

The global point prevalence survey (Global-PPS): trends of antimicrobial use in adult patients in the Philippines 2017-2024

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BACKGROUND & OBJECTIVES

Monitoring trends of antimicrobial use is essential for clinical practice, public health, stewardship programs, and policymaking. This study aims to monitor antimicrobial use and evaluate a set of quality indicators to identify areas for improvement in antibiotic use in the inpatient setting in the Philippines.

METHODS

The Global-PPS is a cross-sectional survey measuring the prevalence of antimicrobial use among admitted patients in the hospital. It was conducted in the Philippines from 2017-2024. The survey included all inpatients receiving an antimicrobial on the day of survey. Data collected included details on the antimicrobial agents, indications for antimicrobial treatment and prophylaxis, as well as a set of quality indicators. A web-based application, designed by the University of Antwerp (www.global-pps.com), was used for data entry, validation and reporting.

RESULTS

Data were collected from 86 unique hospitals in the Philippines (2017:16, 2018:28, 2019:31, 2020:34, 2021:50, 2022:57, 2023:61, 2024:72). The prevalence of antimicrobial use in adult patients ranged from 46.5% in 2024 to 57.2% in 2021. Antimicrobial use in the different hospital areas: intensive care (IC) unit 63.7-71.7%, medical (M) wards 44.0-56.9%, and surgical (S) wards 48.2-62.1% (Figure 1). The most used systemic antibiotics (JO1) for adults were ceftriaxone, cefuroxime and piperacillin and enzyme inhibitor (Figure 2). The most common indications for therapeutic antibiotic use were pneumonia and skin and soft tissue infections (Figure 3).

The quality indicators monitored were documentation of reason/indication in notes (62-83.4%), stop/review date documentation (27.9-57.9%), and compliance to treatment guidelines (64.3-83.4%).

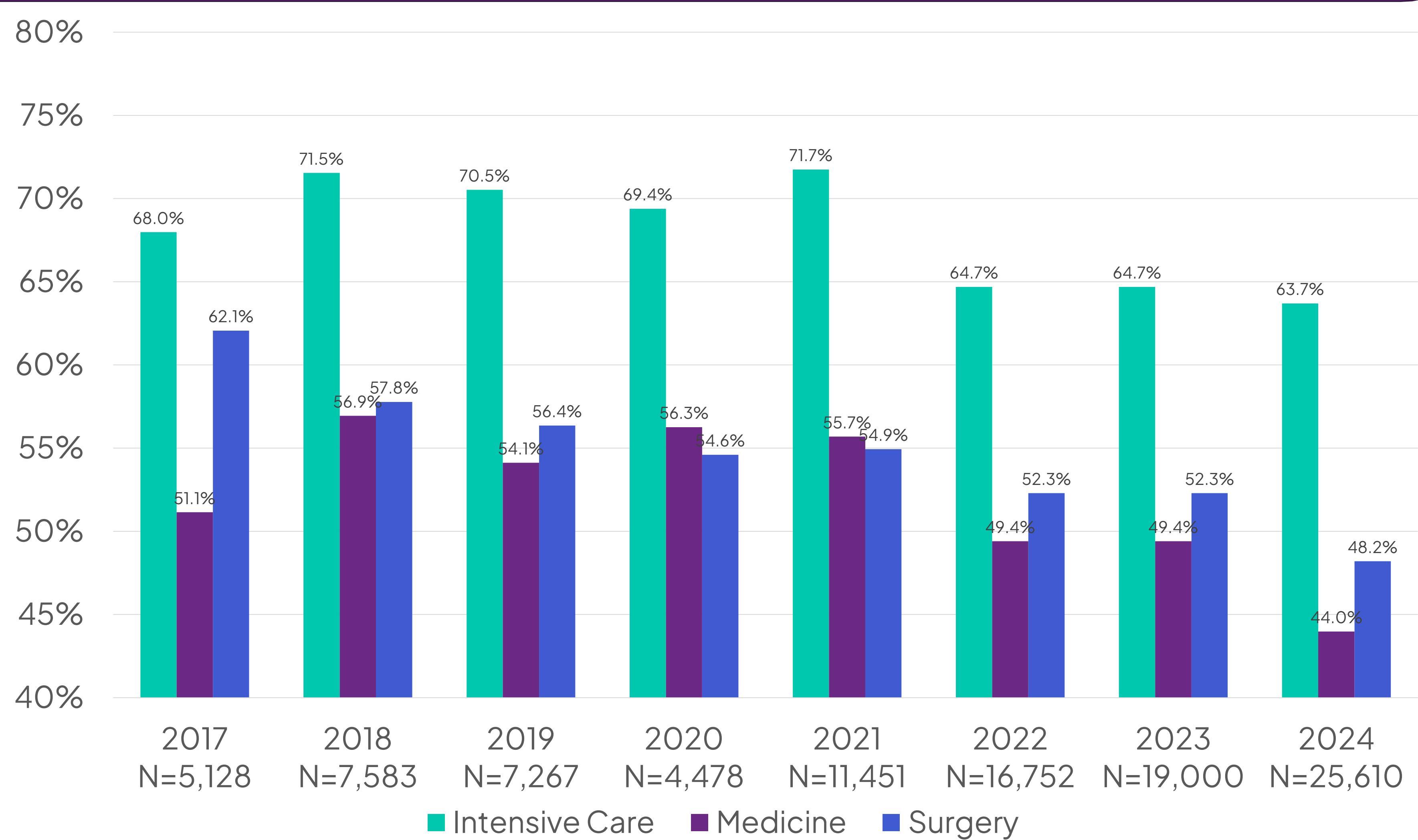


Figure 1. Antimicrobial Use Prevalence in Adult Patients in the Philippines

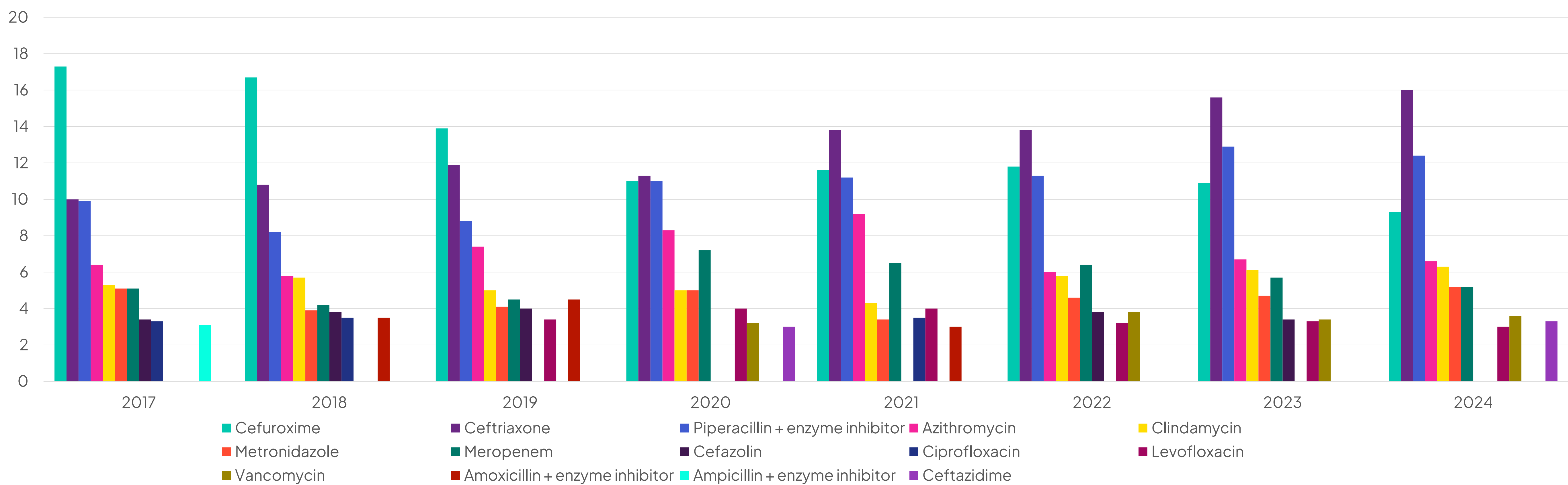


Figure 2. Top 10 Most Used Antibiotics (JO1) in Adult Wards 2017-2024

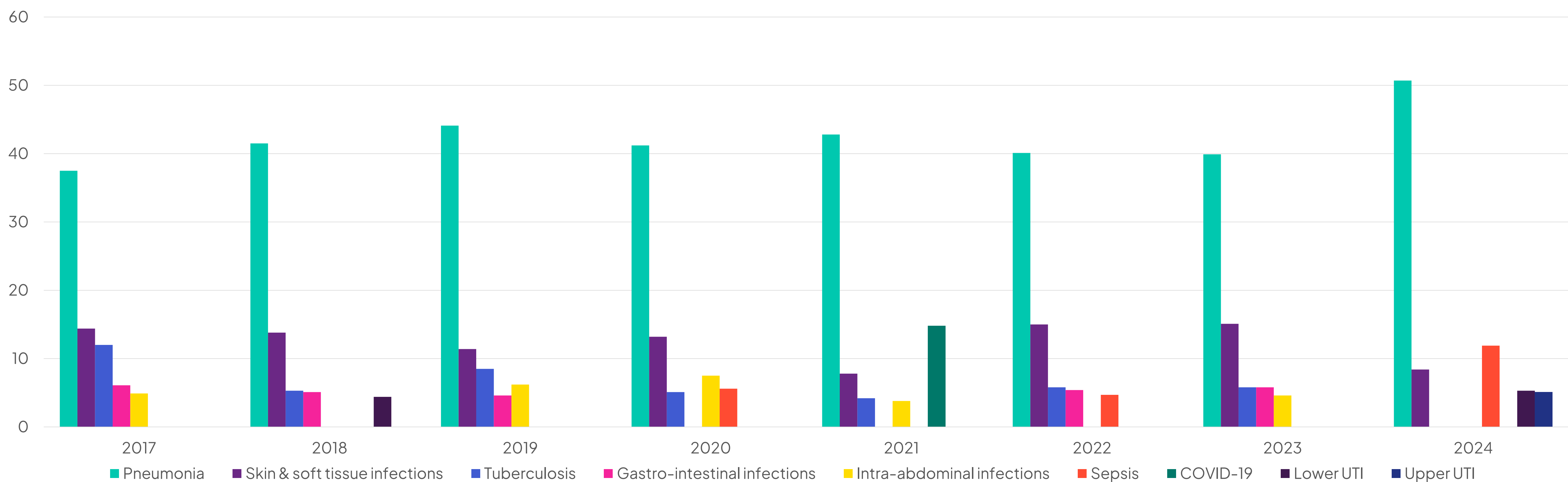


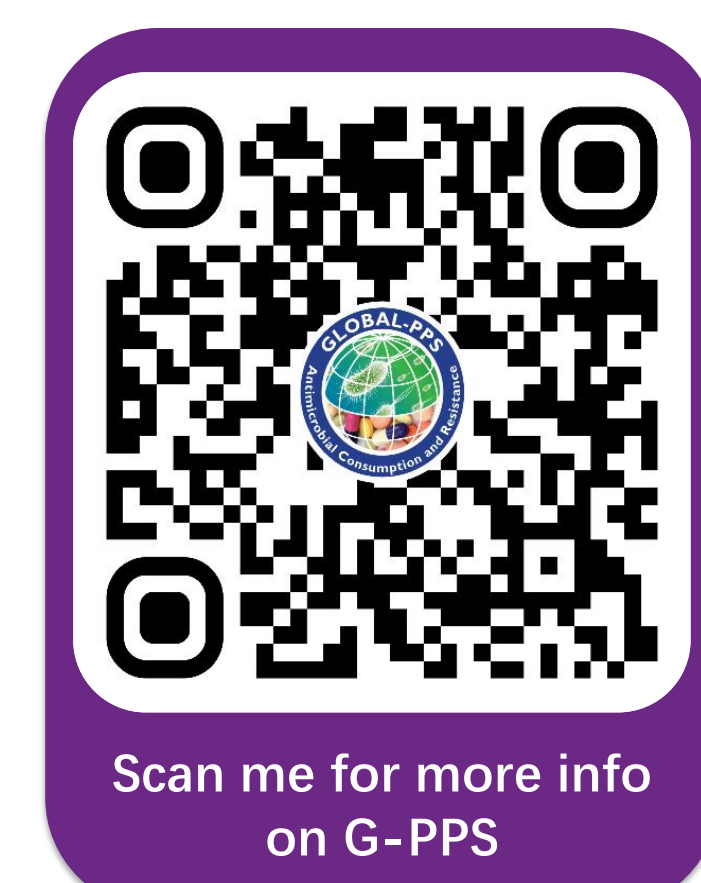
Figure 3. Top 5 Diagnosis for Antimicrobial Treatment in Adults 2017-2024

CONCLUSION

Monitoring antimicrobial use trends over time is vital for early detection of inappropriate use, guiding stewardship actions, correlating with resistance, informing policies, improving patient outcomes, and ensuring healthcare system preparedness. Antimicrobial stewardship programs need to be strengthened further to improve documentation, review of treatment duration and guideline compliance.

Key words: antimicrobial use, point prevalence survey, quality indicators

Disclosures: bioMérieux is the sole industrial partner of the Global-PPS. The company has no role in study design, data collection, data analysis, data interpretation, or writing the report. Data are strictly confidential and stored anonymously at the coordinating centre of the University of Antwerp.



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