

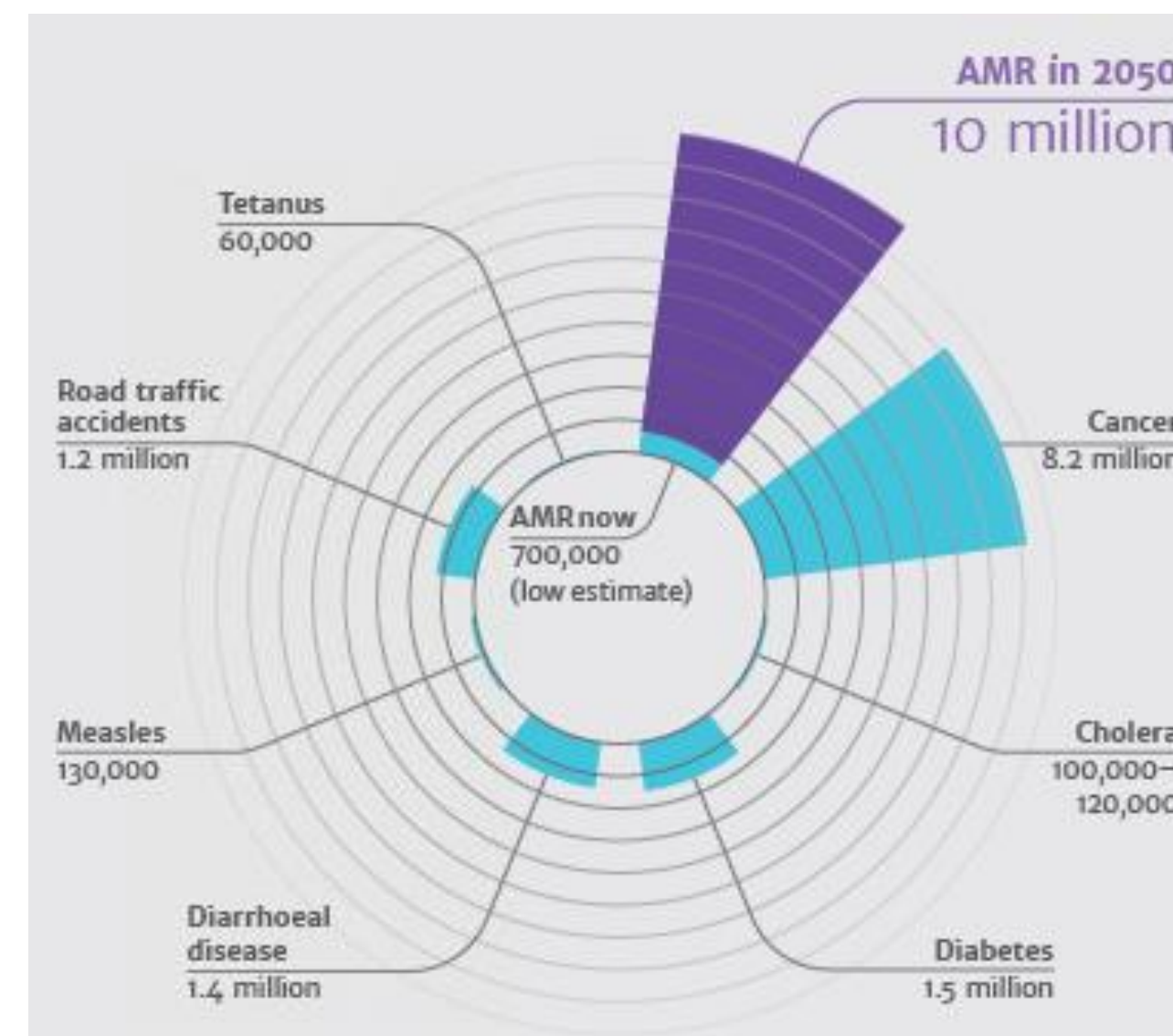
THE I-4-1-HEALTH PROJECT: INFECTION PREVENTION AND ANTIMICROBIAL REDUCTION IN HUMAN AND VETERINARY MEDICINE AND THE PUBLIC SECTOR IN THE BORDER REGION OF FLANDERS AND THE SOUTHERN PROVINCES OF THE NETHERLANDS

Postma M.¹, Caekebeke N.¹, van den Hoogen A.², Ringenier M. H.¹, Houben M.³, Velkers F. C.², Sleenckx N.⁴, Tobias T. J.², Van Cleven A.¹, Heederik D.⁵, Zoons J.⁴, Stegeman J. A.², Dewulf J.¹

¹VETERINARY EPIDEMIOLOGY UNIT, DEPARTMENT OF REPRODUCTION, OBSTETRICS AND HERD HEALTH, FACULTY OF VETERINARY MEDICINE, GHENT UNIVERSITY, BELGIUM; ²DEPARTMENT OF FARM ANIMAL HEALTH, FACULTY OF VETERINARY MEDICINE, UTRECHT UNIVERSITY, THE NETHERLANDS; ³PIG HEALTH DEPARTMENT, GD ANIMAL HEALTH, THE NETHERLANDS; ⁴EXPERIMENTAL POULTRY CENTRE, BELGIUM; ⁵IRAS, UTRECHT UNIVERSITY, THE NETHERLANDS

BACKGROUND

Antibiotic resistance is declared one of the biggest threats to public health by the WHO. Without additional measures the hypothesis is that in 2050 more people will die of an infection with a resistance pathogen in comparison to cancer.



Source: O'Neill, 2014

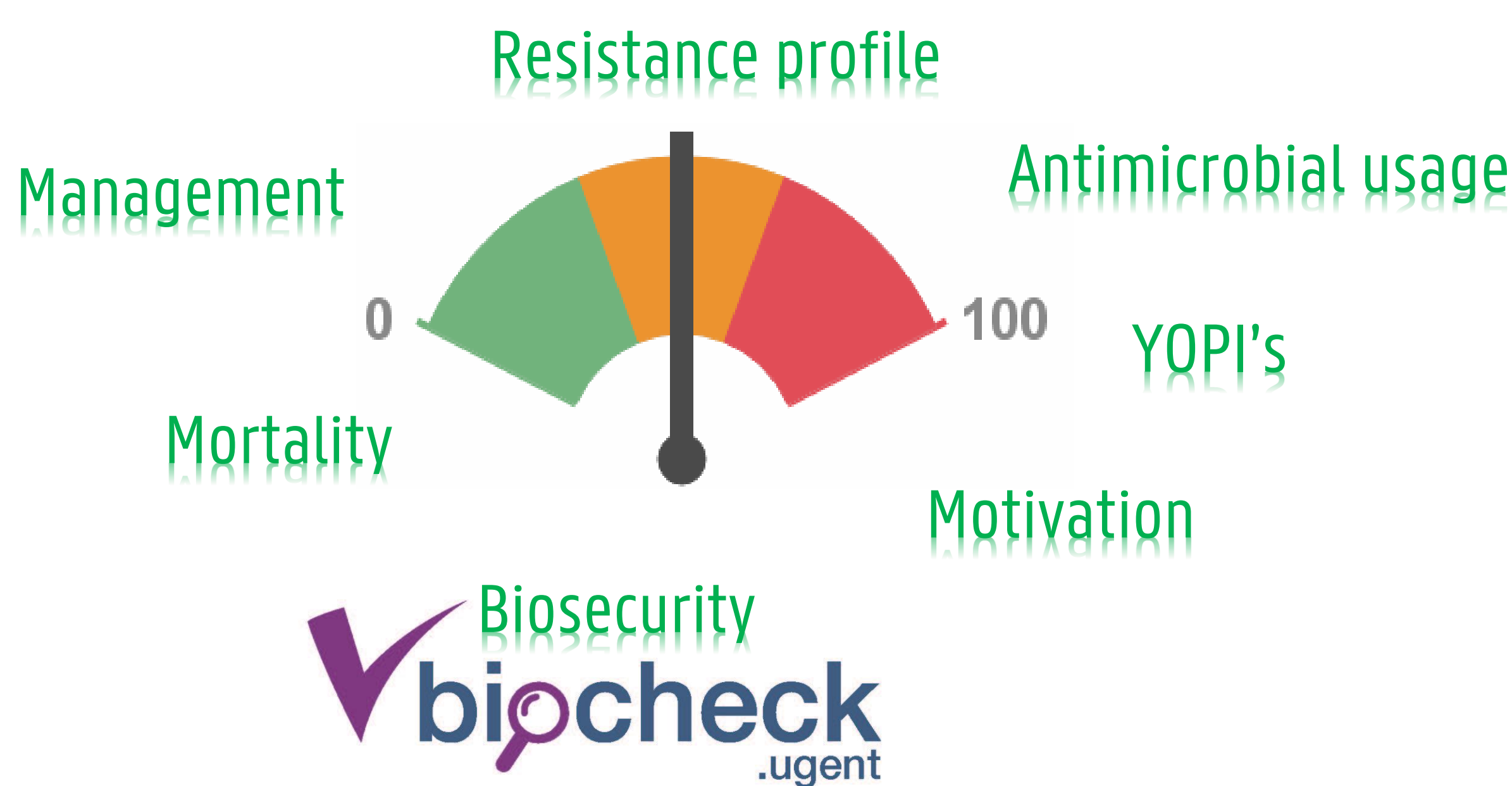
OBJECTIVE

The "i-4-1-health" project has as goal to gain insight in the level/type of resistance in healthy civilians, human patients and the pig/poultry sector. Since pathogens do not respect borders, a cross-border approach is needed.

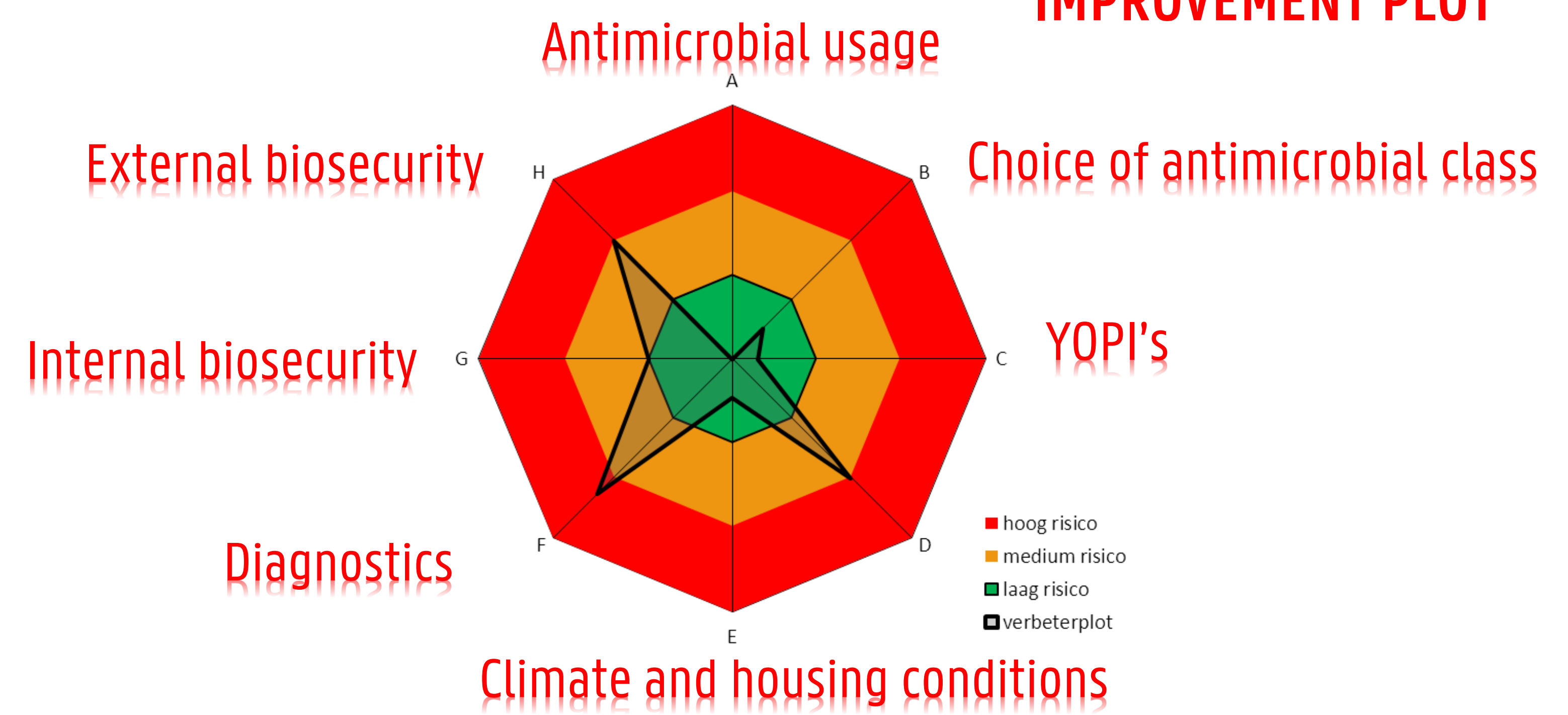
MATERIALS & METHODS

A digital quantification tool for the level of infection prevention will be developed for use in human (IRIS Scan) as well as for veterinary medicine (V-IRIS Scan).

RISK PROFILE

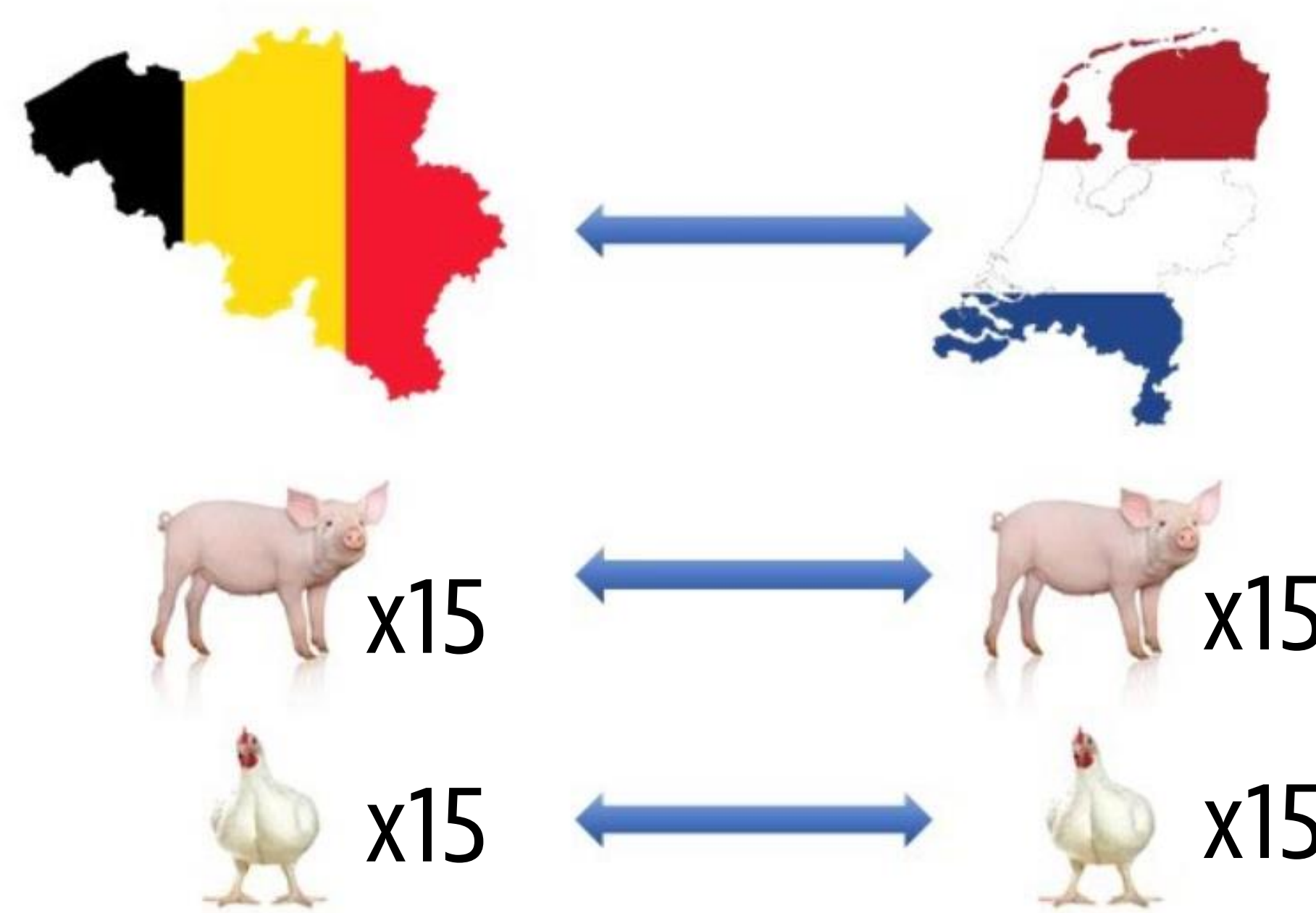


IMPROVEMENT PLOT



COACHING FARMERS & VETERINARIANS

15 poultry and 15 pig herds on both sides of the border will be coached in infection prevention and antimicrobial stewardship.



WHOLE-GENOME-SEQUENCING

A track & trace system will visualize the spread of pathogens and resistance both in the human/public sector as well as in the veterinary sector.

PERSPECTIVES

The i-4-1-health project started in spring 2017 and will run for three years. Many knowledge sharing sessions are planned between people working in public health, human medicine and veterinary medicine. This project will allow to identify antibiotic resistance and infection prevention in humans and animals. Knowledge hereof can help us in the global fight against antimicrobial resistance.

March 2018, Conference for Human & Veterinary Medical professionals
Location: Leuven, Belgium. Check www.i41health.eu for more information.

I-4-1-Health

This European project is a collaboration between biotechnical sciences, human and veterinary medicine, nanotechnology, microtechnology and agrifood. This way, knowledge from different fields of expertise can be pooled and data exchanged. If you want more information on the other partners involved in this project, we refer you to the projects' website: <https://www.i41health.eu/>

CONTACT

MereL.postma@ugent.be

<http://www.rohh.ugent.be/v3/home/>