Accessible text

ESPAUR report infographics 2025 to 2026

Infographics

Introduction

ESPAUR oversight group

There is a graphic summarising the achievements of the ESPAUR oversight group:
•ESPAUR English Surveillance Programme for Antimicrobial Utilisation and Resistance
•Over 30 member organisations including all UK nations, government and member organisations and lay representations
•13 reports since established in 2013
•115 UKHSA peer-reviewed publications from April 2025 to March 2026
•Over 90 author contributions (2025 to 26 report)
•Multi-professional and multi-organisation group led by UKHSA

ESPAUR Report 2025-26

There is a graphic showing the different chapters of the ESPAUR report 2024 to 2025.

There are boxes representing each chapter of the report:

1. The ESPAUR foreword, extended summary and lay summary box includes an image of a clipboard with the word SUMMARY in it.
2. The antimicrobial resistance box includes icons of microbes.
3. The antimicrobial consumption box includes icons of antimicrobials.
4. The antimicrobial stewardship box includes a speech bubble, which contains an icon of an antimicrobial.
5. The NHS England and Improvement assurance schemes box includes the NHS logo.
6. The professional and public education, engagement and training box includes an icon of a person pointing at a board, with other people sat in front of the board.
7. The research insights and knowledge mobilisation box includes an icon of a microscope and DNA.
8. The ESPAUR oversight group members' action to tackle AMR – mapping to the National Action Plan box includes icons of groups of people with arrows to each other.
9. The knowledge mobilization of ESPAUR report: evaluation of feedback from report users box includes an icon of a form and a magnifying glass partly over the left-hand side.

Chapter 2: Antimicrobial resistance (AMR)

The burden of bacteraemia and resistant bacteraemia

Two boxes placed one above the other, each containing a graph and a core statistic. A large green graphic to the right containing a core statistic and 2 boxes each filled with 100 outlines of a human figure.

The upper left box contains a bar chart showing the overall estimated number of selected pathogen bacteraemia by calendar year. The graph shows a decrease from 2019 to 2020 (88,160 to 77,324) followed by annual increases from 2020 to 2025 (94,181 in 2025). The 2020, 2021 and 2022 bars are paler in colour to denote the period of the COVID-19 pandemic. The text reads: “an increase of 6.8% in numbers of bacteraemia* since 2019”.

The lower left box contains a red bar chart showing the number of resistant† bacteraemia by calendar year. The 2020, 2021 and 2022 bars are paler in colour to denote the period of the COVID-19 pandemic. The graph shows a decrease from 2019 to 2020 (18,086 to 15,527) followed by annual increases from 2020 to 2025 (21,129 in 2025). The text reads: “an increase of 16.8% in resistant bacteraemia† since 2019”.

The large green graphic to the right contains 2 boxes: the top box is titled ‘2019’ and has 100 human figure outlines, 21 of which are coloured red. The other 79 figure outlines are coloured grey.

On the bottom another box filled with 100 figure outlines is titled ‘2025’. Twenty-two figure outlines are coloured red and the other 78 are coloured grey.

Below these 2 boxes a key shows a red figure outline indicates resistant and grey indicates susceptible.

Underneath these boxes is one statement: “This means that 22 out of 100 people with a bacteraemia* had a resistant infection in 2025.”

Underneath all the boxes are caveats to the figures:

Pathogens include: E. coli, K. pneumoniae, K. oxytoca, Acinetobacter spp., Pseudomonas spp., Enterococcus spp., S. aureus, and S. pneumoniae.

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of – carbapenems – third-generation cephalosporins – aminoglycosides – fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides

- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin.

The burden of resistant† bacteraemia per week in England in 2025

Full double-decker buses representing how many people get a bacteraemia per week in England in 2025 (87 people per bus). On the left, there are 20 blue double-decker buses and 1 single-decker bus representing the average number of reported susceptible bacteraemia cases per week (approximately 1,811 cases). On the right, there are 4 red double-decker buses and one red single-decker bus representing the average number of reported resistant bacteraemia cases per week (approximately 406 cases).

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

30-day all-cause mortality of patients with Gram-negative bacteraemia* in 2025

Four horizontal bars indicate the percentage of patients with different types of Gram-negative bacteraemia that have died within 30 days.

The bar at the top shows that 14.9% of patients (8,552) with any Gram-negative bloodstream infection died within 30 days in 2025.

An arrow indicates that the lower 3 bars refer to 30-day all-cause mortality of patients with different types of Gram-negative bacteraemia.

The second bar shows that 16.0% of patients (2,318) with an antibiotic-resistant¥ Gram-negative bacteria bloodstream infection died within 30 days in 2025.

The third bar shows that 21.2% of patients (62) with a Carbapenemase-producing Gram-negative bacteria bloodstream infection died within 30 days in 2025.

The fourth bar shows that 14.4% of patients (6,129) with an antibiotic-sensitive Gram-negative bacteria bloodstream infection died within 30 days in 2025.

A higher percentage of people with antibiotic-resistant bloodstream infections die within 30-days compared with those with an antibiotic sensitive bloodstream infection.

Underneath all the boxes are caveats to the figures:

Pathogens include: E. coli, K. pneumoniae, K. oxytoca, Acinetobacter spp., Pseudomonas spp., Enterococcus spp., S. aureus, and S. pneumoniae.

† The resistance combinations included are:

- E. coli, K. pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

**sterile site infections

The burden of bacteraemia* resistant to critically important antibiotics

Bar graph on the left-hand side with 2 pie charts displayed to the right.

The bar graph on the left shows the total bacteraemia* in 2025 (94,181), 73,053 being antibiotic susceptible and 21,129 being antibiotic-resistant.

The pie chart on the upper right has the title ‘Bacteraemia*’ and an arrow from the bar graph indicates that the pie chart represents all bacteraemia in 2025 (both those antibiotic-resistant and susceptible). The pie chart is split up into 3 sections with E. coli displaying 48%, ‘Gram-positive’ displaying 32%, and ‘Other gram-negatives’ displaying 20%.

The pie chart on the lower right has the title ‘Antibiotic-resistant† bacteraemia’. An arrow from the bar graph indicates that the pie chart represents only the antibiotic-resistant bacteraemia in 2025. The majority of the pie chart is taken up by E. coli at 71%, the smaller proportions are ‘Other gram negatives’ (16%) and ‘Gram-positive’ (12%).

Pathogens include: E. coli, K. pneumoniae, K. oxytoca, Acinetobacter spp., Pseudomonas spp., Enterococcus spp., S. aureus, and S. pneumoniae.

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones

- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

Rate of resistant bacteraemia† per 100,000 by Index of Multiple Deprivation in 2019 and 2025

A bar graph is displayed showing the rate of AMR burden per 100,000 population by IMD quintile, with an arrow across the top of the graph indicating the most deprived group is on the left and least deprived group on the right. Each quintile has 2 bars, one for 2019 and one for 2025, with the percentage change from 2019 to 2025 within each quintile displayed above them. The bar graph shows a gradient of lower rate of AMR burden in the least deprived quintiles compared to the more deprived quintiles.

The most deprived quintile shows, per 100,000 population, a rate of 35.7 in 2019 and 44.4 in 2025, indicating this is an increase of 24.4% from 2019 to 2025.

The second most deprived quintile shows, per 100,000 population, a rate of 34.2 in 2019 and 40.9 in 2025, indicating this is an increase of 19.7% from 2019 to 2025.

The middle quintile shows, per 100,000 population, a rate of 32.3 in 2019 and 35.5 in 2025, indicating this is an increase of 9.8% from 2019 to 2025.

The second least deprived quintile shows, per 100,000 population, a rate of 30.1 in 2019 and 35.1 in 2025, indicating this is an increase of 16.6% from 2019 to 2025.

The least deprived quintile shows, per 100,000 population, a rate of 27.6 in 2019 and 30.8 in 2025, indicating this is an increase of 11.3% from 2019 to 2025.

Note that figures are rounded and may cause different rates to appear the same in the text.

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

Rate of resistant bacteraemia† by Index of Multiple Deprivation from 2019 - 2025

A line graph is displayed showing the rate of AMR burden per 100,000 population by most deprived and least deprived IMD quintile from 2019 to 2025, with an arrow between the 2 lines indicating the percentage change between the most deprived group and least deprived group. The most deprived IMD quintile rate is shown by a green line and is increasing at a greater rate than the least deprived IMD quintile, which is shown as a blue line.

In 2019, the most deprived IMD quintile had a 29.0% higher rate than the least deprived IMD quintile (35.7 versus 27.6 per 100,000 population).

In 2020, the most deprived IMD quintile had a 41.1% higher rate than the least deprived IMD quintile (31.9 versus 22.6 per 100,000 population).

In 2021, the most deprived IMD quintile had a 36.0% higher rate than the least deprived IMD quintile (31.6 versus 23.2 per 100,000 population).

In 2022, the most deprived IMD quintile had a 39.6% higher rate than the least deprived IMD quintile (33.9 versus 24.3 per 100,000 population).

In 2023, the most deprived IMD quintile had a 41.4% higher rate than the least deprived IMD quintile (39.2 versus 27.7 per 100,000 population).

In 2024, the most deprived IMD quintile had a 48.9% higher rate than the least deprived IMD quintile (43.5 versus 29.2 per 100,000 population).

In 2025, the most deprived IMD quintile had a 44.2% higher rate than the least deprived IMD quintile (44.4 versus 30.8 per 100,000 population).

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

Regional notifications per 100,000 population of acquired carbapenemase-producing organisms and proportion of carbapenemase mechanism in England, 2025

There is a map of England showing the rate per 100,000 population of acquired carbapenemase-producing Gram-negative bacterial notifications by carbapenemase families (NDM, OXA-48-like, KPC, IMP, VIM and other) by region, 2025. The rate is highest in London (22.8 per 100,000 population), followed by the West Midlands (19.6 per 100,000 population).

Each region has a pie chart showing the proportion of acquired carbapenemase-producing Gram-negative bacterial notifications by carbapenemase families. NDM, OXA-48-like and KPC are the most common carbapenemase families across regions in 2025.

Estimated regional rate of bacteraemia* per 100,000 population in England, 2025 and estimated regional rate of resistant bacteraemia† per 100,000 population in England, 2025

Maps showing the variation in rate per 100,000 population of the estimated burden of resistant bacteraemia on the right in red, and the estimated rate of overall bacteraemia by region on the left in blue.

Resistant bacteraemia by region

The highest rate per 100,000 population of resistant bacteraemia was observed in London (45 per 100,000), followed by the North West (42 per 100,000) and Yorkshire and Humber (40 per 100,000). The lowest rates were observed in the South West (30 per 100,000).

Bacteraemia by region

The highest rate per 100,000 population of bacteraemia was observed in the North East (208 per 100,000) followed by Yorkshire and Humber (179 per 100,000) and the North West (169 per 100,000), with the lowest rates in London (144 per 100,000).

Pathogens include: E. coli, K. pneumoniae, K. oxytoca, Acinetobacter spp., Pseudomonas spp., Enterococcus spp., S. aureus, and S. pneumoniae.

† The resistance combinations included are:

- E. coli, K pneumoniae and K. oxytoca, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones
- Acinetobacter spp, resistant to aminoglycosides and fluoroquinolones, or carbapenems
- Pseudomonas spp., resistant to 3 or more antimicrobial groups, or carbapenems
- Enterococcus spp., resistant to glycopeptides
- S. aureus, resistant to meticillin
- S. pneumoniae, resistant to penicillin and macrolides, or penicillin

Fungaemia due to yeast species - 2019 and 2025

Two waffle charts present the proportion of bloodstream infections due to yeast species in 2019 and 2025 respectively. In 2019 *Candida albicans* was the predominant cause of bloodstream infections due to yeast (40%) followed by *Nakaseomyces glabratus* (formerly *Candida glabrata*; 27%). *Candida parapsilosis* was the third most prevalent cause of bloodstream infections due to yeast (11%). The remaining 22% of bloodstream infections due to yeast we caused by other yeast species. In 2025, *albicans* remained the predominant cause of bloodstream infections due to yeast (40%) followed by *N. glabratus* (29%). *C. parapsilosis* was the third most prevalent cause of bloodstream infections due to yeast with the proportion caused by this species increasing to 12%. The remaining 19% of bloodstream infections due to yeast were caused by other yeast species.

Detections of *C. auris* in patients in England in UKHSA region; 2025

This infographic is a map of the 9 English regions, showing the number of patients who have tested positive for *C. auris* colonisation or infection for the first time in England, 2025.

Candidozyma auris (*C. auris*) is a rapidly emerging fungal pathogen with a global distribution. Designated a critical priority fungal pathogen by the World Health Organisation in 2022, it can cause severe invasive infection, mostly within healthcare settings. There was a continued elevation in the prevalence of *C. auris* in England in 2025 including protracted outbreaks in two large NHS trusts in London and the South-East. These regions reported the majority of *C. auris* detections in England. In 2025; 213 patients were reported to the UKHSA with first detections of *C. auris,* of these 165 patients were reported in London and 18 in the South East, and between 0 and 6 detections in all other regions.

Chapter 3: Antimicrobial consumption

Antibiotics account for the majority of NHS antimicrobial use in England, and are largely prescribed in general practices, 2025

There are two pie charts. The first pie chart on the left shows the NHS antimicrobial use distribution in England (by percentage of Defined Daily Doses, from treatments assessed in the report only) for the year 2025. Antibiotics account for 85% of NHS antimicrobial use, followed by antifungals (8%), antivirals (5%) and antiparasitics (2%). Note: Antivirals include influenza, COVID-19, hepatitis and herpes simplex virus (aciclovir) treatments. Antiparasitics include antimalarials and anthelmintics.

The second pie chart on the right shows the subset of NHS antibiotic use by prescriber setting in England in 2025. Antibiotics are most prescribed in the General Practice

setting (65%), followed by Hospital (inpatient and outpatient; 24%), other community settings (4%), dental practices (3%) and Pharmacy First service (3%).

Total NHS consumption of antibiotics has reduced below pre-pandemic levels

Total consumption of antibiotics is presented across the seven-years studied, from 2019 to 2025. Consumption has steadily decreased over the years. Vast reduction noted in 2020 (from 17.8 in 2019 to 15.9 DDDs per 1,000 inhabitants per day in 2020). Following an increase to 17.1 DDDs per 1,000 inhabitants per day in 2023, consumption decreased in 2025 to 15.9 DDDs per 1,000 inhabitants per day.

NHS antibiotic consumption in primary care from 2019 to 2025

Primary care consumption of antibiotics is presented across the seven-years studied, from 2019 to 2025, measured as items per 1,000 inhabitants per day. Consumption saw a large decline in 2020 and 2021 due to the COVID-19 pandemic. Antibiotic consumption subsequently increased to 2019 levels in 2023 and then decreased to 1.54 per 1,000 inhabitants per day in 2025.

Antibiotic consumption through private (non-NHS) routes

Antibiotic consumption in the independent sector is presented from 2019 to 2025 measured as DDDs per 1,000 population per day. A series of seven pills increasing in size contain the numbers: 0.48, 2019; 0.39, 2020; 0.47, 2021; 0.61, 2022; 0.74, 2023; 0.76, 2024; 0.62, 2025. In the bottom left corner, there is an image of a hospital with the following text: “Usage across the independent sector, that is via private (non-NHS) routes, includes data on sales to private hospitals and private pharmacies, private prescriptions dispensed in community pharmacies, and private prescription in NHS hospitals.”

Next to this is a heading which reads “2025: 0.62 DDDs per 1,000 inhabitants per day (DID)”. Below this is small rectangle graphic which shows dispensing 0.50 DID, and purchasing 0.13 DID. Below this is the image of a pill showing that 4.0% of primary care prescribing was from private prescriptions dispensed in community pharmacies. In the bottom right is a graph showing the percentage of AWaRe use in the independent sector. It also shows that:

- private prescriptions dispensed in community pharmacy was 0.48 DDDs per 1,000 population per day
- private pharmacy purchasing was 0.04 DDDs per 1,000 inhabitants per day
- independent hospital purchasing was 0.08 DDDs per 1,000 inhabitants per day
- private usage in NHS hospitals was 0.01 DDDs per 1,000 inhabitants per day

NHS Antibiotic consumption in secondary care from 2019 to 2025

Secondary care consumption of antibiotics is presented across the seven-years studied, from 2019 to 2025, measured as DDDs per 1,000 admissions. In 2025, consumption increased compared to 2024 (4,724 in 2025 compared with 4,709 DDDs per 1,000 admissions in 2024). Consumption remains above pre-pandemic 2019 levels.

Being AWaRe

The World Health Organization classified key antibiotics into three categories (AWaRe): to improve access (Access), to monitor important antibiotics (Watch) and preserve 'last resort' antibiotics (Reserve). Access antibiotics have a narrow spectrum of activity and are first and second choice antibiotics recommended for empiric treatment of the most common infections; they should be widely available. Watch antibiotics are broad-spectrum with a higher resistance potential and should be prescribed for a limited number of infective syndromes. Reserve antibiotics are "last-resort", used for highly selected patients (with infections due to multi-drug resistant bacteria) and are closely monitored. These definitions are adapted by the UK for the National Action Plan.

Proportion of AWaRe antibiotic use across the NHS (primary and secondary care), in 2025 (using the 2024 UK AWaRe classification)

AWaRe antibiotic use as a proportion of total antibiotic use in 2025 is presented for primary care, secondary care and total across both settings, using the 2024 UK-AWaRe classification. The proportion of Access antibiotic use represented 68.9% of total antibiotic use in primary care (first bar, green block) and 55.0% in secondary care (second bar, green block). Access antibiotic use represented 65.6% of total antibiotic use across the healthcare system (third bar, green block), 4.4% below the UK NAP target for 2024-29 (70% Access antibiotic use, represented by the horizontal dashed line through the third bar).

For primary care, Watch antibiotic use represented 30.9% of the total antibiotic use (first bar, yellow block), whilst the Reserve and Other categories accounted for 0.1% and 0.1%, respectively (first bar, red and blue blocks at the top). In secondary care, Watch, Reserve and Other antibiotics accounted for 42.0%, 2.9% and 0.1%, respectively (first bar, yellow, red and blue blocks respectively). This amounts to a total Watch proportion of 33.6%, 0.8% for Reserve and 0.1% for Other antibiotics (third bar, yellow, red and blue blocks respectively).

England regional variation in antibiotic consumption, across the NHS

The image highlights variation in total primary and secondary care antibiotic use in UKHSA centers across England as DDDs per 1,000 inhabitants per day. A map on the

left side shows primary care antibiotic use was highest in the North East , followed by the East of England and was lowest in London . A map on the right shows secondary care antibiotic use was highest in London, followed by the North East and was lowest in the South East. A map in the centre shows total antibiotic use was highest in the North East , and was lowest in the South East.

Access and use of newly licensed antibiotics in England (2015 to 2025)

There is a timeline along the top of the infographic, spanning every year from 2015 to 2025. The following antibiotics and the year they were licensed were: Ceftobiprole medocaril, and Ceftolozane with tazobactam in 2015; ceftazidime with avibactam in 2017; cefiderocol, and imipenem with relebactam in 2020; eravacycline in 2022; aztreonam with avibactam in 2024. The two antibiotics included in the antimicrobial products subscription model pilot are displayed in orange (ceftazidime with avibactam in 2017; cefiderocol in 2020).

In the bottom left corner, there is a map showing the distribution of DDDs per 1,000 admissions for all newly licensed antibiotics, where London has the highest rate of 0.62 DDDs per 1,000 admissions. The lowest rate of 0.14 per 1,000 admissions was observed in Yorkshire and the Humber, the South West and East Midlands.

In the bottom right corner, the proportion of Subscription model antibiotics (orange) to other newly licensed antibiotics (blue) are represented by seven pie charts ranging from the years 2019 to 2025. The total DDDs per 1,000 admissions of newly licensed antibiotics was 1.02 in 2019, 1.60 in 2020, 1.26 in 2021, 1.64 in 2022, 1.88 in 2023, 1.98 in 2024, 2.25 in 2025.

Consumption of antifungals in primary and secondary care

Primary and secondary care consumption of antifungals are presented across 2019, 2020 and 2025, measured as DDDs per 1,000 inhabitants per day (DID). Antifungal consumption across primary care was 1.10 DID in 2019, reducing to 0.84 DID in 2020 then increasing to 1.21 DID in 2025. Antifungal consumption across secondary care was 0.15 DID in 2019 and 2020 then increased to 0.18 DID in 2025.

UK National Action Plan ambitions and England progress

This slide describes two of the UK National Action Plan (NAP) ambitions aimed at 1) preventing any increase in a specified set of drug-resistant infections by 2029, and 2) reducing UK antibiotic use in humans by 5% by 2029, compared to 2019 baseline. The figure also describes figures for 1) the estimated number of drug-resistant infections in England in financial year 2025/26, which is 25.7% higher than the financial year 2019/20 baseline, and 2) that total antimicrobial use in humans in England in 2024 was

15.9 DID, representing a 10.7% reduction from 17.8 DID in 2019. Both AMR and consumption measures are yet to meet the required NAP measures, highlighting the need for continued stewardship.

Chapter 4: AMR and AMU spotlights

Emerging *Trichophyton indotineae*

This slide introduces *Trichophyton indotineae* (pronounced tri-ko-fy-ton in-doe-tin-ee-ay) as an emerging health concern. *T. indotineae* is a fungus that causes ringworm, a skin infection that may be widespread, disfiguring and affect multiple body sites. It is easily spread from person to person. The slide shows that most *T. indotineae* infections detected in the UK have affected the buttocks, groin, perineum and thigh (63%). Cases are concentrated in London, though have been reported in all regions in England, and reports have increased between 2024 and 2025. Increasing cases are causing concern because *T. indotineae* is resistant to the most common drug used to treat fungal skin infections. Also, reports are likely to be an under-estimate due to low clinical suspicion and limited access to accurate diagnostic testing.

Methodological considerations when estimating the economic burden of AMR

This slide presents a framework for estimating the economic burden of antimicrobial resistance (AMR). It shows five boxes.

Box 1: Define what we want to estimate

Population: who is affected?

Infection and resistance: which infections and resistance patterns are included?

Attribution: burden due to infection or resistance?

Time horizon: when do consequences occur?

Setting and perspective: whose costs are considered?

Box 2: Determine the consequences

Quantify the number and spread of cases.

Assess healthcare and care use, including hospital care, primary care, community or social care, and family or unpaid care.

Measure health impacts, including illness, complications, and deaths.

Box 3: Value the consequences

Estimate costs by applying unit costs to resources used.

Estimate quality of life losses resulting from illness or death.

Box 4: Estimate burden and potential savings

Calculate the total burden from resistant infections.

Estimate the proportion of burden attributable to resistance.

Calculate potential savings from reducing infections or resistance.

Box 5: Preliminary estimates

Hospital stays for patients with Gram-negative bloodstream infections were estimated to cost NHS England trusts £840 million in the 2023 financial year. The estimate reflects total admission costs rather than costs specifically attributable to the infection or resistance.

Chapter 5: Antimicrobial stewardship

TARGET Activities 2025 to 2026

Between April 2025 and March 2026, TARGET (Treat Antibiotics Responsible, Guidance, Education and Tools) completed the following activities:

- Engaged with 59 professionals and 50 members of public to develop three new resources (expected 2026/27)
- Published updated NHSE/UKHSA UTI Diagnostic Quick Reference Tool
- A urinary tract infection pre-consultation survey accessed by over 200,000 people
- Ran three webinars with a combined total of 980 live attendees and 643 online views
- World AMR Awareness Week campaign reached over 29,000 RCGP members and viewed over 1.1 million times on Google and social media

TARGET resources supporting the UTI Care Pathway

This image highlights the TARGET resources supporting the UTI care pathway and settings in which they can be accessed from. Resources suitable for pharmacy setting include the patient information leaflets and the TARGET antibiotic checklist. Tools available for the GP setting are the diagnostic quick reference tool, urine sample collection leaflets and videos, patient information leaflets, training and learning tools, as well as audits. For care home settings, TARGET resources that are available include the patient information leaflets and the UTI communication tools and diagnostic support.

Findings from a scoping review and impact assessment of UKHSA tools to support secondary care in England

Flow diagram outlining findings from an evaluation of UKHSA AMS tools to support secondary care in England.

A box on the far left contains the text 12 AMS tools identified. To the left of this box, the 12 AMS tools are listed: Start Smart then Focus, Antibiotic Guardian website, ESPAUR report, EAAD and WAAW toolkit, Prescribing competencies, England adapted AWaRe categories, National AMS surveillance system, Fingertips AMS portal, IV to Oral Switch criteria (adults), National Audit Tool for hospitals, Secondary care peer-to-peer review tool. Three arrows extend from this box linking to a second column of three boxes. The top arrow links to a box containing the text Peer reviewed publications for 9 out of 12 tools. An arrow links this to a box in the top right of the image containing the text Average citation rate equals 44 (range 2 to 206). The middle arrow that extends from the far left box links to a box containing the text Website analytics for 7 out of 12 tools. This links to another box with the text Average website visits over 4-years = 71588 (range 1526 to 407761). The third arrow extending from the initial far left box links to a box with the text Evidence of use in secondary care for 7 out of 12 tools. This links to two final boxes containing the text Evidence of impact in the UK for 11 out of 12 tools and Evidence of international impact for 4 out of 12 tools.

A footnote is included defining impact as evidence of the tool influencing national or international AMS policy/guidelines or other tools.

The review authors are listed at the bottom of the image: Berry R and Ashiru-Oredope D. Evidence of impact of national stewardship tools for secondary care in England. 2025

Findings from anonymous online survey of secondary care antimicrobial stewardship (AMS) tools

The infographic outlines the key findings from an online survey of secondary care AMS tools. The top section of the infographic shows that 90 AMS specialists responded to the questionnaire, of which 68% were from Acute Trusts (61 out of 90) and less than 50% reported having dedicated AMS time (45/90). The next section of the infographic shows the findings from the evaluation of 12 AMS tools. For Awareness index the top 5 tools were Antibiotic Guardian website, IVOS criteria (adults), antimicrobial prescribing and stewardship competencies, start smart then focus and the England adapted AWaRe categories. For the usability index the top 5 tools were the start smart then focus toolkit, EAAD and WAAW toolkit, the England-adapted AWaRe categories, Antibiotic Guardian website and the antimicrobial prescribing and stewardship competencies. For Deployment index the top 5 tools were the Antibiotic Guardian website, the start smart then focus toolkit, the England adapted AWaRe categories, antimicrobial prescribing and stewardship competencies and the EAAD and WAAW toolkit. For Perceived Impact index the top 5 tools were start smart then focus toolkit,

the England adapted AWaRe categories, IVOS criteria (adults), EAAD and WAAW toolkits and antimicrobial prescribing and stewardship competencies. Across all four assessment categories the lowest two tools were the national audit tool for hospitals and the secondary care peer-to-peer review tool.

A box below the evaluation section highlights that patterns suggest a relationship between awareness, use, deployment and perceived impact.

Section 3 highlights organisation readiness. AMS staff with dedicated or protected time for AMS had organisational readiness scores approximately 18 percentage points higher than those without dedicated time aligned with thematic analysis.

Section 4 highlights findings from the thematic analysis of facilitators and barriers to use of national AMS tool. Leadership support and organisational readiness facilitators included national endorsement; barriers included lack of organisational ownership an buy-in. Time, resource and capacity facilitators included education and training; barriers included time and staff constraints. Usability, integration and perceived impact facilitators included accessible, user-friendly resources and patient safety; barriers included integration with digital system and clinical workflow. Professional, cultural and behavioural change facilitators included positive leadership behaviour and best practice sharing; barriers included lack of senior clinician engagement and buy-in. Awareness and interpretation facilitators included awareness and visibility; barriers included data interpretation and relevance for non-AMS specialists.

Development of a health inequalities toolkit

The image provides an overview of the process taken to develop a toolkit for addressing health inequalities in AMR.

Across the top of the infographic is a flow chart which contains the following information reading from left to right:

- January – March 2024 - Scoping review conducted.
- September – October 2025 - Grey literature search TNovember 2025 – January 2026 – Data extraction and resource bank development. February 2026 – Workshop held to discuss format of the toolkit and provide feedback on suggested content
- March 2026 – Workshop held to receive feedback on draft toolkit. Call for evidence. Met with dashboard team to discuss how to host the toolkit

The infographic also contains a table listing the population groups and the number of resources within the toolkit that fall under each group, as well as a list of collaborating organisations and a screen shot of the title page of the published toolkit.

Addressing health inequalities in infection and AMR

Infographic outlines the content of a UK-wide collaborative toolkit to help organisation identify unequal burden in infection and AMR, select relevant resources and translate local needs into action.

The toolkit supports UK AMR National Action Plan 2024-2029, Outcome 8 and Commitment 8.2. The focus is inequalities in access, infection incidence, clinical outcomes, vaccine update and antimicrobial exposure.

The toolkit was co-developed across the 4 UK nations. It contains 86 signposted resources, collating evidence, tools, data and examples in one place. It has 3 core sections: data, practical resources and shared learning. There are 23 population categories including protected characteristics, social determinants and inclusion health groups.

The toolkit contains:

- AMR data and dashboards where you can find evidence to understand where inequalities exist, which populations are most affected, where action should be prioritised, and whether interventions reduce gaps over time across national, regional local and UK-wide resources
- Practical resources. Translate identified needs into action using guidelines and structures approaches, toolkits, assessment tools and flow charts, patient information and communication materials, and e-learning and workforce development resources. Search by population, type, language, focus and user
- Case studies and learning. Learn from practice across different settings including how teams identified local challenges, interventions implemented and adapted, barriers encountered and lessons learned, and ideas for replication and continuous improvement. This can be gained from campaigns, co-production, QI and research.

Navigate resources across 23 population and inequality categories.

- Age, care leavers and vulnerable young people, clinical vulnerability, deprivation, disability, ethnicity, gender, georgraphy, Gypsy, Roma and Traveller communities, low health literacy, marriage/civil partnership, migrants, overcrowded/communal housing, drug/alcohol dependence, homelessness, criminal justice, pregnancy/maternity, religion/belief, sex, sex workers, sexual orientation, underserved or disadvantaged populations

The infographic contains a flow diagram at the bottom with the text:

- Identify the gap
- Select relevant resources
- Adapt locally
- Implement

- Monitor impact
- Share learning

Resources are signposted rather than independently quality-assured: assess suitability, accuracy and local applicability, and ensure interventions do not exacerbate inequalities.

Behavioural interventions for AMR: an umbrella review

The image provides an overview of findings from an umbrella review to identify behavioural interventions for AMR.

Aim: To describe and summarise behavioural interventions for AMR to identify effective intervention strategies and to identify where health inequalities may exist.

The image highlights that 8164 records were screened with 40 reviews included (a total of 346 unique individual papers) with 44 unique combinations of intervention functions.

The most commonly reported intervention functions were education. Persuasion, training and enablement.

The review shows that intervention content, target populations, outcome population and outcome measures varied resulting in mixed effectiveness across and within intervention types.

The image also highlights why it matters:

- Health inequalities are difficult to assess due to limited reporting on outcome populations
- Standardisation of reporting related to intervention content, populations and outcomes is essential
- Future studies should also focus on study quality and robust evaluation

Chapter 6: NHS England improvement and assurance schemes

Overview of NHS England improvement and assurance schemes and antibiotic performance for financial year 2025 to 2026

The image provides an overview of NHSE improvement and assurance schemes from 2025 to 2026 arranged in four columns from left to right.

- NHS Oversight Framework: Antibiotic exposure among children aged 0–9 fell from 32% to 28%, remaining above the 27% target. Twenty of 41 integrated care boards (49%) met the target.
- National Medicines Optimisation Opportunities: The proportion of five-day amoxicillin 500 mg prescriptions increased from 69% to 74%, with 26,118 fewer capsule items. Intravenous antibiotic consumption increased by 2%. The summary highlights improving use of the shortest effective course alongside rising intravenous antibiotic consumption.
- NHS Standard Contract: Eighty-four trusts (65%) reduced Watch and Reserve antibiotic use. Consumption in England was 2,136 defined daily doses per 1,000 admissions, 4.2% below the 2019–20 baseline.
- Pharmacy Quality Scheme: A total of 8,789 contractors submitted audit data covering 92,320 acute sore throat consultations. Compliance ranged from 73.0% for neck examinations in people with FeverPAIN scores of 2–3 to 98.6% for advice on when to re-consult.

Overview of Pharmacy First service in England during 12 months April 2025 to March 2026

The infographic is titled "Pharmacy First - April 2025 to March 2026". At the top of the infographic, under the heading "Across all 7 infection pathways", icons represent the seven clinical pathways: Acute otitis media, Acute sinusitis, Acute sore throat, Impetigo, Infected insect bites, Shingles, and Uncomplicated urinary tract infection. Below this, a panel on the left states that Patient access increased by 42.2% on average, while a panel on the right states that the Percentage of consultations resulting in antimicrobial supply was lower, ranging from 1% to 5% lower by pathway, compared to the previous year.

In the middle row, four panels present key activity measures. The first reports a total of 3,328,445 consultations delivered in English community pharmacies. The second states that 97% of all consultations were face to face. The third shows that Children aged 0–14 years accounted for 20% of all Pharmacy First consultations. The fourth states that 43% to 84% of consultations had an antimicrobial supplied.

The bottom row provides pathway-specific findings. The first panel states that Effective analgesia – acute otitis media accounted for 49% of consultations for children and of these 32% were supplied antibiotic-sparing analgesic anaesthetic ear drops. The second panel, titled "Shining a light on gender differences", states that excluding UTI, 64% of adult consultations were for women. The third panel, titled "Improving timely access to appropriate treatment", reports that about 850,000 women used the uncomplicated UTI pathway. A panel connected to this states that for UTI, 4 in 5 were supplied an immediate antibiotic.

Capability Framework for Antimicrobial Stewardship (AMS) Specialists

The infographic is titled “Capability Framework for Antimicrobial Stewardship (AMS) Specialists” and is arranged from left to right. On the left-hand side, four coloured boxes are stacked vertically and connected by coloured pathways that converge towards the centre of the infographic.

The top green box is labelled “Domain 1: Professional practice” and states: “Provides specialist AMS knowledge, skills and practices to shape and deliver AMS in their organisation and healthcare system, for the benefit of individual patients and services; collaborating with other patients, and the public.”

The second pink box is labelled “Domain 2: Leadership and management” and states: “Provides leadership across organisations and systems to optimise the management of infections and use of antimicrobials; leading on complex issues relating to AMR and behaviours driving antimicrobial use.”

The third orange box is labelled “Domain 3: Education” and states: “Develops and improves the knowledge, attitudes, and practices of others regarding the optimal use of antimicrobials; and uses their own professional development to improve AMS programmes and patient care.”

The fourth blue box is labelled “Domain 4: Research and Quality Improvement” and states: “Co-ordinates surveillance and monitoring of antimicrobial use across services, organisations, and systems; and develops and applies evidence to improve AMS programmes and interventions and optimise the use of antimicrobials.”

In the upper centre of the infographic, two text boxes state: “Capability statements and descriptors of practice for core, advanced and expert to guide users through benchmarking and professional development” and “Applicable to healthcare professionals specialising in AMS from all professional backgrounds working in all sectors of the NHS.”

In the upper right are the British Society for Antimicrobial Chemotherapy and NHS England logos. Beneath the logos, text headed “Associated resources:” lists “Job descriptions”, “Person specifications”, and “Job plans”.

Across the lower centre of the infographic are three large blue circles representing capability levels. The left-hand circle is labelled “Core (enhanced) Supports the delivery of AMS activities.” The middle circle is labelled “Advanced Delivers and develops AMS programmes and activities.” The right-hand circle is labelled “Expert Leads and is responsible for AMS programmes.” Coloured circular arrows connect the three circles and lead to an upward-pointing arrow on the far right, illustrating progression through the capability levels.

Along the bottom of the infographic, text states: “Signposting to educational resources for AMS knowledge and skills to support practitioners to move from core to advanced and expert advice.”

Chapter 7: Professional and public education and training

TARGET training roll out reach and impact 2025/26

The infographic provides an evaluation of the TARGET training roll out. A map of England is shown on the left of the infographic with shading to show the number of people who received training*. The North west has the darkest shading indicating the highest number of people trained. This is followed by the Midlands then North east and the South East then the East of England. The South West and London are greyed out indicating that training has not yet been rolled out in these areas. Below the map is a table which indicates the training reach over time with the following statistics:

- 2022-23: 107
- 2023-24: 1322
- 2024-25: 986
- 2025-26: 844
- Overall training reach = 3,318 (October 2022 to March 2025)

The right side of the infographic contains information on participant intentions to enact antimicrobial stewardship activities immediately post-training (n=534). The activities arranged from most (93%) to least likely (84%) are: discuss antimicrobial stewardship at my practice meeting; keep antimicrobial stewardship on the agenda; embed a whole practice approach to antimicrobial stewardship; take time to explain my prescribing decision with my patients; reflect on my own prescribing; use delayed prescribing where appropriate; use appropriate coding to support research into AMR.

*Figures obtained through completed evaluation surveys, actual training reach will be higher

Accompanying text to intentions to enact include 47% (n=422) of respondents intend to implement these actions within 6 months post-training.

Abbreviations: TARGET, Treat Antibiotics Responsibly, Guidance, Education and Tools; AMR, Antimicrobial Resistance; NHSE, National Health Service England

TARGET and RCGP antimicrobial stewardship webinars

Between April 2025 and March 2026, TARGET hosted three webinars in partnership with the Royal College of General Practitioners. After each webinar, attendees were asked to give feedback. Their responses were used to calculate a Net Promoter Score (NPS) – a way to measure how satisfied people were with the event. These have been colour coded where Red = Needs improvement, Yellow = Good, Light green = Great, Dark green = Excellent.

Webinar 1: Managing RTIs in children: What is the evidence? – 506 attendees and a NPS of 73 (Dark green).

Webinar 2: From guidance to practice: Managing paediatric RTIs – 300 attendees and a NPS of 73 (Dark green).

Webinar 3: Clinical decision making for skin infections: From Group A Strep to insect bites – 174 attendees and a NPS of 68 (Dark green).

Abbreviations: TARGET, Treat Antibiotics Responsibly, Guidance, Education and Tools; RCGP, Royal College of General Practitioners; AMS, Antimicrobial Stewardship; NPS, Net Promoter Score.

e-Bug topics across key stages

e-Bug contains 4 age-specific teaching packs for educators. This infographic shows which topics are covered in each key stage pack:

- Early Years (3 to 5 years): Hand hygiene, respiratory hygiene and oral hygiene
- Key Stage 1 (5 to 7 years): Introduction to microbes, hand hygiene, respiratory hygiene and oral hygiene, vector-borne diseases
- Key Stage 2 (7 to 11 years): Introduction to microbes, useful microbes, harmful microbes, hand hygiene, respiratory hygiene, oral hygiene, food hygiene, animal and farm hygiene, vector-borne diseases, vaccinations and antibiotics
- Key Stage 3 (11 to 14 years): Introduction to microbes, useful microbes, harmful microbes, hand hygiene, respiratory hygiene, oral hygiene, food hygiene, vector-borne diseases, sexually transmitted infections, vaccinations and antibiotics
- Key Stage 4 (14 to 16 years): Introduction to microbes, useful microbes, harmful microbes, hand hygiene, respiratory hygiene, oral hygiene, food hygiene, vector-

borne diseases, sexually transmitted infections, vaccinations, antibiotics and antimicrobial resistance

e-Bug resources for school and community settings

This infographic highlights the different e-Bug resources for school and community settings which include:

- Germ Busters Academy

  A resource for wraparound care, youth groups, school and holiday clubs aimed at children ages 5 to 16. It includes interactive resources teaching children about germs, infection prevention, antimicrobial resistance and healthy habits.

- Vector-borne Diseases Teaching resources
  This resource is aimed for delivery in schools with curriculum-linked lesson plans, activities and worksheets tailored to key stages 1 through 4 (children aged 5 to 16). It covers vectors, vector-borne diseases transmission, prevention, and One Health.

- Beat the Bugs
  This is a community resource for young adults with learning disabilities. It is a six-session course covering microbes, hygiene, antibiotic use and AMR, self-care when unwell and accessing reliable health information

e-Bug engagement 2025 to 26

Between April 2025 and March 2026, e-Bug carried out the following engagement activities:

- Access – 198,979 views on the e-Bug website
- Social media –166,000 views on YouTube
- Global reach – onboarded two new partners to join the existing network of partners across Europe and beyond
- Training – two e-learning courses hosted on FutureLearn
- Newsletter – quarterly newsletter distributed to 10,000 subscribers

Antibiotic Guardian engagement: pledges and newsletter

The infographic provides an overview of the antibiotic guardian campaign

The box on the left side of the infographic contain the following text: 195796 antibiotic guardian pledges on main pledge page from inception (2014) to end of 2025; 73 Organisations registering AMS activity through Antibiotic Guardian in 2025

Below, there are five arranged consecutively to show pledges over time based on the main pledge page. From left to right the arrows contain the number of pledges in 2021 (32423), 2022 (13951), 2023 (19321), 2024 (12967) and 2025 (5148).

The right had side of the infographic shows information on the Antibiotic Guardian newsletter. It contains the following text:

- 5 editions October 2024-Nov 2025
- 23k-32k subscribers across 5 editions
- 31%-38% open rate across editions
- 2%-15% click rate across editions
- 42,543 unique opens across five editions
- 32,392 subscribers at launch edition
- the antibiotic Guardian newsletter is delivered in collaboration with the Microbiology Society

Feedback on Antibiotic Guardian Translations pages

The image provides a summary of feedback received on translated Antibiotic Guardian pages. A box in the top left contains the text: In Nov 2025, Antibiotic Guardian pledges were translated to Urdu, Punjabi, Mandarin, Polish, and Romanian. User feedback were obtained. Below this are screen shots of the translated Antibiotic Guardian web pages. To the right the image shows that the feedback survey had 39 responses (21 Mandarin, 9 Romanian, 5 Urdu, 4 Polish). 17 of the responses were from members of the public and 21 were from those under the age of 25.

74% (29 out of 39) found the AG pledges were either very easy or somewhat easy to access; 85% (33 out of 39) found the AG pledges were either clear and understandable in their chosen language; 82% (32 out of 39) found the AG website either very useful or useful in improving knowledge about antimicrobial use and Antimicrobial Resistance and 59% (23 out of 39) reported increase antimicrobial resistance knowledge.

Further feedback highlighted three themes for improvement:

- Readability
- Clarity
- Terminology

National World AMR Awareness Week (WAAW) Toolkit 2025

The image shows key highlights from WAAW in 2025. The toolkit received 1643 views of which 1322 views were unique. A total of 350 social media posts using the hashtags #AntibioticGuardian and #KeepAntibioticsWorking in 2025, a 53% increase compared to 2024.

The bottom half of the infographic highlights new resources added to the WAAW toolkit in 2025.

1. UKHSA Keep Antibiotics Working (Andi Biotic). Box includes an image of Andi Biotic from the campaign with a speech bubble that states How to keep antibiotics working.
2. Changes to WAAW daily themes and cross cutting themes – Day 1: Prevention; Day 2: Antimicrobials in clinical practice; Day 3: Optimising diagnostics; Day 4: Tackling health inequalities; Day 5: One Health and research.
3. WAAW multilingual videos
4. Tools for schools toolkit – includes image of the AMR awareness tools for schools toolkit
5. Penicillin allergy de-labelling – image of the NHS poster for penicillin allergy

Chapter 8: Research insights and knowledge mobilisation

Word cloud representation of keywords for the research projects showcased in 2025-2026 Research insights and knowledge mobilisation chapter

Keywords for the research projects showcased in 2025-2026 Research insights chapter, in order of frequency:

Antibiotic, Resistant, Infection, Antimicrobial, Surveillance, Systematic, England, Review, Bloodstream, National, Model, Evaluation, Clinical, Novel, UK, Impact, Bacteraemia, Study, Use, Isolate, Management, Stewardship, Support, Tests, Europe, Health, Escherichia coli, Associated, Role, Pharmacy, Prevention, Rapid, Assessing, Screening, Analysis, Detect, Emerging, Genomic, Carbapenemase-producing, Gram-negative, Klebsiella pneumoniae, Patient, Activity, Against, Gene, New, Combinations, Carbapenemase, Enterobacterales, Experience

AMR peer-reviewed publications from April 2025 to March 2026 by UK National Action Plan for AMR 2024-2029 outcome

A figure showing the number of peer-reviewed publications by NAP outcome: IPC and infection management = 15 publications, public engagement and education = 12 publications, strengthening surveillance = 30 publications, antimicrobial stewardship and disposal = 6 publications, AMR workforce = 3 publications, innovation and influence = 17 publications, using information for action = 21 publications, health disparities and health inequalities = 9 publications, AMR diplomacy = 2 publications.

Chapter 9: ESPAUR oversight group members' activities and actions to tackle AMR – mapping to National Action Plan

Examples of activities undertaken by ESPAUR Oversight Group members to support the UK National Action Plan for AMR 2024-29

This infographic highlights the ESPAUR Oversight Group members who have contributed to this years' ESPAUR report by sharing their activities undertaken to support commitments within the UK National Action Plan for AMR 2024-29.

A circle in the centre of the infographic contains the logos of the organisations who have contributed to this years' ESPAUR report. Four boxes around the circle contain examples of the work that ESPAUR Oversight Group members have conducted that support the National Action Plan for AMR and not a comprehensive list.

The top left box contains the text:

Theme: Optimising the use of antimicrobials
Outcome: Antimicrobial stewardship and disposal
Commitment: 4.1; Clinical decision support, 4.2; Appropriate prescribing and disposal
Hosting discussions addressing antibiotic use and diagnostics in critical care on patient cases and lectures given by critical care infections experts.

The top right box contains the text:

Theme: Investing in innovation, supply and access
Outcome: Using information for action
Commitment: 7.1; Evidence generation and use, 7.2; Research network
Collating and reporting data from a nationwide study on teicoplanin use in hospital practice (TUCK-SHOP), to primary and secondary care pharmacists to provide an update on the current antimicrobial stewardship agenda.

The bottom left box contains the text:

Theme: Optimising the use of antimicrobials
Outcome: AMR workforce
Commitment: 5.1; Health and social care training
Conducting and reporting on engagement call's with Trusts in England to demonstrate good AMS practice and to highlight areas for improvement.

The bottom right box contains the text:

Theme: Optimising the use of antimicrobials
Outcome: AMR workforce
Commitment: 5.1; Health and social care training
Supporting colleagues in work related to the NAP. Signposting resources related to antimicrobial stewardship and World AMR Awareness Week and producing informational posts on AMS in a range of settings including primary care.

The organisations that have contributed to this years' ESPAUR report are:

- British Dental Association (BDA)
- British Infection Association (BIA)
- British Society for Antimicrobial Chemotherapy (BSAC)
- College of General Dentistry
- Microbiology Society
- Royal College of General Practitioners
- Royal College of Nursing
- Royal Pharmaceutical Society
- UKCPA Pharmacy Infection Network (PIN)
- Veterinary Medicines Directorate (VMD)
- NHS England
- Department of Health and Social Care
- Public Health Agency, Northern Ireland
- ARHAI Scotland (Scottish One Health Antimicrobial Use and Antimicrobial Resistance (SONAAR))

Chapter 10: Knowledge mobilisation of ESPAUR report: evaluation of feedback from report users

Evaluation of ESPAUR report and Knowledge Mobilisation Activities

This infographic summarises ESPAUR report use, views, and knowledge mobilisation activities.
Top left title: ESPAUR report chapter use and reasons for accessing the report uses.
On the top left hand side of the table, under a heading titled 'Participant demographics and engagement', the top job roles of participants reported for each year is listed.

- 2020/21: Pharmacists: 34 (39.5%); Nurses: 11 (12.8%); Public health professionals: 9 (10.5%); Doctors: 8 (9.3%); Epidemiologists: 4 (4.7%); IPC specialists: 0 (0%).

- 2021/22: Pharmacists: 136 (34.6%); Doctors: 52 (13.2%); Nurses: 47 (12.0%); Epidemiologists: 28 (7.1%); Public health professionals: 23 (5.9%); IPC specialists: 0 (0%).

- 2022/23: Pharmacists: 116 (28.7%); Nurses: 78 (19.3%); Doctors: 42 (10.4%); Public health professionals: 33 (8.2%); Epidemiologists: 29 (7.2%); IPC specialists: 2 (0.5%).

- 2023/24: Pharmacists: 131 (33.7%); IPC specialists: 53 (13.6%); Doctors: 41 (10.5%); Public health professionals: 22 (5.7%); Epidemiologists: 18 (4.6%); Nurses: 25 (6.4%).

- 2024/25: Pharmacists: 167 (31.3%); Doctors: 85 (16.0%); Public health professionals: 53 (9.9%); Nurses: 35 (6.6%); IPC specialists: 29 (5.4%); Epidemiologists: 21 (3.9%).

This table also shows the most used chapters ("AMR", "AMS", and "AMC") highlights responses from surveys sent through annual webinars in 2020/21 to 2024/25 with counts, percentages, and totals:

- AMR:
  2020/21: 23 (46%); 2021/22: 96 (47%)*; 2022/23: 201 (86%)*; 2023/24: 165 (80%)*; 2024/25: 276 (85%)*; total 761.
- AMS:
  2020/21: 23 (46%); 2021/22: 93 (45%); 2022/23: 154 (66%); 2023/24: 131 (54%); 2024/25: 226 (70%); total 630.
- AMC:
  2020/21: 24 (48%)*; 2021/22: 84 (41%); 2022/23: 150 (64%); 2023/24: 110 (45%); 2024/25: 182 (56%); total 550.

*these values are highlighted in yellow in the table.

Overall, AMR is the most used chapter in the reports, followed by AMS, with
AMC chapters., except year 2020/21, where AMC was most used followed by both AMR and AMC.
The top reasons for accessing the report:

- First reason for all report years – Reading for information:
  2020/21: 40 (77%); 2021/22: 187 (77%); 2022/23: 179 (50%); 2023/24: 58 (19%); 2024/25: 138 (41%); total 602.
- Second reason:

To share with others in 2020/21: 10 (19%); 2021/22: 41, (17%); 2022/23: 69 (19%), and 2024/25: 107 (32%).
Personal learning in 2023/24: 31 (10%); total 258.

- Third reason:

Other in 2020/21: 2 (4%); 2021/22: 15 (6%).
Informing policy in 2022/23: 67 (19%); 2024/25: 49 (15%).
Sharing with others in 2023/24: 30 (10%); total 163
A footnote under this table states "Numbers highlighted in yellow represent the highest value for the report year."

Webinar registrations:

- Webinar registrations increased substantially over the period:
  86 in 2020/21, 393 in 2021/22, 404 in 2022/23, 389 in 2023/24, 533 in 2024/25

There were 1,805 webinar registrations in total across all years.
The AMR chapter is consistently the most-used section of the ESPAUR report, reading for information remains the primary reason for access, and engagement through webinars has increased markedly, reaching its highest level in 2024/25.

A table in the bottom left summarises the ESPAUR report and lay summary views

- Main report views:
  2020/21: 563; 2021/22: 642; 2022/23: 4,022; 2023/24: 3,930; 2024/25: 6,316*; total 15,473.
- Lay summary views:
  2020/21: NA; 2021/22: NA; 2022/23: 37; 2023/24: 200; 2024/25: 750*; total 987.

*these values are highlighted in yellow in the table.

A footnote under this table states “Numbers highlighted in yellow represent the highest value for the report year.”

On the right side of the infographic, knowledge mobilisation activities of the ESPAUR report are provided.
Infection Control Matters Podcast: 543 downloads since 14 January. *

- Social media assets:
  Platform logos displayed: LinkedIn, Instagram, X, and Facebook.
  40,631 impressions
  3,263 engagements
  13,280 reach**
  Abstracts: JAC-AMR abstracts: 518 views/downloads ***, Medical Sciences Forum abstracts: 52,719 views, 8,688 downloads, 5 citations ****.

A teal box contains the text “Examples of other activities” and below this, the following are listed; meetings, annual ESPAUR webinars, Secretary of State briefings, conferences, the ESPAUR report lay summary, ESPAUR report extended summary, press releases, the Antibiotic Guardian website and newsletters, regional data summaries, UKHSA newsletters, the UKHSA intranet, and UKHSA Health Protection Reports”.

Foot note: *Data correct as of 31 March 2026. **Facebook and Instagram only. ***Data correct as of 4 June 2026. **** Data correct as of 09 October 2026.

Knowledge Mobilisation of the ESPAUR report using the Knowledge-to-Action Framework

At the top left corner of the graphic, a burgundy box shows the heading “Who is the audience?” followed by a list of groups including the general public, patients, pharmacists, prescribers, vets, dental subgroups, the NHS AMR Diagnostic Team, RCGP, National Public Health Teams, NHSE, Regional AMS Leads, CQC, DHSC, VMD, CGDent, and many other government and national organisations.

At the top right corner of the graphic, a blue box shows the heading “What are the main messages? What does the report present?” and lists key points: the burden of AMR in England, antibiotic consumption in GPs, community and secondary care settings, inequalities in AMR and antimicrobial consumption (AMC), antimicrobial stewardship interventions, and professional and public education and training.

At the bottom left corner, an amber box shows the heading “Why have you undertaken this work? Why are these findings important?” and explains that the work aims to understand gaps and health inequalities (such as deprivation and specific groups), ensure progress towards meeting UK NAP targets, and raise awareness of and encourage use of stewardship initiatives. At the bottom right corner, a green box shows the heading “How will you get the message(s) across to this audience? (KM activities)” and lists communication methods including press releases since 2013, yearly infographics since 2018, webinars since 2021, yearly after-action reviews, co-production and stakeholder engagement, leaflets, posters and digital messaging (including social media), peer-reviewed abstracts (with a link to an MDPI publication in JAC-Antimicrobial Resistance), podcasts in 2022 and 2025, and social media using #ESPAUR.