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Medicines security—a national priority

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SUMMARY

In the UK, the vast majority of our medicines are manufactured, or are reliant on key ingredients from outside of the UK—primarily from India, China, or from single sources—leading to reliance on a potentially fragile global supply chain. Dynamic changes in geopolitics, trade, and the threat of natural disasters abroad mean that the UK could quickly be at risk of medicine shortages affecting patients up and down the country. Medicines are essential for the health of the nation, and therefore it is vital that the UK has strong, resilient medicine supply chains. The UK Government, and NHS, are key to ensuring resilient supply of medicines to patients yet our report found there is a lack of oversight and coordination over medicine resilience, and concerns over medicines shortage are not seen as a security issue.

Reports of medicines shortages are rising. Without access to the right medication, patients may experience worsening health outcomes, stress, and anxiety over their health, and they may fall out of work. In the worst cases, medicines shortages have led to patient deaths. In 2025, 73% of pharmacy team members stated medicine supply issues were putting patient health at risk. Yet despite the significant impact medicines shortages can have, the DHSC were unable to tell us if the number of shortages was rising or falling. Shortages can vary in length and cause–there may be brief interruptions to supply which are swiftly rectified, longer term supply chain disruptions caused by global issues, or complete severance of supply where a medicine is no longer available to the UK.

This report sets out the need for clear, proactive leadership from the UK Government to strengthen medicines supply and resilience of supply chains. This leadership needs three strands.

Firstly, the DHSC need to better support pharmacies and hospitals to manage shortages. Connectivity presents a key issue here. Currently, community pharmacies and hospitals may only discover a medicine shortage is occurring when they are unable to order medicines for patients, and shortages create extra pressure and work for clinicians trying to support patients, both through sourcing medicines and providing alternatives. The Government needs to improve how it shares information with care providers about shortages and availability of medicine throughout the supply chain, and ensure GPs, hospitals and community pharmacies have the tools they need to access medicines and support patients during shortages.

Secondly, the Government needs to better work with the pharmaceutical industry to identify and prevent shortages, through boosting medicines manufacturing and supply chain resilience both globally and once medicines have arrived on UK shores. The Government should clearly signal the importance of stable supply chains to the industry through resilience-focused procurement and contract management. As part of this, the Government should identify and share which medicines they believe are critical for the UK through publishing a Critical Medicines List. The Government should then set out how it plans to boost resilience for medicines on that list.

Thirdly, the importance of medicine supply must also be emphasised within government. The impact of medicines shortages goes far beyond the health system, and this should be recognised through more effective cross-government

work and putting medicine supply shortages on the National Risk Register. Crucially, this cross-government work must include foreign and trade policy. Problems in medicine supply are not unique to the UK, and governments across the world are taking steps to boost their own medicines resilience. The UK needs to work with international partners to develop a diverse range of medicine resilience measures to make sure the UK is not left behind as other countries shore up their medicine supply.

This leadership will not happen by accident. The Government needs to appoint a senior figure to champion medicines in policy across government. A key part of their role should be making sure the Government shifts its view of medicines shortages—viewing them not only as a health issue, but as a matter of national security.

Medicines security—a national priority

CHAPTER 1: INTRODUCTION

1. Prescribing medicine is one of the main ways the NHS treats patients. In 2024/25, the NHS in England spent £21.6 billion on prescribed medicines,[1] and there are over 14,000 medicines licensed for use in the UK.[2] Community pharmacies in England dispense "approximately 100 million prescription items" every month.[3] Patients may access prescription medicines from hospitals, pharmacies, GPs, or other healthcare professionals.

2. DHSC state that medicines "not only treat illnesses, but they can also empower patients to manage long-term conditions and live comfortable, fulfilling lives."[4] Medicines are a key part of our health and care system, making sustainable, resilient access to medicines essential for the health of the nation.

3. Despite this, there have been a number of high-profile medicine shortages in recent years ranging from medicines for specific conditions to shortages of antibiotics. Alongside these well publicised cases, many patients may experience shortages which fly under the radar. These can present a significant risk to patients' health and wellbeing, and in the most serious cases has led to patient deaths.

This inquiry

4. Before this inquiry began, a significant body of material already existed which examines medicine security and supply chains, including that published by the House of Commons Science and Technology Committee, the All-Party Parliamentary Group on Pharmacy, and the Royal Pharmaceutical Society. Alongside this, the Government is currently conducting work relating to pharmacy provision and medicines supply chains. Further information regarding this work is set out later in this chapter and referenced throughout the report.

5. The aim of this inquiry was to build on that work, to better understand the causes of medicine shortages, and the UK's capabilities in predicting and preventing medicine supply issues and minimising patient harms. In particular we wanted to explore how the Government could improve medicines resilience through actions at a national and international level, and consider whether new Government policy went far enough to meet the scale of the problem in an ever-changing geopolitical environment.

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1 NHS, *Press Release: NHS Prescribing Costs Reach £21.6 Billion in 2024/25*, 20 November 2025. This includes medicines which were issued in hospitals; prescribed in primary care and dispensed in the community; prescribed in hospitals and dispensed in the community; prescribed by dentists and dispensed in the community, and prescribed and dispensed in the Adult Secure Estate.

2 Written evidence from the Department of Health and Social Care (DHSC) (MED0043)

3 Written evidence from Pharmacists' Defence Association (MED0031)

4 Department of Health and Social Care (DHSC), *Managing a robust and resilient supply of medicines*, 15 August 2025 [accessed 27 November 25]

6. The Committee launched the inquiry by publishing a call for evidence on 5 August 2025.[5] A list of all those who submitted written evidence, and those who gave oral evidence, is published in Appendix 2. We are grateful to all those who took the time and effort to contribute to our inquiry.

7. Health and economic development are devolved matters in Wales, Northern Ireland and Scotland, however matters relating to the medicines industry such as competition, national security, international trade, and intellectual property are reserved (and in the case of Northern Ireland, excepted).[6] Recommendations in this report will primarily apply to England, but may be of interest to the governments of Scotland, Northern Ireland and Wales.[7]

8. The Committee's remit is on public services, and as such our inquiry and report focus on medicine supply chains for medicines prescribed through the NHS, without reference to private prescriptions. However, medicines prescribed privately will likely rely on the same supply chains as those prescribed through the NHS, so this report may be of interest to those working solely in private practice.

Other relevant work and inquiries

9. In May 2024, the House of Commons Health and Social Care Committee published a report on Pharmacy.[8] This included a chapter on medicine shortages which focused on pharmacy and patient experience of shortages. They called for a review of the efficacy of the Serious Shortage Protocols (SSPs)[9], and for pharmacies to have greater powers to substitute medicines. They also stated that the Government needed a clearer understanding of global supply chains for medicines and called for an independent review of medicine supply chains.[10] In the Government's response to this report they acknowledged the importance of resilient supply chains and stated they would consider conducting an independent review,[11] however to date no such review has taken place.

10. In November 2024, the Royal Pharmaceutical Society published a report called *Medicines Shortages: Solutions for Empty Shelves*.[12] The report's recommendations included the publication of a "cohesive cross-government and NHS strategy across the whole UK" on medicines supply chain resilience and medicines security, improved data connectivity including improved forecasting and data sharing, enabling pharmacists to amend prescriptions, and education for healthcare teams and the public regarding what to do during a shortage.

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5 Public Services Committee, *Lords Committee looks at Medicines security: Prediction and prevention of medicine supply*, 05 August 2025

6 Northern Ireland Act 1998, Schedule 2

7 Post-Brexit some aspects of EU law governing medicines also apply to Northern Ireland by virtue of the UK/EU Withdrawal Agreement and the Windsor Framework (Annex 2). See the European Union (Withdrawal) Act 2018, and the European Union (Withdrawal Agreement) Act 2020, Ireland/Northern Ireland Protocol.

8 Health and Social Care Committee, *Pharmacy* (3rd Report, Session 2023–24, HC Paper 140)

9 SSPs enable pharmacies to make specific substitutions when a prescribed medicine is in shortage. See also NHS Business Services Authority, *Serious shortage protocols (SSPs)* [accessed 14 January 2026]

10 Health and Social Care Committee, *Pharmacy* (3rd Report, Session 2023–24, HC Paper 140)

11 Health and Social Care Committee, *Pharmacy: Government Response* (1st Special Report, Session 2024–25, HC Paper 602)

12 Royal Pharmaceutical Society, *Medicines Shortages: Solutions for Empty Shelves*, 27 November 2024

11. In July 2025 the parliamentary All-Party Parliamentary Group on Pharmacy published a report on medicines shortages, arguing that shortages had become a "chronic, structural challenge", with over 90% of pharmacists spending more time managing shortages and seeing decreased patient satisfaction. Their recommendations included pharmacists being able to make dose and formulation substitutions during shortages, reform of the contractual framework for community pharmacies to deliver sustainable funding, and the publication and implementation of a UK-wide medicines shortages communication and patient support strategy.[13]

12. In November 2025, the House of Commons Science and Technology Committee wrote to the Secretary of State for Health, stating that the life sciences sector had "lost confidence in the credibility of successive UK governments to deliver on their ambitions", though it noted the sector had welcomed the Government's *Life Sciences Sector Plan*.[14] The Committee also noted arguments that the National Institute for Health and Care Excellence (NICE) process for approving medicines for NHS usage were "needlessly complex", referenced concerns on pricing, and stated that US trade talks were "taking precedence for ministers over their own goals for the UK life sciences sector".[15] The Government's response was published in December 2025. It highlighted several investments in UK life sciences and indicated that further information regarding NICE and the UK-US trade deal would be shared with the Committee "in due course".[16]

Government activity

13. In addition to the evidence provided to this inquiry, the Government has published a number of documents relating to strengthening medicine supply chains.

14. In March 2025, NHS England published *A guide to the systems and processes for managing medicines supply issues in England*, which details the national, regional, and local management and escalation processes, and communications routes for medicines supply issues in England.[17]

15. In July 2025, the Government published the *Life Sciences Sector Plan*, as part of the Government's wider *Industrial Strategy*.[18] The *Life Sciences Sector Plan* document is co-owned by the Department of Health and Social Care (DHSC), the Department for Science, Innovation and Technology, and Department for Business and Trade, and the DHSC states that it sets out a "vision and action plan to drive growth, innovation and better health outcomes."[19]

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13 All Party Parliamentary Group on Pharmacy, *Inquiry into Medicines Shortages in England*, July 2025 [accessed 27 January 2026]

14 Correspondence, *Chair of Science, Innovation and Technology Committee to Secretary of State for Health and Social Care*, 11 November 2025 and HM Government, *Life Sciences Sector Plan*, 16 July 2025

15 Correspondence, *Chair of Science, Innovation and Technology Committee to Secretary of State for Health and Social Care*, 11 November 2025

16 Correspondence, *Parliamentary Under-Secretary of State at the Department of Health and Social Care and the Minister for Science, Research, Innovation and Nuclear to the Chair of the Science, Innovation and Technology Committee*, 1 December 2025

17 NHS England, *A Guide to the Systems and Processes for Managing Medicines Supply Issues in England*, 27 March 2025

18 HM Government, *The UK's Modern Industrial Strategy, Life Sciences Sector Plan*, 16 July 2025

19 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

16. In August 2025, the DHSC published *Managing a robust and resilient supply of medicines,* a policy paper which explores how the government supports robust supply chains and outlines further actions the government is taking to boost resilience. The interventions include efforts to identify potential supply chain disruptions earlier, making the supply base of medicines more resilient, improving communication and guidance, and building stronger international partnerships.[20] In September 2025, the DHSC also published a consultation, *Enabling pharmacist flexibilities when dispensing medicines.*[21]

17. In December 2025 the Government announced that UK medicines exports to the US would face zero tariffs, that it would increase spending on medicines from 0.3% of GDP to 0.6% over the next ten years, alongside changes to the way medicines are judged to be financially viable for the NHS, and that there would be changes to the amount drug companies must pay back to the NHS on sales. This will be explored later in the report.

This report

18. This report explores opportunities to create more resilient, sustainable supply chains and systems to predict and prevent medicines supply issues and ensure patients can access the medicines they need, when they need them.

19. The next chapter explores key background information, including the scale of the problem and impact on patients. The third chapter explores problems relating to information, considering different stakeholders' access to information about current and predicted medicines stocks and demand, and whether they have the information they need to act appropriately. Chapter 4 examines how information about medicines shortages is communicated by central government, enabling local health partners to take appropriate steps to support patients.

20. Chapter 5 explores the incentives and disincentives for manufacturers to develop resilient supply chains, and how to better incentivise the development of a resilient medicine supply system. It also notes other barriers to resilience, such as regulatory issues, and arguments relating to developing stockpiles of medicines.

21. Chapter 6 examines two issues—barriers to boosting UK medicines manufacturing, and the global dimension of medicines supply chains, including reliance on India and China, and opportunities to work with allies to create a sustainable, resilient supply of medicines. This chapter also argues that the UK needs to develop a list of 'critical' medicines—medicines with significant health impact on a significant number of patients, where the supply chain is fragile, relies on single points of failure, or is otherwise problematic for developing supply chain resilience.

22. Our final chapter calls for medicines resilience to be viewed as a national security issue, and calls for more effective oversight and leadership through the appointment of a Senior Responsible Officer who will champion medicines resilience across government.

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20 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025

21 Department of Health and Social Care (DHSC), *Enabling Pharmacist Flexibilities When Dispensing Medicines*, 18 September 2025

CHAPTER 2: THE CHALLENGE—MEDICINE SHORTAGES

Defining shortage

23. For the purposes of this report, we have used the Organisation of Economic Cooperation and Development (OECD) definition of shortage, which is:

> "any supply disruption or sudden change in the supply-demand equilibrium of a marketed pharmaceutical product that leads to an actual or anticipated lack of stock on the shelf for patients".[22]

24. The Office for Health Economics argued that the "lack of a unified definition of 'drug shortage'" means "there is not a consensus on the level at which all drug shortages should be assessed and the appropriate timeframe applied."[23] Academics Vann Yaroson et al. stated that the definition "is diverse across the supply chain" adding "complexity to building resilience strategies". They questioned whether a shortage should be said to occur if a hospital or pharmacy runs out, or when there is an insufficient supply at a national level.[24] Medicines being unavailable to patients because of poor management at an NHS Trust or pharmacy level is a separate issue which we refer to as an 'outage' and is outside the scope of this report, rather than medicines being unavailable to patients because there are not enough medicines available to meet demand.

25. Richard Bowers, Lead Clinician, Medicines Procurement and Supply at Leeds Teaching Hospitals NHS Trust, suggested that defining shortages was "really difficult". He suggested that a shortage was "any disruption to the status quo in procuring a medicine" which required intervention in procurement processes. He went on to suggest that 80% of such shortages would be "straightforward to manage".[25]

26. Dr Emilia Vann Yaroson, a lecturer in operations and supply chain management at the University of Sheffield, explained different ideas of shortages, noting that when there was a shortage of Hormone Replacement Therapy (HRT) medicines, pharmacies identified this "six months before" but manufacturers and DHSC said "there was enough to go round." She argued that a "unifying definition" of shortage across all levels of the supply chains was needed to understand the scale of the problem.[26]

27. The Department for Health and Social Care's David Simmons, the Director of Supply Resilience and Medicines at the DHSC, stated that "shortages have a common definition", and stated that shortages are then tiered by severity.[27] In a letter to the Committee he stated that:

> "a supply shortage of a presentation of health service medicine occurs when supply does not meet patient demand at national level; irrespective of whether it applies to the entire UK, or only to one or more of England, Scotland, Wales or Northern Ireland as individual UK nations."[28]

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22 Office for Economic Co-operation and Development (OECD), *Securing Medical Supply Chains in a Post-Pandemic World*, 23 February 2024
23 Written evidence from the Office of Health Economics (MED0011)
24 Written evidence from Dr Emilia Vann Yaroson et al. (MED0028)
25 Q 49 (Richard Bowers)
26 Q 9 (Dr Emilia Vann Yaroson)
27 Q 17 (David Simmons)
28 Correspondence, *DHSC and NHSE to Public Services Committee*, 19 November 2025

However, it should be noted that DHSC and NHS England (NHSE) investigate issues "on a case-by-case basis, regardless of whether they fit this definition".[29]

28. James Davies noted problems with this definition, arguing that the DHSC "spent a lot of time focusing on whether there is enough of a medication within the UK's shores" and argued that patients "often experience supply disruptions rather than supply shortages" noting there were "lots of cases" of shortages in local areas.[30]

29. **It is deeply concerning that, despite increased reports of shortages from the medical professionals, the Government is unable to judge whether medicine shortages and supply issues are increasing or decreasing.**

30. ***The DHSC should provide a clear working definition of shortages to inform strategy and response. This definition should more effectively account for local and regional shortages, and shortages which directly impact on patients. Supplementary to this, it should review its current information repositories and channels on shortages and supply issues to present a transparent and effective measurement mechanism to judge the severity of shortages in the UK.***

What causes medicine shortages?

31. Shortages are caused by a range of factors, varying from local or regional issues affecting only part of the UK[31], to problems across global supply chains which can affect multiple countries.[32] Causes of shortages can broadly be broken up into two types of issues.

32. Firstly, there are supply-based issues, such as manufacture or supply chain failure,[33] the UK's place in a global market, pricing strategies, challenges associated with globalised supply chains, and regulatory challenges which delays a drug being approved for UK use—all of which will be explored in this report.

33. Secondly, there are demand-based issues. Demand may increase due to changes in prescribing policy, increased patient-led demand, market exit by manufacturers placing increased demand on other suppliers, and stockpiling causing increased demand.

34. The causes of supply chain issues and medicine shortages have been explored effectively and in some depth by bodies such as the Royal Pharmaceutical

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29 Correspondence, *DHSC and NHSE to Public Services committee*, 19 November 2025

30 Q 35 (James Davies)

31 Written evidence from the Pharmacy Procurement Department at Leeds Teaching Hospitals NHS Trust (MED0008)

32 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

33 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043). The DHSC state manufacturing issues were listed as a root cause in 59% of supply issue notifications made to the DHSC by suppliers in 2024. This included but was not limited to raw material shortage (20%), manufacturing relocation or failure (14%), supply chain delay (12%),'other manufacturing' (12%), product recall/quality failure (4%) and capacity constraints (2%). Multiple causes can be attributed to individual supply issues, so percentages will total more than 59%. It should be noted this uses the DHSC definition of shortages, which focuses on shortages reported by suppliers rather than by those downstream in medicine supply chains.

Society.[34] We identify a number of these causes throughout the report, primarily information-sharing related issues which can relate to both supply and demand (Chapter 3), geopolitical pressures which primarily focus on supply (Chapter 7), and the attractiveness of the UK as a market for medicines sales and investment, which again focuses primarily on supply (Chapters 5 and 6). Two specific case studies are highlighted in Boxes 1 and 2.

Box 1: Supply case study: ingredient shortages—Creon/PERT

Pancreatic Enzyme Replacement Therapy (PERT) medications are used to address pancreatic issues caused by conditions including cystic fibrosis and pancreatic cancer. One specific type of PERT medication, Creon, accounts for 80% of the UK PERT market. Since 2024, significant disruptions to Creon supply have meant that UK demand has not been met, and similar issues have been seen in other countries.

This has been due to limited availability of a pancreatic enzyme used to make the drug, found in the pancreas of pigs, which the National Pharmacy Association attributed to the global demand for leaner pigs leading to the reduction of harvesting of the enzyme.[35] The Cystic Fibrosis Trust stated that another cause was insufficient manufacturing capacity. This disruption is expected to continue until at least 2027.[36]

The Government has responded to this shortage by issuing a Serious Shortage Protocol for the two most common Creon formulations which allows pharmacist to prescribe alternatives, issuing guidance to prescribers and pharmacists to limit PERT prescriptions to one month's supply at a time.[37] At the same time, it issued two National Patient Safety Alerts and enabled the prescription of unlicenced alternatives to Creon when there was an inadequate supply.[38]

However, the Cystic Fibrosis Trust reported "variable" awareness and willingness to use unlicenced alternatives "with GPs and pharmacists communicating poorly with patients and one another" and patients having to "navigate the system with incomplete information" to get medication.[39]

34 Royal Pharmaceutical Society, *Medicines Shortages: Solutions for Empty Shelves*, 20 November 2024
35 Written evidence from the National Pharmacy Association (MED0027)
36 Written evidence from Cystic Fibrosis Trust (MED0020)
37 Written evidence from Cystic Fibrosis Trust (MED0020)
38 Community Pharmacy England, *National Patient Safety Alert: Shortage of Pancreatic Enzyme Replacement Therapy (PERT)—Additional Actions*, 18 December 2024
39 Written evidence from Cystic Fibrosis Trust (MED0020)

Box 2: Demand-based case study: shortages caused by the public and prescribing demand—hormone replacement therapy shortages

Hormone Replacement Therapy (HRT) is used to manage symptoms associated with menopause, for treating young women with ovarian insufficiency, and other associated conditions.[40] There are different forms of HRT, including patches, tablets and gels.[41]

Demand for HRT has spiked in recent years—NHS prescription data shows that between 2022/23 and 2023/24, HRT prescriptions in England rose by 22%, from 11 million to 13 million items being prescribed, with a 12% increase in the number of women receiving HRT, from 2.3m to 2.6m.[42]

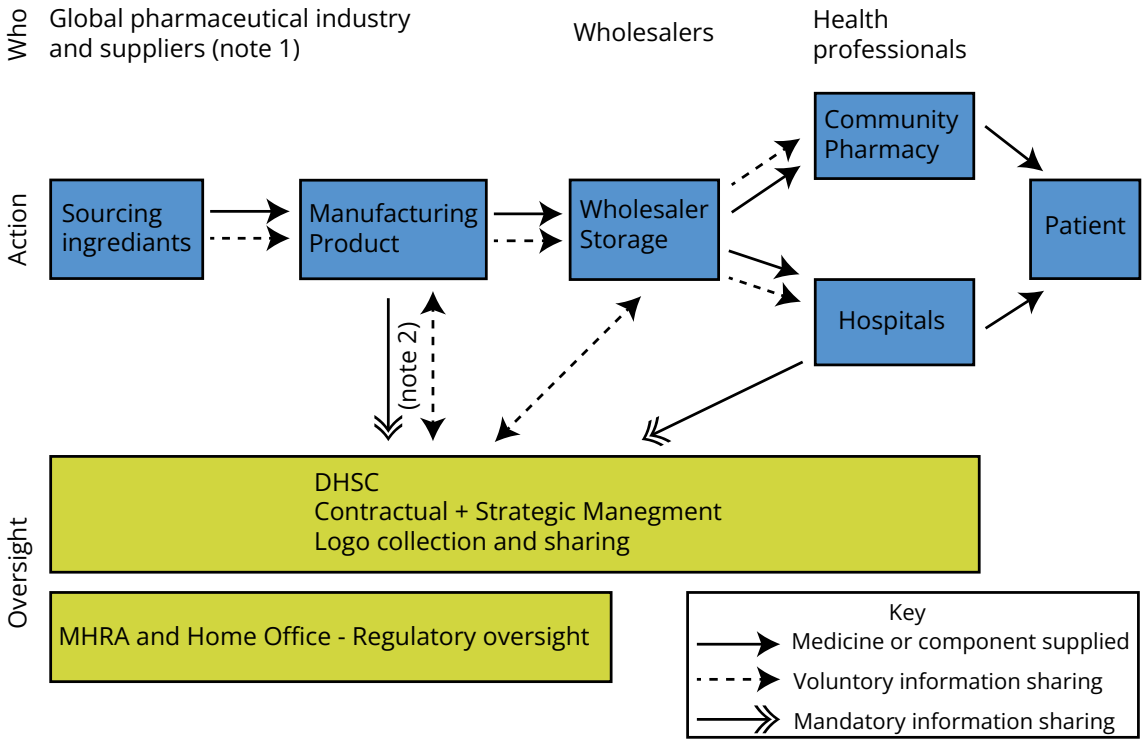
Besins Healthcare UK Ltd, a UK based company which supplies HRT to the UK, attributed the rise to "increased public awareness, celebrity advocacy, and social media campaigns [which] have helped destigmatise menopause and empowered more women to seek treatment."[43] Other contributing factors to the increased demand were policy changes in the UK such as the reduction of prescription costs, the *Women's Health Strategy*,[44] and the introduction of HRT pre-payment certificates, which allowed patients to pay £19.80 for a years' worth of prescriptions.[45] Community Pharmacy England (CPE) noted that NICE publishing guidance stated that HRT is "effective and is very safe; discrediting previous claims about the risk of the treatment," which further drove demand.[46]

Besins stated that while this was a "positive sign of progress in women's health", the "exponential" increase in demand caused "an unprecedented supply chain challenge" for HRT suppliers, impacting both manufacturing and logistics. As a result, there was a national shortage of many HRT products.[47]

The DHSC responded to the shortage by setting up the HRT Supply Taskforce, which took steps including issuing Serious Shortage Protocols for several HRT products, and collaborating with businesses and pharmacies to improve information sharing.[48] Manufacturers responded to the shortage with measures including drawing on excess product elsewhere in their markets and fast-tracking UK deliveries, and in the longer term by boosting manufacture.[49] For example, Besins acquired an existing manufacturing site in Belgium and constructed a new manufacturing facility in Spain, significantly scaling up manufacturing capacity.[50]

40 The Conversation, *HRT Crisis: What's Causing the Shortages of Menopause Treatments?*, 5 May 2022
41 NHS, *About hormone replacement therapy (HRT)*, 7 February 2023
42 NHS Business Services Authority, *HRT England summary*, 17 October 2024
43 Written evidence from Besins Healthcare UK Ltd (MED0033)
44 Written evidence from Besins Healthcare UK Ltd (MED0033)
45 Q 55 (Paul White); HM Government, *Get a Prescription Prepayment Certificate* [accessed 15 January 2026]
46 Correspondence, *Community Pharmacy England to Chair of Public Services Committee*, 11 November 2025
47 Written evidence from Besins Healthcare UK Ltd (MED0033)
48 See written evidence from British Pharmaceutical Industry (ABPI) (MED0016), British Association of European Pharmaceutical Distributors (BAEPD) (MED0030), Besins Healthcare UK Ltd (MED0033) and Alliance Healthcare (MED0044)
49 Written evidence from Besins Healthcare UK Ltd (MED0033) and Alliance Healthcare (MED0044)
50 Written evidence from Besins Healthcare UK Ltd (MED0033)

Figure 1: How do medicines get to patients?



Note 1: The majority of medicines ingredients suppliers are based in China and India

Note 2: manufacturers are required to share information about supply issues in specific situations (see paragraphs 61–70) but may share further information voluntarily/at DHSC's request.

Scale of the problem

35. DHSC state that the "overwhelming majority" of medicines "are in good supply and are available in sufficient quantity to meet patient needs".[51] However, demand for medicines, and therefore medicine supply chains, is increasing. Prescribed medicine spend in England has risen from £16.4bn in 2020/21 to £21.6 billion in 2024/25.[52] Alongside this, the UK's population is becoming older[53] and levels of long-term sickness are rising.[54] As demand for critical medicines rises, the consequences of a supply chain failure will be greater.

36. We heard that medicine shortages and medicine supply chain issues are increasingly becoming a problem for patients, pharmacies and NHS services.[55] James Davies, Director of Research and Insights at Community Pharmacy England told us that a shortage of medicines was "certainly having more of an impact on patients than it ever has before."[56] The Royal Pharmaceutical Society state that it is "widely recognised that problems in the

51 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043); Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
52 NHS Business Services Authority, *Prescribing Costs in Hospitals and the Community—England 2024/25*, 20 November 2025
53 Office for National Statistics, *Population estimates for the UK, England, Wales, Scotland and Northern Ireland: mid-2024*, 26 September 2025
54 Office for National Statistics, *Rising ill-health and economic inactivity because of long-term sickness, UK: 2019 to 2023*, 26 July 2023
55 Q 34 (Malcolm Harrison and Martin Sawer)
56 Q 34 (James Davies)

global medicines market" mean medicine shortages are on the rise in many countries.[57] Similarly, a 2025 survey conducted by Community Pharmacy England of 1,600 pharmacy team members and of owners or representatives of 4,300 pharmacy premises in England found that 73% of pharmacy team members reported that medicine supply issues were putting patient health at risk. In the same survey, over 80% of owners reported an increase in medicines supply or wholesaler issues in comparison to the previous year.[58]

37. Pharmacy2U reported that, since June 2023, up to 10% of orders where the prescription "could not be fulfilled in its entirety" was due to shortages of one or more prescribed medicines, though they noted "in recent times", improvements mean the rate is now between 2.5–4%, due "in part by better supply in the market, and in part by increased resilience" within their business.[59]

38. The Government has acknowledged that medicine shortages present a challenge and has noted that supply issues have "increased in complexity in recent years".[60] The number of supply disruptions reported by pharmaceutical suppliers to DHSC has increased, from under 1,000 in 2021,[61] to around 1,600 notifications per year from suppliers in 2022 and 2023, to over 1,900 in 2024, though the DHSC noted that 2025 had seen a return to 2022 levels.[62]

39. However, DHSC also argued that in the UK "there is no single, reliable measure that can comprehensively reflect an increase or decrease in the frequency of reported supply issues over the past 3 years".[63] This may be in part due to the DHSC's view that the majority of supply disruptions or potential disruptions reported to the DHSC by manufacturers "had no impact on patients".[64] The DHSC classifies risk to continuity of supply to medicines as "amber-red" on the DHSC High Level Risk Register, reflecting that they view the risk as medium to high.[65]

40. When asked about the scale of the problem Dr Zubir Ahmed MP, the Parliamentary Under-Secretary for Health Innovation and Safety,[66] acknowledged that in the pandemic and in 2024 "there were issues", but argued that in 2025 the supply chain issues had significantly reduced, and that the "overall supply of medicines is in a good place".[67] However, in response to the Minister's appearance in front of the Committee, Debra Ainge, Chief Executive of iethico, a company which provides intelligence on medicine supply chains, stated that this view "bears very little resemblance

57 Royal Pharmaceutical Society, *Medicines Shortages: Solutions for Empty Shelves*, 27 November 2024
58 Community Pharmacy England, *Pressures Survey 2025: Medicine Supply Report*, 11 November 2025
59 Written evidence from Pharmacy2U (MED0035)
60 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043); Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
61 The Pharmaceutical Journal, *Medicines Shortages Reported to Government Increase by Almost 70% Since 2021*, 06 March 2024
62 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
63 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
64 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
65 Correspondence, *DHSC and NHSE to Public Services Committee*, 19 November 2025
66 The Minister's responsibilities include medicines and medical technology; life sciences, research and innovation; international and trade; and patient safety. HM Government, *Dr Zubir Ahmed MP*, September 2025 [accessed 22 January 2026]
67 Q 90 (Dr Zubir Ahmed MP)

to reality." arguing that shortages were "affecting patient care… financially ruining community pharmacy [and] pushing the NHS into expensive workarounds".[68]

The impact of shortages

41. Medicines shortages can significantly affect patients. Contributors stated that the impact on patients included stress, anxiety and frustration,[69] rationing medication,[70] delays to treatment,[71] or patients having to go to hospital or Accident & Emergency departments.[72] Patients may also spend significant time seeking out medication from alternative community pharmacies[73] or may seek medication from alternative, unlicensed sources.[74] The Bioindustry Association noted that for some patients with chronic and debilitating conditions, interruption of medicine supply can "result in rapid deterioration in health"[75] and several witnesses noted that shortages may impact patients' ability to socialise, study,[76] or work.[77] Box 3 provides some case studies of how medicine shortages can affects patients.

42. Longer term shortages or unreliable supply may also affect the availability of treatments offered to patients. Prof. Bola Owolabi CBE, Chief Inspector of Primary Care and Community Services at the Care Quality Commission (CQC), noted that issues with the supply of long-acting injections of zypadhera (olanzapine)—used to manage symptoms of schizophrenia and bipolar disorder—alongside complexities related to the treatment "means other less effective options for individual patients may be prioritised due to ease of access and use."[78]

43. In a small number of cases, medicine shortages have led to patient deaths.[79] The Prevention of Future Deaths Report relating to David Crompton's death in 2024 linked shortages of anti-epileptic medication to his death and stated that "there is a risk that future deaths will occur unless action is taken".[80]

44. However, on the whole, information on the impact of shortages is not captured or understood centrally. Dr Emilia Vann Yaroson noted "there is currently no data that captures [medicine shortages'] impact on patients," arguing that "we cannot accurately measure the risk involved" with shortages, even when mitigating action has been taken.[81]

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68 Debra Ainge, LinkedIn, *"Medicines Shortages Are Improving—This is What We Are Being Told"* [accessed 13 January 2026]

69 Written evidence Cystic Fibrosis Trust (MED0020), National Pharmacy Association (MED0027), Pharmacy2U (MED0035), Urology at Guys' and St Thomas' NHS Trust (MED0039), Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043) and Accord Healthcare (MED0045); Q 3 Dr Emilia Vann Yaroson

70 Written evidence from National Pharmacy Association (MED0027) and Pharmacy2U (MED0035); Q 3 (Dr Emilia Vann Yaroson)

71 Written evidence from National Pharmacy Association (MED0027)

72 Correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025; written evidence from British Society for Rheumatology (MED0014)

73 Written evidence from Accord Healthcare (MED0045); correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025

74 Written evidence from Accord Healthcare (MED0045)

75 Written evidence from Bioindustry Association (BIA) (MED0042)

76 Written evidence from Cystic Fibrosis Trust (MED0020)

77 Written evidence from Cystic Fibrosis Trust (MED0020) and Urology at Guys' and St Thomas' NHS Trust (MED0039)

78 Correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025

79 Written evidence from National Pharmacy Association (MED0027); Q 3 (Dr Keith Ridge CBE)

80 Courts and Tribunals Judiciary, *David Crompton: Prevention of Future Deaths Report*, 9 January 2025

81 Q 3 (Dr Emilia Vann Yaroson)

45. When asked, David Simmons stated "I do not have the hard numbers" but that there were extremely few deaths associated with medicine shortages.[82] Similarly, the Minister for Health Innovation and Safety stated he "could not provide exact numbers" but that he could say "that the number of [major incidents] is extremely low."[83]

Box 3: Examples of the impact of medicine shortages on patients

1. Cystic Fibrosis patients who experience PERT shortages may experience digestive issues and weight loss, and may feel that they have to ration medication and skip meals. The Cystic Fibrosis Trust also noted that patients experienced stress and anxiety, and that even when people could access their medication, "uncertainty associated with whether future prescriptions will be fulfilled and ultimately how long the shortages will continue creates significant levels of anxiety, stress and frustration."[84]
2. HRT shortages reportedly caused extreme anxiety among patients, increased demand on GPs and clinicians rationing prescriptions,[85] and an increase of sale of counterfeit medications.[86] Losing access to HRT can lead to a return of menopausal symptoms, including physical discomfort and psychological distress.[87]
3. For patients with kidney or renal issues, "life-saving" kidney transplants may be missed or postponed due to shortages of medicines required during the process, causing stress for patients, and potentially extra monitoring, blood tests and hospital visits.[88] The urology department at Guys' and St Thomas' NHS Trust noted that shortages can cause stress, increased risk of health complications "such as surgical interventions", and a loss of trust in the healthcare system.[89]
4. For patients with rheumatic and musculoskeletal conditions, the British Society for Rheumatology stressed that shortages can lead to delays in beginning treatment, and noted NICE's statement that delays to the start of treatment for conditions such as rheumatoid arthritis can lead to "worse functional impairment, irreversible damage to joints and a lower change of achieving sustained disease remission".[90] Patients experiencing shortages may also be "moved onto alternative drugs—where they exist—at short notice" or having to use older, less effective treatments. Such changes to treatment can be time consuming for patients and clinicians and may lead to patients not using medication.[91]

46. **When considering the management of medicine shortages, it is vitally important to have in mind their impact on patients. Many patients require medicines to live healthy, fulfilling lives, and disruptions to medicine supply chains can have significant, life changing or even life-threatening impacts.**

82 Q 90 (David Simmons)
83 Q 90 (Dr Zubir Ahmed MP)
84 Written evidence Cystic Fibrosis Trust (MED0020);
85 Written evidence from Besins Healthcare UK Ltd (MED0033)
86 Written evidence from Dr Emilia Vann Yaroson et al. (MED0028)
87 Written evidence from Besins Healthcare UK Ltd (MED0033)
88 Written evidence from the Renal Pharmacy Group, part of the UK Kidney Association (MED0024)
89 Written evidence from Urology at Guys' and St Thomas' NHS Trust (MED0039)
90 Written evidence from the British Society for Rheumatology (MED0014)
91 Written evidence from the British Society for Rheumatology (MED0014)

Impacts of shortages on the NHS

47. The impact of shortages is not limited to patients. The National Pharmacy Association stated that for "community pharmacies, the operational impact [of shortages] is severe",[92] with pharmacy teams spending "significant time sourcing stock, liaising with prescribers, and applying for price concessions, adding to workload and stress".[93] Community Pharmacy England Report that 74% of pharmacy owners say their businesses are spending longer to procure medicines than ever before, and 26% of pharmacy teams spend over two hours a day sourcing alternative medicines.[94] Pharmacy2U said their staff were "consumed daily by supply problems",[95] while the Pharmacists' Defence Association reported "an increasing prevalence of verbal abuse which on occasion spills over into physical assault" from patients to pharmacists when medicines are not available. [96]

48. Patients may face challenges accessing a different prescription from their GP, due to GP services being overstretched,[97] problems in communication between pharmacies and GPs,[98] and because GPs may have poor awareness of possible substitute medicines.[99]

49. The impact is also felt in secondary care. Speaking to the Committee, Richard Bowers, Lead Clinician for Medicine Procurement and Supply at Leeds Teaching Hospital, said that a member of his staff recently:

> "stopped her car on the way home and burst into tears because she had spent all day trying to get hold of a chemotherapy drug from a supplier and could not do it, and she felt that she had failed. That was her role. She wanted to get that drug to our patients and could not do it. That human impact when dealing with shortages is really difficult."[100]

50. When medication is unavailable and substitution is necessary, patients generally need to go back to the prescribing clinicians, either in hospital or the GP surgery—creating additional administrative work and time spent by the patient, the healthcare provider and the clinician themselves.[101] When shortages mean patients are moved onto treatments which end up less effective, this can cause distress for clinicians and patients.[102] Alongside this,

92 Written evidence from National Pharmacy Association (MED0027)
93 Written evidence from Dr Natasha Campling and Professor Sue Latter (MED0004) and the National Pharmacy Association (MED0027)
94 Community Pharmacy England, *Medicines Supply Report: Pharmacy Pressures Survey 2025*, 11 November 2025. This statistic is drawn from a Community Pharmacy England Survey of owners (or head office representatives) of over 4,300 pharmacy premises in England and of 1,600 pharmacy team members.
95 Written evidence from Pharmacy2U (MED0035)
96 Written evidence from the Pharmacists' Defence Association (MED0031)
97 Written evidence from and the National Pharmacy Association (MED0027) and Pharmacy2U (MED0035)
98 Written evidence from the Cystic Fibrosis Trust (MED0020)
99 Written evidence from Leeds Teaching Hospitals NHS Trust (MED0008)
100 Q 46 (Richard Bowers)
101 Written evidence from the British Society for Rheumatology (MED0014), British Society of Gastroenterology (BSG) Inflammatory Bowel Disease (IBD) Section Committee (MED0018), National Clinical Homecare Association (MED0019), Healthcare Distribution Association (MED0021) and the Renal Pharmacy Group, part of the UK Kidney Association (MED0024)
102 Written evidence from Urology at Guys' and St Thomas' NHS Trust (MED0039)

additional monitoring by clinicians may be required when shortages mean patients must change medications. [103]

51. Shortages may also lead to increased cost of treatment to NHS trusts, both through trusts having to increase the frequency of treatment using lower strength medications,[104] or having to buy costlier medicines to treat patients.[105]

52. **As well as undermining patient care, disruptions to medicine supply place additional pressure and added cost on frontline health and care staff, including those working in pharmacies, hospitals and GP surgeries.**

103 Written evidence from the British Society for Rheumatology (MED0014), Blockchain Pharma Limited (MED0023) and the Renal Pharmacy Group, part of the UK Kidney Association (MED0024)

104 Correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025, written evidence British Society of Gastroenterology (BSG) Inflammatory Bowel Disease (IBD) Section Committee (MED0018)

105 Correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025; written evidence from the Renal Pharmacy Group, part of the UK Kidney Association (MED0024)

CHAPTER 3: UNDERSTANDING MEDICINE SUPPLY AND DEMAND ACROSS THE SYSTEM

53. This chapter sets out our concerns regarding DHSC's understanding of demand for medicines, current levels of medicine stock, and information sharing throughout the health system.

Predicting demand

54. To effectively meet patients' needs, the DHSC needs to have a strong understanding of current and future patient demand, so that manufacturers can supply the appropriate medicines. Sciensus notes that failure to predict demand means "supply is outpaced by demand", leading to shortages.[106] There is various information the DHSC is able to use to understand patient demand, including population-needs mapping conducted by Integrated Care Boards (ICBs),[107] changing diagnostic or treatment practices,[108] historic data on demand, such as for treatment of seasonal conditions,[109] and information from manufacturers or wholesalers on products sold.

55. However, we heard concerns about the NHS's ability to predict demand and whether it uses such predictions effectively. The Healthcare Distribution Association stated that "poor forecasting" by the NHS led to supply gaps.[110] Sciensus stated that secondary care procurement "informs manufacturers" of predicted demand, but that such predictions "tend to be 6 to 12 months out of date."[111] Darius Hughes, UK General Manager at Moderna, stated that "there is no demand forecasting system" due to the fragmentation between different NHS Trusts, and of the community pharmacy system.[112]

56. Alongside this, changes to prescribing policy and guidance, or regulatory approval of a medicine, can impact demand prediction as predictions may not account for new or other drugs being prescribed. Martin Sawer, Executive Director of the Healthcare Distribution Association (HDA), noted that when prescribing guidance for HRT was changed by NICE "the supply chain was not told … before it was issued publicly" and that, as a result, demand for HRT rose more quickly than production could scale up.[113]

57. Witnesses also suggested ways to improve demand prediction. The Royal Pharmaceutical Society suggested use of "predictive analytics to look at what is being prescribed" and "what is being stocked" in hospitals to

106 Written evidence from Sciensus Pharma (MED0005)
107 Association of the British Pharmaceutical Industry (ABPI), British Association of Pharmaceutical Wholesalers (BAPW), British Medical Association (BMA), Department of Health (DH), Dispensing Doctors' Association (DDA), Ethical Medicines Industry Group, General Pharmaceutical Council, Medicines and Healthcare Products Regulatory Agency (MHRA), National Pharmacy Association (NPA), Pharmaceutical Services Negotiating Committee (PSNC), Royal Pharmaceutical Society, *Best Practice for Ensuring the Efficient Supply and Distribution of Medicines to Patients*, January 2013
108 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
109 Written evidence from Pharmacists' Defence Association (MED0031) and the Company Chemists' Association (CCA) (MED0036)
110 Written evidence from the Healthcare Distribution Association (HDA) (MED0021)
111 Written evidence from Sciensus Pharma (MED0005). It is also worth noting that Medicines UK suggested manufacturers needed over five months to change manufacturing output in response to tenders.
112 Q 65 (Darius Hughes)
113 Q 44 (Martin Sawer)

judge their needs.[114] Professor Kostas Selviaridis, Chair in Operations and Supply Chain Management at Lancaster University, suggested that the DHSC improve forecasting through better analysis of "various sources of demand data, including clinical information such as epidemiological data, disease trends, and hospitalisation rates".[115] Pharmaceutical manufacturer Besins Healthcare recommended that the Government "establish a national forecasting mechanism for medicines" using "prescribing data, demographic trends, and supply intelligence".[116]

58. Demand forecasts might also be improved through DHSC accessing commercial forecasting predictions. The HDA noted that wholesalers "often utilise shared forecasting and complex algorithmic and AI systems" for demand planning, allowing them to develop "sophisticated forecasting plans".[117] Medicines wholesaler Alliance Healthcare Distribution noted that they, and other large wholesalers, "proactively share relevant data" with DHSC to enable better demand forecasting, and argued there was therefore a case for greater mandatory data sharing.[118]

59. The DHSC have stated that they will work with manufacturers and distributors to "better anticipate demand fluctuations" and "want to implement routine broader sharing of our demand forecasting analysis with suppliers".[119] They also acknowledge that current demand forecasts are "often issue specific or seasonal".[120]

Understanding stock levels and predicting shortages

60. The way the Government works to understand stock levels and predict potential shortages varies, depending on which part of the supply chain is being examined.

Manufacturing and wholesalers

61. DHSC does not monitor wholesaler or manufacturer stock information, stating that doing so is the responsibility of companies themselves.[121] They stated this means that DHSC "does not have oversight of general stock level communication across these supply chains."[122] Instead, the Government encourages stakeholder collaboration to address issues across supply chains through publishing best practice recommendations.[123] Alongside this, David Simmons suggested closer monitoring might take place on a "case-by-case" basis, with DHSC working with wholesalers where there was a "pressure point" such as a suspected shortage.[124]

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114 Written evidence from the Royal Pharmaceutical Society (MED0015)
115 Written evidence from Professor Kostas Selviaridis (MED0013)
116 Written evidence from Besins Healthcare UK Ltd (MED0033)
117 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
118 Written evidence from Alliance Healthcare Distribution Ltd (MED0032)
119 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
120 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
121 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
122 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
123 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043); Department of Health and Social Care (DHSC), *Best Practice for Ensuring Efficient Supply and Distribution of Medicines to Patients*, 11 January 2013
124 Q 19 (David Simmons)

62. Martin Sawer stated that the wholesaler sector "works very closely with manufacturing partners" to understand manufacturer demand forecasting, but noted that manufacturers "may supply more than one wholesaler".[125] Wholesalers "cannot talk to each other because of competition reasons: they are all trying to get the manufacturers' business", though he noted that manufacturers could account for this in the information and stock they shared.[126]

63. We heard conflicting views from elsewhere in the system about how effectively information was being shared by wholesalers and manufacturers. Community Pharmacy England argued that "unavailability of real-time stock data from manufacturers and wholesalers" presented a key barrier to DHSC efforts to monitor medicine stock levels, and called for improved collaboration across the entire medicine supply chain.[127] However, Richard Bowers suggested that wholesaler stock information was available to hospitals, stating that most pharmaceutical wholesalers "now have live stock levels available", enabling procurement professionals to "determine quickly whether there is a problem, whether there is an alternative supplier".[128]

64. While DHSC does not proactively monitor manufacturers' stock levels, it takes different steps to work with industry to identify issues, including hosting "a group with the major trade associations" to identify potential stock issues.[129] PAGB, a consumer healthcare association, noted that close, two-way communication between the DHSC and trade associations had been effective in identifying upcoming concerns, including distinguishing between industry-wide issues and issues with specific products.[130]

65. Manufacturers are required to report "any potential supply issue" to the DHSC, including discontinuations of medicine production and anticipated supply shortages. This information must be reported "at least 6 months before the shortage or discontinuation happens" or, where that is not possible, "as soon as reasonably practicable" after the manufacturer becomes aware of the issue or decision to stop producing the medicine.[131] Issues are reported via the DaSH portal, explained in Chapter 4.

66. David Simmons stated that manufacturers reporting supply issues was "our main source of intelligence about shortages".[132] However, as noted in Chapter 4, the nature of this reporting mechanism means it does not capture shortages 'downstream' in the supply chain. DHSC have also committed to further engagement and collaboration with the manufacturing and wholesale industry, stating that they plan to work with manufacturers and wholesalers to "understand how to improve digital tools to address issues more robustly and quickly", although no timescales on this engagement were provided.[133]

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125 Q 35 (Martin Sawer)
126 Q 35 (Martin Sawer)
127 Written evidence from Community Pharmacy England (MED0038)
128 Q 48 (Richard Bowers)
129 Q 19 (David Simmons)
130 Written evidence from PAGB (MED0009)
131 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043); correspondence, *DHSC and NHSE To Chair of Public Services Committee*, 19 November 2025
132 Q 15 (David Simmons)
133 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

Fining manufacturers who fail to share information

67. DHSC describe reporting of potential supply issues by manufacturers as "critical",[134] and state that "while the majority of manufacturers report disruption in a timely manner, not all do so, and this can impede our ability to mitigate patient risk".[135] If manufacturers fail to report supply issues or discontinuations appropriately, DHSC have the power to fine companies.[136]

68. However, when asked, DHSC stated that "to date the Department has not issued any fines".[137] Community Pharmacy England noted this contrasted with comparable systems in other countries, pointing to an example in September 2024 where the French National Agency for the Safety of Medicines and Health Products announced fines against 11 pharmaceutical companies totalling €8 million for failing to maintain minimum buffer stock of "medicines of Major therapeutic interest".[138] David Simmons reflected that there would be "proportionality to using fines and penalties", stating "if someone is having a struggle with a shortage then hitting them with a penalty may not always be the best thing to do".[139] The DHSC state that they plan to "review the penalties for not complying with legal reporting requirements" to ensure DHSC receive timely information.[140]

69. Several stakeholders noted that the nature of supply chain issues meant that it may be difficult to identify issues six months ahead of time.[141] Dr Natasha Campling and Professor Sue Latter of the University of Southampton shared that wholesalers believed that "the inability of manufacturers to adequately predict operational issues or forecast demand led to production issues and shortages of manufactured stock".[142] Others were supportive of early information sharing, for example, the National Clinical Homecare Association argued that the impact of shortages would be better mitigated if manufacturers were required to "notify providers earlier and with greater transparency",[143] rather than the current system notifications going to DHSC and DHSC then deciding what information to share with providers.

70. DHSC stated that it was "proposing to consult on amendments" to the regulations which govern the shortages reporting framework to improve the management of supply issues although no timescales for this were given.[144]

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134 Written Answer, HL11921, Session 2024–25

135 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

136 The Health Service Products (Provision and Disclosure of Information) Regulations 2018 (SI 2018/677)

137 Written Answer, HL11921, Session 2024–25

138 Correspondence, *Community Pharmacy England to Public Services Committee*, 11 November 2025; Bird & Bird, BioTalk, *Fight Against Medicine Shortages: the French Medicines Agency (ANSM) Imposes Fines Totalling €8 Million*, 14 October 2024

139 Q 22 (David Simmons)

140 Written Answer, HL11921, Session 2024–25

141 Written evidence from Medicines UK (MED0029); Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043) For example, RPS noted a fire at a manufacturing site might cause an immediate shortage and would be challenging to predict, as would an unexpected surge in demand. Royal Pharmaceutical Society, *Medicines Shortages: Solutions for Empty Shelves*, 20 November 2024. DHSC gave a fire at a manufacturing site as an example of a shortage cause which could not be predicted six months ahead of time.

142 Written evidence from Dr Natasha Campling and Dr Sue Latter (MED0004)

143 Written evidence from National Clinical Homecare Association (MED0019)

144 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

Stock management in secondary care

71. There is a strong understanding of what medicines stock hospitals hold. Andrew Davies, former national Director of Hospital Pharmacy for NHS England, stated that "the NHS has world-leading medicines data about visibility of what is in stock in hospital pharmacies" and that every item of medicine "is visible to the NHS". He noted that this information was available both to national bodies such as NICE and NHS England, and to individual hospitals.[145]

72. However, this only applies to medicines in hospital pharmacies. Richard Bowers stated that hospitals have "no visibility whatever of what is on our wards, other than what we have supplied", noting that during shortages hospital pharmacies would have to send staff to specific wards and theatres to find out how much medicine they had, and potentially bring some back to redistribute.[146] This was not universal across hospitals. Amandeep Doll, Director of England at the Royal Pharmaceutical Society, noted one hospital with "digitalised drug cupboards on their wards" which was providing a more granular understanding of stock.[147] This means that while hospitals and DHSC know how many medicines hospitals have procured, they may not have a strong understanding of their real-time use or current levels of medicines stored.

Stock management in primary care

73. The evidence we received painted a different picture of stock management in primary care. Community Pharmacy England stated that monitoring of medicine stock levels in community pharmacies "remains fragmented and inadequate".[148] Individual pharmacies manage their own supply chains working with wholesalers, and there is no formal or central mechanism for community pharmacies to share information about their stock levels.

74. Claire Foreman, Director of Medicines Policy and Strategy at NHS England, acknowledged the lack of information on primary care medicine stock, but noted that there are "over 10,000 community pharmacies, many of which are independent" and may use different systems. She stated that having a stronger picture of medicine stock in primary care "would probably be great to have, but realistically how we could get there is a really important question."[149]

75. The DHSC also engages with community pharmacies to identify shortages. Community pharmacies can report shortages via Community Pharmacy England, who share information with the DHSC.[150]

76. There are also reporting mechanisms for potential supply issues due to pricing. When community pharmacies purchase and dispense generic medicines, they are reimbursed for the medicines by the NHS at a set rate for each specific medicine—the Drug Tariff rate.[151] When pharmacies can source a medicine but only at a cost over the Drug Tariff rate—meaning they

145 Q 48 (Andrew Davies)
146 Q 48 (Richard Bowers)
147 Q 48 (Amandeep Doll)
148 Written evidence from Community Pharmacy England (MED0038)
149 Q 18 (Claire Foreman)
150 Written evidence from Community Pharmacy England (MED0038)
151 The King's Fund, *Community Pharmacy Explained*, 11 September 2025; NHS Business Services Authority, *Drug Tariff*, December 2025 [accessed 27 January 2026]

would be supplying medicine at a loss—they can report this to Community Pharmacy England.[152] However, in both cases such reporting is voluntary, and time-poor pharmacists may prioritise sourcing difficult-to-find medicines over reporting to CPE.

77. Dr Emilia Vann Yaroson questioned how effectively DHSC used such information, noting that when HRT shortages occurred "pharmacies saw it coming and were reporting it six months before" actions were taken, due to DHSC believing there was adequate stock.[153]

Other methods of predicting shortages and improving medicines stock understanding

78. The DHSC identifies and predicts shortages in a range of ways. This includes what David Simmons called the "health family" of officials within DHSC, alongside "networks across government" to identify issues which may sit beyond DHSC's remit or where other departments "would have initial intelligence", such as "a disruption in the red sea or trade restriction put in place somewhere".[154] Looking forward, the Department for Business and Trade are trialling a Global Supply Chain Intelligence Programme,[155] which DHSC states should support prediction of shortages.[156]

Digitising the supply chain and using 2D barcodes

79. Several contributors highlighted the importance of digitising the supply chain to improve supply chain transparency. The Company Chemists' Association stated that digitising supply chain information would "help improve real time information and provide greater foresight to pharmacies of potential shortages"[157] which could have direct benefits, such as GPs being better aware of medicine availability when making prescribing decisions.[158] As mentioned above, the secondary care supply chain is already digitised to some extent, with NHS bodies being able to view stock levels in hospital pharmacies.[159]

80. However, as pointed out by Dr Vann Yaroson, parties across the supply chain including "manufacturers, wholesalers and NHS procurement operations" use legacy IT systems which "are not fully interoperable".[160] The Association of the British Pharmaceutical Industry (ABPI) stated that tracking stock levels across disparate manufacturers, wholesalers, health and care providers and other parties, all using different stock management systems, would be "almost impossible".[161] The CCA also noted that while digitising supply chains would boost awareness and could mitigate the impact of shortages, it would not alleviate shortages or "directly address the cause of shortages".[162]

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152 Community Pharmacy England, *Report Product over Drug Tariff Price*, 22 November 2024
153 Q 9 (Dr Emilia Vann Yaroson)
154 Q 15 (David Simmons)
155 Department for Business and Trade, *Global Supply Chain Intelligence Programme (GSCIP) Privacy Notice*, 22 August 2025
156 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
157 Supplementary written evidence from the Company Chemists' Association (CCA) (MED0050)
158 Written evidence from the Company Chemists' Association (CCA) (MED0036)
159 Written evidence from Andrew Davies (MED0006)
160 Written evidence from Dr Emilia Vann Yaroson (MED0041)
161 Written evidence from the Association of the British Pharmaceutical Industry (ABPI) (MED0016)
162 Supplementary written evidence from Company Chemists' Association (CCA) (MED0050)

81. Similarly, the Minister for Health Innovation and Safety stated that there was not "an easy way that will not be time-consuming and will not divert front line staff from their work" and that trying to implement a fully digitised stock management system would mean "clogging the system". He did however suggest it could be an "aspiration in future".[163] David Simmons stated that "we do not have a system where we track every single item" but noted that tracking of individual medications was done for specific medications. He noted that during the winter the DHSC "identified several hundred products we want to keep a very close track of" and that DHSC then get data from wholesalers about products they have, and have sold to pharmacies. He argued that this "targeted" approach was preferable "because we want to ask for data only when we are going to use it".[164] However, written evidence from the DHSC states that it has committed to further engagement and collaboration with the manufacturing and wholesale industry, stating that it plans to "work with suppliers and wholesalers to understand how to improve digital tools to address issues more robustly and quickly."[165]

82. One method of improving the information on medicines across supply chains was the use of 2D barcodes which can hold significantly more information than traditional barcodes[166] including the product's unique identifying number, batch number and expiry date.[167]

83. Until recently manufacturers supplying the UK were required under the EU Falsified Medicines Directive (FMD) to put 2D barcodes on their medicine packages, for the purposes of detecting counterfeit medicines and boosting patient safety.[168] However, as of 1 January 2025 the FMD no longer applies[169] and some manufacturers have stopped using 2D barcodes on their medicine packages.[170]

84. It should be noted that the FMD system is not a stock management system—at this time it only allows dispensers to check the veracity of the medicine, but does not give information on "what goes on in between" the medicine leaving the manufacturer and getting to the patient.[171] DHSC stated that it was considering consulting on the use of something akin to the FMD.[172] Andrew Davies argued that if something like the FMD were to be introduced, it should support the wider "serialisation and digitising" of the medicines supply chain.[173]

85. However, numerous stakeholders have called for manufacturers to continue putting 2D barcodes on their medicine packs, noting benefits for patient

163 Q 91 (Dr Zubir Ahmed MP)
164 Q 91 (David Simmons)
165 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines*, 15 August 2025
166 1D barcodes (the most commonly used) contain information only on one axis, while 2D barcodes contain information on both the horizontal and vertical axes.
167 MHRA Inspectorate, *The Importance of Accurate GTIN and 2D Barcade Data in the Modern Healthcare Environment*, 18 November 2025
168 Community Code Relating to Medicinal Products for Human Use, As Regards the Prevention of the Entry Into the Legal Supply Chain of Falsified Medicinal Products, 2011/62/EU, 1 July 2011
169 Medicines and Healthcare Products Regulatory Agency, *Disapplication of Falsified Medicines Directive Safety Features: Requirements for Parallel Imports*, 3 June 2025
170 Q 48 (Andrew Davies)
171 Q 36 (Martin Sawer)
172 Correspondence, *DHSC and NHSE to Chair of Public Services Committee*, 19 November 2025
173 Q 48 (Andrew Davies)

safety[174] and for stock management.[175] In June 2025 the Chief Pharmacists for England, Wales, Northern Ireland and Scotland wrote to pharmaceutical companies urging them to continue to print 2D barcodes on packaging given "safety and operational benefits".[176] GS1, a not-for-profit body that sets and enables global standards in supply chains, including through producing 2D barcodes, argued that without such barcodes and accompanying systems, "medicines cannot be efficiently tracked or verified and are incompatible with advanced dispensing and stock management systems."[177]

86. Regarding stock management, we heard that 2D barcodes were necessary for some hospitals[178] and wholesalers[179] to manage their stock effectively. Leeds Teaching Hospital stated that without 2D barcoding "digital systems used in the supply chain cannot operate effectively."[180] Witnesses also highlighted concerns regarding patient safety. GS1 stated that the lack of 2D barcodes "increases the risk of counterfeit and falsified medicines entering the supply chain".[181]

87. While they were supportive of reintroducing 2D barcodes, Alliance Healthcare noted that this would require "significant investment" from all stakeholders. They also noted that using such a system would require medicines to be scanned and information uploaded throughout the entire supply chain, noting this would slow "the supply of product to allow such management" and would require regulatory change.[182]

88. When asked about 2D barcoding, the Minister for Health Innovation and Safety stated that "it is not only about the barcodes; it is about how the information would then be shared by what are, in essence, very individual businesses".[183]

Effectiveness of shortage prediction

89. We heard mixed reports of how effectively DHSC could effectively identify potential shortages. Professor Kostas Selviaridis stated that "the Government's ability to accurately predict and prevent shortages remains rather limited", noting that multiple advanced healthcare systems had this issue.[184] Pharmaceutical company Blockchain Pharma Limited argued that "the NHS does not have stock availability" meaning shortage predictions "can be inaccurate" even after supply issues were reported.[185] Medicines manufacturer Orion Pharma noted that the DaSH portal reporting does not include or apply to generic medicines, meaning a shortage of these could "come without warning".[186]

174 Supplementary written evidence from CCA (MED0050)
175 Q 36 (Martin Sawer, James Davies), Q 48 (Andrew Davies, Richard Bowers), written evidence from Leeds Teaching Hospitals NHS Trust (MED0008), GS1 UK (MED0047); correspondence, *Community Pharmacy England to Public Services Committee*, 11 November 2025
176 Correspondence, *Chief Pharmaceutical Officer for Wales, Chief Pharmaceutical Officer for Northern Ireland, Chief Pharmaceutical Officer for Scotland and Chief Pharmaceutical Officer for England to Pharmaceutical Companies Marketing Medicines Within the UK*, 17 June 2025
177 Written evidence from GS1 (MED0047)
178 Written evidence from Leeds Teaching Hospitals NHS Trusts (MED0008)
179 Q 36 (Martin Sawer)
180 Written evidence from Leeds Teaching Hospitals NHS Trusts (MED0008)
181 Written evidence from GS1 (MED0047)
182 Written evidence from Alliance Healthcare (MED0044)
183 Q 91 (Dr Zubir Ahmed MP)
184 Written evidence from Professor Kostas Selviaridis (MED0013)
185 Written evidence from Blockchain Pharma Limited (MED0023)
186 Written evidence from Orion Pharma (MED0012)

90. One key issue identified was the way information was, or was not, shared. Dr Vann Yaroson stated that "everybody has different pockets of data and no-one is talking to each other. The inability to use real-time data to predict when a shortage happens is a problem." She went on to suggest that better information sharing, such as demand information held by GPs and pharmacies, could improve demand prediction and by extension shortage prediction.[187]

91. **Despite a range of stakeholder engagement and reporting mechanisms, the DHSC has at best an incomplete picture of medicines stocks and shortages in the UK, with serious gaps in its understanding of primary care stock levels and manufacturer stock situations. This makes it challenging to predict, identify and respond to medicine shortages, and to forecast demand for medicines.**

92. ***The DHSC should take steps to improve its own understanding of real-time stock availability and visibility of medicines across the supply chain, including primary care supply chains.***

93. ***The DHSC should strengthen its engagement with manufacturers and wholesalers. This should include:***

- ***Mandating greater information sharing regarding stock levels relating to critical medicines so that the DHSC can better judge demand and shortage risks.***
- ***Reviewing the use of sanctions where reporting requirements are not met, including requirements regarding medicine supply issues alongside the wider stock level information. We note the DHSC's plans to review the use of sanctions regarding supply issues where manufacturers do not share information regarding supply issues within appropriate timeframes.***
- ***Exploring what further information it could share with manufacturers and suppliers, including demand forecasts, medicines usage information, and information about supply issues that the DHSC has identified.***
- ***Working with NICE and the MHRA to explore how information regarding potential and actual regulatory change and prescribing guidance could be more effectively shared with supply chain stakeholders.***

94. ***The DHSC should accelerate the digitisation of medicine supply chains, building on the strong work already conducted in secondary care. A digitised system should enable stakeholders across the supply chain to access accurate, real-time information about current and predicted stock availability, and take appropriate actions. As part of this work, the Government should mandate the use of 2D barcodes for medicines, considering both how this would support effective stock management.***

187 Q 8 (Dr Emilia Vann Yaroson)

CHAPTER 4: RESPONDING TO SHORTAGES

95. Once the DHSC has become aware of a supply issue, they "complete a thorough risk assessment of the severity of the issue."[188] The DHSC assign a tier to the shortage, ranging from Tier 1 (low impact) to Tier 4 (critical). Tiering decisions are based on the patient safety impact, alternative sources of the medication and availability of substitute medicines or treatments (and associated risks with such alternatives).[189] There are a range of actions DHSC may then take.

96. DHSC may increase communication with manufacturers, wholesalers and pharmacies, for example providing additional information about potential shortages so manufacturers can scale up production in response and pharmacies may anticipate disruptions.[190] Orion Pharma suggested that this was effectively conducted during HRT shortages,[191] and as noted in Chapter 2, this resulted in Besins significantly increasing the manufacture of HRT to meet patient demand.

97. The Medicines and Healthcare products Regulatory Agency (MHRA) may take action to improve access to medicines, such as through granting temporary exemptions to labelling requirements, providing advice to companies or expediting regulatory approval procedures for critical products.[192]

98. DHSC may also take steps to ration or preserve medicine stock, such as by adding a medicine to a restricted export list.[193] Manufacturers are also able to introduce quotas limiting the amount of medication that can be sold by a wholesaler or given in a single prescription to "ensure fair distribution of medicines when out of the ordinary demand exceeds supply".[194]

99. The Government can also take steps to support the NHS and community pharmacies. When needed DHSC issues Medicine Supply Notifications (MSNs), which notify the wider NHS of potential supply issues and provide guidance on how to manage patients while there is a supply disruption. These are available to NHS healthcare professionals.[195] Information regarding shortages is communicated via the Medicines Supply Tool, which is operated by the NHS Specialist Pharmacy Service.[196]

100. Considering community pharmacies specifically, DHSC may issue Serious Shortage Protocols (SSPs), which give pharmacists the power to substitute specific medications in place of a prescribed medicine in short supply. These

188 Written Answer, HL11921, Session 2024–25
189 For a more detailed breakdown of the tier criteria, see appendix A of NHS England: A guide to the systems and processes for managing medicines supply issues in England, NHS England, *A Guide to the Systems and Processes for Managing Medicines Supply Issues in England*, 27 March 2025
190 Written evidence from the Association of the British Pharmaceutical Industry (ABPI) (MED0016)
191 Written evidence from Orion Pharma (MED0012)
192 Written evidence from the Association of the British Pharmaceutical Industry (ABPI) (MED0016)
193 Written evidence from Health Innovation Wessex (MED0002)
194 Association of the British Pharmaceutical Industry (ABPI), British Association of Pharmaceutical Wholesalers (BAPW), British Medical Association (BMA), Department of Health (DH), Dispensing Doctors' Association (DDA), Ethical Medicines Industry Group, General Pharmaceutical Council, Medicines and Healthcare Products Regulatory Agency (MHRA), National Pharmacy Association (NPA), Pharmaceutical Services Negotiating Committee (PSNC), Royal Pharmaceutical Society, *Best Practice for Ensuring the Efficient Supply and Distribution of Medicines to Patients*, January 2013, [accessed 27 January 2026; written evidence from iethico (MED0026)
195 Department of Health and Social Care (DHSC), *Managing a Robust and Resilient Supply of Medicines: Data Pack*, 11 August 2025
196 NHS Specialist Pharmacy Services, *Tools*, [accessed 14 January 2026]

modifications may include substituting the dosage or strength of the same medication, the amount of medication, or prescribing a different medication intended to have the same or similar effect.[197]

101. When community pharmacies are unable to source a medicine at or below the Drug Tariff rate, DHSC may grant a "price concession" where pharmacies are instead reimbursed at the market rate. Community Pharmacy England report that there has been significant increase in the use of concessions, and that "as of 2025 there may typically be 100+ medicines a month affected", increasing the cost of medicine reimbursement to the NHS.[198] Price concessions are typically announced at the end of the calendar month, and apply to that month.[199] They are usually secured when community pharmacies report that they have to buy medicines above the reimbursement rate to Community Pharmacy England, who then negotiate a concession with DHSC.[200]

102. Outside of actions from national government, hospitals may make "mutual aid" arrangements to share medicines,[201] and individual manufacturers or wholesalers may have their own resilience processes or shortage protocols.

Problems with shortage management

103. We heard a number of concerns regarding the ways DHSC responds to shortages.

104. A key concern was that information was not communicated to pharmacies or hospitals at all, or was not communicated in a timely manner, meaning pharmacies[202] and hospitals[203] were not forewarned of shortages. Community Pharmacy England shared that "often, the first time that pharmacies are aware of stock issues is when an order fails to arrive from the wholesaler"[204] and that currently slow information sharing means pharmacies are "left to manage shortages for weeks before central guidance is published".[205]

105. A similar picture can be seen in secondary care, with Richard Bowers stating that:

> "Unfortunately, we find out about two-thirds of the shortages that we experience in our hospital when stock does not arrive. Patients find that astonishing when you say it to them, but we have no idea unless stock does not arrive and we then start to ask questions. We may find out that it will be back in a couple of days or we may find out that it is out until next summer; that makes it incredibly difficult to plan."[206]

106. The Company Chemists' Association noted that communications may miss key stakeholders, noting that MSNs are "not integrated into GP prescribing

197 Community Pharmacy England, *Serious shortage Protocols (SSPs)*, 22 December 2025; written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
198 Written evidence from Community Pharmacy England (MED0038)
199 Written evidence from iethico (MED0026)
200 Written evidence from the National Pharmacy Association (MED0027)
201 Written evidence from Leeds Teaching Hospitals NHS Trusts (MED0008); iethico (MED0026)
202 Written evidence from the National Pharmacy Association (MED0027); Dr Emilian Vann Yaroson et al (MED0028)
203 Written evidence from Urology at Guys' and St Thomas' NHS Trust (MED0039)
204 Correspondence, *Community Pharmacy England to Chair of Public Services Committee*, 11 November 2025
205 Written evidence from Community Pharmacy England (MED0038)
206 Q 47 (Richard Bowers)

software", meaning GPs may not be aware of supply issues when making prescribing decisions.[207]

107. The British Society for Rheumatology (BSR) noted that "central bodies want to avoid the risk of sensationalising supply problems",[208] which could worsen or cause shortages due to pharmacies, hospitals or patients stockpiling medicines or increasing medicine orders enough to cause a bullwhip effect.[209] However, BSR argued that "a better balance must be found" regarding managing communications and sharing "essential information with NHS teams".[210]

108. Similar concerns were raised regarding the timeliness of price concessions. iethico argued that the delay between Community Pharmacy England beginning negotiations with DHSC regarding concessions, and those concessions being implemented, led to medicines being unavailable.[211] The National Pharmacy Association stated that such delays meant pharmacies "must purchase medicines at inflated prices without knowing whether they will be adequately reimbursed" as the price concession may not be granted, or may be granted at a lower rate than the pharmacy purchased the medicine for.[212] This uncertainty regarding concessions creates a disincentive for community pharmacies to purchase medicines when the market price exceeds the compensation rate, meaning patients will need to get their medicines elsewhere.

109. Manufacturers also require up-to-date information regarding shortages if DHSC expects them to increase supply when another manufacturer experiences a supply issue.[213] However, biotech company AbbVie noted that manufacturers "will want to manage any issues before making any shortage risk public" and noted that even if they shared information with DHSC, it was "not clear if the NHS/DHSC are able to share this quickly with alternative suppliers".[214]

110. DHSC stated that they are committed to "improving communications and guidance to different sectors", including through publishing guidance for patients, pharmacies and GPs on how to respond to shortages, providing prescribers with information on shortages, and improving the Medicines Supply Tool.[215] In November 2025, the DHSC published leaflets and posters for patients, GPs and community pharmacies about what to do when shortages occur.[216]

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207 Written evidence from the Company Chemists' Association (CCA) (MED0036)
208 Written evidence from British Society for Rheumatology (BSR) (MED0014)
209 The bullwhip effect is when small demand changes at the end of a supply chain has a significant impact at the manufacturer/supplier end, due to the changes being amplified throughout the supply chain. In this context, that could be many community pharmacies slightly increasing their orders of a medication due to concerns about shortages, leading to demand becoming greater than supply and causing a shortage.
210 Written evidence from British Society for Rheumatology (BSR) (MED0014)
211 Written evidence from iethico (MED0026)
212 Written evidence from the National Pharmacy Association (MED0027)
213 Written evidence from Dr Natasha Campling and Professor Sue Latter (MED0004)
214 Written evidence from AbbVie Inc (MED0025)
215 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
216 Community Pharmacy England, *DHSC Publishes Medicines Shortages Leaflets and Posters*, 26 November 2025

111. Many of the issues raised above, as well as funding for pharmacies, and the integration between community pharmacies and NHS services is governed by the Community Pharmacy Contractual Framework, also known as the Community Pharmacy Agreement.[217] This is a key mechanism for the DHSC and NHS to provide support to independent community pharmacies who undertake NHS contracts. This agreement is due to be renewed in 2026.[218]

Substituting prescription medicines during shortages and Serious Shortage Protocols

112. As noted above, DHSC may issue Serious Shortage Protocols (SSPs) which enable pharmacies to make specific substitutions when a prescribed medicine is in shortage.

113. The Care Quality Commission (CQC) were critical of their limited use and scope, noting that in September 2025 "only three different medicines [were] covered by active SSPs", arguing that this "significantly reduces the potential of this service to make any meaningful impact".[219] Community Pharmacy England were also critical, describing SSPs as "cumbersome, clunky and hard to operate" as well as "slow to be implemented", and called for a review of SSPs.[220]

114. Currently, pharmacists cannot prescribe an alternative dose of a prescribed medication, and cannot substitute prescribed medications, unless a SSP has been issued. As noted above, there are situations where pharmacies experience or identify shortages before actions such as issuing SSPs are taken, and this limitation means they are unable to respond other than by sending the patient to another community or hospital pharmacy to get medication or sending them back to the GP for an alternative prescription. The National Pharmacy Association stated that a survey of 500 pharmacies found that all 500 reported "being unable to dispense a medicine at least once daily" and called for greater flexibility in pharmacy practice.[221]

115. Andrew Davies stated this problem does not typically arise in hospitals, due to hospitals having "direct access" to the relevant clinicians or "pharmacists with the skills to make those changes", creating "a lot more flexibility".[222] However, Amandeep Doll, Director of England at the Royal Pharmaceutical Society, noted such changes still had an "opportunity cost" as time spent mitigating shortages, such as finding the alternative prescription and communicating information regarding different teams, "could be spent on looking at other patients".[223]

116. Community Pharmacy England provided an example of the impact of community pharmacies being unable to make such substitutions, with the case of Ava Hodgkinson, outlined in Box 4.

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217 Department of Health and Social Care (DHSC) and NHS England (NHSE), *Community Pharmacy Contractual Framework: 2019 to 2024*, 12 May 2023; Department of Health and Social Care (DHSC), *Community Pharmacy Contractual Framework: 2024 to 2025 and 2025 to 2026*, 31 March 2025

218 Department of Health and Social Care (DHSC), *Community Pharmacy Contractual Framework: 2024 to 2025 and 2025 to 2026*, 31 March 2025

219 Correspondence, *Care Quality Commission to Chair of Public Services Committee*, 23 September 2025

220 Correspondence, *Community Pharmacy England to Chair of Public Services Committee*, 11 November 2025

221 Written evidence from the National Pharmacy Association (MED0027)

222 Q 46 (Andrew Davies)

223 Q 46 (Amandeep Doll)

Box 4: The death of Ava Hodgkinson

Community Pharmacy England provided a summary of issues leading to the death of Ava Hodgkinson:

"An outbreak of Streptococcus A infection spread in the winter of 2022/23 increased demand for liquid penicillin, specifically amoxicillin. With reduced product in the supply chain and increased demand there was an acute shortage of amoxicillin liquid across Europe.

This had catastrophic consequences for Ava Hodgkinson who tragically died on 14 December 2022, at Ormskirk District General Hospital in Lancashire. In evidence at the inquest, it was explained that Ava had seen her GP who had prescribed amoxicillin with a dose of 250mg/5ml. The pharmacy did not have this strength in stock due to the nationwide shortage of the medication.

The pharmacy did have a different strength of amoxicillin (125mg/5ml) in stock but could not issue this as restrictions currently in place prevent a pharmacist issuing any different strength of medication without an amended prescription, even where smaller doses of the medicine can be added together to enable the prescribed dose to be administered. As suggested by the coroner, Ava's parents could have been instructed to provide 10ml enabling the same dose of antibiotics to be provided. As a result, Ava was delayed in accessing the lifesaving antibiotics that she required. Ava died due to overwhelming sepsis caused by Streptococcus A infection.

The CPE went on to state that the relevant SSP, which would have allowed the pharmacy to give Ava the medication she needed, arrived too late."[224]

Source: Courts and Tribunal Judiciary, Ava Hodgkinson: Prevention of Future Deaths Report - Courts and Tribunals Judiciary, 13 January 2025, and correspondence, Letter from Community Pharmacy England to Baroness Morris of Yardley, Chair, Public Services Committee, 11 November 2025

117. The Government has expressed concerns about giving community pharmacies these powers, arguing that it could lead to "knock on" shortages due to community pharmacies not having a strong understanding of wider supply chain issues at play,[225] and potentially not understanding why a particular medicine had been prescribed.[226] The National Pharmacy Association rejected the idea that pharmacist substitutions would lead to more shortages, arguing that sourcing a different prescription from the GP has the same impact on the supply chain, and also places greater pressures on GPs and pharmacists..[227] The Company Chemists' Association argued that even when SSPs are used, these can "lead to a domino effect of shortages, with alternatives then going into short supply due to an increase of demand", and that pharmacist flexibilities would ensure a more diverse range of substitutions, avoiding such shortages.[228]

118. Richard Bowers noted that community pharmacies would have significantly less information when making decisions about medicines procurement than secondary care providers, saying in secondary care "decision-making and

224 Correspondence, Community Pharmacy England to Public Services Committee, 11 November 2025; Courts and Tribunal Judiciary, Ava Hodgkinson: Prevention of Future Deaths Report, 13 January 2025

225 Department of Health and Social Care (DHSC), Enabling Pharmacist Flexibilities when Dispensing Medicines, 18 September 2025; Q 187 (David Webb)

226 HC Written answer, 14539, Session 2023–24; Health and Social Care Committee, *Work of the Department 2023–24, HC 384,* 25 March 2024, Q 70 (Sir Chris Wormald)

227 Written evidence from the National Pharmacy Association (MED0027)

228 Written evidence from the Company Chemists Association (CCA) (MED0036)

intelligence on the supply chain, is at a greater level than what a community pharmacy can access" due to access and capacity issues, and said he would "support anything that could be done to help them gain that information."[229]

119. In September 2025, the DHSC published a consultation on enabling "pharmacist flexibilities" when dispensing medicines the pharmacy cannot obtain, in cases where there is urgent need. The proposed changes are limited to changes in strength or formulation, and do not include enabling pharmacists to prescribe a different medicine altogether, or a generic version of a branded medicine. They also would not be applicable when there is "a known serious shortage of the medicine prescribed or the alternative".[230] The Royal Pharmaceutical Society welcomed these proposals but criticised the restrictions built into the proposed flexibility, noting opportunities for greater substitution powers where branded generics had been prescribed, and suggested that too many barriers to pharmacist flexibilities would create "a risk that pharmacists may not fully engage with the proposals."[231]

120. Alongside this, some pharmacists are qualified to prescribe specific medicines within their competence (independent prescribers), while others have the same prescribing powers as GPs (supplementary prescribers).[232] Due to changes in pharmacist education and training, from September 2026 newly qualified pharmacists will be independent prescribers.[233] However, pharmacists cannot make changes to a prescription made by a GP. It is not clear to the Committee how these prescribing powers would interact with rules relating to substitution of medicines prescribed by GPs.

121. ***It is unacceptable that community pharmacies and hospitals may only discover medicines shortages when they are directly affected, even where DHSC may have been aware of supply issues. The DHSC should take steps to improve communications regarding shortages through providing information in a more timely manner to pharmacies and hospitals, and ensuring prescribers and secondary care have an up-to-date understanding of the current medicines supply situation and relevant guidance. This should include steps to improve transparency in supply chains, alongside improvements to mechanisms such as SSPs, the Medicines Supply Tool, and Medicines Shortages Notifications.***

122. ***The Committee welcomes the Government consultation on giving pharmacists further powers to provide substitutions in limited circumstances when medicines are in shortage, and we are mindful of the introduction of prescribing pharmacists. To support these new powers and ensure pharmacists do not cause knock-on shortages, pharmacists should be given improved access to relevant sources of information to inform substitution decision-making, including relevant supply chain and patient information. Alongside this, the Government should take steps to increase the level of stock***

229 Q 50 (Richard Bowers)
230 Department of Health and Social Care, *Enabling Pharmacists Flexibilities when Dispensing Medicines*, 18 September 2025
231 Royal Pharmaceutical Society, Department of Health and Social Care (DHSC), *Enabling Pharmacist Flexibilities when Dispensing Medicines*, 18 September 2025
232 NHS Business Services Authority, *What Can a Pharmacist Prescriber Prescribe?* [accessed 22 January 2026]
233 NHS Business Services Authority, *NHS Community Pharmacy Independent Prescribing Pathfinder Programme* [accessed 15 January 2026]

information community pharmacies share with local or national NHS bodies, and provide support for them to do so. This should be included in the next Community Pharmacy Agreement, due to take effect from April 2026.

CHAPTER 5: DEVELOPING RESILIENCE

123. In this chapter we focus on NHS procurement processes for medicines in the UK, as well as pricing, and how that affects resilience of supply. We also consider Government regulation and its impact on supply, while finishing with an examination of stockpiling as a means to stabilise supply of medicines.

Procurement

124. Medicines procurement is, in primary care, a decentralised operation. Each pharmacy purchases their medicines independently through preferred wholesalers. As noted in Chapter 3, once medicine is dispensed to a patient following an NHS prescription, pharmacists can receive a reimbursement from the NHS at the Drug Tariff rate.[234] For some medicines, or those dispensed in secondary care, commercial arrangements govern procurement through the Medicines Value and Access Directorate in NHS England, with medicine procured through tenders.[235]

125. In the UK, the Government and the NHS have sought to procure medicines at a low price through negotiation, leading to "some of the lowest [prices] in the developed world" which has been "widely regarded as positive for the public purse".[236] As outlined by the Association of the British Pharmaceutical Industry (ABPI), there has been a focus in the NHS on lowest-price procurement, with less focus of supply resilience, which could "risk future shortages and generate erratic demand signals for manufacturers."[237] This, argued the National Clinical Homecare Association, can lead to suppliers being awarded contracts "without sufficient consideration of whether they can guarantee supply".[238] As a result, says James Davies, they are therefore not taking into account resilience of future supply.[239]

126. The Government has demonstrated good practice in this area already where it has identified a need for resilience of particular medicines—for example, in the case of RNA vaccines following the COVID-19 Pandemic. Working with Moderna, the Government set up a "strategic partnership" in which Moderna will onshore their end-to-end supply chain, research and development through a technology centre, as well as stockpile raw materials for millions of doses.[240] In return, the Government will guarantee payment for the millions of doses over the course of the 10 year contract as this is a "quid pro quo" for both the manufacturer and the Government.[241]

127. We heard from the Government that:

> "NHSE is currently moving to a value-based procurement approach following a successful trial in order to reward and recognise strong supply chain and procurement performances versus a price only approach, which now includes suppliers holding buffer stock alongside procurement and supply chain Key Performance Indicators performance. This means

234 NHS Business Services Authority, *Drug Tariff*, last accessed 14 January 2026
235 NHS England, *Medicines Procurement and Supply Chain*, last accessed 14 January 2026
236 Written evidence from Royal Pharmaceutical Society (MED0015)
237 Written evidence from Association of the British Pharmaceutical Industry (ABPI) (MED0016); Q 38 (James Davies)
238 Written evidence from National Clinical Homecare Association (MED0019)
239 Q 38 (James Davies)
240 Q 57 (Darius Hughes)
241 Q 58 (Darius Hughes)

that suppliers are more likely to be selected for contracts if they operate a well-managed buffer stock programme that has sufficient reporting, compliance and utilisation."[242]

128. The DHSC said that their move to Value-Based Procurement (VBP) was about "recognising that value [for money] remains important but so does supply resilience."[243] It will give the DHSC powers to incentivise resilience through "rewarding strong performing suppliers" as buffer stocks will be "an important factor in assessing supplier performance and could not only lead to penalties for non-complying suppliers, but also influence the award of future framework agreements."[244]

129. Some stakeholders have called for VBP in primary care medicine procurement, as it is being introduced in secondary care.[245] Some stakeholders suggested that VBP has already "been successful in recognising and rewarding the value of stock availability" where rolled out in secondary care.[246] VBP should ensure that the performance of a supplier previously, in terms of their ability to continuously supply, would impact tender award criteria, rather than just the lowest price.[247] Dr Emilia Vann Yaroson suggested that the NHS was always looking for cost efficiency rather than resilience, which left the UK with "limited manufacturers in the economy" and left the country at risk.[248]

130. The move to VBP by the NHS was welcomed by a number of stakeholders,[249] as it should "in theory ensure a more robust and resilient supply market rather than one based on a race to the bottom in terms of price."[250] It will also, according to Mark Samuels, Chief Executive of Medicines UK, "incentivise and reward companies that are good at supplying secondary care; the companies that have not historically been good will be penalised. Market forces will work and the more reliable companies will, of course, win more tenders, which is to be welcomed."[251] While VBP has begun its rollout in secondary care, Professor Kostas Selviaridis has said "there is still very limited evidence of its use on the ground, and its operationalisation remains ambiguous."[252]

131. Stakeholders also highlighted that NHS tenders do not adequately account for the lead-in time required to provide medicines.[253] Stakeholders argued that NHS contracts with insufficient lead time for contract awards "can lead to supply gaps".[254] The Royal Pharmaceutical Society said that "tender management should also support supply resilience by providing sufficient lead time for manufacturers to increase production."[255] Medicines UK told the

242 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
243 Q 31 (Claire Foreman)
244 Correspondence, *DHSC and NHSE to Public Services Committee*, 19 November 2025
245 Q 38 (James Davies)
246 Supplementary written evidence from the Company Chemists Association (CCA) (MED0050)
247 Written evidence from Medicines UK (MED0029)
248 Q 1 (Dr Emilia Vann Yaroson)
249 Written evidence from Professor Kostas Selviaridis (MED0013), Association of the British Pharmaceutical Industry (ABPI) (MED0016) and Medicines UK (MED0029); Q 73 (Mark Samuels)
250 Written evidence from Medicines UK (MED0029)
251 Q 73 (Mark Samuels)
252 Written evidence from Professor Kostas Selviaridis (MED0013)
253 Written evidence from Medicines UK (MED0029), Besins Healthcare UK Limited (MED0033) and Sandoz UK (MED0040)
254 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
255 Written evidence from Royal Pharmaceutical Society (MED0015)

Committee that, on average, it takes five and a half months to manufacture a product but manufacturers are sometimes expected to provide stock much earlier during a new tender.[256]

132. The Department of Health and Social Care suggested that long lead times in supply chains is one of the leading root causes of supply shortages.[257] Stakeholders recognised that NHS England has improved its record on lead times in contracts, but suggested that the NHS Medicines Value and Access team who run these tenders, should not lose resources during the NHSE and DHSC merger, as this would be "highly detrimental to both secondary care in the NHS and the industry."[258]

Pricing

133. As outlined in Chapter 4, in primary care the prices paid by the NHS for medicines are set by the DHSC in the Drug Tariff.[259] Stakeholders told us that the Drug Tariff price has led to generic medicine prices becoming so low that "it no longer becomes desirable for some manufacturers to supply into this market",[260] with a third of generic medicines costing less than £1 for a month's supply.[261] We heard that this has led manufacturers and suppliers to prioritise other countries,[262] which can increase the risk of medicine shortages in the UK.[263] It has also led to medicines being "available in other countries that are not launched in the UK for reasons of UK pricing."[264] The concern around price was not unique to manufacturers[265] but included clinicians,[266] retailers,[267] research organisations,[268] and representative bodies.[269]

134. As noted in Chapter 4, low Drug Tariff rates for medicines may lead to pharmacies purchasing medicines at a loss, in the hope of a price concession from DHSC. Alternatively, pharmacies may simply choose not to purchase medicines when they are more expensive than the Drug Tariff rate. The Company Chemists' Association argued that: "Low Drug Tariff prices are creating a vicious cycle of avoidable shortages and the NHS paying more for medicines."[270]

256 Written evidence from Healthcare Distribution Association (HDA) (MED0021)and Medicines UK (MED0029); Q 73 (Mark Samuels)
257 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
258 Q 73 (Mark Samuels)
259 Written evidence from Company Chemists' Association (CCA) (MED0036)
260 Written evidence from Pharmacy2U (MED0035) and Company Chemists' Association (CCA) (MED0036)
261 Written evidence from Company Chemists' Association (CCA) (MED0036)
262 Written evidence from Sciensus Pharma (MED0005), Royal Pharmaceutical Society (MED0015) and Company Chemists' Association (CCA) (MED0036)
263 Written evidence from Healthcare Distribution Association (HDA) (MED0021), Medicine UK (MED0029) and Pharmacy2U (MED0035)
264 Written evidence from Sciensus Pharma (MED0005)
265 Written evidence from Orion Pharma UK (MED0012) and Sandoz UK (MED0040)
266 Written evidence from Leeds Teaching Hospitals NHS Trust (MED0008),
267 Written evidence from Pharmacy2U (MED0035) and Alliance Healthcare (MED0044); Q 38 (Martin Sawer)
268 Written evidence from Office of Health Economics (MED0011)
269 Written evidence from Royal Pharmaceutical Society (MED0015), Association of the British Pharmaceutical Industry (ABPI) (MED0016), National Clinical Homecare Association (MED0019), National Pharmacy Association (MED0027), Medicines UK (MED0029) and Company Chemists' Association (CCA) (MED0036) Q 38 (Malcolm Harrison)
270 Written evidence from Company Chemists' Association (CCA) (MED0036)

135. Speaking to the Committee, the Minister for Health Innovation and Safety said that the UK is an "attractive" market, and that despite concern around pricing from manufacturers, the UK is a "valuable market to them".[271] The Government said that "price does not regularly come through as a specific reason for a shortage in the way that it is reported to us."[272] However, they acknowledged that: "Suppliers will have felt in the past that a tender's primary criterion was price. The move to value-based procurement is about recognising that value remains important but so does supply resilience."[273]

136. **While the Government's current approach to the medicines market has resulted in low-cost medicines for the UK, this leaves little room or incentive to develop resilient supply of medicines, resulting in a fragile supply chain. The Government has to understand the value of resilience and decide how much it is willing to work with industry to achieve this. We welcome that in some areas, such as vaccine production, this has already taken place.**

137. ***We welcome the steps the DHSC has taken to better consider the resilience and sustainability of supply chains through value-based procurement, however we believe that the DHSC should go further and place greater emphasis upon resilience in tendering processes, contracting arrangements and performance management.***

138. ***DHSC should review tendering processes for medicines, and should include realistic implementation periods or manufacture 'lead in' time in contracts so that health providers and manufacturers are able to accurately predict when medicine supply will begin.***

Regulation

Licensing

139. We heard that, in general, the licensing for medicines in the UK is very slow compared to other countries, potentially reducing the availability of alternative medicines during a shortage.[274] Stakeholders told us that licences from Government which allow them to operate in the UK are impacting on their resilience.[275] Licences required for managing a medicine supply chain are granted by multiple organisations. Here we will focus on controlled drug licences issued by the Home Office, and licences for clinical trial and authorisation of medicines in the UK, issued by the MHRA.

Home Office

140. The Home Office issues controlled drug licences for companies that "manufacture, produce or supply controlled drugs in England, Wales or Scotland".[276] Controlled drugs are medicines subject to controls due to their

271 Q 100 (Dr Zubir Hamed MP)
272 Q 24 (David Simmons)
273 Q 31 (Claire Foreman)
274 Written evidence from Orion Pharma UK (MED0012)
275 Written evidence from see also written evidence from PAGB (MED009), Healthcare Distribution Association (HDA) (MED0021), Medicines UK (MED0029) and supplementary written evidence from the Healthcare Distribution Association (HDA) (MED0049); Q 13 (Dr Keith Ridge CBE), Q 38 (Martin Sawer),
276 Home Office, *Controlled Drugs: Domestic Licences*, 11 July 2025; written evidence from Medicines UK (MED0029)

potential for misuse, dependence, or harm if used incorrectly[277]—many of which are regulated under the Misuse of Drugs Act 1971[278] and the Misuse of Drugs Regulation 2001.[279] Examples of these are "diamorphine that are used in a wide variety of clinical treatments, for example, for the relief of acute and chronic pain, end-of-life treatments or as part of the treatment of substance misuse. Other medicines such as anxiolytics, sleeping pills, steroids and growth hormones are also designated as CDs".[280] Licences are provided by the Home Office, and sometimes require "compliance visits" to ensure a company premises is complying with controlled drug regulations.[281] Regulations ensure that only appropriate individuals handle controlled drugs, that they are stored securely, and are handled in line with strict operating procedures.[282] These licences are crucial for manufacturers and wholesalers to distribute these, often vital, medications through the supply chain.

141. The Healthcare Distribution Association told us that: "Delays, inconsistencies, inefficiencies, and a lack of transparent dialogue surrounding the processes of issuing and renewal of CD [controlled drug] licences by the Home Office are another significant cause of medicine supply chain issues",[283] with Martin Sawer saying that "the Home Office is an awful organisation to deal with, with controlled drug licences".[284] Wholesalers have been relying on emails from the Home Office to verify their licence rather than being issued with official documentation, or have been unable to have their premises inspected due to lack of resource in the Home Office.[285]

142. The delay in renewal of licences means that some manufacturers will not supply to wholesalers who only possess an email rather than an official certificate, and other wholesalers have had to shut premises and distribute from alternative warehouses due to renewal delays—all of which add cost to business and reduce the resilience of medicine supply.[286]

143. We were told that the Home Office had a "marked lack of capacity to handle controlled drugs" which created longer waiting times for licences, "increasing the risk of companies not having stock to supply".[287]

144. **It is unacceptable that Home Office administrative problems and resourcing are leading to medicine supply issues.**

145. ***DHSC should work with the Home Office and MHRA to address licence renewal and inspection backlogs. If improvements are not seen within six months of this report's publication, the Cabinet Office should review where responsibility for licences for controlled drugs should reside.***

277 National Institute for Health and Care Excellence, *Controlled Drugs: Safe Use and Management*, 12 April 2016
278 Misuse of Drugs Act 1971
279 Misuse of Drugs Regulations 2001
280 Department of Health and Social Care (DHSC), *Controlled Drugs (Supervision of Management and use) regulations 2013: information about the Regulations*, 25 February 2013
281 Home Office, *Controlled Drugs: Domestic Licences*, 11 July 2025
282 Department of Health and Social Care (DHSC), *Controlled Drugs (Supervision of Management and use) regulations 2013: information about the Regulations*, 25 February 2013
283 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
284 Q 38 (Martin Sawer)
285 Q 38 (Martin Sawer)
286 Written evidence from Healthcare Distribution Association (HDA) (MED0021); supplementary written evidence from Healthcare Distribution Association (HDA) (MED0049); Q 38 (Martin Sawer)
287 Written evidence from Medicines UK (MED0029)

MHRA

146. The Medicines and Healthcare products Regulatory Agency (MHRA) are the regulator of medicines and medicines devices, with responsibilities including to "secure [a] safe supply chain for medicines".[288] Some stakeholders argued the MHRA's efficacy may be hindering medicine supply resilience. We heard that the MHRA had experienced delays in providing licences for medicines,[289] or amending licences in cases where alternative ingredients were needed when shortages occurred.[290] PAGB told us that recent MHRA backlogs resulted in approvals which led to "supply issues, which would have otherwise been avoided".[291]

147. Darius Hughes from Moderna noted that the MHRA were responding to this,[292] while the Healthcare Distribution Association said there had been "commendable progress recently".[293] However, we were told that the MHRA lacked resource[294] having lost talent, and that it had up to 50% fewer assessors since the pandemic.[295] PAGB called for the MHRA to be adequately resourced and funded "to always meet statutory timelines".[296]

148. The Department for Health and Social Care told us that when shortages occur, they can be mitigated by MHRA "expediting regulatory review" which can "speed up reviews of variations that can assist in securing additional supply quickly."[297] The Department also said that "the MHRA continues to assess medicines applications well within statutory timelines and will always prioritise applications according to public health need."[298] The MHRA also said it "expedites its review of products that are known to have supply issues" which can be processed "in as little as two working days."[299]

Harmonisation

149. We heard that, since Brexit, the divergence between UK and EU regulators has led to slower approvals processes for new medicines and delays in manufacturers' access to the UK, which leaves the UK at greater risk of medicine shortage.[300] Organisations told us that misalignment with other jurisdictions made it "more challenging to access alternative inventory in the event of a shortage within the UK".[301] We heard that different regulatory agencies often ask for different criteria and information when making decisions, and as such, manufacturers need multiple dossiers for each jurisdiction, which adds complexity.[302] We were told greater international

288 Medicines and Healthcare Products Regulatory Agency (MHRA), *About Us*, last accessed 14 January 2026
289 Written evidence from Medicines UK (MED0029)
290 Written evidence from Besins Healthcare UK Limited (MED0033)
291 Written evidence from PAGB (MED0009)
292 Q 60 (Darius Hughes)
293 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
294 Written evidence from Blockchain Pharma Limited (MED0023)
295 Q 62 (Darius Hughes)
296 Written evidence from PAGB (MED0029) and CPI (MED0034)
297 Written evidence from Department for Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
298 Written evidence from Department for Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
299 Written evidence from Department for Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
300 Written evidence from iethico (MED0026)
301 Written evidence from AbbVie Inc (MED0025)
302 Q 62 (Darius Hughes)

cooperation would allow for "cross-border reallocation of supplies during shortages".[303] We were told that the MHRA are looking at ways to align with other jurisdictions.[304]

150. Digital pharmaceutical company Vial suggested that "comprehensive Mutual Recognition Agreements (MRAs) between like-minded nations with similar high standards for clinical approvals and regulatory reliance would substantially reduce duplication, minimise delays, and significantly speed up access to alternatives during critical shortages".[305] This was echoed by the Office of Health Economics which suggested that reliance could be built with MRAs to "reduce barriers to market entry".[306] Medicines UK suggested that the UK could seek an MRA with the EU via a "Joint Health Security Alliance" to ensure greater reliance in our supply chain, allowing for easier movement of medicines between allies.[307]

151. The Department of Health and Social Care said that the UK had "secured a new agreement in the EU which included a commitment to 'Safeguarding our supply chain resilience and monitoring trade diversion.'[308] The MHRA also has a parallel import licencing scheme which "allows a medicine with a full marketing authorisation in a European Economic Area (EEA) member state to be imported and marketed in the UK. A parallel import licence may only be issued to imported products where therapeutic equivalence to the cross-referenced UK licensed product is confirmed", which the Department said it could utilise to mitigate medicines shortages.[309]

152. ***We note progress made at the MHRA regarding licensing speed and parallel import licensing. While these are welcome developments, further progress should be made to speed up patients' access to medicines. DHSC should work with the MHRA to further reduce regulatory approval delay, while maintaining safe quality assurance processes. DHSC and MHRA should take steps to harmonise regulatory requirements with other countries. This should include work to develop Mutual Recognition Agreements with appropriate countries and the EU.***

Stockpiling and stockholding

153. The Department for Health and Social Care told us that the Government introduced supplier-held buffer stocks in 2022 which require suppliers to hold at least 8-weeks of buffer stock for all secondary care products on Medicines Procurement and Supply Chain frameworks.[310]. This requirement for buffer stocks only applies to medicines for secondary care (e.g. hospitals), not community pharmacies. For this section, when we talk about stockpiling, we mean the holding of stocks outside of the 8-week buffer.

303 Written evidence from Vial (MED0037)
304 Q 62 (Darius Hughes)
305 ritten evidence from Vial (MED0037)
306 Written evidence from Office of Health Economics (MED0011)
307 Written evidence from Medicines UK (MED0029)
308 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
309 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
310 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

154. We heard from some witnesses about their concern that "stockpiling is not current government policy" when it comes to ensuring resilience in medicine supply.[311] We also heard evidence from manufacturers of medicines who have suggested that "strategic stockpiles of critical medicines" should be created which could "buffer against supply shocks".[312]

155. The European Union have plans to stockpile medicines under the Critical Medicines Act.[313] Germany mandates a six-month supply stockpile at manufacturer level for specified medicines, mainly generics.[314] France, the Netherlands and Portugal all have mandates of at least two-month stocks for medicines, with Portugal increasing this to four months for critical medicines.[315] Stockpiling of medicines is also taking place in the United States, where there will be a six-month Strategic Active Pharmaceutical Ingredients Reserve for APIs.[316]

156. We have been told that as the EU begins stockpiling, it may "unintentionally reduce the UK market's attractiveness by prioritising EU supply over UK access during shortage situations".[317] Further, Medicines UK cautioned that uncoordinated stockpiling country-by-country may "reduce flexibility to respond where medicines are needed".[318] However, pharmaceutical company Vial suggested that coordinated stockpiling through international cooperation could "dramatically improve resilience".[319]

157. The UK is a member of the EU's Critical Medicines Alliance, which aims to boost medicines manufacturing, facilitate joint procurement and stock sharing among EU member states.[320] Despite this, and despite increasing moves to stockpile by the UK's closest allies, the Government told us that how they engaged with Europe on stockpiling was a "more open question". However, they identified that some previous commitments by allies to stockpile "never came to fruition."[321] Dr Ahmed, Parliamentary Under-Secretary of State at DHSC, suggested that: "Mandating, as some countries have done on the European continent, large amounts of stockpiling, to the point where it makes business unviable, has unhelpful consequences in terms of the investment present in those countries, as well as on jobs and the spin-off impacts downstream on the life sciences sector" and that "even the biggest countries in the world have found it difficult to deliver on it."[322]

311 Q 1 (Dr Keith Ridge CBE)
312 Written evidence from Besins Healthcare UK Limited (MED0033)
313 European Commission, *Critical Medicines Act*, [accessed 14 January 2026]; written evidence from Orion Pharma (MED0012), Professor Kostas Selviaridis (MED0013) and Alliance Healthcare Distribution Ltd (MED0032)
314 Q 1 (Dr Keith Ridge CBE); correspondence, *DHSC and NSHE to Chair of the Public Services Committee*, 19 November 2025
315 Medicines for Europe, *Medicine Shortages and National Stockpiling Requirements in the EU*, April 2024, last accessed 14 January 2026
316 Written evidence from Alliance Healthcare Distribution Ltd (MED0032)
317 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
318 Written evidence from Medicines UK (MED0029) and Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
319 Written evidence from Office of Health Economics (MED0011) and Vial (MED0037)
320 Written evidence from Professor Kostas Selviaridis (MED0013)
321 Q 99 (Dr Zubir Ahmed MP)
322 Q 99 (Dr Zubir Ahmed MP)

158. We heard evidence from witnesses across the supply chain who said that stockpiling can "destabilise supply chains",[323] particularly when uncoordinated.[324] Stockpiling by individuals or organisations can "worsen medicine shortages".[325]

159. Another issue with stockpiling is knowing which medicines are critical and should be stockpiled. As discussed in Chapter 6, a critical medicines list is useful.[326] Dr Martin Turner from the BioIndustry Association told us that "you cannot stockpile for all eventualities".[327] For example, Amandeep Doll told us that PERT/CREON was not considered a critical medicine until it was in a shortage,[328] at which point it caused great impact on patients.[329]

160. The Department of Health and Social Care told us that it has sought to "move away" from stockpiling as the "primary mitigation" against medicine shortages.[330] The Minister told us that "stockpiling is not an appropriate policy-level lever instrument."[331] The DHSC identified that in some circumstances stockpiles "have merits" if they are "maintained and deployable quickly", however they can "reduce flexibility in supply chains" and "lead to waste if stock is not effectively rotated".[332] As such the Government is pursuing a strategy in which stockpiling is part of a "multilayered approach", in which having a diversified supply chain allowing switching of suppliers is, they say, more resilient than stockpiling.[333]

161. The Government has previously undertaken stockpiling activities. For example, it sought a six-week supply of medicines ahead of Brexit.[334] This action also meant that the UK, incidentally, had stockpiles of critical medicines ahead of the COVID pandemic.[335] However, such buffers no longer exist and Medicines UK suggested that more thought should be given to "how the UK would fare in a crisis".[336]

162. ***The Government's approach to stockpiling vaccine resources with Moderna shows willingness to stockpile critical medications or ingredients, with the costs and associated risks of stockpiling being absorbed by the Government and taxpayer rather than medicines manufacturers. The Government should explore other medicines they could consider this approach with.***

163. ***Through its membership of the Critical Medicines Alliance and using other diplomatic channels, the Government should ensure stockpiling by partner countries and blocs is coordinated effectively to both avoid waste and mitigate impact on the UK's medicine resilience.***

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323 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
324 Written evidence from Association of British Pharmaceutical Industry (ABPI) (MED0016) and Department of Health and Socia Care (DHSC) and NHS England (NHSE) (MED0043)
325 Written evidence from Association of the British Pharmaceutical Industry (ABPI) (MED0016)
326 Q 50 (Amandeep Doll)
327 Q 74 (Dr Martin Turner)
328 Q 50 (Amandeep Doll)
329 Written evidence from Cystic Fibrosis Trust (MED0020), Blockchain Pharma Limited (MED0023), National Pharmacy Association (MED0027) and Alliance Healthcare Distribution Ltd (MED0032)
330 Q 25 (David Simmons)
331 Q 99 (Dr Zubir Ahmed MP)
332 Correspondence, *DHSC and NHSE to Chair of the Public Services Committee*, 19 November 2025
333 Q 25 (David Simmons)
334 Written Statement, HCWS1358, Session 2019–2020 see also Q 25 (David Simmons)
335 Written evidence from National Pharmacy Association (MED0027) and Medicines UK (MED0029)
336 Written evidence from Medicines UK (MED0029)

CHAPTER 6: BUILDING A MANUFACTURING BASE AND MEDICINES ALLIANCES

164. Medicine supply chains are complex. They include the manufacture of the medicine itself, alongside the manufacture and supply of the Active Pharmaceutical Ingredient (API)—the part of the medicine that has the desired medical effect[337]—and the excipients, which are substances other than the API in the medicine which may aid in the manufacturing, function, safety, delivery, taste or texture of the medicine.[338] DHSC stated that the "overwhelming majority" of medicines used in the UK "rely on some level of import, even if part of the manufacturing or packaging is done in the UK".[339] Further, the Bioindustry Association said that the medicines supply chain is "inherently global and the UK is highly reliant on overseas production; both of active pharmaceutical ingredients, excipients and other compounds".[340]

165. While these supply chains are complex, in many cases they are concentrated in particular countries—some 80% of all APIs come from China and India.[341] In some cases the treatment for a condition may appear to be resilient due to a variety of suppliers or treatment options, when in fact, all options share a single point of failure. Dr Paul-Enguerrand Fady, Biosecurity Policy Manager at the Centre for Long-Term Resilience, provided one such example where an antibiotic appeared to have seven different formulations available from two manufacturers, but both manufacturers were "collocated in one city in China."[342]

166. The DHSC acknowledged reliance on single sources for particular medicines, and David Simmons noted that for some products the UK was reliant "on particular countries, or even on particular regions within countries."[343] The Minister noted that while "diversification [of supply] is always desirable" it is "genuinely challenging" to secure a range of sources for products including antibiotics.[344]

167. This international focus has not historically been the case. The Government's *Life Sciences Sector Plan*, published in July 2025, noted that "in recent decades the UK has become increasingly uncompetitive" in medicines manufacturing,[345] with manufacturing increasingly being offshored. Dr Paul-Enguerrand Fady stated that offshoring had been driven in the 1990s by private industry focusing on lowering costs and increasing profits, and argued that at the time this was "seen as really positive, with no view for the long-term resilience of the nations within which they were initially

337 National Cancer Institute, *Definition of "Active Pharmaceutical Ingredient"*, last accessed 15 January 2026; Medicines and Healthcare Products Regulatory Agency (MHRA), *Medicines: Register to Manufacture, Import or Distribute Active Substances*, 1 April 2025
338 NHS Specialist Pharmacy Service, *Understanding Excipients in Medicines*, 2 September 2025
339 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
340 Written evidence from Bioindustry Association (BIA) (MED0042)
341 Q 42 (Malcolm Harrison)
342 Q 10 (Dr Paul-Enguerrand Fady)
343 Q 90 (David Simmons)
344 Q 98 (Dr Zubir Ahmed MP)
345 HM Government, *The UK's Modern Industrial Strategy, Life Sciences Sector Plan*, 16 July 2025, Association of the British Pharmaceutical Industry (ABPI), *Fulfilling the Potential Identified in the Government's Life Sciences Vision*, 23 January 2023; written evidence from the Centre for Long-Term Resilience (MED0017)

manufacturing".[346] He also noted that a decline in heavy industry had led to API manufacture offshoring, due to heavy industry manufacture creating "key starting materials".[347] Chemical manufacturer INEOS highlighted this problem in the UK, noting that the recent loss of UK ethanol production and difficulties in manufacturing PVC compounds used in medicines manufacturing meant that "many new blockbuster drugs which will now be imported" rather than manufactured in the UK.[348]

Barriers to building our manufacturing base

168. There have been several high-profile cases where investment in UK-based medicines manufacture has been withdrawn. In September 2025, Merck, also known as MSD, cancelled a planned £1bn expansion of its UK operations,[349] Mounjaro manufacturer Eli Lilly paused investment in UK Research and Development (R&D) amid concerns about financial viability,[350] and AstraZeneca paused plans to invest £200m at a Cambridge research site.[351] Mark Samuels told us that the UK had missed out on a further £400m investment in generic manufacturing which had not been publicised.[352]

169. Many contributors said that the UK is in many ways, attractive for R&D.[353] However, this view was challenged by some contributors such as Accord Healthcare who suggested "there are a number of negative elements in terms of the attractiveness of the UK market" citing VPAG, drug spend, and NICE cost effectiveness thresholds[354] as examples.[355]

170. We heard from stakeholders there was a lack of investment in "scale-up capital" for companies to move from research and development to manufacture.[356] The ABPI noted that while there were incentives for R&D investment, direct foreign investment in R&D had fallen.[357] The Bioindustry Association argued that "structural disincentives" such as "higher operating costs, limited tax and investment incentives and regulatory challenges" meant companies chose to manufacture overseas.[358]

171. Medicines UK argued that failure to invest in scaling up, from R&D to large scale manufacturing, compromised the value of UK investment in life sciences, stating that while the UK's investment in R&D should translate to improving GDP, "other countries can often benefit from this GDP, not

346 Q 2 (Dr Paul-Enguerrand Fady)
347 QQ 2–12, (Dr Paul-Enguerrand Fady)
348 Written evidence from INEOS (MED0048)
349 BBC News, *Blow for UK Drugs Sector as Merck Scraps £1bn Expansion*, 11 September 2025
350 Joanna Roberston, 'Eli Lilly Pausing Investment in UK as Report Warns Against "Limited" NHS Uptake of New Drugs' *the Pharmaceutical Journal*, (September 2025): https://doi.org/10.1211/PJ.2025.1.373055
351 BBC News, *AstraZeneca Pauses £200m Cambridge Investment*, 12 September 2025
352 Q 75 (Mark Samuels)
353 Written evidence from the Association of the British Pharmaceutical Industry (MED0016), the Centre for Long Term Resilience (MED0017), iethico (MED0026), Medicines UK (MED0029), Vial (MED0037) and Bioindustry Association (MED0042)
354 These are thresholds set by NICE considering the cost of the drug and the impact the drug has on patients' health. National Institute for Health and Care Excellence (NICE), *Changes to NICE'S Cost-Effectiveness Thresholds Confirmed*, 1 December 2025
355 Written evidence from Accord Healthcare (MED0045)
356 Written evidence from the Bioindustry Association (BIA) (MED0042)
357 Written evidence from the Association of British Pharmaceutical Industry (ABPI) (MED0016), Centre for Long Term Resilience (MED0017) and iethico (MED0026)
358 Written evidence from the Bioindustry Association (BIA) (MED0042)

the UK" as "growing companies move to jurisdictions with better funding options" despite initial UK public investment.[359]

Financial challenges

172. We were told about the Voluntary Scheme for Branded Pricing Access and Growth (VPAG), which acts as a pricing clawback or system for patented medicines and is described further in Box 5. Witnesses described the VPAG as a disincentive for investment in the UK as a manufacturing base.[360]

Box 5: VPAG

VPAG, the Voluntary Scheme for Branded Pricing Access and Growth, is a scheme set up by the DHSC and negotiated with the Association of the British Pharmaceutical Industry.[361] It is levied on medicines which are branded for clinical reasons or where a supplier wishes to differentiate their product.[362]

Manufacturers make payments to the Department of Health and Social Care if their sales growth rises above an agreed cap.[363]

The aim of VPAG was to support patient access to medicines and to support the financial sustainability of the NHS and the UK Life Sciences Sector.[364]

Until recently, VPAG payments could vary between 10–35% depending on the product, which manufacturers said was very high and could be a disincentive for operations in the UK,[365] in comparison to other countries.[366] Following a recent UK-US Tariff deal, VPAG rates on sales revenue of eligible medicine have been lowered to 14.5% in 2026.[367]

173. We heard that VPAG was a "punitive tax" which "penalises UK pharmaceutical companies supplying the UK's NHS".[368] We were told that VPAG has had a "detrimental effect on the life sciences sector" in the UK with "multiple pharmaceutical companies exiting the UK or choosing not to launch new technology".[369] There was agreement across the supply chain that VPAG was a disincentive for companies to manufacture in the UK and that it had a negative impact on medicine supply resilience.[370] For comparison, even after the recently announced reduction on VPAG rates to 14.5%, the UK VPAG is still higher than comparable schemes in many

359 Written evidence from Medicines UK (MED0029)
360 Written evidence from the Office of Health Economics (MED0011)
361 Department of Health and Social Care (DHSC) and Association of the British Pharmaceutical Industry (ABPI), *2024 Voluntary Scheme for Branded Medicines Pricing, Access and Growth*, last accessed 15 January 2026
362 Written evidence from Medicines UK (MED0029)
363 Written evidence from Association of the British Pharmaceutical Industry (ABPI) (MED0016)
364 Department of Health and Social Care (DHSC), *The 2024 Voluntary Scheme for Branded Medicines Pricing, Access and Growth: Payment Percentage for 2026*, 10 December 2025; written evidence from Blockchain Pharma Limited (MED0023)
365 Q 59 (Ian Wariner, Paul White); written evidence from Medicines UK (MED0029)
366 Written evidence from Orion Pharma (MED0012), CPI (MED0034) and Accord Healthcare (MED0045)
367 Department of Health and Social Care (DHSC), *The 2024 Voluntary Scheme for Branded Medicines Pricing, Access and Growth: Payment Percentage for 2026*, 10 December 2025
368 Written evidence from Besins Healthcare UK Limited (MED0033)
369 Written evidence from Blockchain Pharma Limited (BIA) (MED0023)
370 Written evidence from Pharmacy Procurement at Leeds Teaching Hospitals NHS Trust (MED0008), Office of Health Economics (MED0011), Association of the British Pharmaceutical Industry (ABPI) (MED0016), National Clinical Homecare Association (MED0019), National Pharmacy Association (MED0027), Medicines UK (MED0029), Besins Healthcare UK Limited (MED0033) and CPI (MED0034)

European countries,[371] and some are calling for the percentage rate to be reduced further to single digits.[372]

174. The Government acknowledged concerns from stakeholders that the VPAG was "potentially deterring inward investment" and has sought to take a "pro-innovation, pro-competition approach" to the new charges, including increasing the level of annual allowed growth in sales to double to 4% by 2027.[373]

Clinical trials

175. The process for bringing new medicines to market has also been criticised, with approval from the MHRA to get a clinical trial taking "60 to 90 days" compared to the US which is "around 30 days".[374] There is then two or three years to obtain regulatory authority for a medicine, a delay which "is important for UK competitiveness" when manufacturers are looking for incentives to manufacture in the UK.[375] Further, the Association of the British Pharmaceutical Industry said explicitly that "slower clinical trial delivery all risks deterring companies from basing operations" in the UK.[376] The Government have shown willingness to work with businesses to develop trials in more flexible and innovative ways through their Moderna strategic partnership where they are supporting the company in "getting patients into clinical trial within 150 days."[377] However we have not seen evidence of this style of partnership with Government elsewhere in the industry.

176. The Government highlighted the UK Clinical Research Delivery (UKCRD) Programme which aims to make the UK a "world leader in clinical trials".[378] The UKCRD Programme is aiming to streamline "the set-up and delivery of clinical trials and boosting research delivery within community settings".[379] The Government have suggested that using money raised from VPAG charges they will introduce a £400 million joint government-industry initiative designed to deliver growth across the UK in clinical trials, Health Technology Assessments, and manufacturing."[380] In January 2026, the DHSC announced that the number of clinical trials had risen in comparison with previous years, and stated a new regulatory framework would take effect in April with faster assessments, a fast-track route, and "clearer, more agile routes to support innovation."[381]

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371 Written evidence from Orion Pharma (MED0012), CPI (MED0034) and Accord Healthcare (MED0045)
372 Written evidence from AbbVie Inc (MED0025)
373 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
374 Q 60 (Darius Hughes)
375 Q 60 (Darius Hughes)
376 Written evidence from Association of the British Pharmaceutical Industry (ABPI) (MED0016)
377 Q 95 (Dr Zubir Ahmed MP)
378 Department of Health and Social Care (DHSC), *Transforming the UK Clinical Research System: August 2025 Update*, 4 August 2025
379 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
380 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
381 Medicines and Healthcare Products Regulatory Agency (MHRA), *Press Release: Patients to Benefit Sooner as UK Boosts Clinical Trials Attractiveness with Faster Assessments and Agile Regulation*, 13 January 2026

What should the UK prioritise to manufacture?

177. We heard a range of views about what the UK should prioritise for manufacturing. APBI stated that it "may be more valuable" to invest in high tech approaches and innovation rather than reshoring "older medicines or outdated manufacturing methods".[382] Similarly, the Bioindustry Association argued that the UK should focus on "the most innovative and complex medicines" building on a "strong scientific and industrial base" rather than focusing on generic medicines or API, arguing that those markets are "dominated by large-scale production hubs in Asia" and that reshoring generics would not be commercially viable.[383]

178. Conversely, the Centre for Long Term Resilience argued that investment in "high-cost-per-dose biological drugs" could "worsen the UK's supply chain resilience" due to the typical fragility of supply chains for those drugs. They argued that the UK should instead focus on "returning to the basics and manufacturing APIs" to boost resilience.[384] Mark Samuels argued that investing in generic manufacturing would boost resilience due to it being "unusually agile", noting that during the pandemic, one generic manufacturer was able to switch to producing the AstraZeneca vaccine when AstraZeneca could not manufacture enough.[385] Another argument in favour of manufacturing generic drugs is that they make up 80% of the prescribed medicines which are dispensed. Dr Keith Ridge CBE, Former Chief Pharmaceutical Officer for England, argued that despite this, generic medicines were neglected in policy compared to "branded innovative medicines".[386]

179. The Minister stated that "this country should be focusing on the manufacture of innovative medicines" as the priority,[387] and argued that this would strengthen the UK's supply chains for innovative medicines and "more importantly it will enable us to have a thriving life sciences sector."[388]

180. The Minister was less optimistic regarding generic medicines. He stated that the UK is "not competitive in terms of generic manufacturing globally" and that this was unlikely to ever change, and argued that regarding generic manufacture the UK should instead "optimise our relationships with international partners".[389] However, Mark Samuels indicated that a quarter of generic medicines that the NHS used were produced in the UK, while a further third were made in the EU.[390] Alongside this, the Minister stated that the UK was investing in generics manufacturing through the Life Sciences Innovative Manufacturing Fund.[391] This is a fund to support businesses investing in life sciences manufacturing projects in the UK.[392]

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382 Written evidence from the Association of the British Pharmaceutical Industry (ABPI) (MED0016)
383 Written evidence from the Bioindustry Association (BIA) (MED0042)
384 Written evidence from the Centre for Long Term Resilience (MED0017)
385 Q 74 Mark Samuels
386 Q 8 (Dr Keith Ridge CBE)
387 QQ 95–97 (Dr Zubir Ahmed MP)
388 Q 96 (Dr Zubir Ahmed MP)
389 QQ 95–97 (Dr Zubir Ahmed MP)
390 Q 84 (Mark Samuels); written evidence from the Royal Pharmaceutical Society (MED0015) and Medicines UK (MED0029)
391 Q 28 (Andrew Howard), Q 97 (Dr Zubir Ahmed MP)
392 Department for Science, Innovation and Technology and Office for Life Sciences, *Life Sciences Innovative Manufacturing Fun (LSIMF): Expression of Interest*, 5 September 2025

Other witnesses noted comparable countries such as Canada,[393] France and Austria investing in generics manufacturing.[394]

181. The Minister also indicated a lack of Government control or influence over what the medicines industry chose to manufacture. When asked what medicines he would like to see manufactured on UK soil, the minister stated:

> "I wish I had such a level of control over an agency as to decide exactly which medicines I could manufacture here and which ones I could outsource".[395]

However, it is clear that the Government is able to onshore the manufacture of specific medicines when it views it as a priority, as evidenced by the Government's work with Moderna to secure the manufacture of RNA vaccines in the UK (see Chapter 5).

Boosting UK manufacturing

182. The Government has set a clear ambition to invest in the life sciences sector, including in medicines manufacturing and resilience, through the *Life Sciences Sector Plan* published in 2025, which includes measures to "build a more secure and resilient Life Sciences sector".[396] The Minister noted that the UK aims to be "strategically the biggest life sciences economy in Europe by 2030."[397]

393 Q 78 (Mark Samuels)
394 Written evidence from the Centre for Long-Term Resilience (MED0017) and Sandoz UK (MED0040); Q 10 (Dr Paul-Enguerrand Fady), Q 78 (Mark Samuels)
395 Q 97 (Dr Zubir Ahmed MP)
396 HM Government, *The UK's Modern Industrial Strategy, Life Sciences Sector Plan*, 16 July 2025
397 Q 99 (Dr Zubir Ahmed MP)

Box 6: Headline actions of the *Life Sciences Sector Plan*

The Government's *Life Sciences Sector Plan* includes the following six headline actions:

- "Realising a Health Data Research Service (HDRS): Up to £600 million investment from Government alongside the Wellcome Trust, to create the world's most advanced, secure, and AI-ready health data platform. It will unite genomic, diagnostic, and clinical data at population scale, turning NHS and wider healthcare data into a magnet for global trials and AI investment.
- Slashing trial set up times to under 150 days: By implementing the O'Shaughnessy reforms,[398] updating the NIHR governance and placing a dual health and growth mandate on the NIHR, we will cut delays that deter investors and aim to double commercial interventional trial participants by 2026, and again by 2029.
- Backing manufacturing with up to £520 million: The Life Sciences Innovative Manufacturing Fund (LSIMF) will bring globally mobile manufacturing investments to the UK. This will help build and maintain the UK's critical sovereign capability across the sector, creating high-value jobs nationwide, and strengthen domestic health resilience and supply chain security. The Government will also develop a new, bespoke approach to supporting investments over £250 million.
- Streamlining regulation and market access: Supporting the Medicines and Healthcare products Regulatory Agency (MHRA) to become a faster, more agile regulator, and giving industry a clearer route to market through joint advice and parallel approvals with the National Institute for Health and Care Excellence (NICE), alongside a route for international reliance for medicines and medical devices so patients benefit sooner from cutting-edge innovation.
- Introducing low-friction procurement: Streamlining the route to procurement, ensuring it is clearer and less bureaucratic, giving industry low-friction access to the NHS through a Rules Based Pathway (RBP) for MedTech and an NHS 'Innovator Passport', enabling innovative MedTech products to reach patients more quickly.
- Partnering with industry to drive growth and innovation: Building on our collaborative approach with the sector, we will continue to partner with industry throughout delivery, and working directly with individual companies, we will secure at least one major strategic partnership annually with leading Life Sciences companies. Additionally, a dedicated support service will be established to help 10–20 high-potential UK companies to scale, attract investment, and remain headquartered in the UK."

Source: HM Government, The UK's Modern Industrial Strategy, Life Sciences Sector Plan, 16 July 2025

398 Lord O'Shaughnessy's review on commercial clinical trials in the UK was published in May 2023, and set out recommendations focusing on: reducing regulatory burdens for trials; improving data publications relating to trials; establishing targets for the number, kind and diversity of trials and KPIs for trials; establishing financial and training incentives for NHS staff and organisations to engage in trials; improved communications with patients; and increased engagement between primary care providers and clinical trials. Department of Health and Social Care (DHSC), Department for Science, Innovation and Technology, Office for Life Sciences, *Commercial Clinical Trials in the UK: the Lord O'Shaughnessy Review—the Final Report*, 26 May 2023

183. The plan also states the Government will "identify strategic vulnerabilities and take targeted steps to build resilience" such as through supporting UK manufacturing, diversifying supply chains, or "improving access to resilience finance".[399]

184. Considering direct government investment, the LSIMF commits up to £520m in capital grants to life science manufacturers to "support economic growth and to build resilience for future health emergencies" between 2025–30.[400] We were told that decisions on how these grants were allocated would equally consider health resilience and economic growth.[401] Since its launch in October 2024, £6 million, or around 12%, has been awarded.[402] Between 2022–2024 £69 million was awarded in grant funding through predecessor schemes.[403]

185. Alongside this, we were told that through the Office for Life Sciences' engagement with venture capital companies there had been "billions of pounds of investment" in start-up biotechnology companies,[404] and that the UK was more effective than European competitors in securing this capital (though less effective than the US).[405] Subsequently, the Government clarified that the "Life Sciences Sector Plan is supported by £2bn government funding over the lifetime of the Spending Review, including funding for innovative medicines manufacturing as part of the up to £520 million Life Science Innovative Manufacturing Fund (LSIMF)."[406] The National Institute for Health and Care Research also funds further research. [407]

186. **The global nature of supply chains and lack of domestic manufacturing means that UK medicines security is fragile and is reliant on international partners. Increasing geopolitical tensions mean that there is an increased risk to the UK medicine supply.**

Developing medicines alliances to strengthen resilience

187. While many witnesses called for increased support for UK manufacturing, evidence indicated that onshoring or reshoring all of the UK's medical supply chains was unlikely considering cost and the range of medicines used.[408] Dr Paul-Enguerrand Fady, of the Centre for Long Term Resilience, stated that such reshoring was "not possible",[409] while DHSC stated it was "not viable".[410]

399 HM Government, *The UK's Modern Industrial Strategy, Life Sciences Sector Plan*, 16 July 2025
400 Correspondence, *DHSC and NHSE to Chair of Public Services Committee*, 19 November 2025; Written Answer, HL11975, Session 2024–25
401 Q 95 (David Simmons)
402 Written Answer, HL11975, Session 2024–25
403 Written Answer, HL11975, Session 2024–25
404 Q 97 (Dr Zubir Ahmed MP)
405 Written evidence from the Bioindustry Association (BIA) (MED0042)
406 Correspondence, *Parliamentary Under-Secretary of State for Health Innovation and Safety to the Public Services Committee*, 26 January 2026
407 National Institute for Health and Care Research (NIHR), *Who We Are*, [accessed 15 January 2026]
408 Written evidence from Orion Pharma (MED0012), the Association of the British Pharmaceutical Industry (ABPI) (MED0016), the Centre for Long-Term Resilience (MED0017), Healthcare Distribution Association (HDA) (MED0021), Medicines UK (MED0029), Sandoz UK (MED0040), Bioindustry Association (BIA) (MED0042) and Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043); Q 10 (Dr Paul Enguerrand Fady), Q 30 (David Simmons)
409 Q 10 (Dr Paul Enguerrand Fady)
410 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

188. We also heard that this would not be "desirable".[411] Orion Pharma stated that it would be "incredibly difficult" and that "any investment would be very high risk".[412] DHSC also stated that global supply chains meant that the UK could "draw on a global network of expertise and capabilities, supporting mutual benefits and consistency in patient access to medicines around the world."[413]

189. The Bioindustry Association stated that the government should instead take a:

> "realistic approach … reshoring and expanding critical capabilities where security of supply is essential, while strengthening international partnerships and diversifying overseas sources for inputs where global reliance will remain."[414]

190. Several witnesses discussed the idea of 'nearshoring' supply chains—developing supply chains in nearby countries or regions—and 'friendshoring'—developing supply chains with geopolitical allies.

191. Dr Fady encouraged "strategic industrial strategy co-ordination to be done across our allies and partners" to avoid duplication of investment. For example, he noted that the French government had "put 7 million into building a paracetamol factory in the south-west" and encouraged the Government to "get paracetamol from France rather than duplicating effort and also building a paracetamol factory in the UK."[415]

Current and potential international collaboration to strengthen resilience

192. Some companies may effectively friendshore through increasing manufacturing capacity based in other countries which the UK consider to be allies–although not necessarily geographically close. Paul White noted that Besins "has already got the nearshoring piece"[416] through Europe-based in-house manufacturing.[417] As noted in Chapter 2, in response to HRT shortages, Besins increased production through building factories in mainland Europe.

193. David Simmons stated that nearshoring "reduces the risk [of shortages] considerably" compared to supply being concentrated "in certain places".[418] The Minister noted ongoing discussions at the World Health Organisation and G20 regarding "intelligence sharing" and work to improve sharing of information regarding pathogens.[419] He stated that medicines resilience was included in UK foreign policy but that discussions between departments go "in myriad directions" and are "always changing".[420]

194. David Simmons noted that the UK has joined the EU's Critical Medicines Alliance, "making sure that we are part of the conversations" regarding

411 Written evidence from the Healthcare Distribution Association (HDA) (MED0021)
412 Written evidence from Orion Pharma (MED0012)
413 Written evidence from Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
414 Written evidence from the Bioindustry Association (BIA) (MED0042)
415 Q 10 (Dr Paul-Enguerrand Fady)
416 Q 69 (Paul White)
417 Q 60 (Paul White)
418 Q 30 (David Simmons)
419 Q 98 (Dr Zubir Ahmed MP)
420 Q 98 (Dr Zubir Ahmed MP)

domestic manufacture in the EU, and argued that through this the DHSC would seek to increase "the diversity of manufacturing capability across the world".[421] However, as noted in Chapter 5, the UK is not following steps being taken by the EMA and others to develop medicines and API stockpiles, though the Minister stated that discussing API stockpiles with European partners may be ongoing..[422]

195. India was also identified as a key medicines partner, with witnesses noting existing reliance upon them for generic medicines and API. Mark Samuels noted that a third of generic medicines used by the NHS "are made in India" alongside around 50% of API.[423] The Minister stated that the relationship with India was "important", noting close trade ties and a "good working relationship with them at the health department level." [424] He also stated that the Government were "looking at closer co-operation" on medical technologies, improving regulatory relations and quality assurance, and making supply chains more agile and, when necessary, "fast tracked".[425] However, the Centre for Long Term Resilience argued that "overreliance on Indian API" could lead to "critical failure" of medicine supply, and suggested that India's "policy of strategic autonomy in its international relations [led] to ambiguity in alignments."[426]

196. The UK-US trade deal also provides an example of medicines alliances. In December 2025, the UK and US confirmed zero tariffs on UK medicine exports to the US, while the UK would increase medicines spend from 0.3% to 0.6% over the next 10 years and would reduce the VPAG clawback rate.[427] The DHSC stated that this deal will encourage manufacturers to "prioritise the UK for early launches of their new medicines" meaning that UK patients can access innovative treatments quickly.[428] The Minister stated that the UK-US trade deal was "done primarily because of [the US Administration's] view of what medicines pricing across the world should look like" considering their own pharmaceutical businesses, and argued that the deal was "about making sure that the UK continues to be at the front of the queue for medicines being launched in our country".[429] In November 2025 the House of Commons Science and Technology Committee stated that "US trade talks are taking precedence for ministers over their own goals for the UK life sciences sector",[430] noting that the Minister told them VPAG negotiations had "largely been usurped" by US trade talks.[431] Others have

421 Q 30 (David Simmons)
422 Q 99 (Dr Zubir Ahmed MP)
423 Q 84 (Mark Samuels)
424 Q 96 (Dr Zubir Ahmed MP)
425 Q 96 (Dr Zubir Ahmed MP)
426 Written evidence from the Centre for Long-Term Resilience (MED0017)
427 BBC News, *'US and UK Agree Zero Tariffs Deal on Pharmaceuticals'*, 1 December 2025; Department for Science, Innovation and Technology, Department of Health and Social Care (DHSC), Department for Business and Trade, National Institute for Health and Care Excellence, and Dr Zubir Ahmed MP, *Landmark UK-US Pharmaceuticals Deal to Safeguard Medicines Access and Drive Vital Investment for UK Patients and Businesses*, 1 December 2025
428 Department for Science, Innovation and Technology, Department of Health and Social Care (DHSC), Department for Business and Trade, National Institute for Health and Care Excellence, and Dr Zubir Ahmed MP, *Landmark UK-US Pharmaceuticals Deal to Safeguard Medicines Access and Drive Vital Investment for UK Patients and Businesses*, 1 December 2025
429 Written evidence from the Centre for Long-Term Resilience (MED0017)
430 Correspondence, *Chair of Science, Innovation and Technology Committee to Secretary of State for Health and Social Care*, 11 November 2025
431 Science, Innovation and Technology Committee, *Inquiry into Life Sciences Investment,* 28 October 2025, QQ 67–86 (Dr Zubir Ahmed MP, Lord Vallance)

expressed concerns about the reliability of such a trade deal at this stage, noting the absence of a signed legal text.[432]

Critical Medicines List

197. The EU's Critical Medicines Act has enabled the EU to build stockpiles and targeted reshoring or nearshoring of critical medicines, given the importance of medicine security to the bloc.[433] Medicines UK suggested that without a similar strategy, "the UK faces being left behind".[434] One aspect of this Act has created the European Union's Critical Medicines Alliance, of which the UK is an associate member[435], which has generated a list of critical medicines in collaboration with the private sector.[436] As part of this, the EU is adopting a more proactive approach to their shortages identification and management and as part of this are undertaking a vulnerability assessment drawing on information submitted via their reporting platforms and other sources.[437]

198. The World Health Organisation also has an Essential Medicines List, which is a list of medicines that every country "should have routine stocks for".[438]

199. David Watson of the Association of the British Pharmaceutical Industry suggested that from a "national security point of view, there would be a critical medicines list".[439] However, Dr Ridge told us that the DHSC does not have such a list.[440] The Department of Health and Social Care have said it has instead "identified medicines which are deemed both clinically critical and have potentially vulnerable supply chains".[441] DHSC use this information to inform which product areas may require additional resilience measures.[442] These measures may include actions such as adding medicines to the export restriction list, enabling the use of Serious Shortage Protocols (SSPs),[443] proactive monitoring of supplies and allowing 'off-label' use.[444]

200. We heard from some stakeholders that medicines which had been subject to recent shortages, such as HRT and Creon/PERT, were widely used products and would likely not have been on a critical medicines list, even if one had existed.[445] This means that the effectiveness of such a list might be limited, even though the impact on patients when these medicines are short is profound.[446]

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432 The Guardian, *'MPs Warn that UK Agreements with Donald Trump are "Built On Sand"'*, 17 December 2025
433 Written evidence from the Company Chemists' Association (CCA) (MED0036)
434 Written evidence from Medicines UK (MED0029)
435 Written evidence from Professor Kostas Selviaridis (MED0013)
436 Written evidence from the Royal Pharmaceutical Society (MED0015) and Q 1 (Dr Keith Ridge)
437 Monica Dias, PhD and European Medicines Agency, *Value of Real-World Evidence in Managing Medicinal Product Shortages*, 15 November 2025
438 Q 5 (Dr Keith Ridge CBE); World Health Organization (WHO), *WHO Model Lists of Essential Medicines*, last accessed 15 January 2026
439 Q 74 (David Watson)
440 Q 5 (Dr Keith Ridge CBE)
441 Written Answer, HL11670, Session 2024–2026
442 Written Answer, HL11670, Session 2024–2026
443 For further commentary on SSPs see Chapter 4
444 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
445 Q 74 (David Watson), Q 50 (Amandeep Doll)
446 Written evidence from Cystic Fibrosis Trust (MED0020), Blockchain Pharma (MED0023), National Pharmacy Association (MED0027), Alliance Healthcare Distribution Ltd (MED0032)and Besins Healthcare UK Limited (MED0033); Q 50 (Richard Bowers)

201. However, stakeholders from across the medicine supply chain, from industry,[447] manufacturers,[448] and representative bodies,[449] have called for the Government to develop a list of critical medicines because of the benefits to the resilience of the UK's medicine supply it would bring. Such a list could help define, in order of priority, "what should be manufactured in the UK".[450] Ian Wariner, UK Country Manager at Orion Pharma, suggested that a critical medicines list would help start a dialogue in the supply chain about shortages rather than "waiting until someone has reported that we are going out of stock in three months' time".[451]

202. The Department of Health and Social Care said that it has "no plans to create or publish a list of critical medicines in the United Kingdom".[452] When asked, the Minister suggested that publishing information like a critical medicines list could cause "a self-fulfilling prophecy" due to individuals stockpiling medicines, creating additional demand which led to shortages.[453] He also argued that "it is hard" to identify which medicines should be viewed as critical.[454] David Simmonds told us that DHSC "quite often" debated what was the "right level of transparency in this space" and noted that the lists of products at risk would vary depending on the risk presented, for example energy disruption within the UK would affect different medicines to other risks.[455] Responding to this, Renee Kalia, Head of Operations at iethico, stated that the "refusal to publish a list of critical or at risk medicines, unlike our neighbours in France and the EU" was concerning. She argued that suggesting that the British public was "uniquely prone to stockpiling behaviour … insults patients and professionals alike" and called for greater transparency around potential medicine shortages.[456]

203. David Simmons also questioned the impact of such lists, asking whether France had taken action after publishing their list.[457] The comparison with France was interesting: as noted previously, in 2024 the French Medicines Agency imposed €8m of fines on companies who failed to meet stockpiling requirements for "medicines of therapeutic interest", their equivalent of a critical medicines list.[458]

204. As discussed above, the Government does hold a list of medicines which have export restrictions, however inclusion on the list is based on existing shortages or on whether a medicine is at risk of shortage, rather than on patient impact should a shortage transpire.[459]

205. **We are disappointed that the Government is not doing more to influence and incentivise critical medicines manufacturing in the UK or to develop reliable and resilient offshore capacity.**

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447 Q 13 (Dr Keith Ridge CBE)
448 Q 64 (Paul White), 59 (Ian Wariner); written evidence from CPI (MED0034)
449 Q 50 (Amandeep Doll)
450 Q 10 (Dr Keith Ridge CBE)
451 Q 65 (Ian Wariner)
452 Written Answer, HL11670, Session 2024–2026
453 Q 93 (Dr Zubir Ahmed MP)
454 Q 94 (Dr Zubir Ahmed MP)
455 Q 93 (David Simmons)
456 Renee Kalia, LinkedIn, Comments on Medicines Supply Crisis [accessed 15 January 2026]
457 Q 94 (David Simmons)
458 Bird & Bird, BioTalk, *Fight Against Medicines Shortages: The French Medicines Agency (ANSM) Imposes Fines Totalling €8 Million*, 14 October 2024
459 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)

206. ***The Government should create a public Critical Medicines List and list of critical Active Pharmaceutical Ingredients (API), based on clinical priority and supply chain vulnerability. This would be used to inform UK production, potential medicines for stockpiling, contract negotiations, and international diplomatic deliberations.***

207. **We welcome the Government's vision to make the UK the leading life sciences economy in Europe through investment in innovative medicines and the wider aims of the Life Sciences Sector Plan. However, we are concerned that significant barriers remain to boosting UK manufacture of medicines and API.**

208. **Considering that the UK already sources more than half of its generic medicines from the UK and EU countries, it is disappointing that the Government does not view the UK as a competitive place for manufacturing generic medicines. Considering actions by other countries to boost medicines manufacturing, we are concerned that a lack of ambition for generics manufacturing will mean the UK is left behind.**

209. ***When implementing the Life Sciences Sector Plan, the Office for Life Sciences should ensure that investment boosts the UK's generic and API manufacturing capacity. This investment should consider which medicines and APIs the UK Government views as critical for medicines security and resilience.***

210. **Regardless of efforts to encourage greater medicine manufacture in the UK, it is neither realistic nor desirable for the UK to domestically manufacture all medicines. The UK will remain reliant on other countries for a level of medicine and API supply.**

211. ***The Government should develop a strategy identifying which medicines and API it plans to manufacture in the UK, and which medicines could be supplied through strategic alliances with other countries. This should be mapped against the UK Critical Medicines List and should be used to highlight opportunities for investment and innovation in UK medicines manufacturing by the medicines industry. It should also be used to determine which products will need to be imported, informing procurement decisions.***

212. ***We are pleased to see the Government's engagement with the European Critical Medicines Alliance, and ongoing diplomatic work relating to medicine supply chains. Resilience of medicines supply chains should be prioritised in diplomatic work, including in the UK-US trade deal and UK-EU reset. As part of this, the Government should work with international partners to form strategic medicines alliances, which coordinate efforts to develop more resilient supply chains, share information, improve supply chain transparency, and increase manufacturing capacity.***

CHAPTER 7: NATIONAL SECURITY AND LEADERSHIP

213. We have highlighted the fragility of the UK's medicine supply chain in Chapter 2, and the serious impact that a shortage of medicine, through deliberate action or otherwise, could have on patients and the NHS. This chapter outlines the need for medicine supply to be treated as a national security issue given current geopolitical instability, and for greater leadership from Government in ensuring a more resilient medicine supply chain.

Medicines as National Security

214. As highlighted from stakeholders across the medicine supply chain, the UK is reliant on single nations or geographies—most notably India and China for a vast number of APIs as well as raw materials for medicine manufacture,[460] and this is a risk of which we "should be mindful".[461] For example, over 90% of penicillin API production, a crucial antibiotic, is located in China,[462] and as we discussed in Chapter 6, one formulation of important antibiotic gentamicin is produced by just two factories, both located in one city in China[463] which would be at risk from natural disaster, or geopolitical tensions.[464] One medicines manufacturer told the Committee that in the event of geopolitical tensions "the UK is particularly exposed to such a heavy reliance on a single country".[465]

215. The Centre for Long-Term Resilience stated that deteriorating relations between the UK and China presented a "clear but perhaps underestimated threat" to medicines supply. They noted that there were examples of the UK "resisting the influence of Chinese materials in its supply chains", such as ruling out the use of Huawei equipment in the 5G network for national security reasons, but argued that "very little discussion exists in the public space around the UK's reliance on China's pharmaceutical production".[466]

216. Further, Mark Samuels of Medicines UK suggested that India supplies "about a third of the NHS's generic medicines" with 50% of APIs coming from India.[467] India has chosen a policy of "strategic autonomy" in its international relations, and therefore the Centre for Long Term Resilience suggests that escalations in broader geopolitical tensions could result in a "critical failure" of the supply chain with the UK "being particularly exposed to export bans, tariffs, or secondary sanctions on Indian APIs".[468]

217. The Centre for Long Term Resilience suggested that the "heavy reliance" on China and India makes supply chains "intrinsically exposed to geopolitical risks" and means that our current supply chains are "intrinsically fragile".[469]

460 Written evidence from Royal Pharmaceutical Society (MED0015), CPI (MED0034), Company Chemists Association (CCA) (MED0036), Dr Emilia Vann Yaroson (MED0041) and Bioindustry Association (BIA) (MED0042); Q 42 (Malcolm Harrison)
461 Q 55 (Paul White)
462 Written evidence from Sandoz UK (MED0040)
463 Q 10 (Dr Paul- Enguerrand Fady)
464 Written evidence from the National Pharmacy Association (MED0027), CPI (MED0034) and Community Pharmacy England (MED0038)
465 Written evidence from Centre for Long-Term Resilience (MED0017), Dr Vann Yaroson et al. (MED0028), Company Chemists Association (CCA) (MED0036), Community Pharmacy England (MED0038), Sandoz UK (MED0040) and Bioindustry Association (BIA) (MED0042),
466 Written evidence from the Centre for Long-Term Resilience (MED0017)
467 QQ 72–84 (Mark Samuels)
468 Written evidence from Centre for Long Term Resilience (MED0017)
469 Written evidence from the Centre for Long Term Residence (MED0017)

218. Dr Martin Turner of the Bioindustry Association told the Committee that medicine shortage was a "national security risk"[470] and others said that it should be treated as such.[471]

219. Dr Paul-Enguerrand Fady told us that "biological security is national security" and that "we should defend the homeland from biological threats, and those can be natural, accidental or deliberate".[472] Allies of the UK have identified the overconcentration of supply from China and India and have made investments to counter this, such as domestic manufacturing to become more self-reliant.[473] The US has begun a policy of stockpiling[474] while other countries, such as France and Austria, have chosen to manufacture APIs for paracetamol and antibiotics—a move which, if replicated here, the Centre for Long Term Resilience suggests could be key for the UK's national security.[475] Further, the United States Department of Commerce launched an investigation to determine "the effects on the national security" of the United States "of imports of pharmaceuticals and pharmaceutical ingredients", suggesting that they may consider medicine supply a national security issue.[476] India, through their Production Linked Incentive Scheme for Pharmaceuticals, has sought to strategically build their API manufacturing capability through Government incentives, in order to reduce import reliance from China.[477]

220. The Government already treats pandemic preparedness as a biodefence and biosecurity issue through the MHRA's Project Pegasus,[478] and their strategic partnership with Moderna for vaccines.[479] Further, the UK already holds stockpiles of the smallpox vaccine within the Ministry of Defence and other Government departments for national security.[480] There is a call from across the medicine supply chain to do the same for other selected medicines.[481]

221. The Government admitted that the risk level to medicines had heightened due to the "geopolitics of recent years"[482] and said that medicines issues had previously been referred to the National Security Council (Resilience) Cabinet sub-committee.[483] However, we were told by Medicines UK that there was "no national risk register for medicines resilience" which they found to be "unusual".[484] We were told by stakeholders that medicine shortage should be on the National Risk Register.[485]

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470 Q 71 (Dr Martin Turner)
471 Q 88 (Mark Samuels); written evidence from Medicines UK (MED0029)
472 Q 10 (Dr Paul-Enguerrand Fady)
473 Written evidence from the Centre for Long-Term Resilience (MED0017)
474 Written evidence from Alliance Healthcare Distribution Ltd (MED0032)
475 Written evidence from the Centre for Long-Term Resilience (MED0017)
476 United States of America Department of Commerce, Bureau of Industry and Security, *Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Pharmaceuticals and Pharmaceutical Ingredients*, 16 April 2025
477 Reji K Joeph, Ramaa Arun Kumar, 'Making Global Pharma Supply Chain Resilient: Will the PLI Scheme of India Make it a Reliable Alternative to China for the Supply of APIs?', *The Indian Economic Journal,* (2024): https://doi.org/10.1177/00194662241265475; written evidence from Centre for Long-Term Resilience (MED0017) and Medicines UK (MED0029)
478 NHS England, *Pandemic Preparedness & Exercise Pegasus*, 16 July 2025
479 Q 57 (Darius Hughes)
480 Written evidence from the Centre for Long Term resilience (MED0017); Q 13 (Dr Paul-Enguerrand Fady)
481 Q 71 (Dr Mark Turner, Mark Samuels), Q 88 (Mark Samuels) and Q 10 (Dr Paul- Enguerrand Fady)
482 Q 24 (David Simmons)
483 Q 20 (David Simmons)
484 Q 71 (Mark Samuels)
485 Q 88 (Mark Samuels)

222. The Department of Health and Social Care currently has continuity of medicine supply as "amber-red after consideration of the mitigations available" in their own department-wide High Level Risk Register.[486] Some elements of medicine supply already appear on the NHS England risk register, such as the NHS capacity to supply chemotherapy through aseptic manufacture, which could leave 13,000 patients without chemotherapy by 2030.[487] However, David Simmons suggested that the reason for a red/amber on the internal risk register was due to chronic risks picked up on the National Risk Register such as "major energy disruption or a major cyber-attack, say—they would obviously cause us difficulties around manufacturing, storage and distribution",[488] rather than because of inherent risks of the medicines supply chain. The UK's National Risk Register 2025 does not have an entry for medicine shortage, despite having one for both gas and oil shortages, and in the health field, it has an entry for "major adult social care provider failure".[489]

223. The Minister admitted that for some medicines the UK relies on "less-than-ideal supply chain systems" and that it was "genuinely challenging at the moment to find some medicinal products [manufactured] in more than one region or country in the world."[490] He told the Committee that the DHSC is liaising with the Foreign Office regarding medicine resilience "as the geopolitics are changing".[491] The UK is also working with the World Health Organization and the G20 on intelligence and pathogen sharing.[492] With India in particular, the Government have signed a memorandum of understanding with the Indian government, agreeing to "collaboration on a range of health and life sciences priorities including medical supply chain resilience."[493]

224. ***Disruption to medicines or API supply poses an extreme risk to the UK's security. Therefore the Government should accept that medicine security is, and should be treated as, a national security issue. The Government should place medicine supply failure on the National Risk Register, and should conduct preparedness exercises focused on large scale medicine supply and API supply failure.***

Oversight and leadership

225. As outlined in Chapter 3 there is a lack of oversight of the medicine supply chain, particularly in the sharing of information, and coordination across the supply chain.[494]

226. Evidence from organisations such as the National Clinical Homecare Association suggest a "lack of coordination" across the sector,[495] while the Government has "no oversight of stock levels and potential risks" for medicines

486 Written Answers, HL11810, Session 2024–2026; correspondence, *DHSC and NHSE to Chair of the Public Services Committee*, 19 November 2025
487 Q 49 (Andrew Davies)
488 Q 90 (David Simmons)
489 HM Government, *National Risk Register*, 2025 [accessed 15 January 2026]
490 Q 98 (Dr Zubir Ahmed MP)
491 Q 98 (Dr Zubir Ahmed MP)
492 Q 98 (Dr Zubir Ahmed MP)
493 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
494 Written evidence from Royal Pharmaceutical Society (MED0015) and Alliance Healthcare (MED0044)
495 Written evidence from the National Clinical Homecare Association (MED0019)

not on tender.[496] We received evidence from across the supply chain asking for greater leadership, particularly in pharmacy, to ensure oversight across the supply chain,[497] and for greater coordination, particularly in the UK's industrial strategy.[498] Community Pharmacy England told us that without better coordination the sector "remains reactive rather than proactive in its response to shortages",[499] while Medicines UK said that the UK should have a "strategic medicines security plan".[500]

227. The National Pharmacy Association called for a "supply chain Tsar" to monitor supply chain issues.[501] We heard from Dr Keith Ridge, who suggested that given the increasing risk towards medicine supply chains there should be a Senior Responsible Officer or "SRO" within Government, to oversee medicine supply, with perhaps a "medicine security board" which works across agencies, particularly due to the increased geopolitical risks around medicines.[502] This sentiment was shared by patient groups such as the Cystic Fibrosis Trust, who suggested a Medicine Shortages Taskforce, which could "develop a strategy for preventing, anticipating and responding to medicines shortages", working across Government and industry.[503]

228. Not all stakeholders agreed on the need for a tsar. Martin Sawer from the Healthcare Distribution Association (HDA) told the Committee:

> "I am not suggesting that we have an overarching tsar who has visibility of every pack going around the UK, because that would be costly and almost unmanageable. We did that—we supported NHS England in Covid like that—and it was a massive exercise for just hospital ICU products."[504]

However the HDA identified the need for leadership from Government, in terms of "Government support/guidance" to facilitate communications on supply issues, and "the development and publication of a comprehensive UK-wide strategy for managing shortages outlining clear protocols and responsibilities for all."[505]

229. Concerns were also raised from stakeholders that the merger of NHS England with the Department for Health and Social Care, as announced in 2025,[506] could result in medicine supply issues being lost. Richard Bowers of Leeds Teaching Hospitals NHS Trust told the Committee that "we cannot lose the gains that have been made" during the reorganisation.[507] Further, Mark Samuels of Medicines UK expressed concern that as NHS England's Medicines Value and Access team, who coordinate procurement, are merged into DHSC, they should not lose resources.[508] Dr Ridge highlighted the need

496 Written evidence from AbbVie Inc (MED0025)
497 Written evidence from the Royal Pharmaceutical Society (MED0015); Q 53 (Amandeep Doll), Q 13 (Dr Keith Ridge CBE)
498 Written evidence from the National Pharmacy Association (MED0027)
499 Written evidence from Community Pharmacy England (MED0038)
500 Written evidence from Medicines UK (MED0029)
501 Written evidence from the National Pharmacy Association (MED0027)
502 Q 13 (Dr Keith Ridge CBE)
503 Written evidence from the Cystic Fibrosis Trust (MED0020)
504 Q 36 (Martin Sawer)
505 Written evidence from Healthcare Distribution Association (HDA) (MED0021)
506 Department of Health and Social Care (DHSC) and the Rt Hon Wes Streeting MP, *NHS England: Health and Social Care Secretary's Statement*, 13 March 2025
507 Q 53 (Richard Bowers)
508 Q 73 (Mark Samuels)

for leadership during the re-organisation.[509] Some stakeholders spoke of the need for greater collaboration between DHSC and NHSE.[510]

230. DHSC said that they do have a "collaborative approach" to address supply chain issues, and "engage with industry, the Medicines and Healthcare products Regulatory Agency, and other colleagues across the supply chain".[511] The Medicines Shortage Response Group in the Department undertakes some cross-government work, however, as the name suggests, this is a group undertaking reactive mitigation to medicine supply issues rather than proactive work.[512]

231. The Department of Health and Social Care have already undertaken similar oversight and leadership roles in other areas such as the Vaccines Taskforce during the pandemic, as well as for individual medicine shortages such as the HRT Supply Taskforce.[513] However they do not currently have a proactive leader or taskforce in this area.

232. ***The Government should appoint a Senior Responsible Officer with the appropriate seniority and authority to oversee the implementation of resilience into the UK's medicines supply chain. The role should include:***

- ***working across government to ensure medicine supply chains are appropriately included and prioritised in relevant areas of Government policy, including but not limited to policy relating to health, the Life Sciences Sector Plan, the Industrial Strategy, trade, and national resilience and preparedness;***
- ***improving the sharing of data regarding medicines stock held across supply chains, including by government departments, wholesalers, manufacturers, primary care, and secondary care; and***
- ***driving forward effective regulatory approaches.***

509 Q 13 (Dr Keith Ridge CBE)
510 Written evidence from National Clinical Homecare Association (MED0019)
511 Written Answer, HL11922, Session 2024–2026
512 Written evidence from the Department of Health and Social Care (DHSC) and NHS England (NHSE) (MED0043)
513 Written evidence from Besins Healthcare UK Limited (MED0033)

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The challenge—medicine shortages

1. It is deeply concerning that, despite increased reports of shortages from the medical professionals, the Government is unable to judge whether medicine shortages and supply issues are increasing or decreasing. (Paragraph 29)

2. *The DHSC should provide a clear working definition of shortages to inform strategy and response. This definition should more effectively account for local and regional shortages, and shortages which directly impact on patients. Supplementary to this, it should review its current information repositories and channels on shortages and supply issues to present a transparent and effective measurement mechanism to judge the severity of shortages in the UK.* (Paragraph 30)

3. When considering the management of medicine shortages, it is vitally important to have in mind their impact on patients. Many patients require medicines to live healthy, fulfilling lives, and disruptions to medicine supply chains can have significant, life changing or even life-threatening impacts. (Paragraph 46)

4. As well as undermining patient care, disruptions to medicine supply place additional pressure and added cost on frontline health and care staff, including those working in pharmacies, hospitals and GP surgeries. (Paragraph 52)

Understanding medicine supply and demand across the system

5. Despite a range of stakeholder engagement and reporting mechanisms, the DHSC has at best an incomplete picture of medicines stocks and shortages in the UK, with serious gaps in its understanding of primary care stock levels and manufacturer stock situations. This makes it challenging to predict, identify and respond to medicine shortages, and to forecast demand for medicines. (Paragraph 91)

6. *The DHSC should take steps to improve its own understanding of real-time stock availability and visibility of medicines across the supply chain, including primary care supply chains.* (Paragraph 92)

7. *The DHSC should strengthen its engagement with manufacturers and wholesalers. This should include:*

    - *Mandating greater information sharing regarding stock levels relating to critical medicines so that the DHSC can better judge demand and shortage risks.*

    - *Reviewing the use of sanctions where reporting requirements are not met, including requirements regarding medicine supply issues alongside the wider stock level information. We note the DHSC's plans to review the use of sanctions regarding supply issues. where manufacturers do not share information regarding supply issues within appropriate timeframes.*

    - *Exploring what further information it could share with manufacturers and suppliers, including demand forecasts, medicines usage information, and information about supply issues that the DHSC has identified.*

- *Working with NICE and the MHRA to explore how information regarding potential and actual regulatory change and prescribing guidance could be more effectively shared with supply chain stakeholders.* (Paragraph 93)

8. *The DHSC should accelerate the digitisation of medicine supply chains, building on the strong work already conducted in secondary care. A digitised system should enable stakeholders across the supply chain to access accurate, real-time information about current and predicted stock availability, and take appropriate actions. As part of this work, the Government should mandate the use of 2D barcodes for medicines, considering both how this would support effective stock management.* (Paragraph 94)

Responding to shortages

9. *It is unacceptable that community pharmacies and hospitals may only discover medicines shortages when they are directly affected, even where DHSC may have been aware of supply issues. The DHSC should take steps to improve communications regarding shortages through providing information in a more timely manner to pharmacies and hospitals, and ensuring prescribers and secondary care have an up-to-date understanding of the current medicines supply situation and relevant guidance. This should include steps to improve transparency in supply chains, alongside improvements to mechanisms such as SSPs, the Medicines Supply Tool, and Medicines Shortages Notifications.* (Paragraph 121)

10. *The Committee welcomes the Government consultation on giving pharmacists further powers to provide substitutions in limited circumstances when medicines are in shortage, and we are mindful of the introduction of prescribing pharmacists. To support these new powers and ensure pharmacists do not cause knock-on shortages, pharmacists should be given improved access to relevant sources of information to inform substitution decision-making, including relevant supply chain and patient information. Alongside this, the Government should take steps to increase the level of stock information community pharmacies share with local or national NHS bodies, and provide support for them to do so. This should be included in the next Community Pharmacy Agreement, due to take effect from April 2026.* (Paragraph 122)

Developing resilience

11. While the Government's current approach to the medicines market has resulted in low-cost medicines for the UK, this leaves little room or incentive to develop resilient supply of medicines, resulting in a fragile supply chain. The Government has to understand the value of resilience and decide how much it is willing to work with industry to achieve this. We welcome that in some areas, such as vaccine production, this has already taken place. (Paragraph 136)

12. *We welcome the steps the DHSC has taken to better consider the resilience and sustainability of supply chains through value-based procurement, however we believe that the DHSC should go further and place greater emphasis upon resilience in tendering processes, contracting arrangements and performance management.* (Paragraph 137)

13. *DHSC should review tendering processes for medicines, and should include realistic implementation periods or manufacture 'lead in' time in contracts so that health providers and manufacturers are able to accurately predict when medicine supply will begin.* (Paragraph 138)

14. It is unacceptable that Home Office administrative problems and resourcing are leading to medicine supply issues. (Paragraph 144)

15. *DHSC should work with the Home Office and MHRA to address licence renewal and inspection backlogs. If improvements are not seen within six months of this report's publication, the Cabinet Office should review where responsibility for licences for controlled drugs should reside.* (Paragraph 145)

16. *We note progress made at the MHRA regarding licensing speed and parallel import licensing. While these are welcome developments, further progress should be made to speed up patients' access to medicines. DHSC should work with the MHRA to further reduce regulatory approval delay, while maintaining safe quality assurance processes. DHSC and MHRA should take steps to harmonise regulatory requirements with other countries. This should include work to develop Mutual Recognition Agreements with appropriate countries and the EU.* (Paragraph 152)

17. *The Government's approach to stockpiling vaccine resources with Moderna shows willingness to stockpile critical medications or ingredients, with the costs and associated risks of stockpiling being absorbed by the Government and taxpayer rather than medicines manufacturers. The Government should explore other medicines they could consider this approach with.* (Paragraph 162)

18. *Through its membership of the Critical Medicines Alliance and using other diplomatic channels, the Government should ensure stockpiling by partner countries and blocs is coordinated effectively to both avoid waste and mitigate impact on the UK's medicine resilience.* (Paragraph 163)

Building a manufacturing base and medicines alliances

19. The global nature of supply chains and lack of domestic manufacturing means that UK medicines security is fragile and is reliant on international partners. Increasing geopolitical tensions mean that there is an increased risk to the UK medicine supply. (Paragraph 186)

20. We are disappointed that the Government is not doing more to influence and incentivise critical medicines manufacturing in the UK or to develop reliable and resilient offshore capacity. (Paragraph 205)

21. *The Government should create a public Critical Medicines List and list of critical Active Pharmaceutical Ingredients (API), based on clinical priority and supply chain vulnerability. This would be used to inform UK production, potential medicines for stockpiling, contract negotiations, and international diplomatic deliberations.* (Paragraph 206)

22. We welcome the Government's vision to make the UK the leading life sciences economy in Europe through investment in innovative medicines and the wider aims of the Life Sciences Sector Plan. However, we are concerned that significant barriers remain to boosting UK manufacture of medicines and API. (Paragraph 207)

23. Considering that the UK already sources more than half of its generic medicines from the UK and EU countries, it is disappointing that the Government does not view the UK as a competitive place for manufacturing generic medicines. Considering actions by other countries to boost medicines manufacturing, we are concerned that a lack of ambition for generics manufacturing will mean the UK is left behind. (Paragraph 208)

24. *When implementing the Life Sciences Sector Plan, the Office for Life Sciences should ensure that investment boosts the UK's generic and API manufacturing capacity. This investment should consider which medicines and APIs the UK Government views as critical for medicines security and resilience.* (Paragraph 209)

25. Regardless of efforts to encourage greater medicine manufacture in the UK, it is neither realistic nor desirable for the UK to domestically manufacture all medicines. The UK will remain reliant on other countries for a level of medicine and API supply. (Paragraph 210)

26. *The Government should develop a strategy identifying which medicines and API it plans to manufacture in the UK, and which medicines could be supplied through strategic alliances with other countries. This should be mapped against the UK Critical Medicines List and should be used to highlight opportunities for investment and innovation in UK medicines manufacturing by the medicines industry. It should also be used to determine which products will need to be imported, informing procurement decisions.* (Paragraph 211)

27. *We are pleased to see the Government's engagement with the European Critical Medicines Alliance, and ongoing diplomatic work relating to medicine supply chains. Resilience of medicines supply chains should be prioritised in diplomatic work, including in the UK-US trade deal and UK-EU reset. As part of this, the Government should work with international partners to form strategic medicines alliances, which coordinate efforts to develop more resilient supply chains, share information, improve supply chain transparency, and increase manufacturing capacity.* (Paragraph 212)

National security and leadership

28. *Disruption to medicines or API supply poses an extreme risk to the UK's security. Therefore the Government should accept that medicine security is, and should be treated as, a national security issue. The Government should place medicine supply failure on the National Risk Register, and should conduct preparedness exercises focused on large scale medicine supply and API supply failure.* (Paragraph 224)

29. *The Government should appoint a Senior Responsible Officer with the appropriate seniority and authority to oversee the implementation of resilience into the UK's medicines supply chain. The role should include:*

    - *working across government to ensure medicine supply chains are appropriately included and prioritised in relevant areas of Government policy, including but not limited to policy relating to health, the Life Sciences Sector Plan, the Industrial Strategy, trade, and national resilience and preparedness;*

    - *improving the sharing of data regarding medicines stock held across supply chains, including by government departments, wholesalers, manufacturers, primary care, and secondary care; and driving forward effective regulatory approaches.*

    - *driving forward effective regulatory approaches.* (Paragraph 237)

APPENDIX 1: LIST OF MEMBERS AND DECLARATIONS OF INTERESTS

Members

Lord Blencathra
Lord Bradley
Lord Carter of Coles
Baroness Cass
Baroness Coffey
Lord Laming
Baroness Morris of Yardley
Lord Mott
Baroness Pidgeon
Lord Prentis of Leeds
Lord Shipley
Baroness Wyld

Declarations of interest

Lord Blencathra
No relevant interest declared
Lord Bradley
No relevant interest declared
Lord Carter of Coles
No relevant interest declared
Baroness Cass
No relevant interest declared
Baroness Coffey
No relevant interest declared
Lord Laming
No relevant interest declared
Baroness Morris of Yardley
No relevant interest declared
Lord Mott
No relevant interest declared
Baroness Pidgeon
No relevant interest declared
Lord Prentis of Leeds
No relevant interest declared
Lord Shipley
No relevant interest declared
Baroness Wyld
No relevant interest declared

A full list of Members' interests can be found in the Register of Lords' Interests: https://www.parliament.uk/hlregister.

Specialist Advisors

Professor Liz Breen
No relevant interests declared

APPENDIX 2: LIST OF EVIDENCE AND COMMITTEE ACTIVITY

Evidence is published online at: https://committees.parliament.uk/work/9311/medicines–security/publications/.

Evidence received by the committee is listed below in alphabetical order.

Alphabetical list of witnesses

Abbvie Inc.	MED0025	
Accord Healthcare	MED0045	
The Association of the British Pharmaceutical Industry (ABPI)	MED0016	QQ 70–89, David Watson, Patient Access Executive Director, Association of the British Pharmaceutical Industry
Alliance Healthcare Distribution Ltd (Cencora Alliance Healthcare)	MED0032 MED0044	
Besins Healthcare UK Ltd	MED0033	QQ 54–69, Paul White, Head of Legal, Besins Healthcare UK Ltd
Bioindustry Association (BIA)	MED0042	QQ 70–89, Dr Martin Turner, Director of Policy and External Affairs, Bioindustry Association
Blockchain Pharma Ltd	MED0023	
The British Association of European Pharmaceutical Distributors (BAEPD)	MED0030	
British Society for Rheumatology	MED0014	
British Society of Gastroenterology (BSG) Inflammatory Bowel Disease (IBD) Section Committee	MED0018	
Doctor Natasha Campling, Associate Professor in School of Health Sciences, University of Southampton, Professor Sue Latter, Professor of Health Services Research, University of Southampton	MED0004	
Centre for Long Term Resilience	MED0017	QQ 1–14, Dr Paul-Enguerrand Fady, Biosecurity Policy Manager, Centre for Long Term Resilience

Community Pharmacy England	MED0038	QQ 33–44, James Davies, Director of Research and Insights, Community Pharmacy England
Company Chemists' Association (CCA)	MED0036 MED0050	QQ 33–44, Malcolm Harrison, Chief Executive, Company Chemists' Association
CPI (Part of the High Value Manufacturing Catapult)	MED0034	
Cystic Fibrosis Trust	MED0020	
Andrew Davies	MED0006 MED0046	QQ 45–53, Andrew Davies, Former National Director of Hospital Pharmacy for NHS England
Department for Health and Social Care and NHS England (DHSC and NHSE)	MED0043	QQ 15–32 and QQ 90–100, David Simmons, Director for Supply Resilience and Medicines, Department for Health and Social Care QQ 90–100, Dr Zubir Ahmed MP, Parliamentary Under-Secretary, Department for Health and Social Care QQ 15–32, Clare Foreman, Director of Medicine Policy and Strategy, NHS England
GS1 UK	MED0047	
Guy's and St Thomas' NHS Trust	MED0039	
Healthcare Distribution Association	MED0021 MED0049	QQ 33–44, Martin Sawer, Executive Director, Healthcare Distribution Association
Health Innovation Wessex	MED0002	
iehtico	MED0026	
INEOS	MED0048	

Leeds Teaching Hospitals NHS Trust	MED0008	QQ 45–53, Richard Bowers, Lead Clinician, Medicines Procurement and Supply, Leeds Teaching Hospitals NHS Trust
Medicines UK	MED0029	QQ 70–89, Mark Samuels, Chief Executive, Medicines UK
Moderna		QQ 54–69, Darius Hughes, UK General Manager, Moderna
National Clinical Homecare Association	MED0019	
National Pharmacy Association	MED0027	
NICE (National Institute for Health and Care Excellence)	MED0003	
North East and North Cumbria NHS Collaborative	MED0010	
Office for Life Science		QQ 15–32, Andrew Howard, Deputy Director of Manufacturing, Skills and Partnership Delivery, Office for Life Science
The Office of Health Economics	MED0011	
Orion Pharma UK	MED0012	QQ 54–69, Ian Wariner, Country Manager, Orion Pharma UK
Pharmacy2U	MED0035	
PAGB, The Consumer Healthcare Association	MED0009	
Dr Thomas J W Peck, Lecturer in Law, Lancaster University Law School	MED0007	
The Pharmacists' Defence Association	MED0031	
Renal Pharmacy Group, Part of the UK Kidney Association	MED0024	

Dr Keith Ridge		QQ 1–14, Dr Keith Ridge CBE, Former Chief Pharmacist of England and Wales, NHS England and Department for Health and Social Care
Royal Pharmaceutical Society	MED0015	QQ 45–53, Amandeep Doll, Director for England, Royal Pharmaceutical Society
Rx-info Ltd	MED0022	
Sandoz	MED0040	
Dr Stefan Scholtes, Director of the Centre for Health Leadership and Enterprise (CCHLE), University of Cambridge	MED0001	
Sciensus Pharma	MED0005	
Professor Kostas Selviaridis, Professor of Operations and Supply Chain Management, Lancaster University Management School	MED0013	
Dr Emilia Vann Yaroson, Lecturer in Operations and Supply Chain Management, Sheffield University Management School	MED0041	QQ 1–14, Dr Emilia Vann Yaroson, Lecturer in Operations and Supply Chain Management, Sheffield University Management School

Dr Emilia Vann Yaroson, Lecturer in Operations and Supply Chain Management, Sheffield University Management School Professor Kostas Sleviaridis, Professor of Operations and Supply Chain Management, Lancaster University Management School Dr Nonhlanhla Dube, Lecturer in Operations Management, Lancaster University Management School Professor Ying Xie, Professor of Supply Chain Analytics Logistics, Procurement and Supply Chain Management, Cranfield School of Management Professor Liz Breen, Professor of Health Service Operations, University of Bradford School of Pharmacy and Medical Sciences	MED0028
Vial	MED0037

APPENDIX 3: CALL FOR EVIDENCE

The House of Lords Public Services Select Committee has launched an inquiry into the UK's ability to predict and prevent medicine supply issues.

This is a public call for written evidence to be submitted to the House of Lords Public Services Committee. The Committee has launched an inquiry into the effectiveness of the strategies for predicting and preventing medicine supply issues in England and the resilience of these strategies in the face of future supply issues. The Committee invites written contributions by 23 September 2025.

Committee Inquiries: Background

Committees run inquiries to scrutinise government policy. To do that they take oral and written evidence on specific topics and consider it. They then publish a report with recommendations to government. The Government must respond, and there will in due course be a Parliamentary debate. The Public Services Committee is responsible for scrutinising public services, including health and education.

The Current Inquiry

Medicines shortages across England are increasingly prevalent, putting patient health at risk and placing significant pressure on pharmacies.

The medicines supply chain encompasses the end-to-end sourcing, manufacturing, distribution, and delivery of pharmaceutical goods to providers and consumers. With the development of an increasingly complex and globalised medicines supply chain, events including natural disasters, geopolitical conflicts, and disease outbreaks, pose significant threats to the security and resilience of the medical supply in England. Proactive strategies, by Government and public services such as the NHS and pharmacies, which predict and prevent supply issues are therefore crucial in ensuring shortages do not occur.

The Committee is therefore interested in understanding how effective current strategies in England are for predicting and preventing supply chain issues across both primary and secondary care, and their future resilience in the face of different challenges and threats. We would like to understand how different parts of the supply chain monitor stock levels, anticipate changes in supply, and procure stock, as well as other strategies that may be in place to prevent shortages. We are also keen to understand the extent of collaboration across the supply chain and the barriers faced by different parts of the supply chain in implementing proactive policies to promote supply chain resilience.

As part of our inquiry, we are also keen to hear innovative solutions to increasing the capacity to predict and prevent supply issues in England in both primary and secondary care. In particular, we would be interested to hear thoughts on England's current and potential domestic manufacturing capacity and the viability of this as a means of preventing medicine supply issues.

Who Would We Like to Hear From?

The Committee is interested in hearing from anyone with expertise or experience in the pharmaceutical industry, including think tanks and researchers, as well as individuals and organisations who may have been directly affected by supply issues. We are particularly interested in hearing from organisations, and individuals

from across the medicines supply chain, including manufacturers, distributors, wholesalers, pharmacies, and patients.

Diversity comes in many forms, and hearing a range of different perspectives means that Committees are better informed and can more effectively scrutinise public policy and legislation. Committees can undertake their role most effectively when they hear from a wide range of individuals, sectors or groups in society affected by a particular policy or piece of legislation. We encourage anyone with experience or expertise of an issue under investigation by a Select Committee to share their views with the Committee, with the full knowledge that their views have value and are welcome.

We seek evidence on the following areas. It is not necessary to answer all questions. Where a question asks about different areas of the supply chain, please do not feel compelled to discuss any areas which fall outside of your expertise, but please be clear which groups you are referring to in your response.

Causes of Medicine Supply Chain Issues

1. What are the causes of medicine supply chain issues in the UK?

    (a) What are the impacts of medicine shortages on patients and frontline services when they occur? And what is the significance of the impact when they do occur?

2. What are the current and possible future threats facing the UK medicine supply chain?

    (a) Overall, how resilient is the UK supply chain to these different threats?

Supply Chain Monitoring

3. How do Government and primary and secondary care providers monitor stock levels across different parts of the supply chain and how effective is this monitoring?

    (a) Are stock levels communicated effectively and in a timely manner between different parts of the supply chain?

    (b) Is stock monitoring more effective at some points along the supply chain more so than others?

4. To what extent is the Government able to predict supply chain issues before they occur?

    (a) What barriers are there to predicting supply chain issues?

    (b) What strategies are in place to mitigate the impact of a possible shortage when it has been predicted/detected?

5. How can the monitoring of the medicine supply chain and prediction of potential supply chain issues be improved?

    (a) To what extent can technology and AI be used to augment these processes?

Procurement Strategies

6. What impact do procurement policies within primary and secondary care have on supply chain resilience and how could these be improved?

7. How effectively does the UK, including the NHS and DHSC, collaborate with international partners to procure medicines and to what extent can international collaboration improve supply chain resilience?

The UK Medicines Market

8. To what extent is the UK an attractive market for investment at all stages of the pharmaceutical supply chains, including research, manufacturing, and supply?

    (a) How effectively does the UK promote research and development in the pharmaceutical industry?

    (b) What Government policies or strategies could be implemented to improve investment in the UK pharmaceutical industry?

9. To what extent is the supply chain workforce suitably trained and resourced to produce and supply medicines?

    (a) How effectively can the workforce embrace new strategies to improve management of supply chain issues?

10. What is the current state of the UK's domestic manufacturing capability for producing medicines and their components (e.g., active pharmaceutical ingredients, excipients, or key ingredients)?

    (a) Does this differ across different drug types?

    (b) What is our capacity for upscaling production of medicines in the face of supply issues or surges in demand?

11. The UK Government has pledged £520 million to grow the UK's life sciences manufacturing capacity and strengthen supply chain resilience. How far can the UK 'reshore' its medicine supply chain within the UK?

    (a) To what extent is it possible to reshore all stages of the manufacturing process, including the production of medicinal components such as active pharmaceutical ingredients (APIs)?

Closing date: 11.59pm on Tuesday 23 September 2025.

APPENDIX 4: GLOSSARY

Active Pharmaceutical Ingredient (API)	API is the part of a medicine which has the desired medical effect, i.e. the part of the drug that makes you feel better. [514] This is distinct from the excipient (see below)
Branded medicine	The original version of a medicine product developed by a pharmaceutical company. While a company has a patent on a drug, only they can sell the drug under that name. Medicine patents typically expire after a number of years, and after this, generic versions of the medicine can also be sold by other manufacturers (see generic medicines).[515]
Buffer stock	A reserve of medicine to be used in the case of medicine shortages. The UK Government requires manufacturers maintain an 8-week buffer stock of medicines supplied to secondary care.[516] In this report, unless quoted by a witness, we use buffer stock to refer to Government mandated 8-week stockpiles.
Community pharmacy	Community pharmacy, sometimes called retail pharmacy, are part of the primary care system. The traditional community pharmacy model is a retail outlet with qualified healthcare professionals such as pharmacists, who provided services including dispensing prescription medicines.[517]
Controlled drug	Substances considered harmful to human health and subject to legal controls. These are categorised as Class A, Class B or Class C according to their potential harm.[518]
Critical medicines	For this report, we define critical medicines as medicines with significant health impact on a significant number of patients, where the supply chain is fragile, relies on single points of failure, or is otherwise problematic for developing supply chain resilience.
Excipient	Substances other than the API which may aid in the manufacturing, function, safety, delivery, taste or texture of the medicine. [519] See also API.

514 National Cancer Institute, Definition of active pharmaceutical ingredient, (accessed January 2026); see also MHRA, *Medicines: register to manufacture, import or distribute active substances*, 18 December 2024
515 Lloyds Pharmacy, *How are generic medicines different to brand-name medicines*, 10 November 2020
516 Department for Health and Social Care (DHSC), Managing a robust and resilient supply of medicines, 15 August 2025
517 The King's Fund, *Community Pharmacy Explained*, 11 September 2025
518 House of Commons Library, Misuse of drugs: regulation and enforcement, CBP 10154, 4 December 2024
519 Specialist Pharmacy Service, *Understanding excipients in medicines*, 24 June 2024

Friendshoring	Outsourcing manufacture and production to, or sourcing materials from, countries regarded as political and economic allies.[520] Also sometimes known as allyshoring. See also onshoring and nearshoring.
Generic medicine	Medicines with the same active ingredients as a branded medication that are produced after the patent on a branded medicine has expired. These will typically be cheaper than the branded medicine equivalent.[521] See also branded medicines.
Pharmaceutical manufacturer	Companies or bodies which manufacture and assemble, or just assemble, medicinal products. Also called a supplier.[522]
Medicines shortage/ shortage	There are a range of definitions for medicines shortage. This report uses the OECD definition: "any supply disruption or sudden change in the supply-demand equilibrium of a marketed pharmaceutical product that leads to an actual or anticipated lack of stock on the shelf for patients".[523]
Medicine Supply Notification (MSN)	MSNs are used by the Government to communicate supply issues and management advice to healthcare professionals.[524]
Medicines and Healthcare products Regulatory Agency (MHRA)	The regulator of medicines and medicines devices, with responsibilities including to secure a safe supply chain for medicines. [525]
National Institute for Health and Care Excellence (NICE)	NICE produces guidance for the NHS and wider health and care system, including on the efficacy and value of specific medicines.[526]
Nearshoring	Outsourcing business production and manufacturing to a nearby country, as opposed to 'onshoring' production (see below) or outsourcing to a country further away. [527] See also onshoring, and friendshoring.

520 World Economic Forum, *What's the difference between 'friendshoring' and other global trade buzzwords?*, 17 February 2023
521 Lloyds Pharmacy, *How are generic medicines different to brand-name medicines*, 10 November 2020
522 Medicines and Healthcare Products Regulatory Agency, *Guidance notes for applicants and holders of a Manufacturers Licence*, 2023
523 OECD, *Securing Medical Supply Chains in a Post-Pandemic World*, 23 February 2024
524 Written evidence from the Association of the British Pharmaceutical Industry (ABPI) (MED0016)
525 Medicines and Healthcare Products Regulatory Agency, *About us*, last accessed 19 January 2026
526 National Institute for Health and Care Excellence (NICE), *About us*, (Accessed 19 January 2026)
527 DHL, *Everything you need to know about nearshoring*, 18 November 2024; World Economic Forum, *What's the Difference Between "Friendshoring" and Other Global Trade Buzzwords?*, 17 February 2023

Onshoring	Locating a businesses' production and manufacturing operations within the same country as the company's headquarters. 'Reshoring' is sometimes used interchangeably, though reshoring usually refers to relocating production and manufacturing to a country after it had previously been outsourced.[528] See also friendshoring and nearshoring.
Office for Life Sciences (OLS)	A joint government unit between the Department for Business and Trade, the Department for Health and Social Care, and the Department for Science, Innovation and Technology, which exists to "power the government's health and growth missions" through developing the Life Sciences sector and bringing new treatments and technology to the NHS.[529]
Pharmaceutical wholesalers	Wholesalers are companies which purchase medicines from manufacturers in large quantities and sell them onto others in the supply chain, including community pharmacies, hospitals, and other wholesalers.[530] Also called wholesale drug distributors.
Primary Care	Services which provide the first point of contact in healthcare, "acting as the 'front door' of the NHS". This includes GPs, community pharmacy, dentistry.[531]
Secondary Care	This is usually care that is undertaken when more specialised treatment is required and is usually treatment in which a patient a referred into. These include planned or elective care, or urgent and emergency care which are usually undertaken in a hospital setting.[532]
Serious Shortage Protocol (SSP)	SSPs enable community pharmacies to supply a medication in accordance with a the SSP rather than in accordance with the patients' prescription. SSPs are issued by the DHSC when they decide there is a serious shortage of a specific medicine or appliance. Pharmacists should use their professional judgement to decide whether a substitution is appropriate.[533]
Stockpiling	In this report, unless quoted by a witness, we refer to stockpiling as action above and beyond the mandated 8-week buffer required of manufacturers.

528 Thomas, *All About Onshoring*, 1 August 2025; World Economic Forum, *What's the difference between 'friendshoring' and other global trade buzzwords?*, 17 February 2023
529 Office for Life Science, *About Us*, last accessed 27 January 2026
530 Crescent Pharma Limited, *Wholesalers and Pharmacies*, last accessed 27 January 2026
531 NHS England, *Primary Care Services*, last accessed 27 January 2026
532 NHS Digital, *The Healthcare Ecosystem*, 26 October 2022
533 NHS Business Services Authority, *Serious shortage protocols (SSPs)*, last accessed 27 January 2026

VPAG	VPAG, also known as the Voluntary Scheme for Branded Medicines Pricing, Access and Growth. This is a voluntary agreement between the Government and pharmaceutical manufacturers in which a percentage of manufacturer's sales of branded medicines is clawed back by the NHS to ensure affordability of NHS medicine spend.[534]

534 Department for Health and Social Care, *2024 voluntary scheme for branded medicines pricing, access and growth*, 14 December 2023; House of Commons Library, *How are medicines prices set in the UK?*, 12 December 2025