

# Results of the Global and ECDC Point Prevalence Surveys of Antimicrobial Use and Healthcare-Associated Infections in Belgian Acute Care Hospitals in 2017

Eline Vandael<sup>1</sup> • Katrien Latour<sup>1</sup> • Herman Goossens<sup>2,3</sup> • Koen Magerman<sup>3,4</sup> • Boudewijn Catry<sup>1,5</sup> • Ann Versporten<sup>2,3</sup>

1. Healthcare-associated infections and antimicrobial resistance, Sciensano, Brussels, Belgium • 2. Laboratory of Medical Microbiology, University of Antwerp, Antwerp, Belgium • 3. Belgian Antibiotic Policy Coordination Committee (BAPCOC), Brussels, Belgium • 4. Department of Microbiology, University of Hasselt, Hasselt, Belgium • 5. Faculty of Medicine, Université Libre de Bruxelles (ULB), Brussels, Belgium

The second ECDC point prevalence survey (PPS) of healthcare-associated infections (HAIs) and antimicrobial use and the second Global PPS ([www.global-pps.com](http://www.global-pps.com)) of antimicrobial use and resistance were simultaneously performed in Belgian acute care hospitals.

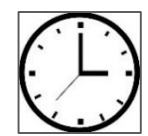
## Methods



All Belgian acute care hospitals were invited to participate in either the ECDC PPS or the Global PPS.



All patients present on the wards at 8 a.m. on the day of the PPS were included.



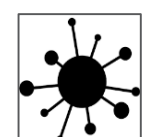
September-December 2017



Standardised methodology (ECDC PPS 2016-2017 protocol, Global PPS 2017 protocol)



Results on antimicrobial use and quality indicators: data ECDC and Global PPS pooled

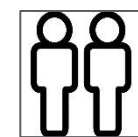


Results on HAIs: data ECDC PPS

## Results



83 Belgian acute care hospital entities participated  
Countrywide participation rate = 81.4%



28,007 included patients



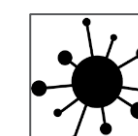
Crude **prevalence** of patients with at least one antimicrobial: **27.1%** (95%CI 26.5-27.6%)

- tertiary hospitals: 29.5%; intensive care: 51.0%
- most frequently reported diagnoses: pneumonia (23.2%), skin and soft tissue infections (11.9%)



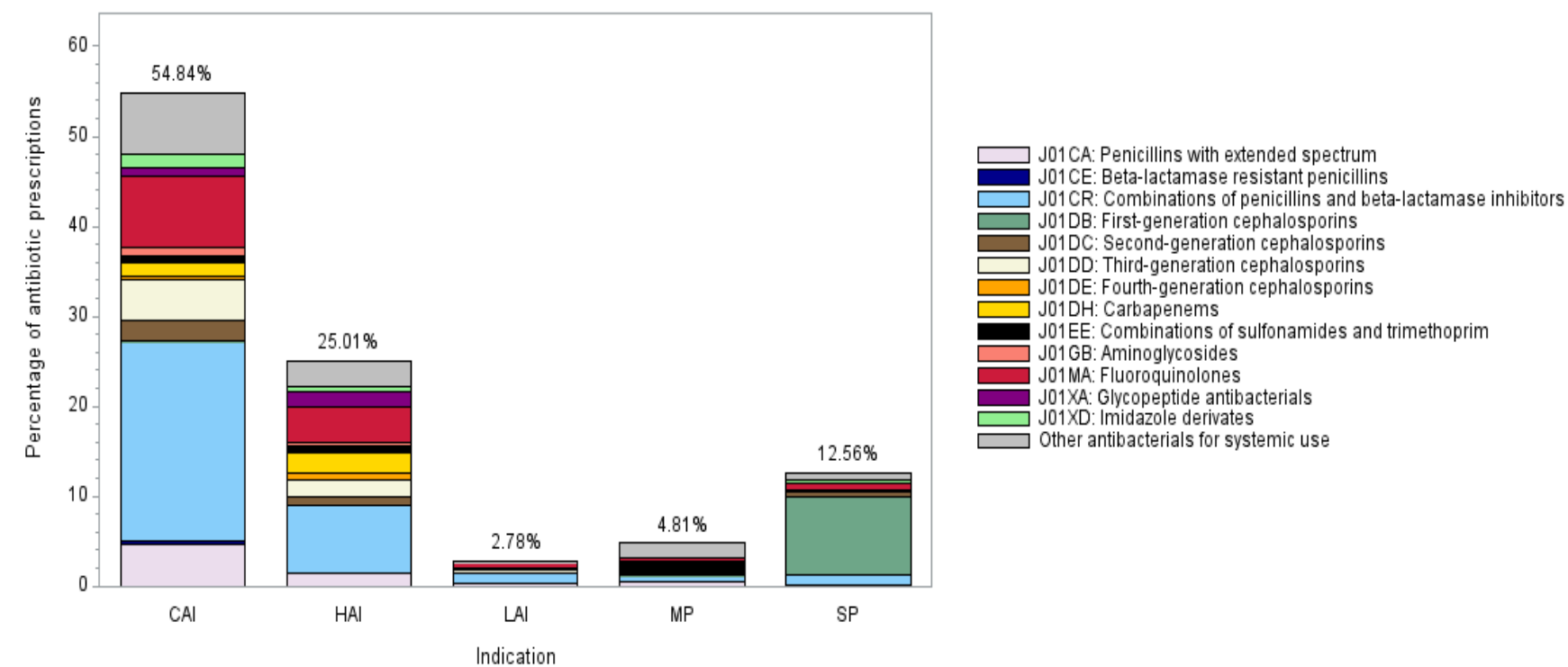
## Quality indicators:

1. Compliance with local antibiotic guidelines (type of antibiotic): 76.6%
2. >1 day surgical prophylaxis: 25.2%
2. Reason for antimicrobial use available: 81.9%
3. Stop/review date available: 40.8%



Crude **prevalence** of patients with at least one HAI: **7.3%** (95%CI 6.8-7.7%)

- tertiary hospitals: 9.1%; intensive care: 20.9%
- most frequently reported HAIs: pneumonia (21.6%), urinary tract infections (21.3%).



CAI = community-acquired infection, HAI = acute-hospital-acquired infection, LAI = infection acquired in long-term care facility or chronic-care hospital, MP = medical prophylaxis, SP = surgical prophylaxis

Figure 1: Distribution of antibiotic (J01) prescriptions per antibiotic subclass (Anatomical Therapeutic Chemical level 4) and per indication in Belgian acute care hospitals, total results for the Global and ECDC point prevalence surveys 2017

## Conclusion

In comparison with previous PPS, the prevalence of antimicrobial use (27.4% in Global PPS 2015<sup>1</sup> vs. 27.1% in 2017) and HAIs (7.1% in ECDC PPS 2011<sup>2</sup> vs. 7.3% in 2017) remained stable in Belgian acute care hospitals. Belgian hospitals should further be stimulated to participate regularly in a PPS and to set local targets to improve.

1. Versporten A et al. Global PPS 2015 in 100 Belgian hospitals. ECCMID 2016, abstract N° EV0684.  
2. European Centre for Disease Prevention and Control (ECDC). ECDC PPS: surveillance report 2011-2012. Stockholm: ECDC; 2013.

Funding: This research was supported by funding of BAPCOC and bioMérieux (Global PPS). Acknowledgements: All participating hospitals.

## CONTACT:

Eline Vandael • [eline.vandael@sciensano.be](mailto:eline.vandael@sciensano.be) • [www.sciensano.be](http://www.sciensano.be)