Antibiotic Stewardship Information System:

Co-design implementation to integrate People and Processes

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Introduction

Antibiotic Stewardship Programs (ASP) and decision-support Information Systems (IS) are designed to prevent and control antibiotic-resistant healthcare-associated Infections [1]. Its implementation could be challenging though.

The aim of this project was to co-design and implement, with healthcare professionals (HP), an effective ASP in hospitals, in Portugal and Cape Verde. It is now preparing to scale-up to the low-resources' settings.

Methods

HAITooL, a surveillance and decision-support open-sourced IS, was developed and implemented, on the Design Science Research Methodology framework. Full participation was ensured, counting in each case, on the close collaboration of researchers and a multidisciplinary team of healthcare professionals.

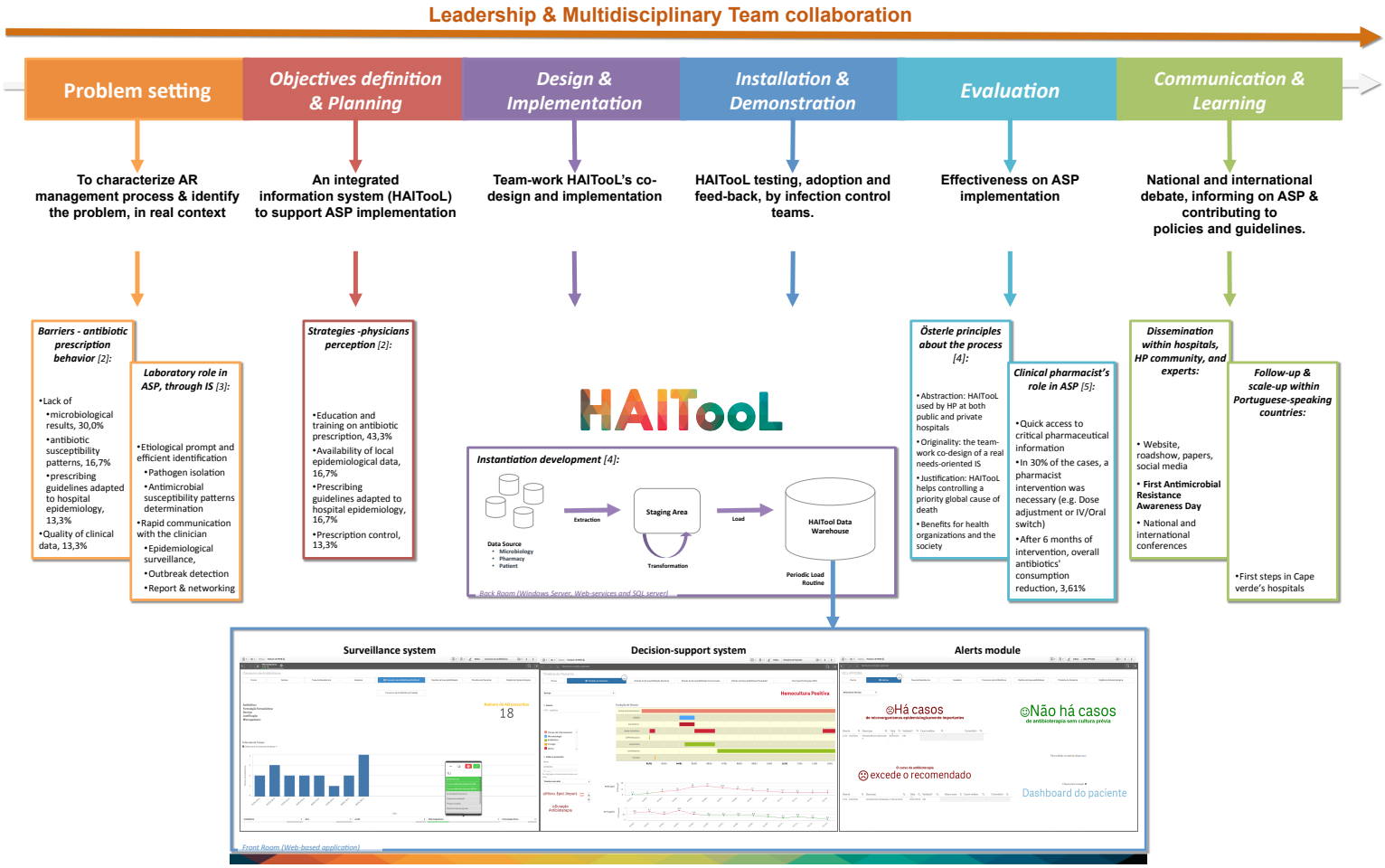
Conclusions

The design, development and implementation process, reveals **benefits in organizational and behavior change** with significant success. **Leadership commitment, multidisciplinary team and mainly informaticians engagement are critical to the implementation process** [6]. The conditions are met to translate to the low-resources' context.

HAITool can be an important step forward to reduce antibiotic misuse and to prevent and control HAI.

Results

Figure 1. Participatory approach and main outputs in the IS implementation for ASP workforce capacity strengthening



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