Intelligent and versatile IT support for antimicrobial stewardship

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INTRODUCTION
Antimicrobial stewardship programs (ASPs) are of increasing importance and focus on therapy correctness, adverse events, and antimicrobial resistance (AMR) prevention. ASPs rely on monitoring, analyzing, and reporting of microbiological test results which can effectively be supported by information technology (IT).

RESULTS
Momo is in routine operation since September 2018. It receives all relevant data from the UHV’s microbiology laboratory in a structured, digitized form including also workflow information from specimen receipt to clearance of reports. Momo provides support through (a) single patient overviews, (b) customizable queries with full microbiological data, (c) frequency distributions of the selected parameters, (d) graphically displaying AMR patterns, and (e) displaying AMR changes over time. Careful consideration was given to the terminology system [2]. An ontology module supports timely management of main terms, synonyms, changes in taxonomy, and multiple supertype concepts. Freely selectable reporting rules issued by CLSI and EUCAST are included. Now, Momo can also be accessed directly with OneClick from the UHV’s intensive care information systems and from its general hospital information system. At present, a total of 1.5 million reports are available for analysis.

REFERENCES