

# The PIRASOA programme: design, structure, organisation and indicators of a comprehensive regional Institutional Programme for the Prevention and Control of Healthcare-associated Infections and Antimicrobial Stewardship for hospitals and primary care settings

Version 2

María Dolores Rojo-Martín, Germán Peñalva, Carmen Pinto, Inmaculada Salcedo, Rocío Fernández-Urrusuno, José Cabeza, Juan de Dios Alcántara, Olaf Neth, Paloma Porras, Javier Bautista, José Garnacho-Montero, Rafael Sierra, Ángel Estella, Carmen Lupión, Elena Hevia, Arantxa Irastorza, José Luis Márquez, María Luisa García-Gestoso, Álvaro Pascual, Jesús Rodríguez-Baño, Raquel Valencia, María Antonia Pérez-Moreno, José Miguel Cisneros, on behalf of the PIRASOA programme group

## Abstract

### Background

Antimicrobial Stewardship Programmes (ASPs) and Healthcare-associated Infections (HAIs) Programmes are recommended by scientific societies as a key intervention to fight against antimicrobial resistance (AMR), but their implementation and sustainability are not easy to achieve. Spain is among the European countries with the highest antimicrobial consumption, as well as high AMR rates; despite this fact, development of ASPs is scarce. In this scenario, we designed and implemented a long-term comprehensive Institutional Programme for the Prevention and Control of Healthcare-associated Infections and Appropriate Use of Antimicrobials (PIRASOA) in both inpatient and outpatient care covering the whole Public Healthcare System of Andalusia, which is the most populated autonomous region in Spain with 8.4 million inhabitants.

### Methods/design

This protocol describes the design, structure, organisation and indicators of the PIRASOA programme, as well as the methodology for its implementation development, data collection, assessment, feedback and continuity over time.

This education-based multifaceted programme with institutional support is divided into two sub-programmes integrated into daily clinical practice: the HAIs sub-programme, aimed at hospitals, and the ASP sub-programme, applied to both hospitals and primary care.

### Conclusions

The PIRASOA programme is the first institutional comprehensive education-based programme integrated into daily clinical practice to prevent and control HAIs and to optimise the use of antimicrobials implemented in the entire public healthcare system of an autonomous region in Spain, being among the first integral regional programmes in Europe. The assessment of antimicrobial consumption, clinical and microbiological indicators and reports are performed on a quarterly basis and are available for assessment and feedback in near real-time with only a three-month delay. The programme started on 1 January 2014, has been adequately implemented in all public centres of Andalusia and it is committed to be integrated into daily clinical practice. Data collection is ongoing. Long-term results will be analysed and published from 2018 onwards.

**Citation:** María Dolores Rojo-Martín, Germán Peñalva, Carmen Pinto, Inmaculada Salcedo, Rocío Fernández-Urrusuno, José Cabeza, Juan de Dios Alcántara, Olaf Neth, Paloma Porras, Javier Bautista, José Garnacho-Montero, Rafael Sierra, Ángel Estella, Carmen Lupión, Elena Hevia, Arantxa Irastorza, José Luis Márquez, María Luisa García-Gestoso, Álvaro Pascual, Jesús Rodríguez-Baño, Raquel Valencia, María Antonia Pérez-Moreno, José Miguel Cisneros, on behalf of the PIRASOA programme group The PIRASOA programme: design, structure, organisation and indicators of a comprehensive regional Institutional

## Protocol