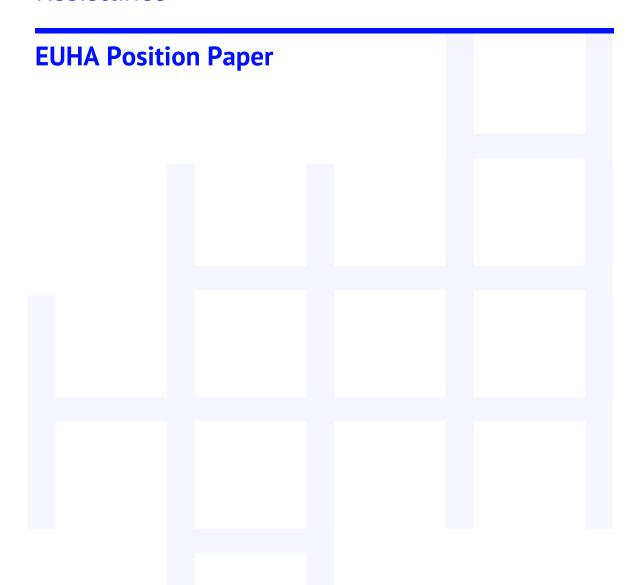


# European Hospitals and the AMR Challenge

From Control to Prevention: How University Hospitals Can Prevent, Prepare, and Protect Against Infections and Antimicrobial Resistance



**Full Title**: European Hospitals and the AMR Challenge: From Control to Prevention: How University Hospitals Can Prevent, Prepare, and Protect Against Infections and Antimicrobial Resistance

#### **Credits**

The paper has been developed by EUHA with input from the Danish AMR Alliance. The content is underpinned by a survey of medical experts at European university hospitals, complemented by in-depth interviews with clinicians, scientists and patient organisations. The interviews and survey, conducted between June and September 2025, focused on policies for addressing AMR; hospital stewardship; patient care; preparedness and resilience; and the role of vaccination. The results and insights, supported by input from EUHA and partners, informed the content of this paper.

November 2025

### To cite this work, please use the following reference:

European Hospitals and the AMR Challenge: From Control to Prevention: How University Hospitals Can Prevent, Prepare, and Protect Against Infections and Antimicrobial Resistance. 2025. Brussels.

European Hospitals and the AMR Challenge: From Control to Prevention: How University Hospitals Can Prevent, Prepare, and Protect Against Infections and Antimicrobial Resistance. © 2025 by European University Hospital Alliance is licensed under CC BY-NC-SA 4.0. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-sa/4.0/



# Table of Contents

Executive Summary	04
Europe's Hospitals: Rising to the AMR Challenge	05
Hospitals Can Do More	07
Antibiotic Stewardship in a Hospital Setting	09
How Infrastructure and Logistics Are Changing Care	10
Good Practices: Doing More of What Works	11
Patient Power: Public Awareness as a Driver of Change	14
Conclusion, Commitments & Recommendations	15

### **Executive Summary**

Antimicrobial resistance (AMR) threatens public health and the sustainability of European health systems. EU leaders have pledged to step up action, and university hospitals are committed to playing a key role in facing this shared challenge. This paper adds evidence, ideas and momentum to these efforts.

The European University Hospitals Alliance (EUHA), a network of Europe's leading university hospitals, recognises the need to take greater responsibility for addressing AMR, to deliver teaching and training, and to engage with partners in health and social care. EUHA members are enhancing infection prevention and control, surveillance and monitoring, and working with the wider health system to accelerate progress. Political support, along with advances in hospital and digital infrastructure, can help Europe to go further, faster.

This paper was developed through a detailed survey of experts at EUHA university hospitals, complemented with in-depth interviews with clinicians, scientists and patient organisations. The research, conducted between June and September 2025 and supported by input from EUHA and partners, informed the development of (a) concrete commitments by university hospitals and (b) proposals for policies that would support this effort.

### **Real-World Impact**

- AMR costs lives: 100 deaths per day in the EU/EEA<sup>1</sup>
- AMR costs money: €11.7 billion per year in healthcare costs and economic losses in the EU/EEA<sup>2</sup>
- AMR will reduce global GDP: losses could reach 3.8% of GDP in 2050<sup>3</sup>
- AMR causes hospitalisation: 568 million extra days in European hospitals every year
- AMR affects food production: livestock, aquaculture and the environment

https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/09/embracing-a-one-health-framework-to-fight-antimicrobial-resistance\_39e8cd70/ce44c755-en.pdf

<sup>&</sup>lt;sup>1</sup> Revised estimates of burden of disease for AMR. ECDC. Retrieved, 3 September,

<sup>2025.</sup>https://www.ecdc.europa.eu/sites/default/files/documents/Annex 1 burden estimate by antibiotic resistance bacterium.pdf

<sup>&</sup>lt;sup>2</sup> Embracing a One Health Framework to Fight AMR. OECD (2023). Retrieved, 3 September, 2025.

<sup>&</sup>lt;sup>3</sup> Drug-resistant infections: a threat to our economic future. World Bank (2017). Retrieved, 3 September, 2025. https://documents1.worldbank.org/curated/en/323311493396993758/pdf/final-report.pdf

# **Europe's Hospitals: Rising to the AMR Challenge**

### The Roles and Responsibilities of European University Hospitals

Antimicrobial resistance (AMR) is a global threat to public health and to the sustainability of healthcare systems. In the EU, it affects 800,000 people per year, causes an estimated 35,000 deaths, and negatively impacts health systems and economies<sup>4</sup>. For European hospitals, geopolitical instability has exacerbated the challenge. The European Council adopted recommendations in 2023 aimed at stepping up EU action on AMR<sup>5</sup>. Accelerated efforts are required to meet these goals<sup>6</sup>. Hospitals have a key role to play in infection prevention and control, surveillance and monitoring, teaching and training, and engaging with the wider health system.

AMR is too big for any single organisation or sector to tackle alone. Resistant bacteria do not recognise borders or distinctions between primary, secondary or tertiary healthcare. That is why collaboration between institutions, regions, and EU Member States is essential. To date, most efforts to address AMR have been led by scientific, professional and government bodies. Now EUHA<sup>7</sup> is ready to go further to tackle this shared challenge. This is essential to the safety, sustainability and resilience of Europe's healthcare systems. Political support, along with advances in hospital and digital infrastructure, can help to catalyse progress.

### **How This Paper Was Developed**

This paper seeks to add evidence, ideas and momentum to the work of the Danish Presidency of the Council of the European Union<sup>8</sup> which hosts a two-day High Level Conference on AMR in November 2025. It has been developed by EUHA with input from the Danish AMR Alliance. The content is underpinned by a survey of medical experts at European university hospitals, complemented by indepth interviews with clinicians, scientists and patient organisations<sup>9</sup>. The interviews and survey, conducted between June and September 2025, focused on policies for addressing AMR; hospital stewardship; patient care; preparedness and resilience; and the role of vaccination<sup>10</sup>. The results and insights, supported by input from EUHA and partners, informed the content of this paper.

#### **About EUHA**

The European University Hospital Alliance is a network of Europe's leading university hospitals, with members in Aarhus, Barcelona, Berlin, Helsinki, Leuven, London, Milan, Paris, Rotterdam, Stockholm and Vienna.

<sup>&</sup>lt;sup>4</sup> Five reasons to care about antimicrobial resistance (AMR). (2023, June 13). Retrieved September 1, 2025, from <a href="https://www.consilium.europa.eu/en/infographics/antimicrobial-resistance/">https://www.consilium.europa.eu/en/infographics/antimicrobial-resistance/</a>

<sup>&</sup>lt;sup>5</sup> Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach (2023, June). Retrieved September 1, 2025 from <a href="https://data.consilium.europa.eu/doc/document/ST-9581-2023-INIT/en/pdf">https://data.consilium.europa.eu/doc/document/ST-9581-2023-INIT/en/pdf</a>

<sup>&</sup>lt;sup>6</sup> Reducing AMR: accelerated efforts are needed to meet EU targets (2004, November 15). ECDC. Retrieved, September 2, 2025,

 $from \ \underline{https://www.ecdc.europa.eu/en/news-events/reducing-antimicrobial-resistance-accelerated-efforts-are-needed-meet-eu-targets. A substitution of the following of the following antimicrobial or the following of the follo$ 

<sup>&</sup>lt;sup>7</sup> European University Hospitals Alliance <a href="https://www.euhalliance.eu/">https://www.euhalliance.eu/</a>

<sup>&</sup>lt;sup>8</sup> Danish Presidency of the Council of the European Union <a href="https://danish-presidency.consilium.europa.eu/en/">https://danish-presidency.consilium.europa.eu/en/</a>

 $<sup>^{\</sup>rm 9}$  Groups representing patients with rheumatism, lung disease and myeloma were included.

<sup>&</sup>lt;sup>10</sup> Estimating the impact of vaccines in reducing AMR and antibiotic use: Technical report. WHO (October 2024)

### Survey Highlights: What Matters to Experts?

- How important is **expanding education and workforce capacity** in AMR? **9.35 / 10**
- How important is integrating AMR into health security & pandemic preparedness? 8.96 / 10
- How important are public-private partnerships for vaccine development? 7.35 / 10

### **AMR** in Hospitals, Care Institutions and the Wider Community

Preventing infection is the essential first step to reducing antibiotic use and thus reducing the risk of AMR. Infections can occur in hospitals, in community care, long-term care institutions and elsewhere. The risk of increasing resistance rates is highest where antibiotic use is most common. University hospitals have a strong interest in reducing AMR everywhere. Successfully driving down hard-to-treat infections starts with infection prevention and will ease pressure on services while protecting patients.

Hospitals can play a role in breaking down silos within health and social care services. They are also well placed to share expertise on the prevention and management of infections. By offering structured training to colleagues and raising public awareness of the AMR challenge, university hospitals have a responsibility – and a readiness – to work across institutions.

### **How Are Hospitals Combating AMR Today?**

- Infection prevention & control (IPC): Hand hygiene protocols aim to minimise transmission, while early detection and follow-up of cases facilitate prompt treatment and isolation, where appropriate.
- **Antimicrobial stewardship:** Misuse and overuse of antibiotics contribute to AMR. Hospitals are implementing strong guidance on appropriate use of antimicrobials e.g. reducing reliance on broad-spectrum antibiotics, and deploying digital and diagnostic technologies to ensure the right product is used.
- Waste management & procurement: Resistant bacteria can spread from hospitals to the wider community when infected patients are discharged, but bugs also leave hospitals through wastewater. Some hospitals are monitoring the presence of antimicrobials and resistant bacteria in the environment. Involving IPC teams in hospital design is helping to reduce risk e.g. by favouring single rooms and private bathrooms.
- **Training and outreach:** Hospitals are training their own staff and, in some instances, extending their expertise to other health and social services. Clinicians and scientists are also well placed to raise public awareness of AMR and offer actionable steps that citizens can take to mitigate risk.

### **Hospitals Can Do More**

### Preventing, Preparing and Protecting Against Infection in Resilient Health Systems

Infection prevention helps to curb AMR in two key ways. First, by reducing bacterial infections, the use of antimicrobials can be avoided. This, in turn, minimises the risk of selection and transmission of resistant bacteria. Second, infection prevention lowers the risk of new patients becoming ill due to hard-to-treat bacteria. Good hospital design can also minimise these risks.

Respondents to the EUHA survey strongly support enhancing organisational commitment to prevention and infection control, rating it 9 on a scale of 1 to 10. Hospitals can help tackle AMR by identifying transmission risks, developing infection control protocols, evaluating the efficacy of preventative measures, and finding ways to improve hospital infrastructure to prevent the spread of infection.

### **How Hospitals Can Go Further**

- 1. Build a strong, multi-specialist infection prevention and control (IPC) team with the capacity to engage with public and private stakeholders outside the hospital. Ensure IPC teams are a key player providing independent expert advice on care delivery.
- 2. Institutionalise IPC measures through decontamination of affected units, embracing digitalisation, and exploring the potential of AI.
- 3. Bolster healthcare systems to meet the challenges imposed by a volatile global environment by including them in conflict and crisis preparedness planning at national and EU level. Survey respondents ranked this as highly important, rating it 9/10, but many feel AMR is not well integrated into emergency planning.
- 4. Strengthen vaccination efforts and combat misinformation. Survey respondents agreed that hospitals should take a lead role in educating the public about how vaccines help prevent infections whose treatment contributes to AMR. Respondents agreed that reviewing vaccination status during hospital stays, incentivising healthcare staff vaccination, and targeted vaccination of high-risk patients are priorities.
- 5. Use rapid, sensitive and specific diagnostic methods to their full potential, delivered by sufficiently equipped and staffed microbiology labs, preferably on-site. Supporting diagnostic innovation was rated 9.15/10 in the EUHA survey.

### **Survey Highlights**

- How important is promoting digital tools and data-driven surveillance methods to monitor and respond to AMR effectively? 8.69 / 10
- How important is supporting diagnostic innovation to enable faster, more accurate identification of pathogens to inform treatment decisions? 9.15 / 10
- How prepared is your hospital for an influx of patients colonised with resistant microbes?
   6.85 / 10 4

#### **Research & Innovation**

University hospitals are hubs of clinical research. They play a central role in clinical trials, developing new technologies, and deploying innovative service delivery models. By translating science into clinical practice, university hospitals can test and incorporate the latest diagnostics, vaccines and digital tools. It is vital that AMR research is an attractive field for students, clinicians and scientists.

Asked to rank the importance of several research areas for reducing unnecessary antibiotic use in hospitals, EUHA survey respondents gave the highest ratings to clinical research, implementation science, and health systems research. For example, implementation research can support the adoption of good practices. Clinical research should study ways to reduce antibiotic treatment duration, optimise the use of diagnostics, and support staff compliance with IPC guidance. Some also saw potential for deepening understanding of how to improve patient care and reduce stigma for those with antibiotic-resistant infections.

- > Action: Funding agencies must invest in clinical research and implementation science, and should share the results.
- > Action: Funding agencies must invest in improving and accelerating diagnostics and infection treatment, not only in hospitals but also in the primary care setting.

### **Protection Through Vaccination**

Vaccines have a role to play in reducing the use of antibiotics<sup>11</sup> while new vaccines could be developed to protect against drug-resistant pathogens<sup>12</sup>. Survey respondents see a role for hospital experts in educating the public about the value of vaccination, including addressing misinformation. Most of those surveyed favoured incentives to encourage vaccine uptake among staff; targeted vaccination for at-risk patients; and reviewing vaccination status of patients during their hospital stay.

Half of all respondents said AMR prevention through vaccination should be a research priority for university hospitals, with some saying 'maybe' and a small minority saying it should not be a priority. For those keen on advancing vaccine research in the context of AMR reduction, the most important areas of focus were the development of new vaccines to target AMR-prone pathogens; research on existing vaccines' impact on antibiotic consumption; and working with companies to support vaccine development.

> Action: Hospitals will encourage staff to be vaccinated, screen at-risk patients, support vaccine research, and foster trust in vaccination in the wider population.

Estimating the impact of vaccines in reducing antimicrobial resistance and antibiotic use: technical report.
WHO (2024).

<sup>&</sup>lt;sup>12</sup> Vaccines for Antimicrobial Resistance. WHO. (Retrieved 8 October, 2025). https://www.who.int/teams/immunization-vaccines-and-biologicals/product-and-delivery-research/anti-microbial-resistance

### **Antibiotic Stewardship in a Hospital Setting**

### Strengthening Antibiotic Stewardship Through Policy, Innovation, and Collaboration

Antibiotic stewardship is one of the most effective strategies hospitals can implement to slow the spread of AMR, by ensuring that antibiotics are prescribed only when necessary, in the right doses, and for the appropriate duration. University hospitals, in particular, are well positioned to lead this effort — they combine clinical expertise, research capacity, and educational missions that can influence how antibiotics are used. By embracing advances in digital technology, stewardship policies can now go further and faster<sup>13</sup>. Data-driven clinical decision tools can improve diagnostic precision, enable more accurate treatment selection, and strengthen AMR surveillance<sup>14</sup>.

To be fully effective, hospitals should institutionalise comprehensive, hospital-wide antibiotic stewardship policies. They should also go beyond the hospital walls, connecting with primary care providers, long-term care facilities, and community health services to ensure continuity of responsible antibiotic use. Investment in digitalisation and evidence-supported AI tools can help clinicians rapidly identify pathogens, tailor treatment, and monitor antibiotic use in real time.

Research and innovation in diagnostics, vaccines, and infection prevention should therefore be a strategic priority for healthcare systems. In addition, hospitals and governments must plan for and mitigate the growing impact of AMR linked to global pressures such as climate change, conflict, and geopolitical instability.

- Action: Hospitals will implement the highest standards of antibiotic stewardship, embedding them in clinical governance and ensuring their hospital-wide use, define and benchmark performance metrics, and quality improvement frameworks.
- > Action: Hospitals will incorporate antibiotic stewardship into teaching and training, ensuring that all clinical staff understand, accept and apply stewardship principles in daily practice.
- > Action: Governments will support research and the uptake of innovation, by funding digital tools, diagnostics and vaccines, and by creating policy environments that reward stewardship and evidence-based care.

<sup>&</sup>lt;sup>13</sup> Rawson TM et al. Using digital health technologies to optimise antimicrobial use globally, The Lancet Digital Health, Volume 6, Issue 12,2024. <a href="https://www.sciencedirect.com/science/article/pii/S2589750024001985">https://www.sciencedirect.com/science/article/pii/S2589750024001985</a>

<sup>&</sup>lt;sup>14</sup> Arnold, A., McLellan, S. & Stokes, J.M. How AI can help us beat AMR. npj Antimicrob Resist 3, 18 (2025). https://doi.org/10.1038/s44259-025-00085-4 https://www.nature.com/articles/s44259-025-00085-4

# How Infrastructure and Logistics Are Changing Care

### Hospital Layout, Patient Flow and Waste Management Shape Infection Risk

The way in which buildings are designed and used affects how people move through space. This influences the spread of microbes. New hospitals should, by design, minimise the risk of infection; older building stock should be adapted where possible.

The flow of people and goods should also be considered as part of a hospital-wide approach to minimising movement and preventing transmission. Separation of patients that constitute a risk for transmission of microorganisms is most easily achieved if all patients are cared for in single rooms. In practice, this means hospitals should have the capacity to isolate at risk patients appropriately and to accommodate patients in single-bed rooms.

Modern hospitals should have specialised ventilation systems, state-of-the-art waste disposal, and well-designed, well-placed handwashing stations, as well as easy-to-clean solid surfaces that use materials which can be disinfected, and where bacteria cannot accumulate or survive.

The current lack of established AMR-related standards and guidelines on hospital design mean designers, architects and construction firms need active participation from medical and scientific professionals. Infection prevention experts should be involved from the earliest stages of hospital design and should remain central to the development process.

> Action: Develop AMR-mitigation guidelines on safer hospital design through collaboration between clinicians, infection prevention experts, scientific organisations, patient advocates, designers and architects.

### **Good Practices: Doing More of What Works**

### While There Is No One-Size-Fits-All Solution, Hospitals Are Learning from One Another

University hospitals have been striving to tackle AMR for decades. During this time, projects an pilot initiatives have tested innovative approaches to infection prevention, preparedness an protection. EUHA hospitals act as catalysts for best practices. By sharing experiences of what works – and what does not – hospitals can raise standards across Europe while saving time and resources that might otherwise be devoted to ineffective measures.

### 1. Denmark: Real-Time Data Driving Patient Review

At Aarhus University Hospital, a collaboration between the departments of haematology, microbiology and infectious diseases has led to the development of an automated system that flags patients where action is needed. Real-time information, drawn from blood tests, clinical data and microbiological samples, feeds into a decision support tool which then prompts clinicians to review the patient's antibiotic regimen, potentially leading to a change of medication or the discontinuation of treatment. A colour-coded alert system helps health professionals to focus on patients that can most benefit from a medication review. In the process, it creates opportunities for prudent use of antimicrobials.

#### 2. Belgium: Linking Hospitals and Residential Care Centres via a Telephone Hotline

During the COVID-19 pandemic, Belgian hospitals took part in the Hospital Outbreak Support Team (HOST) initiative. This saw 21 pilot projects launched in 2021 through which multidisciplinary teams set up a telephone hotline so that hospitals and residential care centres could rapidly access expertise and advice on infection control. The success of the initiative is due to increased communication between hospital management and regional and federal authorities. The Belgian Antibiotic Policy Coordination Committee (BAPCOC) engaged closely with participants, leading to development of a Frequently Asked Questions (FAQs) web page.

### 3. Finland: Measuring Progress on Hand Hygiene

The use of alcohol hand rub before and after contact with a patient is a key infection control measure. However, encouraging compliance can be a challenge. Helsinki University Hospital implemented a decade-long hand hygiene campaign, measuring the use of alcohol hand-rub per thousand patients. This allowed the hospital to track progress, compare hand hygiene practices between wards, and publish the data on its website. By conducting regular audits and providing feedback to staff, the hospital doubled its compliance over a five-year period. The use of disposable gloves, which is associated with lower use of alcohol hand rub, was also audited. This encouraged hand hygiene measures while reducing spending on disposables and supporting environmental sustainability goals. Similar hand hygiene audits are now conducted in Finland's five university hospitals and 18 local hospitals, allowing transparent benchmarking between centres.

### 4. Germany: Integrating Innovative Prescribing Systems

Infectious Diseases (ID) specialists play a pivotal role in advancing innovation within hospital-based antimicrobial stewardship programmes. At Charité – Universitätsmedizin Berlin, specialists and ID pharmacists implemented an advanced electronic prescribing system that includes dosing options tailored to clinical indication, patient age, weight, renal and hepatic function, as well as active prescription control tools for broad-spectrum and reserve antibiotics. While the initiative demonstrated conceptual value, practical challenges, including increased workflow complexity and documentation demands, highlighted the importance of aligning innovation with operational realities. This alignment was achieved by clinical ID specialists working closely with other clinical teams, underscoring the essential function of ID specialists not only as innovators, but also as integrators, ensuring that new interventions are embedded within a coordinated, multidisciplinary framework.

### 5. The Netherlands: Infection Control Experts Informing Hospital Design

Good design can reduce the risk of cross-contamination in hospitals, by considering hospital and ward configuration, the flow of goods and patients, and by selecting fixtures, fittings and materials that minimise infection risks. Architects developing the Erasmus University Medical Centre in Rotterdam's adult hospital worked closely with Infection Prevention and Control (IPC) experts from the outset. The IPC team advocated for single occupancy rooms and private bathrooms, as well as informing technical design specifications – for example, when selecting sink designs. After the adult centre opened in 2018, a study showed its IPC-focused design had a considerable positive impact. The legacy of early consultations between medical and design experts will last decades. The infection control team are now working closely with architects on a new children's hospital.

#### 6. Austria: Antimicrobial Stewardship Ward Rounds & a Restricted Prescribing Tool

The multidisciplinary Antimicrobial Stewardship (AMS) team at the University Hospital Vienna – Medical University of Vienna consists of an infectious diseases specialist, a clinical microbiologist, a hospital hygiene specialist, as well as a clinical pharmacist. Multidisciplinary ward rounds are regarded as point-of-care interventions as they facilitate real-time optimisation of antimicrobial therapy at the individual patient level, while simultaneously reinforcing rational prescribing practices. In the pilot period, there was a clear shift in the consumption of AWaRe-classified antimicrobials towards Access-classified drugs. Another key AMS intervention was the introduction of an electronic restricted prescribing tool for selected antimicrobial agents. This measure helps to reduce the use of reserve antibiotics and to enhance awareness of their appropriate and judicious application.

### 7. Italy: Surveillance of Multi-Drug Resistant Organisms Using Genome Sequencing

At San Raffaele Hospital in Milan, whole genome sequencing (WGS) has been implemented since 2019 to study the molecular epidemiology and transmission patterns of selected multidrug-resistant organisms (MDROs). The hospital sequences approximately 600 MDROs per year and can monitor transmission pathways, relapse and reinfection. An internal reporting form and alert system triggers epidemiological investigations, providing a picture of how bacterial clones and subclones circulate in the hospital. This information guides clinical interventions. The main challenges arise from the turnaround time of sequencing and staff availability.

### 8. The United Kingdom: Rapid Pathogen & AMR Detection Using Metagenomics

The UK Respiratory Metagenomics Programme is establishing a network of 30 NHS hospitals utilising UK-developed, pathogen-agnostic metagenomic testing to provide faster and more accurate diagnosis of respiratory infections. Led by a team at Guy's and St Thomas' NHS Foundation Trust, the deployed test reduces time to pathogen detection from days to hours. Recent pilot studies show that up to 40% of results led to changes in clinical management, the majority of which are de-escalations in the use of antimicrobials, and up to a third of results identified pathogens that are missed by standard testing. The infrastructure being established will also provide a standardised, real-time NHS data feed of known and emerging pathogens to the UK Health Security Agency (UKHSA), including genetic AMR factors, for the purposes of national biosurveillance.

> Action: EUHA hospitals will take the lead, supported by stakeholders, in collecting and sharing good practices.

# Patient Power: Public Awareness as a Driver of Change

### **Patients Must Become Active Partners in Preventing Infection and AMR**

Concerted efforts to tackle AMR are, ultimately, about safeguarding public health and protecting patients. Patients, and the wider community, also have a role to play in preventing infection and supporting appropriate use of antibiotics. Empowering them with actionable information is a vital component of a holistic AMR policy.

Hospitals must view patients as active partners in this shared mission. The first step is to ensure widespread awareness and understanding of the problem. Here, university hospitals, alongside public health and primary care clinicians, have work to do. Clinicians who responded to the EUHA survey said hospital experts can become 'talking heads' in the media on topics such as vaccine advocacy. This could extend to encouraging prudent demand for antibiotics among the general population.

The patient advocacy groups interviewed for this paper stressed the need for effective antibiotics. Patients with chronic conditions fear AMR. However, many see limited opportunities for them to help to solve this problem. Patient organisations indicated a willingness to engage with their constituencies on these topics but highlighted a lack of clear and consistent communication materials. Nationwide campaigns, and schools-based educational programmes on AMR, would support wider public awareness of infection prevention and antibiotic stewardship.

### **Managing Stigma**

For patients, infection with a drug-resistant pathogen can be frightening. Alongside the symptoms of the illness itself, isolation can significantly affect quality of life, and the stigma of being viewed as a risk to others can have a profound psychological impact. Patient groups highlighted the psychological and social harms caused by isolation, and the need to balance public health goals and the needs of immunocompromised or vulnerable patients.

For their part, clinicians responding to the EUHA survey were divided about whether stigma impacts patient care, rating it 5.92 out of 10. For those who believed stigma affects the management of AMR outbreaks, some cited patient opposition to isolation. Clearer communication on the reasons for isolation, supported by clinicians and patient advocacy groups, would reduce the tension around this issue.

- > Action: Hospitals will establish ongoing relationships with patient advocacy groups to deepen mutual understanding and share educational materials.
- > Action: Governments should launch media and education campaigns to raise awareness of the AMR challenge and how the public can help.

## Conclusion, Commitments & Recommendations

AMR demands a concerted response. It is time for a new collaboration between hospitals and policymakers, with each doing all in their power to prevent, prepare and protect against infections and antimicrobial resistance – and to support one another in this shared public health project.

### What Will Hospitals Do?

- Collect and share good practices within networks of university hospitals by 2030
- Prioritise the highest standards of antibiotic stewardship and embed this in teaching activities
- Train health and social stakeholders to play their part in fighting AMR
- Optimise hospital design with input from IPC teams
- Enhance infection prevention policies, including risk assessment for AMR, outbreak management and isolation precautions
- Embrace the latest technologies, including digital tools and Al
- Enhance laboratory capacity for rapid diagnostic tests and genotyping
- Encourage vaccination, screen at-risk patients and support vaccine research
- Engage with the public to raise awareness of AMR and empower them to become active partners.

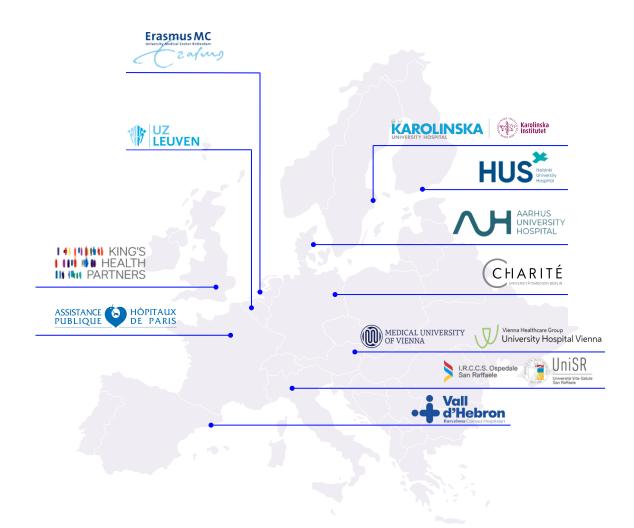
### What Can Policymakers Do?

- Integrate hospital perspectives in policies on pandemic preparedness & crisis planning
- Invest in research and innovation to generate and disseminate best practices
- Support the development of improved diagnostics, as well as new vaccines and vaccine acceptance
- Implement standards on stewardship & monitoring
- Develop and implement guidelines on safer hospital design
- Ensure an environment where researching AMR is attractive for academia
- Keep AMR on the health policy agenda, integrating it into other health strategies where relevant
- Prioritise efforts to ensure high adherence to vaccination programmes, to contain infection rates and thus maintain low use of antimicrobials.

**## 1**5

### **About EUHA**

The European University Hospital Alliance, founded in 2017, is formed of 11 leading European university hospitals. University hospitals play an essential role in healthcare systems and society, taking care of the most complex patients, performing research, pioneering healthcare and innovation, and training the next generation of healthcare professionals.



euhalliance.eu