AMR and HAIls
Antimicrobial Resistance and Healthcare Associated Infections

“The ability of a microorganism to stop an antimicrobial from working against it. As a result, standard treatments become ineffective, infections persist and may spread to others.” (WHO)

The Cause

While AMR occurs naturally over time, its progression has been accelerated by the misuse and overuse of antimicrobials.

The Consequences

Human & Healthcare

Heavy Economic Burden

1 in 3 bacteria associated with HAIls is resistant to antibiotics (ECDC, 2018)

30% of oral antibiotics prescribed in the US are unnecessary (PEW, 2018)

Each year, 33,000 people die from an infection due to bacteria resistant to antibiotics (ECDC, 2018)

Estimated annual cost to the healthcare system in the EU/EEA countries (OECD, 2019): €1.1 billion
Medical technology has a role to play in reducing AMR and preventing HAIs.

**What can medtech do?**

*Prevent and contain healthcare-associated infections* and the development and spread of resistant bacteria.

**Examples of technologies:** coated sutures and implants, impregnated incise drapes, predictive monitoring, alcohol-based antiseptic and proper hand disinfection, and single use duodenoscopes.

*Detect and identify bacterial infections and their susceptibility* to medication, therefore avoiding the misuse or overuse of antibiotics.

**Examples of technologies:** Point-of-Care C-reactive protein test and Strep A pharyngitis rapid test.

*Guide treatment duration and enable patient compliance* to the appropriate use of antibiotics.

**Examples of technologies:** monitoring of immune biomarkers, real time molecular tests and digital health solutions.

*Outbreak management and surveillance.*

Hospital and healthcare facilities can compile data from diagnostic tests to track antimicrobial resistance patterns. This is also vital for the effective implementation of antibiotic stewardship programmes.

**Example of technologies:** clinical surveillance software, next generation sequencing-based technologies.

*Help new antibiotic drug development* by supporting the recruitment of appropriate patients for clinical trials.

Find out more

Visit [amr.medtecheurope.org](http://amr.medtecheurope.org) for more information.

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**MedTech Europe**

*from diagnosis to cure*