Internationell utblick

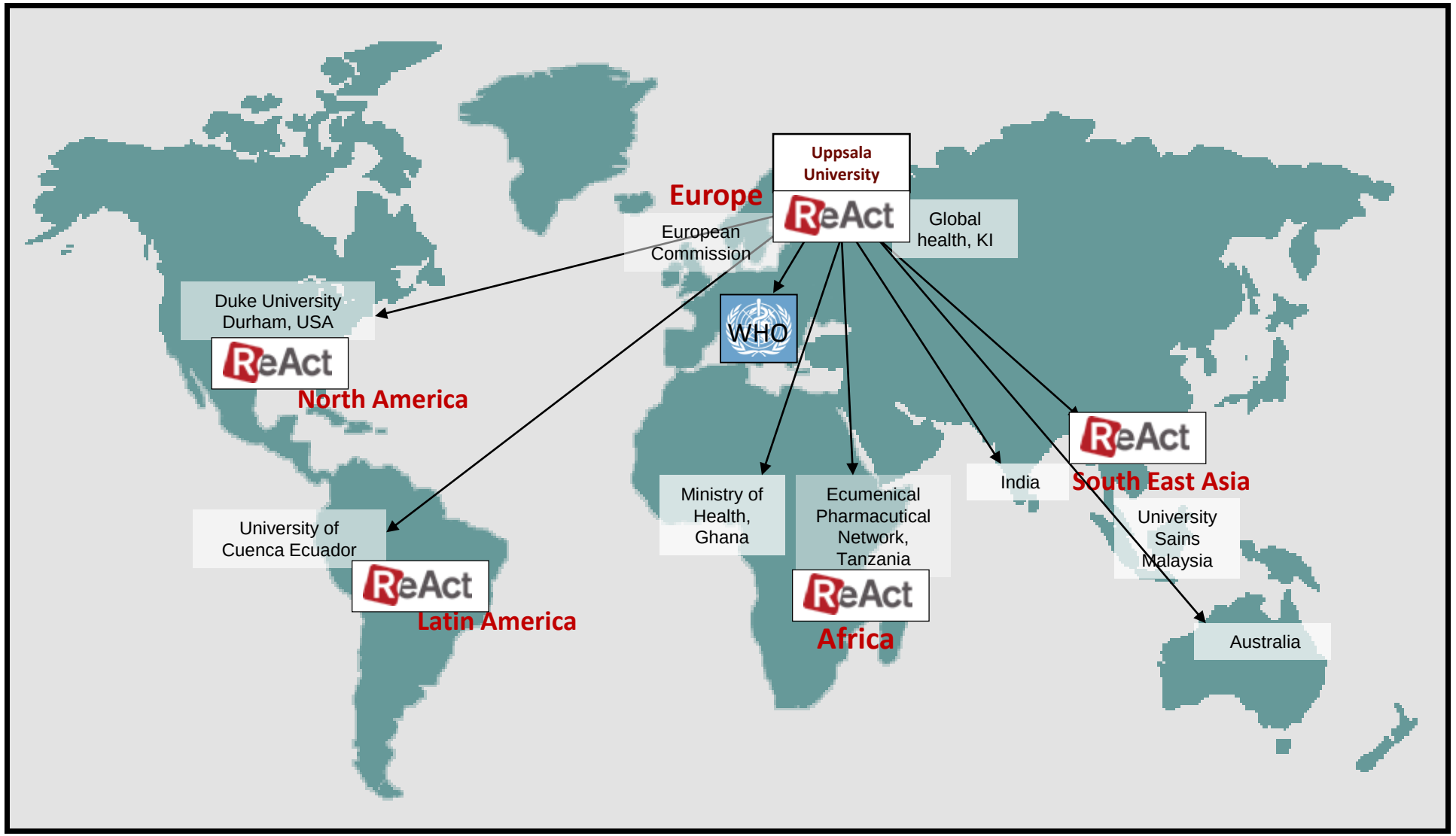
Otto Cars

Stramadagen 2015

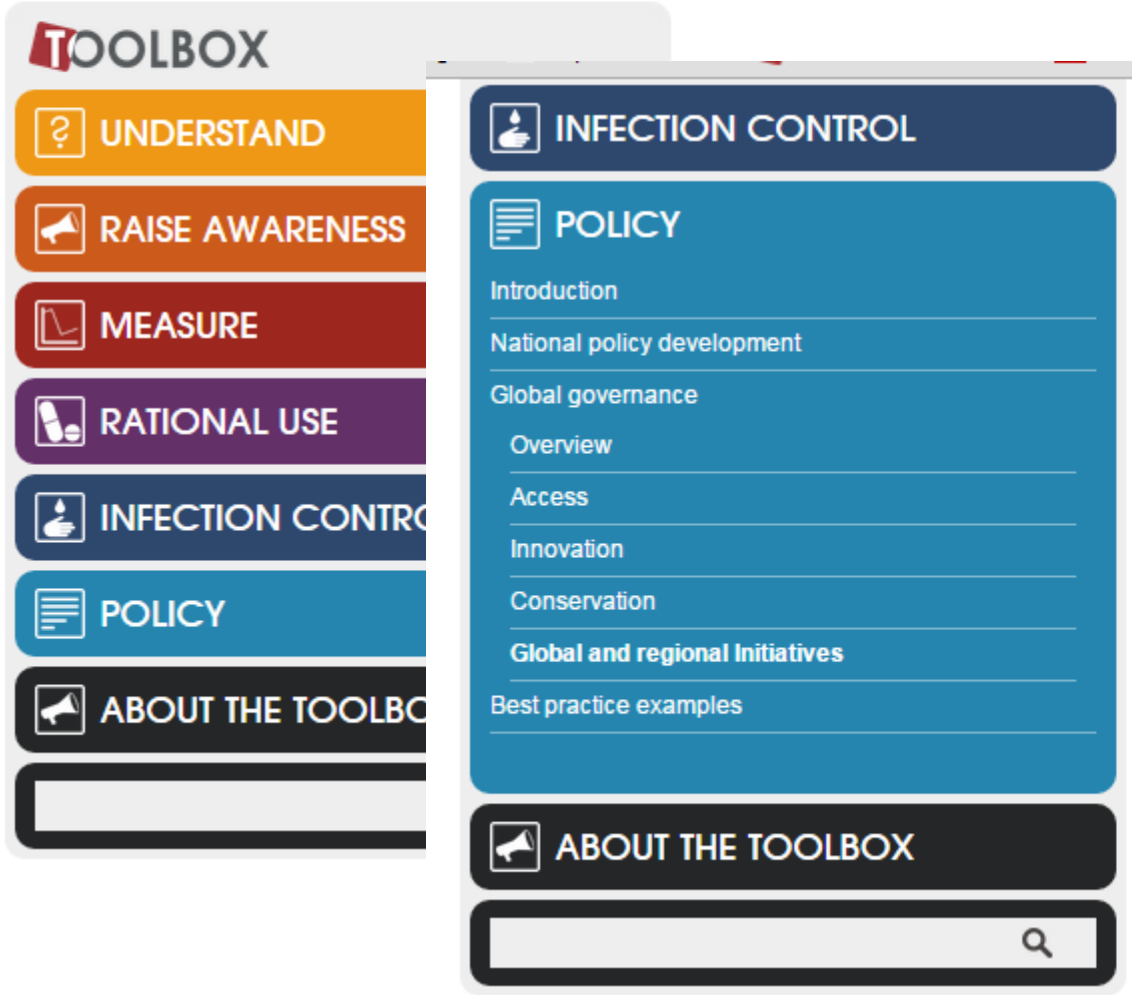
ReAct - Action on Antibiotic Resistance

www.reactgroup.org

ReAct network



ReAct



Numerous initiatives are currently being conducted by various stakeholders and from different perspectives,.

This section provides a list of some important global and regional initiatives in the field of antibiotic and antimicrobial resistance, relevant reports that discuss situation analyses and particular solutions, and finally calls for action as tools for acute advocacy.

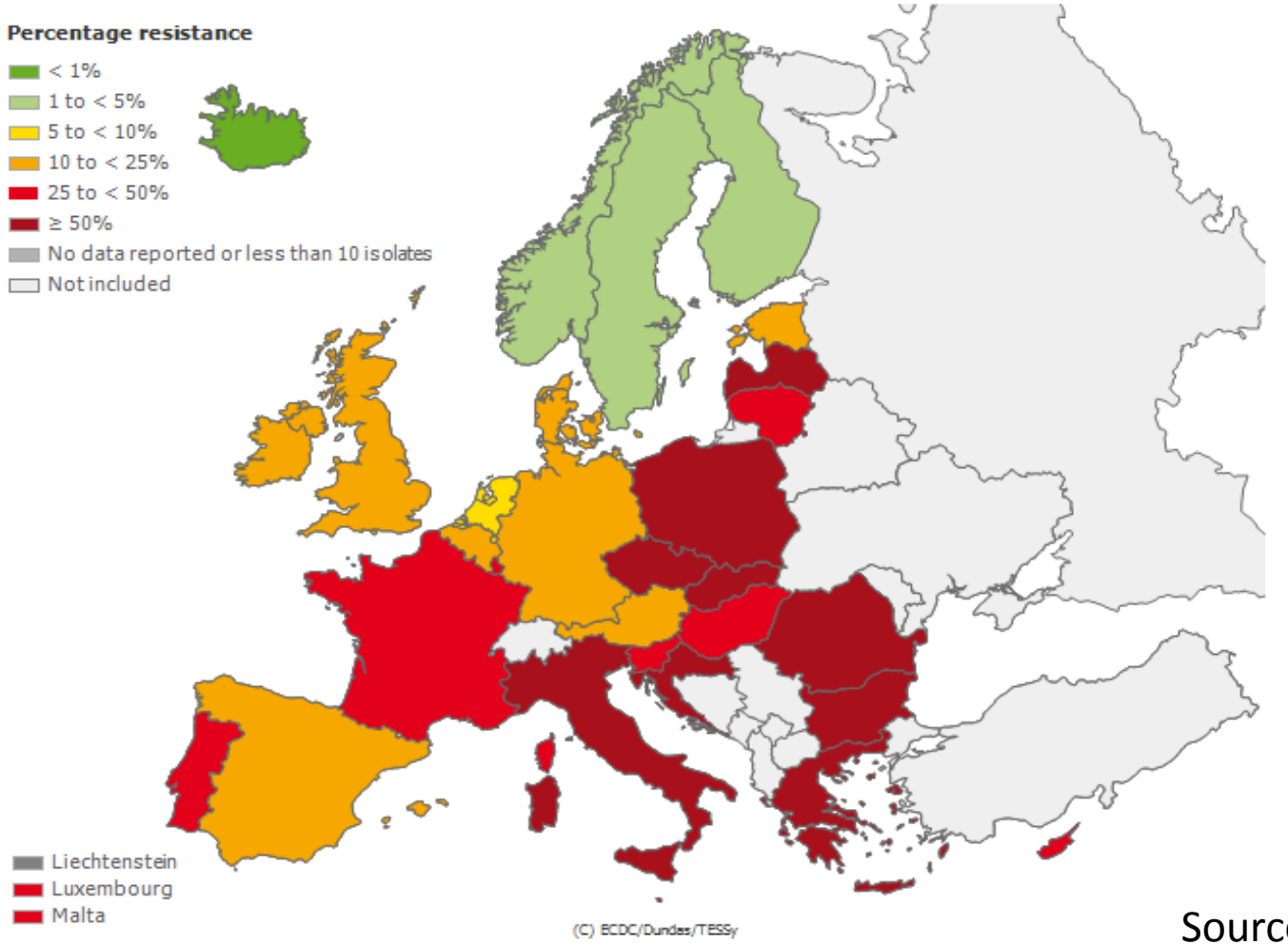
Some of the current international initiatives

× Close

WHO Global Action Plan

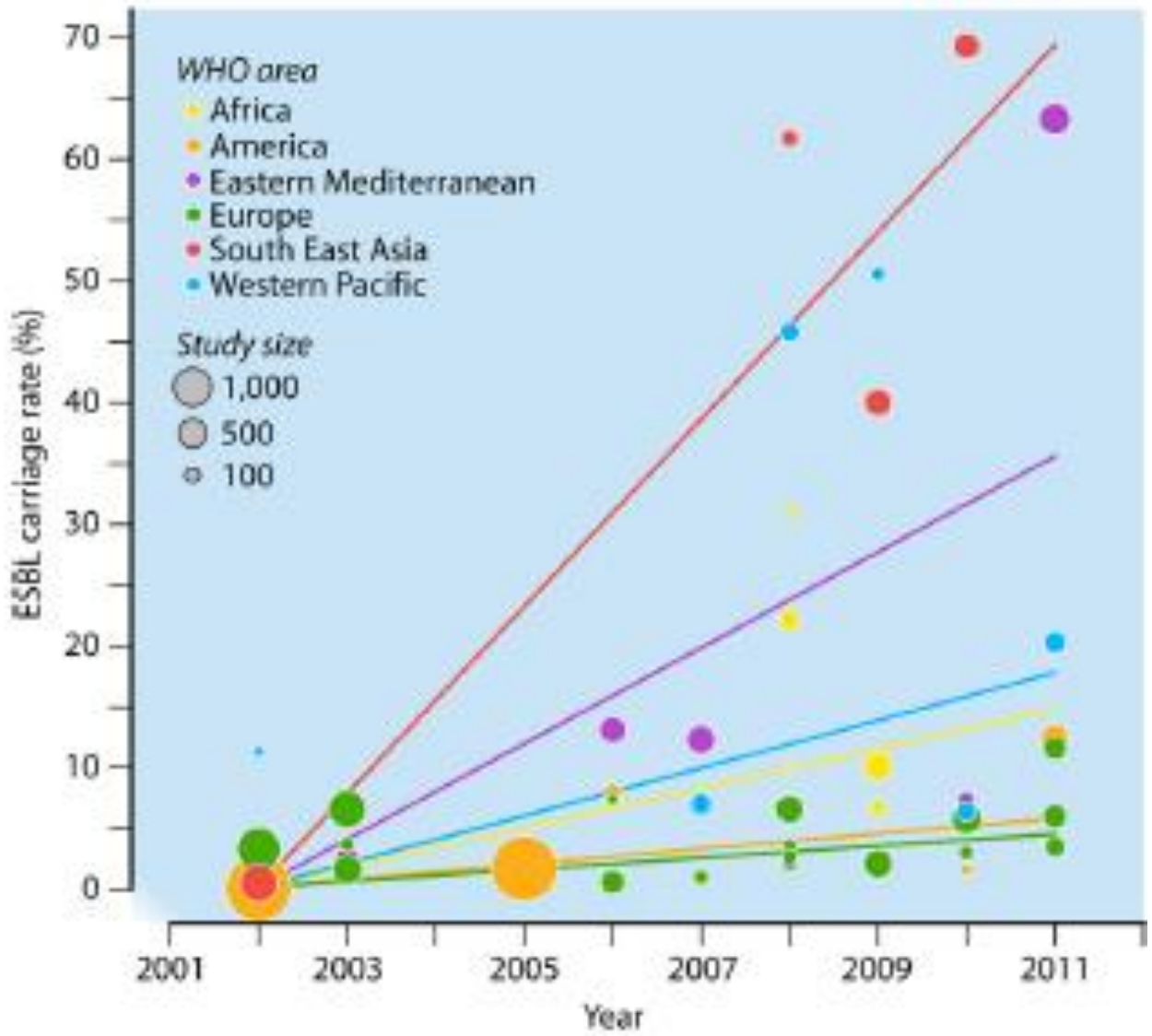
At the Sixty-seventh World Health Assembly in May 2014, the World Health Organization (WHO) was requested to develop a global action plan to combat antimicrobial resistance (AMR), to be submitted to the Sixty-eighth World Health Assembly in May 2015. The global action plan will encourage all Member States to increase their commitment while involving a variety of NGOs, CSOs and research institutions in order to comprehensively tackle the full spectrum of the issue. It is expected that countries will develop their own national action plans on antimicrobial resistance in line with the global plan. A draft global action plan was submitted to the

Klebsiella (ESBL) in the EU 2013



Source Ears-Net

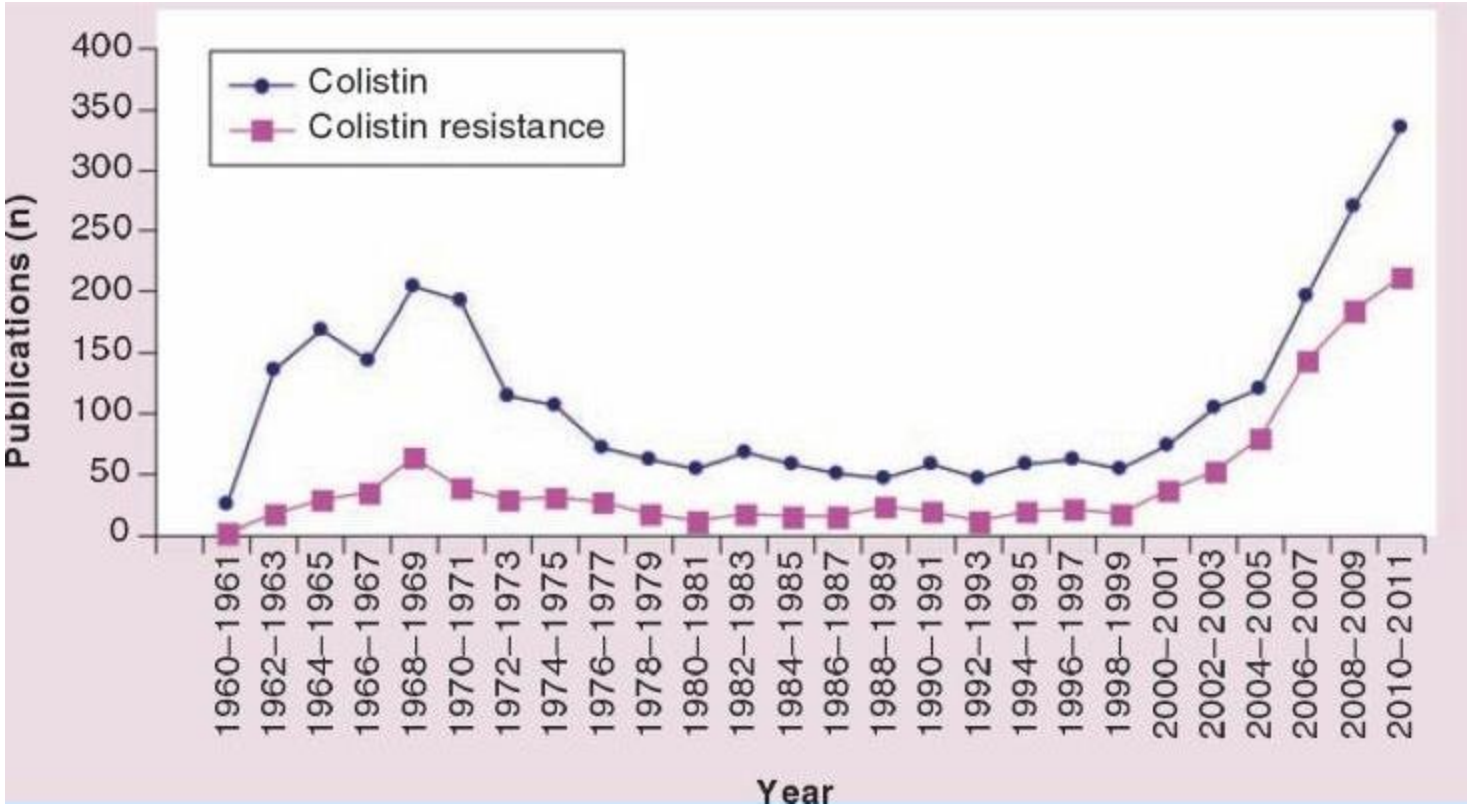
ESBL : Bärarskap i faeces



. Clinical microbiology reviews 26, 744-758, 2013

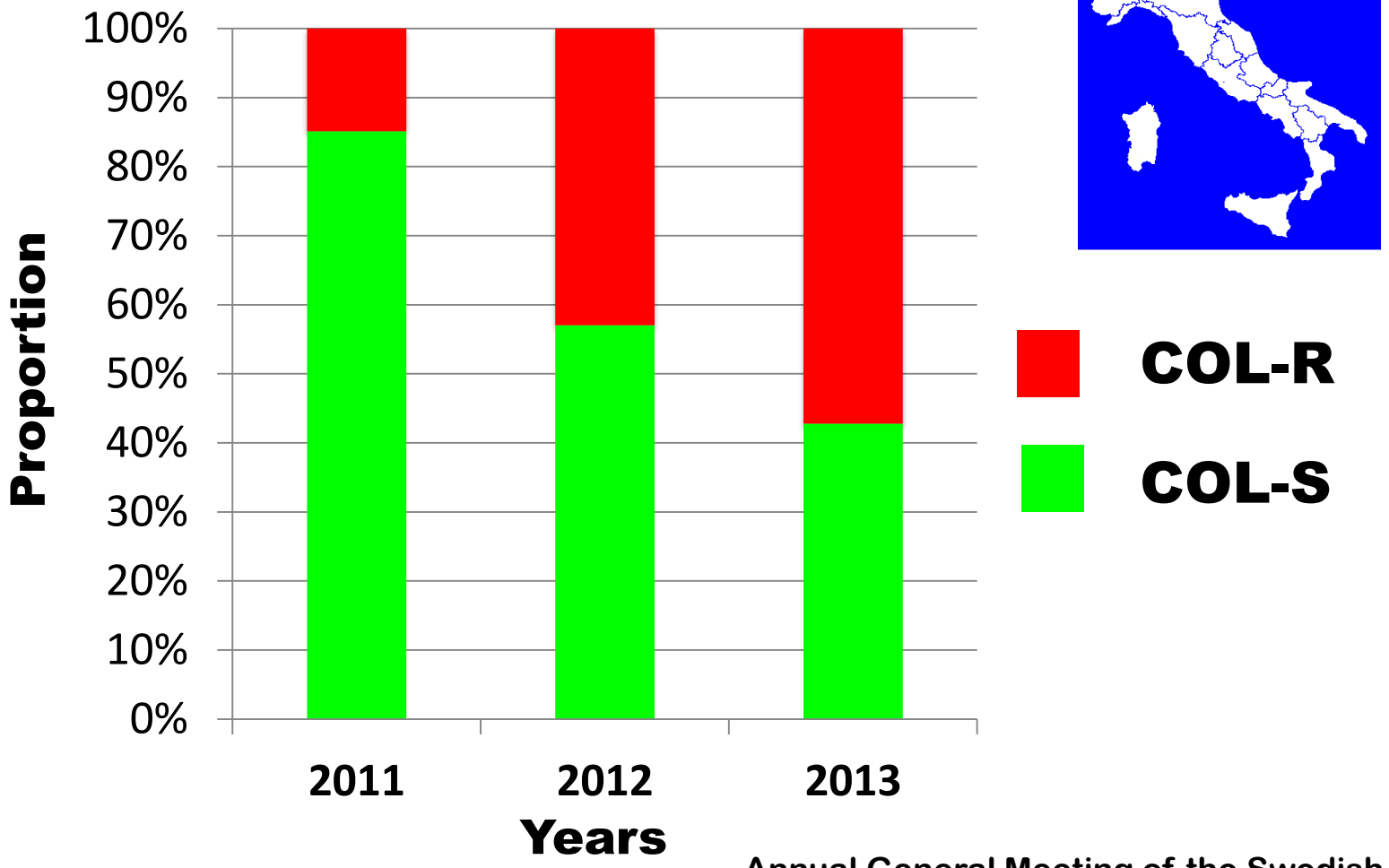
The last resort- Colistin

Increasing number of publications

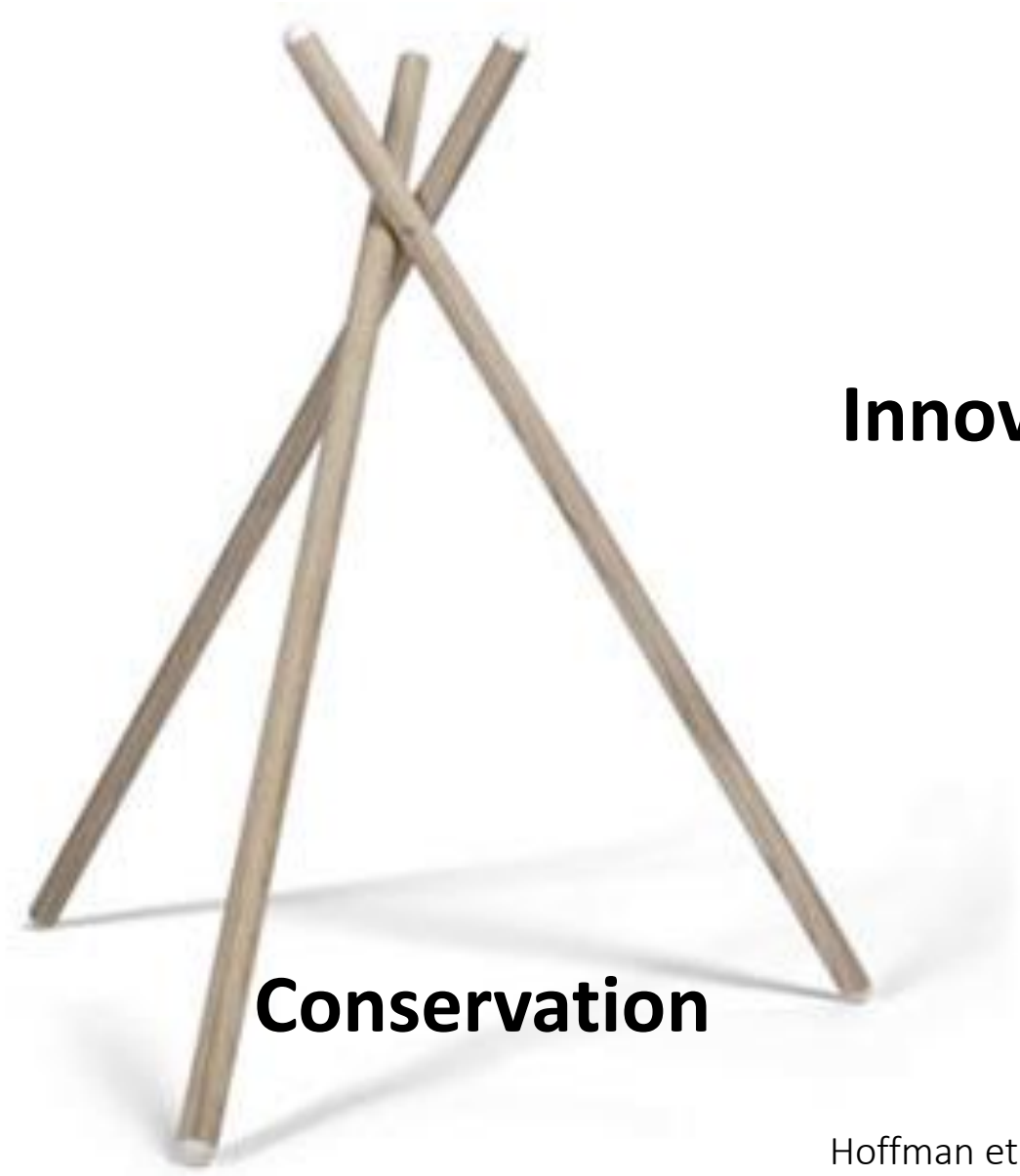


Biswas S. Expert Rev Anti Infect Ther. 2012;10(8):917-934

Evolution of colistin resistant KPC-Kp in one large tertiary care hospital



Global public good



Hoffman et al. (2015)

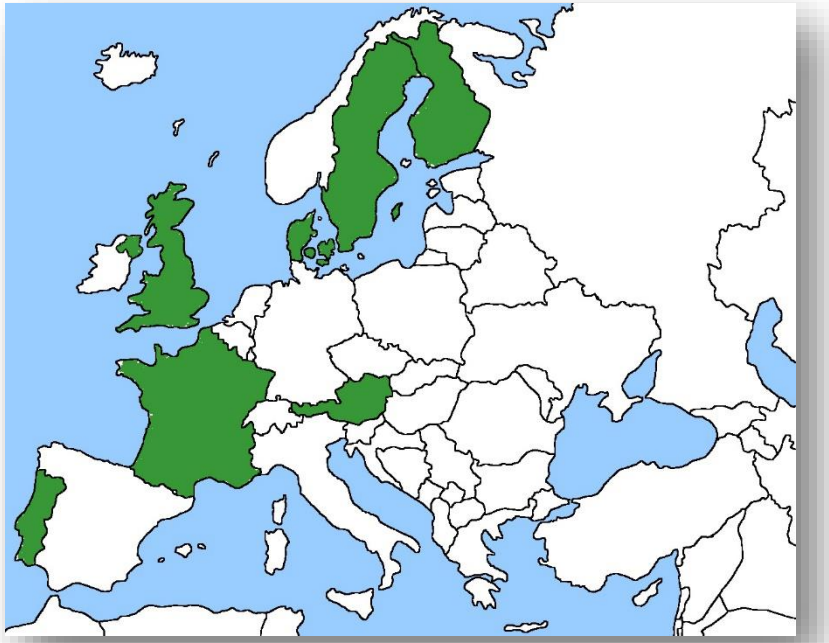
Across developing countries fewer than a third of children with suspected pneumonia receive antibiotics

United Nations Children's Fund (UNICEF) June 2012

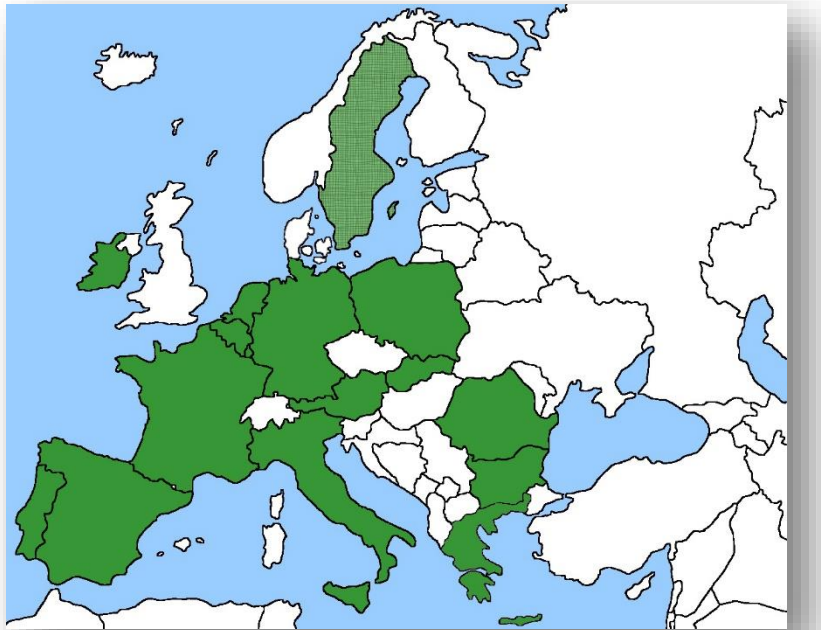
Unsatisfactory access to ”forgotten” antibiotics in the EU

Pulcini et al . Clin Inf Dis 2012

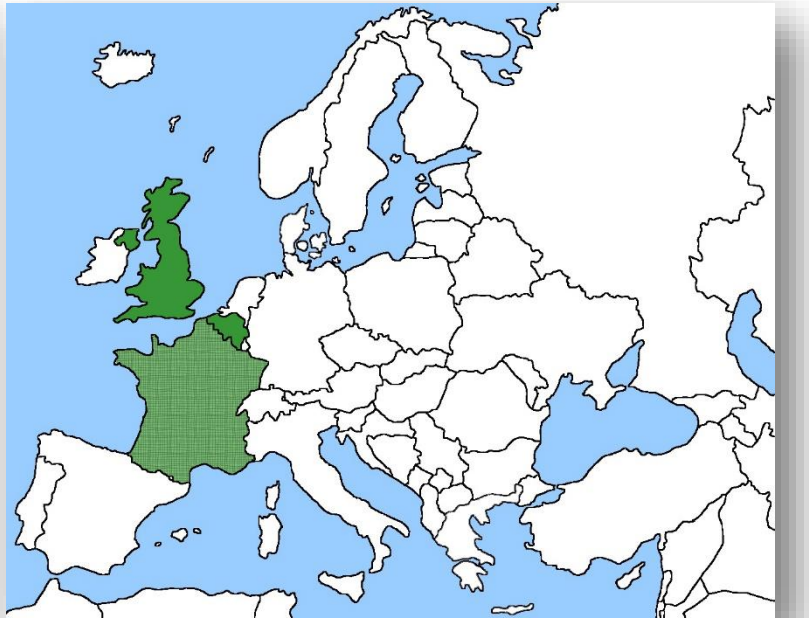
Pivmecillinam



Fosfomycin



Temocillin



Available

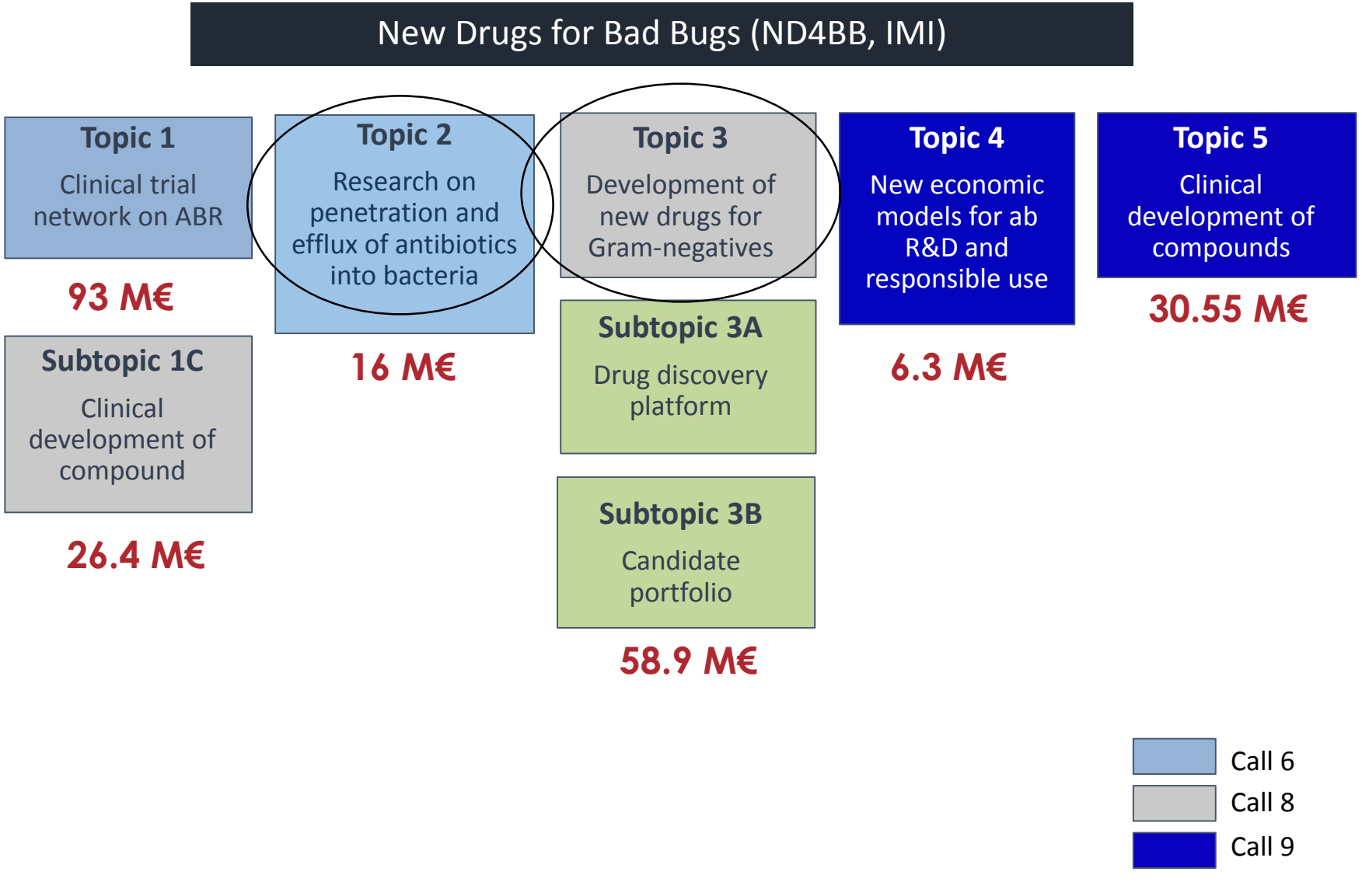
Available through special system

Pulcini et al . Clin Inf Dis 2012

ReAct

The challenges of AMR are too great for any one group to resolve and success will require leadership and partnerships among academia, industry and governments globally.

Payne et al: Phil. Trans. R. Soc. B 370: 20140086.s


New Drugs for Bad Bugs (ND4BB, IMI)
Topic 1
Clinical trial network on ABR
93 M€
Subtopic 1C
Clinical development of compound
26.4 M€
Topic 2
Research on penetration and efflux of antibiotics into bacteria
16 M€
Topic 3
Development of new drugs for Gram-negatives
Subtopic 3A
Drug discovery platform
Subtopic 3B
Candidate portfolio
58.9 M€
Topic 4
New economic models for ab R&D and responsible use
6.3 M€
Topic 5
Clinical development of compounds
30.55 M€
Call 6
Call 8
Call 9
ReAct

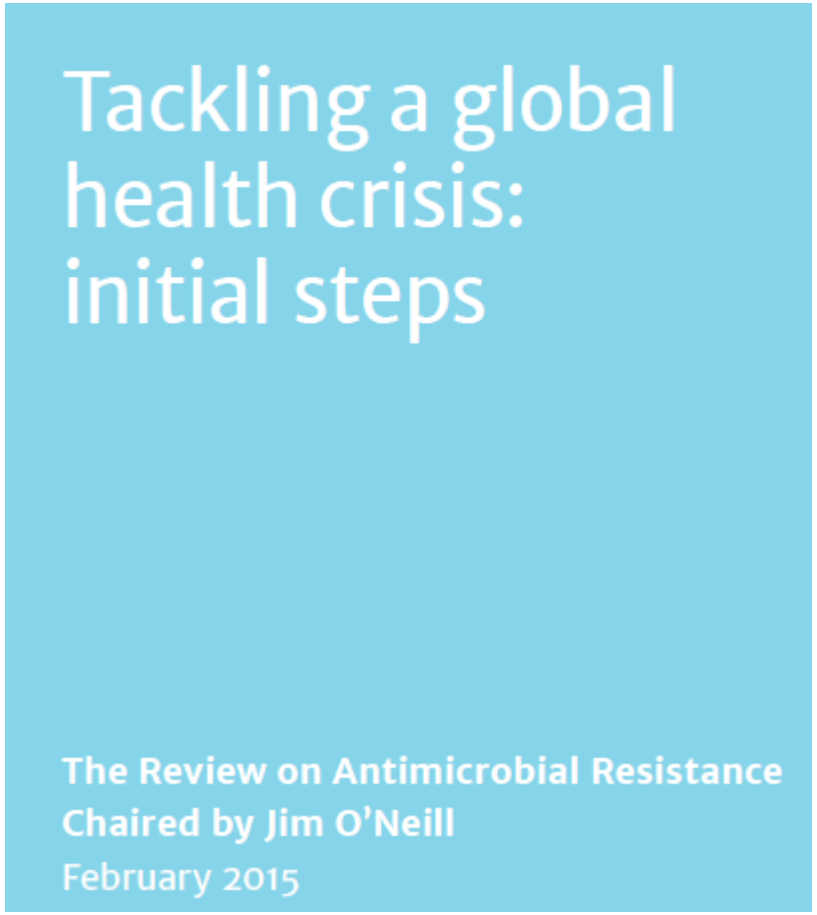
DNDi
Drugs for Neglected Diseases *initiative*

World Health Organization

Investing in the development of new antibiotics and their conservation

A proposal for a global institution for research into new antibiotics

ReAct



Set up a global AMR innovation fund to boost the number of early research ideas

“ Nobody likes to lose business. We give whatever they ask. Competition, location of shops, license issues… everything has become commercialized ”

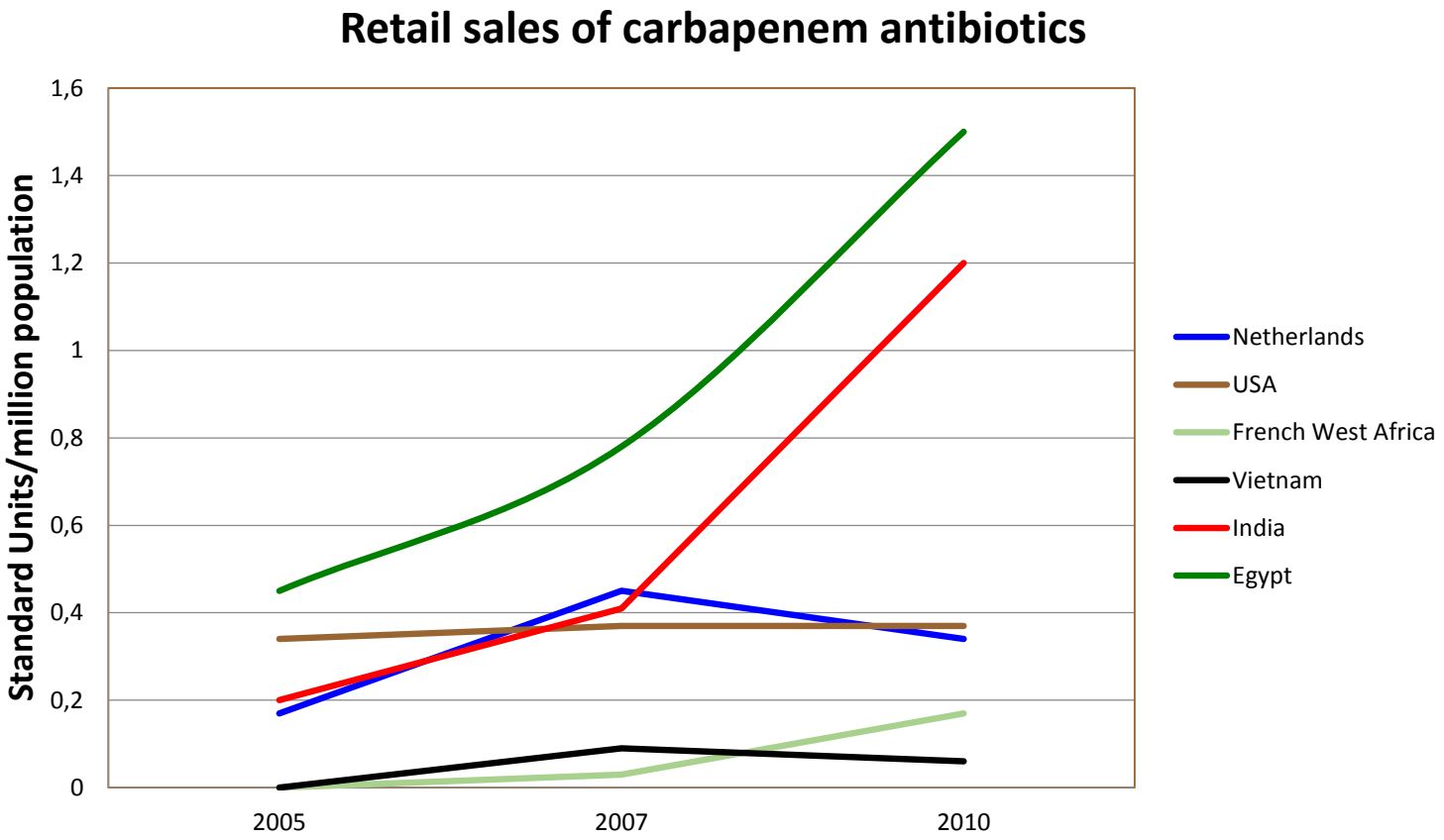
- Urban pharmacist

“Even reputed companies offer complimentaries. If you prescribe more, they offer air conditioned car or free tickets…. Of late, we are forced to try new antibiotics ”

- Urban doctor

- **Many countries in the EU have shown a reduction in antibiotic use**

- **But globally the consumption of antibiotic drugs increased by 36% between 2000 and 2010,**



Clinical Infectious Diseases Advance Access published March 5, 2015

MAJOR ARTICLE

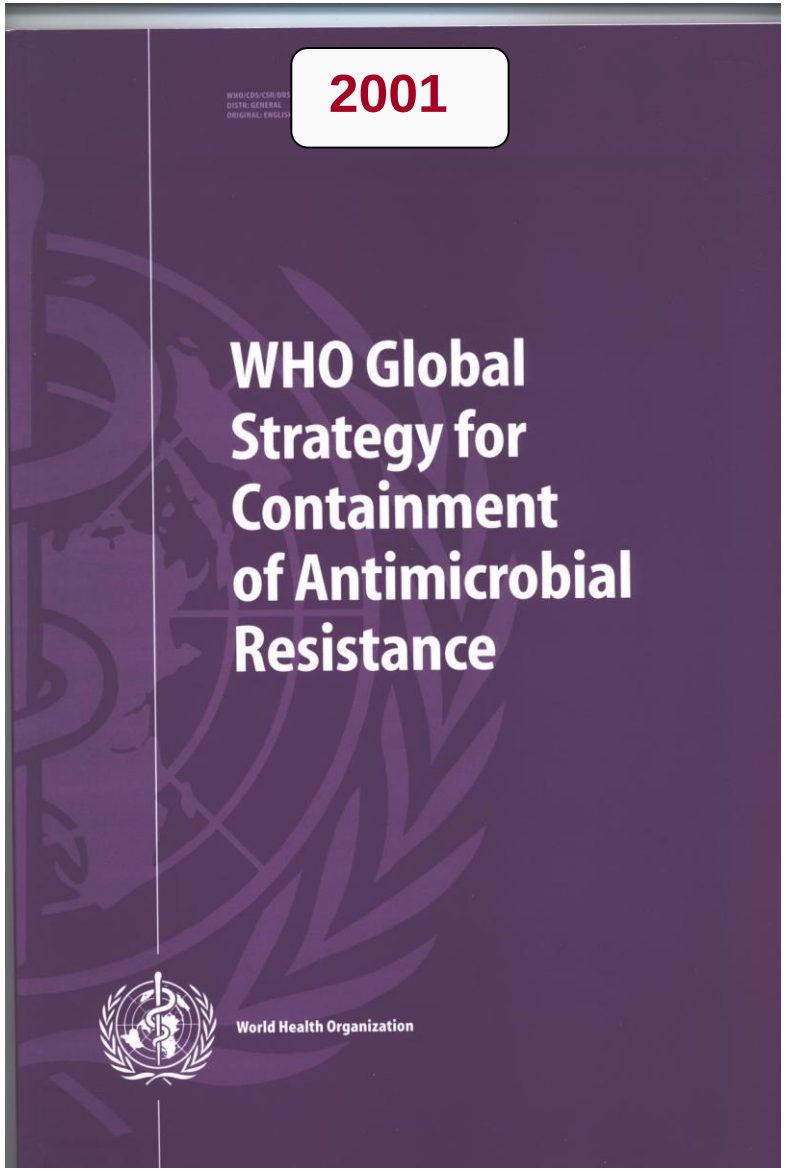
US Outpatient Antibiotic Prescribing Variation According to Geography, Patient Population, and Provider Specialty in 2011

Healthcare providers prescribed 262.5 million courses of antibiotics in 2011
(842 prescriptions per 1000 persons).

NATIONAL ACTION PLAN FOR COMBATING ANTIBIOTIC-RESISTANT BACTERIA

By 2020, significant outcomes in this area will include:

- Establishment of antimicrobial stewardship programs in all acute care hospitals and improved antimicrobial stewardship across all healthcare settings.
- Reduction of inappropriate antibiotic use by 50% in outpatient settings and by 20% in inpatient settings.
- Establishment of State Antibiotic Resistance (AR) Prevention (Protect) Programs in all 50 states to monitor regionally important multi-drug resistant organisms and provide feedback and technical assistance to health care facilities.
- Elimination of the use of medically-important antibiotics for growth promotion in food-producing animals.



2005

FIFTY-EIGHTH WORLD HEALTH ASSEMBLY WHA58.27

Agenda item 13.10 25 May 2005

Improving the containment of antimicrobial resistance

The Fifty-eighth World Health Assembly,

Having considered the report on rational use of medicines by prescribers and patients;

Acknowledging that the containment of antimicrobial resistance is a prerequisite for attaining several of the internationally agreed health-related goals contained in the United Nations Millennium Declaration;

Recalling the recommendations of the Second International Conference on Improving Use of Medicines (Chiang Mai, Thailand, 2004);

Recalling also the findings of relevant WHO reports, including "Priority medicines for Europe and the world",[1] and the Copenhagen Recommendation from the European Union conference on "The Microbial Threat" (Copenhagen, 1998);

Aware that the spread of antimicrobial resistance recognizes no national boundaries and has reached proportions that require urgent action at national, regional and global levels, especially in view of the decreasing development of new antimicrobial agents;

Recalling previous resolutions WHA39.27 and WHA47.13 on the rational use of drugs, WHA51.17 on antimicrobial resistance, and WHA54.14 on global health security;

Recognizing the efforts of WHO in collaboration with governments, universities, the private sector and nongovernmental organizations to contain antimicrobial resistance, thereby contributing to prevention of the spread of infectious diseases;

Noting that, despite some progress, the strategy for containment of antimicrobial resistance has not been widely implemented;[2]

Wishing to intensify efforts to contain antimicrobial resistance and to promote rational use of antimicrobial agents by providers and consumers in order to improve global health security;

[1] Document WHO/EDM/PAR/2004.7.

[2] Document WHO/CDS/CSR/DRS/2001.2.

2015

World Health Organization

SIXTY-EIGHTH WORLD HEALTH ASSEMBLY A68/20
Provisional agenda item 15.1 27 March 2015

Antimicrobial resistance

Draft global action plan on antimicrobial resistance

Report by the Secretariat

1. The Executive Board at its 136th session considered an earlier version of this report[1] and agreed the steps to be taken to revise the draft global action plan on antimicrobial resistance.[2] The Board's comments, input from discussions with FAO and OIE as well as advice from the Strategic and Technical Advisory Group on antimicrobial resistance have been taken into account in the following revised document.

INTRODUCTION

2. When microbes become resistant to medicines, the options for treating the diseases they cause are reduced. This resistance to antimicrobial medicines is happening in all parts of the world for a broad range of microorganisms with an increasing prevalence that threatens human and animal health. The direct consequences of infection with resistant microorganisms can be severe, including longer illnesses, increased mortality, prolonged stays in hospital, loss of protection for patients undergoing operations and other medical procedures, and increased costs. Antimicrobial resistance affects all areas of health, involves many sectors and has an impact on the whole of society.

3. The indirect impact of antimicrobial resistance, however, extends beyond increased health risks and has many public health consequences with wide implications, for instance on development. Antimicrobial resistance is a drain on the global economy with economic losses due to reduced productivity caused by sickness (of both human beings and animals) and higher costs of treatment. To counter it needs long-term investment, such as financial and technical support for developing countries and into development of new medicines, diagnostic tools, vaccines and other interventions, and in strengthening health systems to ensure more appropriate use of and access to antimicrobial agents.

4. The development of this draft global action plan on antimicrobial resistance, requested by the Health Assembly in resolution WHA67.25 in May 2014, reflects a global consensus that antimicrobial resistance poses a profound threat to human health. It reflects the input received to date from broad multisectoral and Member States' consultations.

5. The goal of the draft global action plan is to ensure, for as long as possible, continuity of successful treatment and prevention of infectious diseases with effective and safe medicines that are quality-assured,

[1] Document EB136/20.

[2] See summary records of the 136th session of the Executive Board, sixth meeting, section 4, and seventh meeting.

International Collaboration on AMR

Binding multi-national decisions and pooled funding

Multi-national joint strategies

WHO Global Action Plan

Adapted from J-A Rottingen

What is neeeded?

- Financial and technical assistance
- Harmonized standards
- International law

  Licensing, regulation, sales, trade, marketing

- Pooled funding

  Innovation

  Capacity building for national plans

- Monitoring and accountability
- Political leadership

Bulletin of the World Health Organization

Volume 93, Number 2, February 2015, 65-132

Editorials

An international legal framework to address antimicrobial resistance

Steven J Hoffman,[a] Kevin Outterson,[b] John-Arne Røttingen,[c] Otto Cars,[d] Charles Clift,[e] Zain Rizvi,[f] Fiona Rotberg,[g] Göran Tomson[h] & Anna Zorzet[d]

“Given these global coordination issues, there is a clear role for a binding international legal framework to encompass the issues of access, conservation and innovation “

Three Prizes for new diagnostic tools

Longitude Prize 2014, £10 million
(Nesta & UK government)

US National Stategy /Department of Health and Human Services, $20 million
Co-sponsored by the National Institutes of Health and the Biomedical Advanced Research and Development Authority

“Horizon Prize for better use of antibiotics”, €1 million
Horizon 2020, The EU Framework Programme for Research and Innovation.

Citeras som: Läkartidningen. 2015;112:DCPD
Läkartidningen 07/2015
Lakartidningen.se 2015-02-10

KOMMENTAR

Kommentera Läs kommentarer (0)

Enkla åtgärder i landstingen kan ge säkrare behandling vid sepsis

Tidig diagnos avgörande – laboratorier måste hantera blododlingar snabbare

Otto Cars, seniorprofessor, institutionen för medicinska vetenskaper, Uppsala universitet
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