



USING ABM TO INFORM (HEALTH) POLICY-MAKING: CHALLENGES AND OPPORTUNITIES

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ABM and Policy-Making In An International Context: Some Thoughts On Why We are Underusing This Key Tool



Fit for purpose but not flexible: models are developed for specific tasks and transferability/adaptation is complex



Data limitations: ABMs are 'data hungry' and there is a lack of cross-country comparable data to feed the models



Policy-makers like to feel 'ownership' of the model: stakeholders want to adapt and 'customize' the analyses



THE OECD PUBLIC HEALTH TEAM
IS DEVELOPING AN ABM MODEL
TO EVALUATE THE ROI OF
POLICIES TO TACKLE AMR

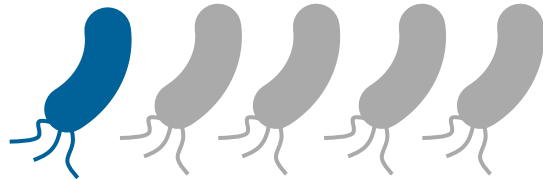


What is AMR? Why Does the OECD Care?

OECD Health Policy Studies
Stemming the Superbug Tide
JUST A FEW DOLLARS MORE

Icons: First Aid Kit, People, DNA

OECD



1 in 5 infections in OECD is **resistant** to antibiotics and resistance **will keep growing**

2.4 M people

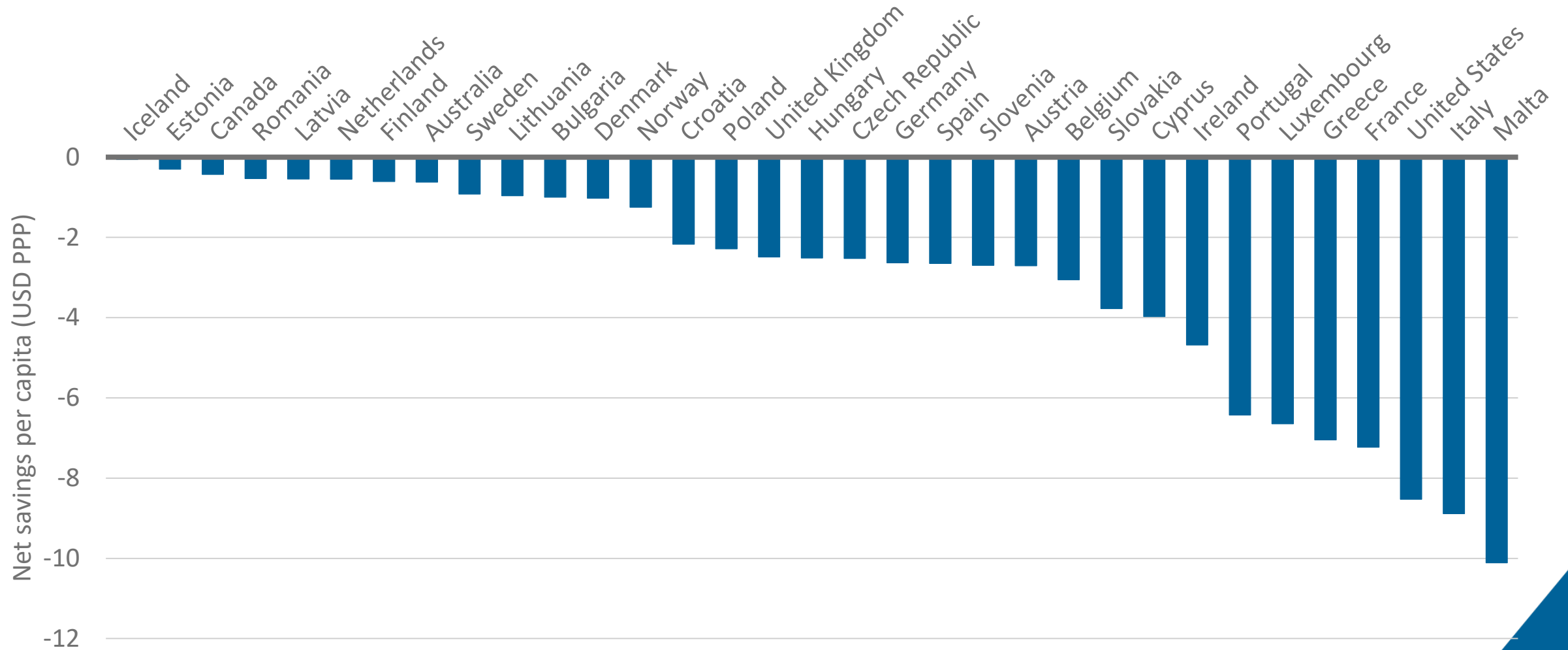
will die in Europe, North America and Australia in 2015-50 due to AMR, **without prompt and effective action**

3.5 B USD per year

Cost of AMR to the Healthcare services of OECD countries between 2015 and 2050

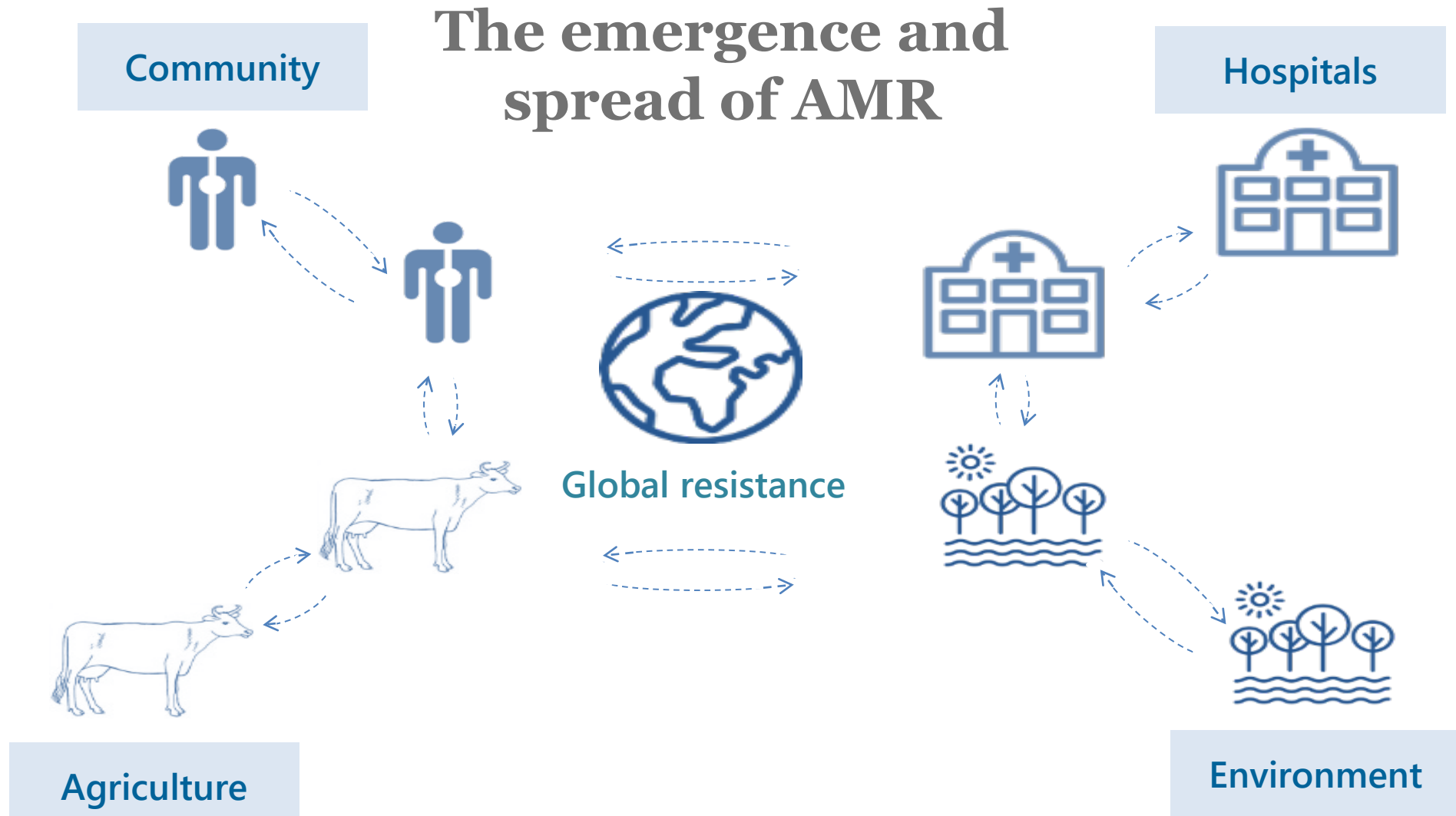


But There is Hope! A 'Mixed' Intervention Package Would Decrease Healthcare Expenditure by 3 USD/Capita/Year





Infectious Diseases, Including AMR, Are an Excellent Case Study For ABM Models





The Road Ahead: Where We Stand And Where We Want To Go

- The OECD Public Health team is developing an ABM in C++
- Modelling the spread of resistant infections in the community and across hospitals is a key focus of the model:
 - Development of a ‘virtual’ (and simplified) healthcare system with patient flows
 - Extrapolation from ‘data-rich’ countries to others, by using international datasets
- The derived model will be used to test the return on investment of selected policies such as:
 - Are investments optimized by targeting policies on ‘high-risk’ hospitals?
 - Is screening of all incoming patients to detect AMR a good investment?