

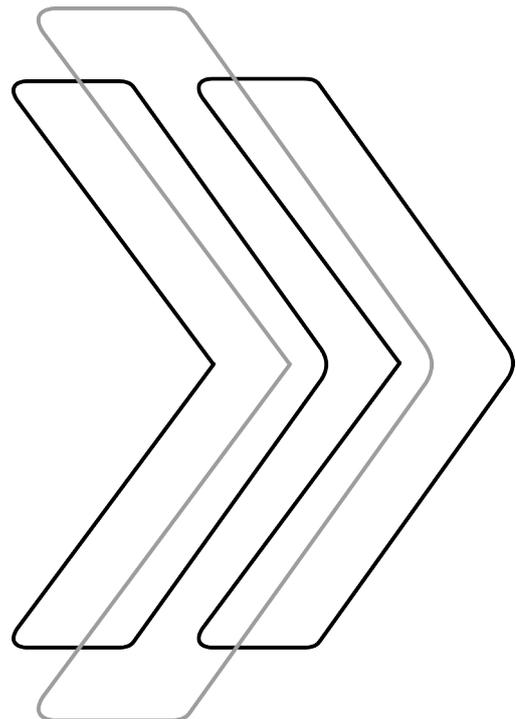
A vision for pharmacy practice in England

A rapid review of
the policy context
(2016–22)

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1 Introduction

It is widely recognised that the NHS needs to change to best meet the needs of an ageing population, not least as the number of people living with long-term health conditions continues to increase. More widely, there are well recognised financial and workforce challenges across all of the NHS. All of which have been exacerbated by the global Covid-19 pandemic.

Since the publication of *the Now or never: shaping pharmacy for the future*, and subsequently the Community Pharmacy Clinical Services Review (2016) there have been significant developments in the health and care landscape. Most recently, the 2022 Health and Care Act set out a reform programme to help bring about significant change to the way health and care is delivered, one that is joined up and integrated care that many want and need whilst also providing a new focus on prevention in order to keep us well.

This rapid policy review aims to capture the key changes in the landscape from 2016 to inform the development of the vision, providing insights and updates where these are available on the evidence of the future for pharmacy.

2 Recent developments in England

The overall policy context

A focus on integration

People too often receive fragmented care from services that are not effectively co-ordinated around their needs, which negatively impacts their experiences, leads to poorer outcomes, and creates duplication and inefficiency. Integrating services has been an objective of national policy for more than three decades, but progress towards delivering it has been slow.

The NHS Five Year Forward View (NHS England *et al* 2014), the NHS Long Term Plan (NHS England 2019) and more recently the Health and Social Care White Paper (Department of Health and Social Care 2021b) and subsequent Health and Care Act (*Health and Care Act 2022*) set out a welcome vision of joined-up services and a system built on collaboration rather than competition. Pharmacy has a role to play in these plans: delivering clinical services at the heart of multidisciplinary teams across primary care networks; in community pharmacies providing high quality care; and in hospitals as part of specialist teams (NHS England 2018).

Integrated care systems (ICSs) bring together providers and commissioners of NHS services with local authorities and other local partners to plan health and care services in 42 areas across the country. ICSs offer an important opportunity to improve population health through genuine partnership working between the NHS, local government, the voluntary and community sector and local communities.

Much of the activity to integrate care and improve population health will be driven by commissioners and providers collaborating over smaller geographies within ICSs (often referred to as 'places') and through teams delivering services working together on even smaller footprints (usually referred to as 'neighbourhoods'). This is particularly important as ICSs tend to cover large populations (typically more than 1 million people), which means they are not well suited to designing or delivering changes in services to meet the distinctive needs and characteristics of local populations (Charles 2021).

Primary care networks (PCNs) are another key part of the NHS Long Term Plan and bring general practices, and wider primary and community services, together to work at scale, often termed the 'neighbourhood' level. Since 1 July

2019, all except a handful of GP practices in England have come together to form around 1,300 networks. This was encouraged by a new GP contract that channels money for new staff directly to general practice via the newly formed PCNs (Baird and Beech 2020b). Clinical pharmacists working within general practice are key to these networks, but community pharmacy will also be increasingly integral to PCNs they develop and improve local partnerships. The Fuller Stocktake, published in June 2022, set out the next steps for integrating primary care, including pharmacy, at local level, and specifically reflects on the potential to increase the role of community pharmacy in prevention (Fuller 2022).

Provider collaboratives are partnerships that bring together two or more NHS trusts to work together at scale to benefit their populations. They do not form part of the legislative changes set out in the Health and Care Act but they are seen as a key component of ICSs. While providers have worked together for many years, the move to formalise this way of working is part of a fundamental shift in the way the health and care system is organised, moving from an emphasis on organisational autonomy and competition to collaboration and partnership working. These collaborative arrangements could see NHS providers coming together to consolidate corporate services for greater efficiency, increase sustainability by making better use of a limited workforce and improve quality of care by standardising clinical practice to tackle variations in care across different sites. They may take different forms and will vary in their scale and scope: some will be 'vertical' collaboratives involving organisations that provide different services (for example primary care, community, local acute, mental health and social care providers); others will be 'horizontal' collaboratives that bring together providers that offer similar services, such as a chain of acute hospitals (Wickens 2022).

Workforce

A prolonged funding squeeze between 2008 and 2018 combined with years of workforce planning, weak policy and fragmented responsibilities mean that staff shortages have become endemic in the NHS, including pharmacy. Delivering the ambitions set out in the NHS Long Term Plan requires making sure there are enough professionals with the right skills and support. The NHS People Plan (NHS England *et al* 2020) set out some potential actions around recruitment, retention and culture, although there has been no comprehensive NHS workforce strategy since 2003.

For pharmacy the focus has been on clinical skills and prescribing (see section on education and training reforms). The government has invested in 26,000 additional roles in general practice, which can include clinical pharmacists and pharmacy technicians, and is resulting in increasing numbers of these roles being employed within primary care networks.

'Levelling up' agenda: increasing focus on health inequalities and diversity

Since 2010, the increases in life expectancy seen over recent decades have slowed, with a growing gap between the most deprived and most advantaged areas both in terms of life expectancy and the proportion of life lived in poor health. Not only do people living in more deprived areas live shorter lives, they also live a greater proportion of their lives in poor health. Inequalities in health have been starkly exposed by the Covid-19 pandemic, which has taken a disproportionate toll on groups already facing the worst health outcomes, including some ethnic minority communities and people living in the most deprived areas. The economic and social consequences of the pandemic risk further worsening these inequalities.

The government published its Levelling Up White Paper in February 2022 (HM Government 2022), setting out its approach to addressing significant regional inequalities. There is a particular focus on the need to narrow the gap in healthy life expectancy and a White Paper on health disparities is due to be published later this year, setting out an ambition for reducing the gap in health outcomes. Areas to be addressed are likely to include the role of the NHS in prevention, its role as an anchor institution in communities and services designed to address inequalities.

Improving the experience of those from diverse groups, both in the workforce and in the wider population, has been a growing priority for the NHS. The NHS Race and Health Observatory was established by the NHS in 2021 to examine ethnic inequalities in health across the country, and to support national bodies in implementing meaningful change for ethnic minority communities, patients and members of the health and care workforce.

The Royal Pharmaceutical Society published its strategy for improving inclusion and diversity in the profession in 2020 (Royal Pharmaceutical Society 2020) and a Joint National Statement on Principles for Inclusive Pharmacy Professional Practice was published in 2020 (NHS England and NHS Improvement *et al* 2020) to address issues of diversity within the pharmacy profession, where 44 per cent of pharmacists and 13 per cent of pharmacy technicians are from Black, Asian and minority ethnic backgrounds.

Digital

Digital technologies now play a key role in health and care. There is significant potential for the transformation of health care through better and widespread use of digital technologies, and they are integral to many of the changes envisaged in the NHS long-term plan. A national data strategy was published in June 2022 (Department of Health and Social Care 2022). Each ICS will be expected to have a renewed digital and data transformation plan and implement

a shared care record. These ambitions will require a strong emphasis on engaging and upskilling the people who are expected to use digital technologies at all levels in the NHS, particularly clinicians.

Commissioning and contracting

With the advent of ICSs, clinical commissioning groups (CCGs) will be absorbed into their parent ICS. The ICS will take on most of the duties currently held by CCGs, as well as many of the commissioning functions undertaken by NHS England. Responsibility for direct commissioning is seen as a key enabler for integrating care and improving population health. The Health and Care Act therefore enables the transfer of the aspects of the community pharmacy contractual framework currently undertaken by NHS England regional teams to be transferred to ICSs from April 2022, although negotiation of the framework will continue to happen at national level. Not all ICSs may take on that role in April next year, but they will all be expected to do so by 1 April 2023.

Pharmacy-specific developments

Education and training reforms

The initial stages of education and training of pharmacists are being reformed to reflect the changing nature of practice, aligning education to that of other health professions. New standards for the initial education and training of pharmacists have been introduced by the General Pharmaceutical Council and from July 2021, the changes to the Master of Pharmacy degree and the foundation training year are being phased in over a five-year period. The reformed standards will provide newly qualified pharmacists with the clinical and consultation skills and confidence to provide the clinical services expected by patients and the NHS, and to work in multi-professional teams across local health systems. This will enable pharmacists to play a much greater role in providing clinical care, benefiting patients and enhancing career progression.

Among the major changes that will benefit pharmacists will be the ability to qualify as a prescriber upon registration. Pharmacists will also have access to enhanced training in consultation skills, to help them to work in partnership with patients, to make shared decisions about care and medicines use.

Science will remain core to pharmacy training, but initial education and training will be reshaped to underpin logical, rational decision-making and clinical skills so that patients benefit from expert, up-to-date and evidence-based care. Research training will be improved so that clinical academic careers become an option, and the NHS and patients will benefit from more pharmacists who engage in clinical research. It is also important to recognise that these changes will support pharmacists in providing and advising on technical pharmacy services.

All pharmacists will be trained to the same enhanced clinical level on registration, creating a more flexible workforce, which will make it easier to move between sectors and allow for a more flexible and rounded career structure.

Plans for post-registration development are also underway, aiming to create a unified approach to the development of post-registration pathways, under the oversight of a single forum – including the development of standards, outcomes, curricula and assessments.

NHS England are also providing an interim solution to train clinical pharmacists and pharmacy technicians employed in PCN additional roles: the Primary Care Pharmacy Education Pathway. When the initial education and training reforms reach maturity in 2026, it is expected that the Primary Care Pharmacy Education Pathway will phase out for pharmacists.

Medicines safety and overprescribing

Safe use of medicines continues to be a priority, nationally and globally. In 2017 the World Health Organization launched its third Global Patient Safety Challenge: Medication Without Harm and the Department of Health and Social Care commissioned various work to support that goal including a short-life working group, which reported in 2018. (Department of Health and Social Care 2018).

The National Overprescribing Review, published in 2021, set out plans to reduce overprescribing to make patient care better and safer, support the NHS and reduce carbon emissions. A national clinical director for prescribing has been appointed to help deliver the recommendations set out in the review including systemic changes to improve patient records, transfers of care and increase patient-centred care; and culture change to reduce the reliance on medicines and support shared decision-making (Department of Health and Social Care 2021b). Within each ICS a role of Chief Pharmacist will be created to lead on medicines optimisation and the safe and effective use of medicines across the system.

The antimicrobial resistance national action plan 2019–24 in support of the United Kingdom 20-year vision for antimicrobial resistance has seen national and regional leads appointed and emphasises the role of clinical pharmacists in primary care, who have a critical role in reviewing prescriptions for antimicrobials and challenging those that may be inappropriate. It also emphasises the role of electronic prescribing in secondary care in providing opportunities to support stewardship, as a source of data for healthcare providers to track prescribing rates and guidance compliance, and potentially link prescribing activity to outcomes through linked datasets. (Department of Health and Social Care 2019).

Public Health England published a review of prescribed medicines in 2020 (Public Health England 2019) that made a series of recommendations including:

- increasing the availability and use of data on the prescribing of medicines that can cause dependence or withdrawal
- tackling illegal sales
- enhancing clinical guidance and the likelihood it will be followed
- improving information for patients and carers on prescribed medicines and other treatments, and increasing informed choice and shared decision-making between clinicians and patients
- improving the support available from the healthcare system for patients experiencing dependence on, or withdrawal from, prescribed medicines
- further research on the prevention and treatment of dependence on, and withdrawal from, prescribed medicines.

The report highlighted the impact of deprivation on dependence to prescription medicines.

Hospital pharmacy

Medicines optimisation is a top priority for pharmacists working within acute hospitals. The Carter Review (Carter 2016) and the subsequent Hospital Pharmacy Transformation programme encourages pharmacists to spend the majority of their time carrying out clinical functions in support of medicines optimisation and the clinical care of patients to reduce the amount of resource devoted to infrastructure services.

Developments such as job planning and e-rostering have enabled greater visibility of workforce capability and capacity in order to plan service delivery. Medicines interoperability has the potential to minimise time spent on medicines reconciliation – a current core hospital pharmacy activity.

NHS hospital pharmacy aseptic services provide sterile, controlled environments for the preparation of injectable medicines for IV-transmitted antibiotics, chemotherapy and monoclonal antibodies, as well as nutrition and cutting-edge medicines for cell therapy and clinical trials. *Transforming aseptic services in England* (NHS England 2020) recommended a series of changes to enable the scaling up of pharmacy aseptic services, these included:

- creation of a network of collaborative regional hub aseptic facilities to prepare large-scale injectable medicines
- a review of the potential new roles and skill mix in aseptic services and new routes of entries
- new longer-term contracts, monitored through key performance indicators

- proposals to incentivise contracts for outpatient antimicrobial therapy to care for people closer to home or at home – thereby reducing pressure on hospital beds and improving patient experience.

Community pharmacy

Community pharmacy makes up one of the four pillars of the primary care system in England, along with general practice, optical services and dentistry. As of the end of March 2019, there were more than 11,500 community pharmacies in England delivering services under contract for the NHS. Of these, about 40 per cent were run by pharmacy contractors that operate five or fewer pharmacies (eg, standalone independent pharmacies or small chains) and about 60 per cent were run by contractors operating six or more pharmacies (for example, large corporate pharmacy chains) (Baird and Beech 2020a).

Published in 2016, the Community Pharmacy Clinical Services Review (Murray 2016) set out an in-depth review of community pharmacy determined by the context in which it operated at the time. The review covered:

- the changing patient and population needs for healthcare, in particular the demands of an ageing population with multiple long-term conditions
- emerging models of pharmaceutical care provision from the United Kingdom and internationally
- the evidence of sub-optimal outcomes from medicines in primary care settings
- the need to improve value through integration of pharmacy and clinical pharmaceutical skills into patient pathways and the emerging new care models
- the need for service redesign in all aspects of care for a financially sustainable NHS.

The review concluded that with other parts of the NHS facing severe financial and operational challenges, there needs to be renewed efforts to make the most of the existing clinical services that community pharmacy can provide and to do so at pace. This was likely to require national action through the national contractual framework, as well action at local level.

The review also identified barriers to making these improvements, despite the case for change being well-made at least among policymakers:

- finance and contracting arrangements inhibit new models of pharmacy
- poorly developed local relationships between professionals continued to inhibit both integration and wider engagement between pharmacists and others, particularly GPs.

- a lack of patient data and interoperability to allow pharmacy staff to see, document and share clinical information about patient care with the clinical records held by other healthcare professionals
- scarce evidence on effectiveness.

Primary care pharmacy

As outlined above, clinical pharmacists and pharmacy technicians employed within general practice are playing a significant role in the delivery of the primary care network contract requirements. Currently available data suggests 5,000 clinical pharmacists and more than 1,000 pharmacy technicians are now working in general practice in England (NHS Digital 2022).

Their roles vary, but include the delivery of the service specification for structured medication reviews, which requires primary networks to undertake reviews for patients in care homes, those with complex polypharmacy, those on medicines commonly associated with medication errors and those with severe frailty or those who are using one or more potentially addictive medications (NHS England 2021).

While PCNs have swiftly recruited to these roles, they are not always being implemented and integrated into primary care teams effectively. Research by The King's Fund found that even though clinical pharmacists have been employed in general practice for some years they still face issues including:

- a sense that they were not being given tasks appropriate to their competencies and that GPs underappreciated their abilities or wanted them to focus on 'tick-box' tasks
- they often felt isolated, especially if they had moved from hospital settings where team structures were in place.
- a strong consensus that having a critical mass of pharmacists and technicians within a PCN, with leadership support, was important.

A lack of shared understanding about the purpose or potential contribution of the roles, combined with an overall ambiguity about what multidisciplinary working would mean for GPs is hampering implementation. Successful implementation of the scheme will require extensive cultural, organisational and leadership development skills that are not easily accessible to PCNs (Baird *et al* 2022).

3 Evidence from other health systems

Other similar systems, both in the devolved nations and further afield, have made changes, particularly within community pharmacy services. Key areas of development include:

- increasing focus on professional clinical services, including prescribing
- increasing adoption of technology, particularly electronic health records and e-prescribing but also prescription dispensing machines and remote dispensing robots
- contract reform in community pharmacy, increasing the proportion of capitated and service-related payments as opposed to dispensing.

Contract changes in Wales

A new community pharmacy contractual framework agreed in 2021 includes makes a number of changes (Welsh Government 2021).

- Four priority services will be brought into national commissioning (from April 2022). Pharmacies will have to agree all components of the Clinical Community Pharmacy Service or opt out altogether. This will improve continuity of service and create a new universal minimum level of service that all pharmacies provide.
- From April 2022, any pharmacy employing a suitably qualified pharmacist will be enabled to provide independent prescribing.
- Commitment to fund training for more independent prescribers, as well as explore 'access to' courses to support widening access to Modern Apprenticeship (MA) training for pharmacy technicians, and ensuring community pharmacists are eligible for NHS funding for extended post-registration education.
- Agreement to fund 60 primary care cluster community pharmacy leads to provide co-ordination and leadership for community pharmacies within clusters.

Pharmacy reform in Scotland

In 2020 Scotland launched the NHS Pharmacy First and NHS Pharmacy First Plus schemes which introduced independent prescribing for common clinical conditions and transforms the use of prescribing in community pharmacy from the clinic model to being embedded in everyday work. A combined National

Foundation Programme and Independent Prescriber Career Pathway have also been established for community pharmacists.

A new pharmacotherapy service added to the General Medical Services contract in Scotland from 2018 formally established the role of pharmacy teams in GP practices.

Minor illness service in Wales

New pathways to increase access to care include the new NHS funded Sore Throat Test and Treat scheme. The scheme is an extension of the Welsh Common Ailment Service, piloted in two Health Boards since November 2021. It allows patients who have a sore throat to call into their local pharmacy and be tested by a trained pharmacist using a quick and pain free test. Less than one in five consultations resulted in antibiotic supply, reinforcing the pivotal role that community pharmacists can play in antimicrobial stewardship. Initial results from a patient satisfaction survey are very positive; patients are satisfied with the service as a whole and also the way it is being delivered.

Changes to contracting and funding models in New Zealand

A new community pharmacy contract, implemented in stages between 2012 and 2014 was intended to shift the sector towards a greater focus on person centred services by changing the contract incentives from a reimbursement-per-dispensing model to a patient-centred services model. Pharmacists are paid a reduced dispensing fee for repeat items dispensed to reduce the incentive for unnecessary repeats. They are paid monthly fee, per registered service user, for providing a long-term conditions services service. Evaluation suggested that a key barrier to implementation of new services was adequate staffing, with remuneration incentives not sufficient to guarantee uptake of the new services (Smith *et al* 2018).

References

Baird B and Beech J (2020a). 'Community pharmacy explained'. The King's Fund website. Available at: www.kingsfund.org.uk/publications/community-pharmacy-explained (accessed on 22 June 2022).

Baird B and Beech J (2020b). 'Primary care networks explained'. The King's Fund website. Available at: www.kingsfund.org.uk/publications/primary-care-networks-explained (accessed on 22 June 2022).

Baird B, Lamming L, Beech J, Bhatt R (2022). *Integrating additional roles into primary care networks*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/integrating-additional-roles-into-primary-care-networks (accessed on 6 April 2022).

Carter P (2016). *Operational productivity and performance in English NHS acute hospitals: unwarranted variations*. London: Department of Health and Social Care. Available at: www.gov.uk/government/publications/productivity-in-nhs-hospitals.

Charles A (2021). 'Integrated care systems explained'. The King's Fund website. Available at: www.kingsfund.org.uk/publications/integrated-care-systems-explained (accessed on 22 June 2022).

Department of Health and Social Care (2022). *Data saves lives: reshaping health and social care with data* [online]. GOV.uk website. Available at: www.gov.uk/government/publications/data-saves-lives-reshaping-health-and-social-care-with-data (accessed on 28 June 2022).

Department of Health and Social Care (2021a). *Good for you, good for us, good for everybody: a plan to reduce overprescribing to make patient care better and safer, support the NHS, and reduce carbon emissions* [online]. GOV.UK website. Available at: www.gov.uk/government/publications/national-overprescribing-review-report (accessed on 26 June 2022).

Department of Health and Social Care (2021b). *Integration and innovation: working together to improve health and social care for all*. White Paper. London: The Stationery Office. Available at: www.gov.uk/government/publications/working-together-to-improve-health-and-social-care-for-all (accessed on 28 June 2022).

Department of Health and Social Care (2019). *UK 5-year action plan for antimicrobial resistance 2019 to 2024* [online]. GOV.UK website. Available at: www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024 (accessed on 22 June 2022).

Department of Health and Social Care (2018). *The report of the short life working group on reducing medication-related harm* [online]. GOV.UK website. Available at: www.gov.uk/government/publications/medication-errors-short-life-working-group-report (accessed on 28 June 2022).

Fuller C (2022). *Next steps for integrating primary care: Fuller stocktake report* [online]. NHS England and NHS Improvement website. Available at: www.england.nhs.uk/publication/next-steps-for-integrating-primary-care-fuller-stocktake-report (accessed on 28 June 2022).

HM Government (2022). *Joining up care for people, places and populations*. Cm 573 (February 2022). London: The Stationery Office. Available at: www.gov.uk/government/publications/health-and-social-care-integration-joining-up-care-for-people-places-and-populations (accessed on 28 June 2022).

Health and Care Act 2022 (c 31). Legislation.gov.uk website. Available at: www.legislation.gov.uk/ukpga/2022/31/contents/enacted (accessed on 29 September 2022).

Murray R (2016). *Community pharmacy clinical services review*. London: NHS England. Available at: www.england.nhs.uk/primary-care/pharmacy/independent-review-cpcs (accessed on 28 June 2022) .

NHS Digital (2022). 'Primary care workforce quarterly update experimental statistics'. NHS Digital. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/primary-care-workforce-quarterly-update/31st-march-2022-experimental-statistics> (accessed on 28 June 2022).

NHS England (2021). *Structured medication reviews and medicines optimisation 2021/22* [online]. NHS England website. Available at: www.england.nhs.uk/publication/structured-medication-reviews-and-medicines-optimisation-2021-22 (accessed on 22 June 2022).

NHS England (2020). *Transforming NHS pharmacy aseptic services in England* [online]. Available at: www.gov.uk/government/publications/transforming-nhs-pharmacy-aseptic-services-in-england (accessed on 22 June 2022).

NHS England (2019). *The NHS long term plan*. London: NHS England. Available at: www.longtermplan.nhs.uk/publication/nhs-long-term-plan (accessed on 28 June 2022)

NHS England (2018). *Integrating NHS pharmacy and medicines optimisation into sustainability and transformation partnerships and integrated care systems* [online]. NHS England website. Available at: www.england.nhs.uk/publication/integrating-nhs-pharmacy-and-medicines-optimisation-into-sustainability-and-transformation-partnerships-and-integrated-care-systems (accessed on 22 June 2022).

NHS England, Care Quality Commission, Health Education England, Monitor, NHS Trust Development Authority, Public Health England (2014). *NHS five year forward view* [online]. London: NHS England. Available at: www.england.nhs.uk/publication/nhs-five-year-forward-view/ (accessed on 28 June 2022).

NHS England, NHS Improvement, Health Education England (2020). *We are the NHS: people plan 2020/21 – action for us all*. London: NHS England. Available at: www.england.nhs.uk/publication/we-are-the-nhs-people-plan-for-2020-21-action-for-us-all (accessed on 28 June 2022).

NHS England and NHS Improvement, Royal Pharmaceutical Society, Association of Pharmacy Technicians UK (2020). 'Joint national statement of principles on inclusive pharmacy professional practice'. Royal Pharmaceutical Society website. Available at: www.rpharms.com/Portals/0/Joint%20National%20Statement%20of%20Principles%20Final%20Version.pdf?ver=2020-09-24-170517-123 (accessed on 29 June 2020)

Public Health England (2019). *Prescribed medicines review: report* [online]. GOV.UK website. Available at: www.gov.uk/government/publications/prescribed-medicines-review-report (accessed on 22 June 2022).

Royal Pharmaceutical Society (2020). *Improving inclusion and diversity across our profession: our strategy for pharmacy 2020–2025* [online]. Royal Pharmaceutical Society website. Available at: www.rpharms.com/recognition/inclusion-and-diversity (accessed on 28 June 2022).

Smith AJ, Scahill SL, Harrison J, Carroll T, Medlicott NJ (2018). 'Service provision in the wake of a new funding model for community pharmacy'. *BMC Health Services Research*, vol 18, no 1, pp 307. Available at: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3120-z> (accessed on 28 June 2022).

Welsh Government (2021). *A new prescription: the future of community pharmacy in Wales* [online]. Welsh Government website. Available at: <https://gov.wales/community-pharmacy-contractual-framework-reform> (accessed on 22 June 2022).

Wickens C (2022). 'Provider collaboratives: explaining their role in system working' The King's Fund website. Available at: www.kingsfund.org.uk/publications/provider-collaboratives (accessed on 22 June 2022).