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# Implementing an Antibiotic Stewardship information system to improve hospital infection control: a co-design process

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**Abstract:** HAITool information system design and implementation was based on Design Science Research Methodology, ensuring full participation, in close collaboration, of researchers and a multidisciplinary team of healthcare professionals. HAITool enables effective monitoring of antibiotic resistance, antibiotic use and provides an antibiotic prescription decision-supporting system by clinicians, strengthening the patient safety procedures. The design, development and implementation process reveals benefits in organizational and behavior change with significant success. Leadership commitment, multidisciplinary team and mainly informaticians engagement was crucial to the implementation process. Participants' motivation and the final product delivery and evolution depends on that.

**Keywords:** Antimicrobial Resistance, Antibiotic Stewardship, Co-design, Implementation, Information system, Decision-Support System.