

**Call:** 7th Call - 2018 Network Call on Surveillance

**Title:** Providing a Roadmap for Automated Infection Surveillance in Europe

**Acronym:** PRAISE

**Network composition**

Type	Name	Institute	Country
Coordinator	Maaïke Van Mourik	University Medical Center Utrecht	The Netherlands
Partner	Marc Bonten	National Institute for Public Health and the Environment	The Netherlands
Partner	Sabine de Greeff	National Institute for Public Health and the Environment	The Netherlands
Partner	Mayke Koek	National Institute for Public Health and the Environment	The Netherlands
Partner	Stephan Harbarth	University Hospitals Geneva	Switzerland
Partner	Jean-Christophe Lucet	Hôpitaux de Paris	France
Partner	Pascal Astagneau	Hôpitaux de Paris & Sorbonne University	France
Partner	Alain Lepape	Centre Hospitalier Universitaire Lyon Sud	France
Partner	Miquel Pujol	Bellevitge University Hospital	Spain
Partner	Zaira Palacios	Universitario Virgen Macarena	Spain
Partner	Petra Gastmeier	Charité University Hospital Berlin	Germany
Partner	Michael Behnke	Charité University Hospital Berlin	Germany
Partner	Evelina Tacconelli	University Hospital Tübingen	Germany
Partner	Brian Kristensen	Statens Serum Institut	Denmark
Partner	Sophie Gubbels	Statens Serum Institut	Denmark
Partner	Hilary Humphreys	Royal College of Surgeons in Ireland	Ireland
Partner	Thomas Tängdén	Uppsala University	Sweden
Partner	Olov Aspervall	Public Health Agency of Sweden	Sweden
Partner	Elisabeth Presterl	Medical University of Vienna	Austria
Partner	Jacqui Reilly	Glasgow Caledonian University	UK
Partner	Yehuda Carmeli	National Institute for Infection Control and Antibiotic Resistance, Ministry of Health	Israel
Partner	Mitchell Schwaber	National Institute for Infection Control and Antibiotic Resistance, Ministry of Health	Israel

## Abstract

Surveillance of healthcare-associated infections (HAI), including surgical site infections (SSI) and central line associated bloodstream infections (CLABSI), is a key component of national surveillance programs. Identifying infections – as opposed to colonisation – allows for the quantification of the burden of infections by antimicrobial-resistant (AMR) pathogens and evaluation of the effectiveness of interventions. Traditional surveillance by manual chart review is time-consuming and prone to error, making large-scale standardised surveillance unachievable in many European countries. In recent years automated HAI surveillance systems using data routinely stored in hospital electronic health records have been developed for among others SSI and CLABSI. Advantages of (semi-)automated surveillance include higher quality of surveillance through better standardisation and a 75-95% reduction of manual chart review workload.

Automated surveillance is promising, but most of the currently available systems were developed in individual hospitals, and are hence heterogeneous in design, aims, methods and definitions used. In addition, within each centre, many similar challenges and barriers are encountered, but knowledge on how to address them is not widely disseminated, thus making inefficient use of resources and repeatedly requiring considerable investments.

Within the PRAISE network, we aim to design a shared roadmap to move automated surveillance from the research setting to large-scale implementation.

PRAISE will deliver:

1. A roadmap to automated HAI surveillance, describing requirements of automated surveillance systems and one or more possible trajectories towards their design.
2. A research agenda to support future development efforts.
3. Guidance documents regarding regulatory and governance barriers, IT and data management solutions and training needs.

PRAISE will organise two workshops and divide tasks among subgroups.

The PRAISE network uniquely brings together experts working in the field of surveillance, with representatives from hospitals as well as public health institutes. The output of the network will improve AMR surveillance by providing the guidance necessary to develop high-quality automated surveillance tools for HAI, caused by AMR and susceptible pathogens.