Annex 04A. EPIET Project proposal form

Date proposed:

Project title	**Please indicate if project is ECDC contract or is part of any EU-funded network activities!**
Fellow (name, email)	
Project (local) supervisor(s)	
Department where the project will take place	
Other possible key stakeholders	

Brief summary of the project, including:
• Aim and objectives of Project
• Background and rational
• Methodology. If relevant:
   ○ Study design
   ○ Study population
   ○ Data analysis
Expected results
Public health importance including national, EU added value and evidence for policy making/decision making	

Expected project outcome(s): e.g. protocol, report, publication, presentation to decision makers, new surveillance system protocol, training material or delivery, etc.	
Start date *(indicate if any flexibility)*	
Anticipated project completion date	
Anticipated time needed per week for the fellow	
Estimated supervision time/sessions per week	
If data required, when will this be available?	
Location of project *(entirely at host site or will travel to other locations be required – if so please describe)*	

Competencies/ learning objectives that the project will address:

Applied epidemiology

☐ Surveillance: design/develop, implement, and/or evaluate a surveillance system, analyse surveillance data, use surveillance data for decision making;

☐ Outbreak: Participate in an outbreak investigation, formulate a case definition, describe by time-place-person, generate hypotheses, design a study, recommend evidence-based measures to control the outbreak, report results;

☐ Epidemiological studies/public health research: identify a public health issue, define objectives, write a study protocol, collect and analyse data, report results, recommend evidence-based interventions;

☐ Laboratory issues: collaborate/communicated with public health microbiologists, define lab testing, specimen collection, interpret lab test results in light of the public health problem;

☐ Public health guidance: conduct literature review, develop evidence-based guidelines, identify target groups for guidance.

Biostatistics

☐ Probability: apply concepts and techniques of calculating independent and conditional probabilities;

☐ Inferential statistics: calculate and interpret point estimates and confidence intervals for means, attack rates, prevalence, risk ratios and odds ratios. Interpret results of significance testing;

☐ Sampling: define a sampling strategy and select a sample.

Informatics

☐ Use different literature search engines on the internet (PubMed, Embase, Lillacs, Scielo, Cochrane Library, etc), define a search protocol;

☐ Create databases, online questionnaires;

☐ Use software to write/edit documents and create presentations.

Communication

☐ Risk communication: apply basic principles, adjust message based on target audience

☐ Write report for decision makers, write an article for a peer-reviewed journal, write an abstract for a conference, press release, prepare a poster or oral presentation, produce documents, letters, or meeting minutes;

☐ Use new communication technologies: video or phone conferencing, webinars, etc.

Teaching

☐ Identify training needs, planning and organising courses;

☐ Facilitate case studies, prepare and give lectures, teach epidemiological concepts, develop a case study.

Ethics

☐ Apply basic concepts of protection of individuals, apply relevant laws in data collection, management, use and dissemination of information;

☐ Confidentiality: adhere to ethical principles regarding data protection and confidentiality;

☐ Be aware of conflict of interests, identify and handle them.

Other

☐ Any other competency (e.g. management, leadership, team building) this project will address:

Briefly outline the work and responsibility that is expected of the fellow (*e.g. produce background papers, organise meetings, supervise staff and any other activities not mentioned above*)	
Ethics approval required? Informed consent?	
Contact details (emails) of supervisor(s):	

Project proposal form (example)

Date proposed: 28 June 2018

Project title	Point Prevalence Survey of Hospital-Acquired Infections and Antimicrobial Use in Acute Care Hospitals: Analysis of the adult critical care population: Ireland 2017 **Please indicate if this project is part of an ECDC contract or part of an ECDC disease programme activity: NO**
Fellow (name, email)	
Project (local) supervisor(s) Overall supervisor	
Department where the project will take place and other key stakeholders	
Brief summary of the project, including aim and objectives, study design, study population, analysis, etc.	**Aim:** to estimate the prevalence of HAIs and antimicrobial use in critical care units in Ireland in 2017 **Background** A national point prevalence survey (PPS) was conducted in May 2017 to assess the prevalence of hospital-acquired infections (HAI) and antimicrobial use in Irish hospitals. The PPS was coordinated in Ireland by the Health Protection Surveillance Centre (HPSC). The survey was conducted across Europe using a standardised protocol devised by the European Centre for Disease Prevention and Control (ECDC) and HAI were defined using standardised European definitions of infection (1). During the PPS, all eligible patients in each hospital were surveyed by a multidisciplinary local PPS team for anonymous demographic details, risk factors, antimicrobial use and the presence of active HAI. The last PPS in Ireland was performed five years ago (May 2012). Enhanced surveillance activities for HAIs and guidelines to strengthen infection prevention and control measures have been implemented, based on 2012 findings (2). The 2017 PPS provides the opportunity to evaluate the latest situation and to direct future interventions for ongoing improvement in patient care and staffing levels related to IPC, antimicrobial stewardship, surveillance and microbiology laboratory activities. Patients admitted to critical care represent a particular population, at higher risk for antimicrobial exposure and HAIs. These patients are generally older than other hospital in-patients, present more severe underlying illness, comorbidities, and exposure to invasive devices. Indeed, results from the PPS 2012 showed that the prevalence of HAI in critical care patients was 23.3%, almost five times higher than the prevalence of HAI in the overall cohort (5.2%) (2). **Objectives** The objectives of the study are: • to describe patients, invasive procedures, HAI (types, causative microorganisms including markers of antimicrobial resistance) and antimicrobials prescribed (compounds, indications) • to describe key structures and processes for the prevention of HAIs and antimicrobial resistance at the hospital and ward level in EU hospitals • to disseminate results to stakeholders and public health decision-makers, at regional and national level: to raise awareness, to identify priority areas for future targeted HAI surveillance, to identify interventions to prevent HAI, to identify areas for targeting antimicrobial stewardship, to evaluate the effect of strategies, to set up priorities accordingly. **Work Plan** - Perform descriptive analysis of 2017 critical care population in Ireland, and comparison with 2012 results - Produce a final report and a manuscript for peer-reviewed journal **References**

	1. European Centre for Disease Prevention and Control. Point prevalence survey of healthcare-associated infections and antimicrobial use in European acute care hospitals – protocol version 5.3. Stockholm: ECDC; 2016. Available at: https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/PPS-HAI-antimicrobial-use-EU-acute-care-hospitals-V5-3.pdf 2. PPS Critical care report. HPSC. Available at: http://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/surveillance/hospitalpointprevalencesurveys/2012/pps2012reportsforireland/File,13914,en.pdf
Expected project outcome(s) (e.g. protocol, report, publication, presentation to decision makers, new surveillance system protocol, training material or delivery, etc.)	Study Protocol Report Manuscript Abstract submission for national/international conferences
Start date *(indicate if any flexibility)*	October 2018
Anticipated project completion date	March 2019 (Report by Dec 2018 and manuscript by Mar 2019)
Estimated supervision time/sessions per week	Meetings as required with project supervisors Weekly meeting with overall supervisor
If data required, when will this be available?	Data are already collected and validated
Public Health importance of this project	• Raise awareness among stakeholders • Enhance surveillance structures and skills • Identify gaps and weaknesses and set up priorities accordingly • evaluate the effect of strategies and guide policies for the future at the local/ regional/national level • Benchmark at EU level

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Briefly outline the work and responsibility that is expected of the fellow (*e.g. produce background papers, organise meetings, supervise staff and any other activities not mentioned above*)	Attend meetings Literature search Data analysis and interpretation Produce report Write scientific manuscript/abstract
Ethics approval required? Informed consent?	No
Contact details (emails) of supervisor(s):	