacy teams working in general practice to monitor trends and identify unwarranted variation. This has been positive, and will continue in order to identify where interventions are needed to improve high prescribing, inefficiencies, variation in volume, formulary compliance and national therapeutic indicators.

Existing prescribing data sources such as the Prescribing Information System (PIS), Prescribing Information System for Scotland (PRISMS), the Scottish Therapeutics Utility (STU) and the Scottish Atlas of Healthcare Variation will continue to be used. However, work will have been undertaken to better link these data with patient outcomes to understand, for example, whether reducing high risk prescribing reduces harm from medicines. In addition, standard Read codes will be agreed to enable Scotland-wide data sets.

By 2030, there will be well developed systems for obtaining continuous feedback from patients and colleagues about general practice pharmacy teams' performance. This, along with the new national clinical outcome measures, will be used to drive continuous service improvement in general practice pharmacy. They will be used to demonstrate population-level improvements delivered by pharmacy teams across Scotland but also be clearly connected to measurements at an individual pharmacy level to make them tangible. This will mean pharmacy teams can see how improvements they make directly contribute to overall population-level changes, as well as enable monitoring of individual pharmacies performance.

2.1.2 Using data for decisions

By 2030, general practice pharmacy teams will use data routinely to provide personalised care and medicines for patients. This will include both prescribing data and population health data.

In 2030, general practice pharmacists will be the clinical lead for pharmacogenomics in practices and this will be an increasingly important focus of their role. They will lead the development of pharmacogenomics services to ensure appropriate testing is carried out and that the results are interpreted and acted upon, as each new pharmacogenomic test is developed. Pharmacists will make prescribing decisions based on pharmacogenomics, including changing medicines and adjusting doses. They will also support other health professionals with understanding pharmacogenomics.

Decision support software will be used routinely to improve the quality of prescribing in general practice teams. By 2030, decision support tools will be improved so that they enable shared decision making with patients by representing data in ways to help patients participate. They will also use data in more intelligent ways to achieve personalised decisions about medicines. This will include the use of artificial intelligence (AI) which has potential in predicting outcomes, targeting intervention and decision support.

New decision support tools were described in *Achieving Excellence in Pharmaceutical Care* [4] which states: "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."

Clinical data will also be used to target pharmacy interventions. For example, pharmacy teams will use hospital admissions and discharge data to identify individual patients who need medicines related support. Biochemical monitoring parameters will be used to identify patients who may need medicine dose adjustments. Similarly, data on people with specific diseases or risk factors will be used to prioritise pharmacy input.

Finally, data will be used to make population-based decisions to plan services and prioritise pharmacy resources in response to local needs. This will include clinical data and workforce planning data, which will be used at both NHS board and GP cluster level to support the service planning process.

2.2 Digital infrastructure

2.2.1 Electronic records and prescribing

The biggest digital change that will have transformed health care by 2030 is the introduction of a single shared electronic patient record across all health and care services in Scotland.

This will be a universal patient record held in a data cloud into which every professional both reads and writes information, using their existing clinical system as the entry point. Each professional group will have a different view, according to what is appropriate for their role, but the key point is that all professionals will be viewing the same set of data.

The single patient record will be transformative for pharmacy. In general practice teams, it will remove the need for medicines reconciliation. This will cut an enormous administrative burden from general practice teams, and free up clinical capacity to focus on the patient-facing part of medicines reconciliation: speaking to the patient about changes to medicines to ensure the patient has the information they need, can take the medicine safely and it is beneficial. Removing the technical aspect of medicines reconciliation will also improve safety, such as avoiding transcription errors.

The single record will also enable seamless care between general practice, community pharmacy and hospital services. Pharmacy teams have full information about medicines prescribed including those in specialist services and in community pharmacy, and importantly this information will be current so changes made to medicines will be immediately visible to other health professionals. Patients will have access to this record and will be able to enter information too, which will help professionals provide better care.

This vision of a single record is in line with the Scottish Parliament's Health and Sport Committee report on the future of primary care. [12] It states there is "strong support for improved sharing of information among professionals, including having the ability to access and input to patient records" and "a desire for an electronic patient record shared with all relevant health professionals".

In addition to the single shared electronic record, full electronic prescribing and transfer of prescriptions will take place across all care settings, removing the need for paper prescriptions. This will deliver safer care and be positive for environmental reasons. Prescription processing will have been automated wherever possible, with serial prescribing being the norm for a large majority of prescribing for long-term conditions: in short, serial prescriptions will be initiated wherever it is clinically safe and appropriate, therefore significantly reducing the burden of processing repeat prescriptions. However, improvements are needed to the current serial prescribing system to make it more efficient and to maximise the potential benefits it brings.

Improved technology will also be an essential part of the prescribing systems in practices. Better alerting systems will be used to indicate when medication reviews and other interventions are needed, and to join together monitoring parameters with prescribing.

To enable all of this, general practice pharmacists will be key stakeholders in the future design of GP IT systems, electronic prescribing, clinical applications and data systems.

2.2.2 Electronic communication

Electronic communication will be used routinely by all general practice pharmacy team members in 2030. Multidisciplinary working and shared care across pharmacy sectors will be underpinned by digital communication such as Microsoft Teams, enabling seamless care for patients. General practice pharmacy teams will have remote access to all necessary clinical systems which will enable them to work remotely where needed, which may include providing support to a number of practices.

Digital technology will also transform professional development, enabling pharmacy teams to be involved in multidisciplinary training and education events remotely: both to learn and as providers of education.

The potential of using digital technology in enabling remote participation in multidisciplinary consultations and in education is highlighted in the Chief Medical Officer's annual report[3] which states: "We need to make greater use of Near Me for supported self management, to involve the wider healthcare team in multidisciplinary discussions about patient care, to facilitate patient support groups, and for continued professional development of health and care professionals. We should also consider how we can make use of further technologies to bring care close to home, such as devices for remote monitoring."

2.2.3 Patient facing digital technology

Patients have stated clearly that they want the NHS to embrace technology, and pharmacy needs to respond to this.

In its recent report, [2] the ALLIANCE endorses greater use of technology, stating: "For many people the innovative and accelerated implementation of virtual services improved access, made it quicker and supported more choices for the individual. People have welcomed the use of this technology and its wider implementation and use should continue." However, it also recognises that digital services are not for everyone so digital should not be default.

Throughout the Covid-19 pandemic, general practice pharmacy teams started to use digital technology to provide services remotely. This included video consultations using Near Me, asynchronous communication, and submitting high resolution photos for clinical review. In some cases, they also used general practice systems such as online booking of appointments with pharmacists. By 2030, all of these forms of digital technology will be used daily by general practice pharmacy teams and they will all have the IT equipment required for this. Digital services will be as easy to use as face to face services.

There is little doubt that there is a public appetite for all services to be more convenient and accessible. This is demonstrated by the rise of internet shopping and data in Scotland from a nationwide public engagement exercise on Near Me video consulting [13] which showed the public demand for remote access to health services. However, what is essential within digital services is the relationship between the pharmacist and patient, with the *National Clinical Strategy's* recommendation [1] that services should be based on long-term relationships between patients and clinicians. This means that although general practice pharmacy teams will use digital technology much more in 2030, it will still be provided by a pharmacy team attached to a practice for that practice's population, rather than from a distant unfamiliar team. This will enable relationships to be built with patients to improve care.

Remote patient monitoring is less well developed than remote consulting, but there is some use throughout Scotland, and by 2030 it will be commonplace. Technology will enable patients to monitor their condition and feed in the results to health professionals. This will include technologies such as wearables to collect monitoring data such as lifestyle factors (exercise, diet, smoking), remote monitoring parameters (like heart rate and blood pressure) and compliance with medicines. General practice pharmacists will use the data to make prescribing decisions to improve care for patients.

In some cases, technology will be needed to support patients' compliance with taking medicines, especially for reminders to take medicines. General practice pharmacy teams will have an essential role in advising on the use of such technology solutions, ensuring appropriate use and avoiding overuse of compliance aids.

Developing more patient-facing digital services is also in line with the *Programme for Government*, [9] which states: "We will now move to a position of Near Me as the default option where that is right for a person and they are happy to use the service, with the aim that all health and care consultations are provided by Near Me or telephone whenever clinically appropriate." It also states computerised cognitive behavioural therapy will be expanded, along with remote monitoring.

Likewise, the recent Health and Sport committee report [12] states: "The health service must now embrace new technology, stop talking about what they are going to do and start delivering a 21st century system." It found among service users "a desire for greater use of technology/wearables to monitor health with automatic submission of results to relevant health professionals".

However, with all digital services, it is essential to recognise that some people are digitally excluded. This can be for a variety of reasons including inability to use digital services, not being able to afford the equipment required to access digital services and inadequate internet connectivity. General practice pharmacy teams will be aware of the possibility of digital exclusion and will take actions to address this, including offering services as a non-digital option. The key point is that they will enable choice, to maximise patients' potential to access services.

Digital inclusion, data and climate change are expected to feature in the Scottish Government's refreshed Digital Health & Care Strategy which is due for publication in Summer 2021.

2.3 Workforce infrastructure: professional development

2.3.1 Career development

By 2030, career development pathways will be in place for all members of the general practice pharmacy team. Pharmacists will feel professionally fulfilled in patient facing roles, with some working exclusively in general practice and others in portfolio careers. Pharmacists in all sectors will stop identifying themselves by their location of work and describe themselves by their clinical role, such as an advanced generalist or a clinical area specialist.

There will be a commitment to education and continual development for general practice pharmacy. By 2030, there will have been a cultural shift to a system that is committed to professional development with an infrastructure in place to enable this. There will be a work culture that embraces teaching, mentoring and supporting others to learn. This culture will be in place from the very beginning of people's careers, so that everyone automatically shares their knowledge with others. Education supervision will be a core part of all Pharmacists' roles.

Professional competency frameworks will be in place to guide pharmacists' professional and career development. Pharmacists will progress through defined career stages and associated credentialing [14] for Foundation, Advanced and Consultant level practice. These frameworks will encompass professional practice, collaborative working, leadership and management, education, and research skills.

Organisations will work together to enable pharmacists to have wider development experiences, such as clinical placements in different locations/settings. This will especially be the case at foundation level, where training will have changed significantly by 2030, and will enable pharmacists to undertake longer placements in multiple pharmacy settings. As a result, all pharmacists will have a far better understanding of the roles of pharmacists working in other settings, which will improve collaborative working as one pharmacy profession to achieve seamless patient care.

Professional development support will be in place for locums to ensure that appropriate backfill is available in all sectors and for all roles, including enhanced roles.

2.3.2 Training and Professional Development

By 2030, all general practice pharmacists will be independent prescribers. Three-quarters of pharmacists working in general practice are already either qualified as prescribers or in training, and this will be expanded via postgraduate training for those already qualified as pharmacists and through new undergraduate and foundation training for newer pharmacists.

All general practice pharmacists will also have advanced clinical assessment and consultation skills, triaging, clinical reasoning, decision-making and risk management skills. All of these skills will give pharmacists the confidence to act as independent practitioners and prescribers, taking a clinical leadership role within the practice around medicines.

Pharmacy technicians working in general practice teams will have increased clinical, consultation, monitoring and medication review skills, including basic observations and interpretation of blood tests. Pharmacy support workers will have a core SVQ qualification relating to their role.

The general practice pharmacy team will have training on new digital developments, including how to adapt consultation skills to newer forms of technology. Pharmacists will have opportunities to develop leadership skills in digital services and informatics, mirroring the Digital Health and Care Leadership Programme open to nurses and allied health professionals. Data management skills and quality improvement training will also be in place for the whole general practice team.

Allocated protected learning time will be in place to enable professional development within working hours. This will include access to activities such as miniCEX (consultation evaluation exercises) and simulation training. Peer review will be the norm to underpin reflective practice. Professional development will include shared multidisciplinary opportunities to better understand the whole team's contribution to patient care and to improve the ability of pharmacists to take on leadership roles within multidisciplinary teams. This will start at university level and continue throughout pharmacists' careers.

In addition to educational activities, inter-professional networking will also be commonplace by 2030. For general practice pharmacy teams, this will include GP clusters which were established for GP teams to learn, develop and improve together or the benefits of local populations.

Protected learning time will not only support professional development, but also contribute to improvements in pharmacy workforce wellbeing. Alongside this, pharmacy teams will be able to take rest/meal breaks during the working day to improve wellbeing, reduce stress and with this reduce the risk of errors.

Providing education and training for others will be a key part of general practice pharmacists' roles by 2030. This will include providing experiential learning facilitation for student pharmacists, supervision for trainee pharmacists in their Foundation year and into the newly qualified pharmacist programme, designated prescribing practitioner roles with trainee independent prescribers (both pharmacists and other healthcare professionals), and undergraduate and postgraduate teaching and development / peer support roles.

They will also provide education for other health care professionals, as the clinical lead for medicines within the general practice team. Mentorship – both being a mentor and a mentee – will become integral to daily work.

Leading and participating in practice-based research will be a normal professional activity for the majority of general practice pharmacists. This will be enabled by protected learning time being firmly embedded in the professional life of all pharmacists. They will also have developed research skills through postgraduate structures and be linked to research networks to enable continued development and cross-team research.

Some general practice pharmacists will develop specialist areas of practice in addition to their core, generalist role. This will enable them to provide services over a wider geographical area, where there is a need identified by the local NHS board. The specialism could be in a particular disease area (such as mental health or chronic pain), relate to a particular patient group (such as frailty), or be public health focused (such as drug use). Leadership, management and research options will exist also.

The *National Clinical Strategy* [1] recognises the need for recruitment and training of pharmacists in general practice teams. It states: "The development of a highly skilled and effective mix of professionals in primary care will require development of targeted training for nurses, pharmacists and allied health care professionals, so that they are able to develop the extended roles that will be required to practice more autonomously in the primary/community care services of the future."

This vision for 2030 explains how these models of practice can be delivered.

Section 3 Additional Information

NEXT STEPS

This vision is now open for consultation until 1 September 2021. We would welcome views on this vision – from pharmacists, other health and care professionals, and importantly the public in Scotland.

Please send any comments or arrange to speak to a member of the RPS team by contacting: scotinfo@rpharms.com

At the same time, scoping work will take place on other areas of pharmacy practice. All the scoping work will then be brought together into a finalised single professional view for pharmacy which will describe pharmacy can work together as a whole profession to deliver seamless, person-centred care for patients. RPS Scotland plans to publish this in autumn 2021.

ACKNOWLEDGEMENTS

With thanks to all the pharmacists who contributed to the short life working group, and shared their views through meetings, emails and messages.

REFERENCES

1 Scottish Government. A National Clinical Strategy for Scotland.
February 2021. Available at:
https://www.gov.scot/publications/national-clinical-strategy-scotland/

2 The ALLIANCE. Health, Wellbeing and the Covid19 pandemic: Scottish Experiences and Priorities for the Future.
February 2021. Available at:
https://www.alliance-scotland.org.uk/blog/news/health-wellbeing-and-the-covid-19-pandemic-our-findings/

3 Scottish Government. Recover, restore, renew. Chief Medical Officer for Scotland Annual Report 2020-2021.
Available at:
https://www.gov.scot/publications/cmo-annual-report-2020-21/

4 Scottish Government. Achieving Excellence in Pharmaceutical Care: a strategy for Scotland.
August 2017. Available at:
https://www.gov.scot/publications/achieving-excellence-pharmaceutical-care-strategy-scotland/

5 iSIMPATHY project.
Available at:
https://www.isimpathy.eu/

6 Scottish Government. Polypharmacy Guidance: Realistic Prescribing, 3rd edition, 2018.
Available at:
https://www.therapeutics.scot.nhs.uk/wp-content/uploads/2018/04/Polypharmacy-Guidance-2018.pdf

7 Scottish Government. National Guidance for Clusters.
June 2019. Available at:
https://www.sehd.scot.nhs.uk/pca/PCA2019(M)08.pdf

8 ISD. Scottish Atlas of Healthcare Variation.
Available at:
https://www.isdscotland.org/products-and-services/scottish-atlas-of-variation/

9 Scottish Government. Protecting Scotland, Renewing Scotland (Scotland's programme for Government).
September 2020. Available at:
https://www.gov.scot/publications/protecting-scotland-renewing-scotland-governments-programme-scotland-2020-2021/

10 Scottish Drugs Deaths Taskforce. Optimising the use of Medication Assisted Treatment.
May 2020. Available at:
https://drugdeathstaskforce.scot/our-work/optimising-the-use-of-medication-assisted-treatment/

11 Alliance for Water Stewardship.
Available at:
https://a4ws.org/about/

12 Scottish Parliament Health and Sport Committee. What should primary care look like for the next generation? Phase II.
February 2019. Available at:
https://www.parliament.scot/parliamentarybusiness/CurrentCommittees/111193.aspx

13 Scottish Government. Video consultations – public and clinician views: consultation report.
September 2020. Available at:
https://www.gov.scot/publications/public-clinician-views-video-consultations-full-report/pages/3/

14 Royal Pharmaceutical Society. Credentialing: setting the standards for pharmacy.
Available at:
https://www.rpharms.com/development/credentialing

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