



From Evidence to Health Policy

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&

European Observatory on Health Systems and Policies



2002-2022

Health Care
Management



Introduction

- For about the last 25 years, the notion that health policy should be evidence-based, or at least evidence-“informed”, has gained momentum, e.g. visible through academic-policy partnerships such as the European Observatory on Health Systems and Policies.
- However,
 - which type of evidence is exactly needed (especially to assess the attributable outcomes of an intervention, policy or system) and
 - in which ways policy-makers most effectively find, understand and use the evidenceis less often discussed.

Who are “policy-makers”?



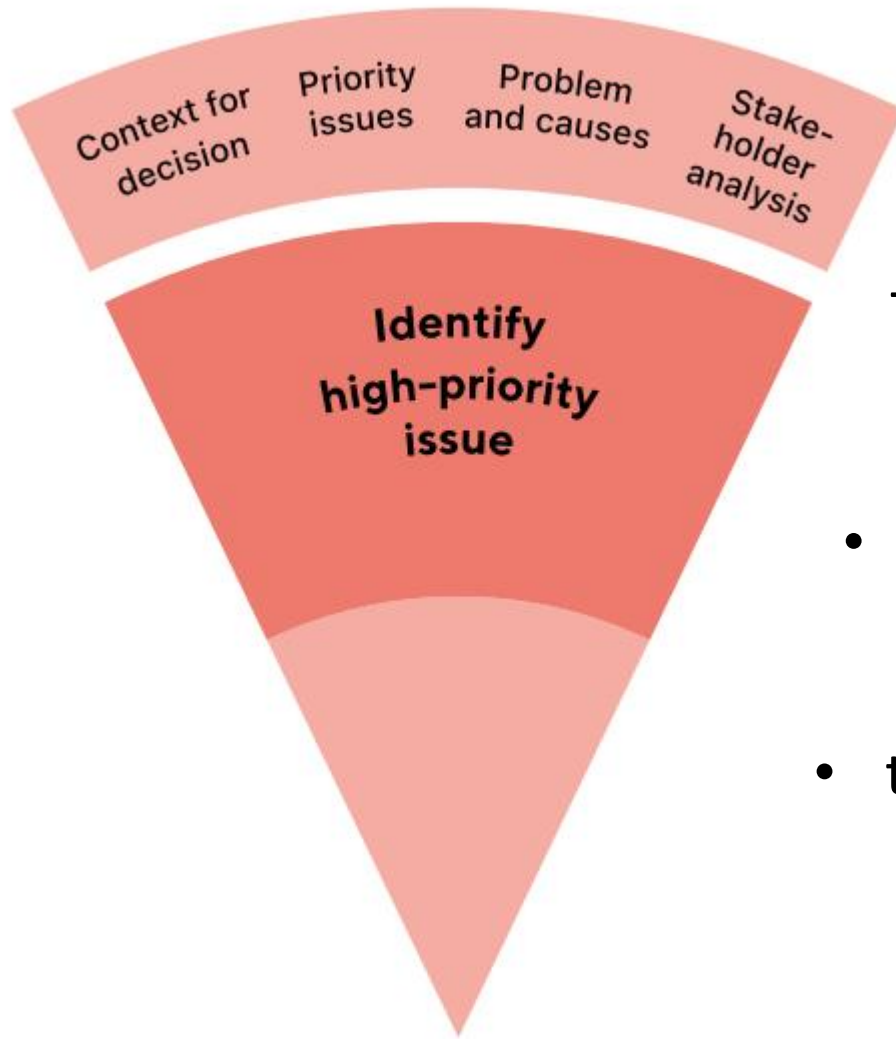
Obviously, ministers of health at the (inter)national level ...
but equally at the meso and institutional level



What is “evidence”?

- Evidence-based medicine (EBM) = “conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients” → implies hierarchy of evidence
- Evidence-informed health policymaking is an approach to policy decisions that aims to ensure that decision making is well-informed by the “best available” research evidence. It is characterised by the systematic and transparent access to, and appraisal of, evidence as an input into the policymaking process.

Any “evidence” requires a problem to be solved first!
Otherwise, “evidence” for what?



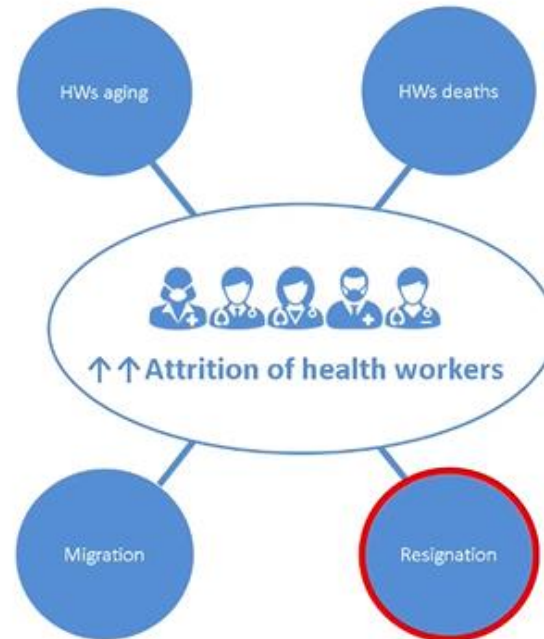
The framing of the problem generally includes

- a clear/concise problem statement,
- a description of the magnitude of the problem,
 - the consequences of the problem,
 - the factors underlying the problem, and
- the equity considerations related to the problem.

The formulation of the problem needs to be specific:
one solution will not be able address all known issues



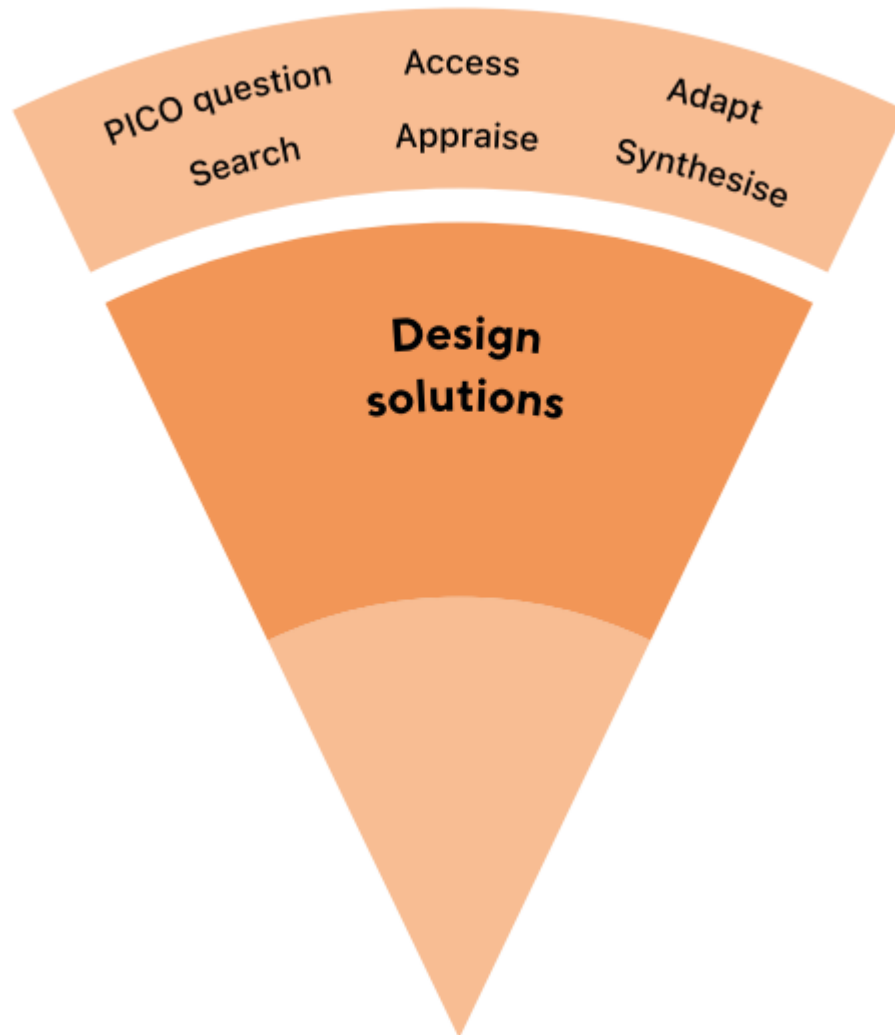
Why are shortages of health workers worsening?



- Higher levels of anxiety and depression compared to other professionals
- Scale of burnout and impact
 - Estimates of burnout among HCW 41–52% among HCWs
 - Highest among physicians and nurses (reported 70% among nurses in some cases)
 - Women among most affected groups
 - HCW absences increased by 62% in the first days of the pandemic
 - Up to 9 out of 10 nurses had declared an intention to quit their jobs



We then need to look for possible solutions:
this is where different (best) “evidence” comes in



Description of possible solutions as PICO:

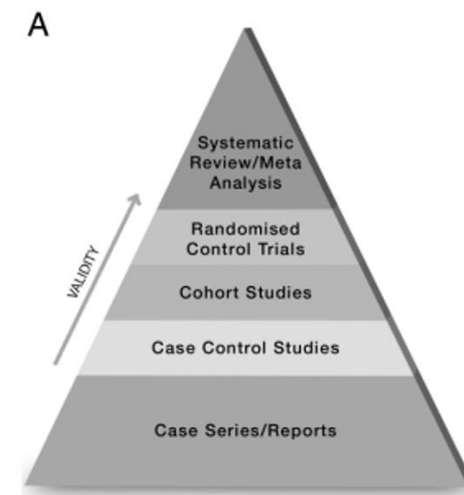
P = Population (e.g. nurses in hospitals)

I = Intervention (e.g. Magnet)

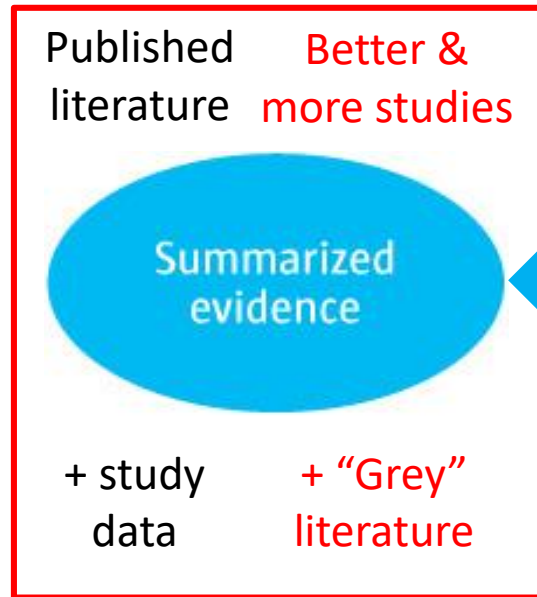
C = Control (e.g. nurses in hospitals w/o Magnet)

O = Outcome (e.g. higher nurse retention)

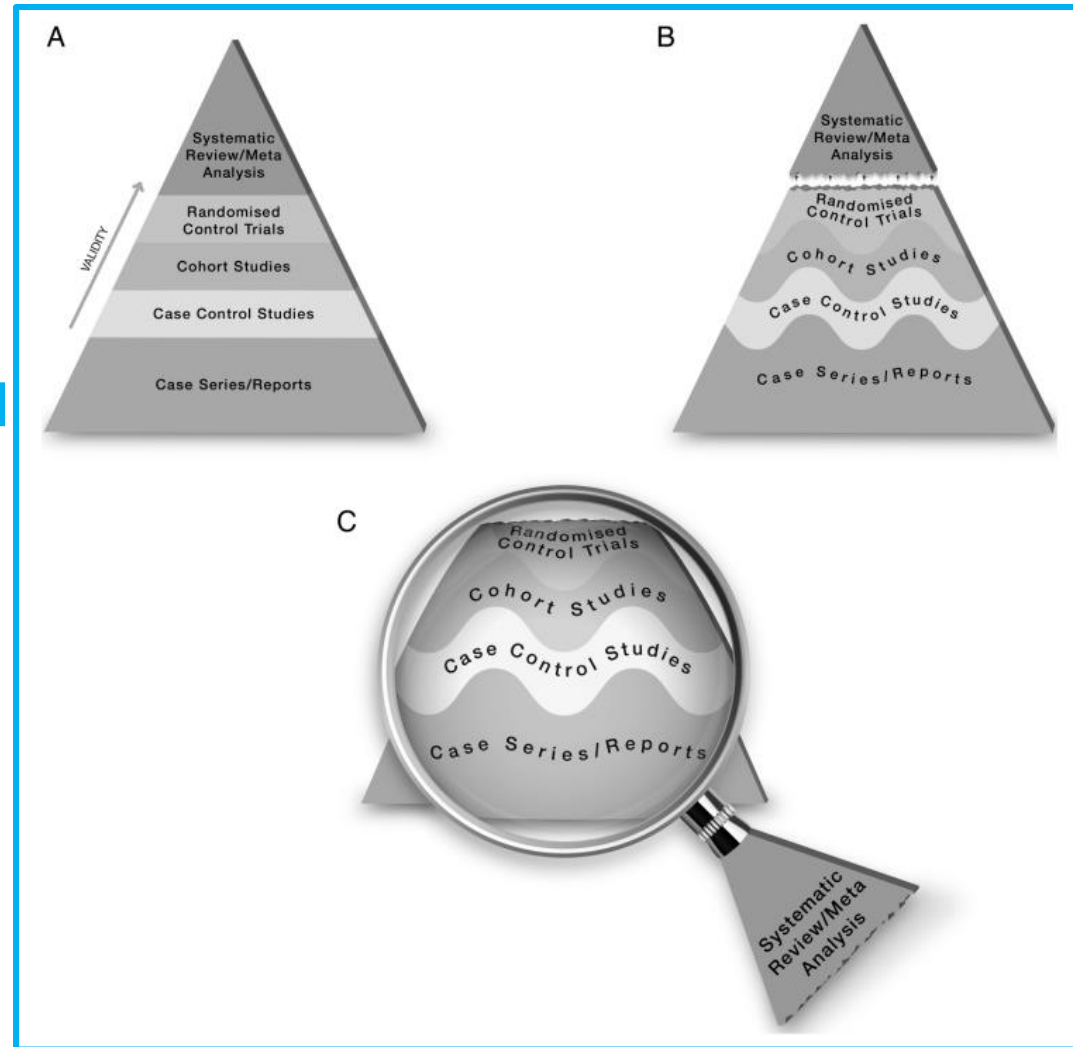
To sort “worse” from
“better” evidence,
EBM uses a hierarchy
for study types




But what is “evidence” for evidence-based health policy? Is it the same as for evidence-based medicine?




1st task of Evidence-based health policy experts




Typically, there are even more solutions than problems ... we need to look at them one-by-one



Framework for action on the health and care workforce in the WHO European Region 2023–2030




World Health Organization
European Region



- INVEST**
 - Increase public investment and optimise use of funds
 - Make the economic and social case for investing in the health and care workforce
- BUILD SUPPLY**
 - Modernise education and training
 - Strengthen continuous professional development
 - Build digital health competencies
- RETAIN & RECRUIT**
 - Improve working conditions and ensure fair remuneration
 - Safeguard health and well-being
 - Ensure policies that address gender inequality and have zero tolerance for abuse and violence
 - Attract young students
 - Recruit and retain in rural and underserved areas
 - Address outmigration; ethical recruitment
- OPTIMIZE PERFORMANCE**
 - Redefine teams and skill mix
 - Improve interactions with patients
 - Promote appropriate use of digital technologies
 - Reconfigure services to be more efficient
- PLAN**
 - Plan and forecast needs
 - Adopt intersectoral planning approach
 - Strengthen capacity of HRH units
 - Regulate education, service delivery and professions
 - Strengthen HRH information systems

Adopted by 53 Member States at WHO Regional Committee for Europe 73, October 2023, Astana

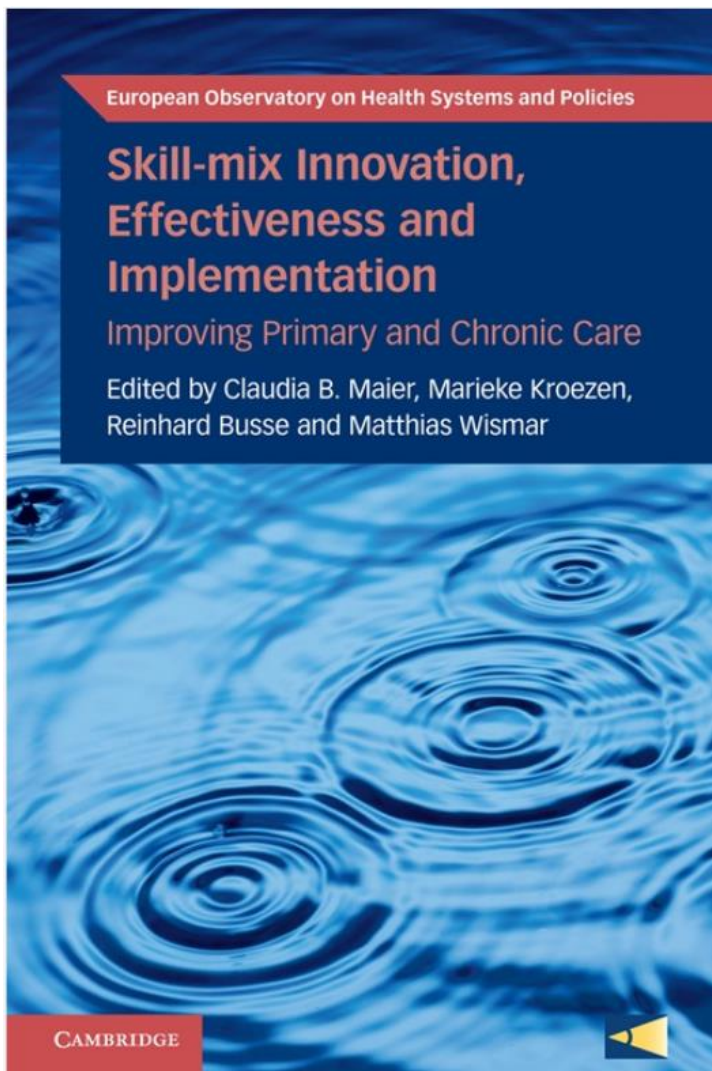


Magnet4Europe

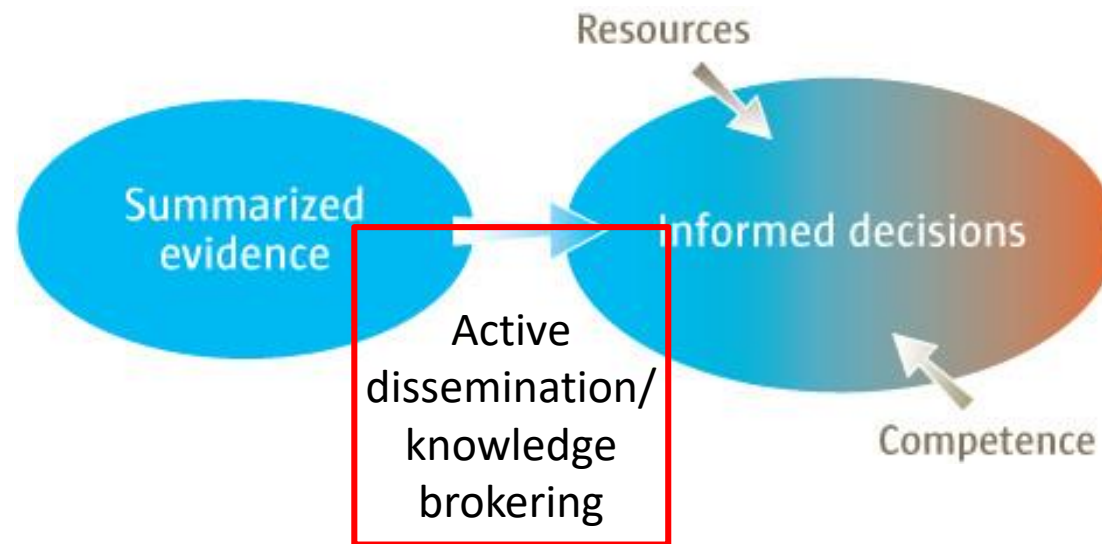
For each, it's best to rely on systematic reviews of policy-relevant solutions, clearly stating population, intervention, controls and outcomes

Table 5.1 Summary of reviews: skill-mix on transitional care and early discharge planning

Description of intervention	Content of interventions and skill-mix changes	Profession(s)	Population	Countries	Patient-related outcomes ^a	Health-system-related outcomes	Profession-specific outcomes
Nurse-led transitional care [14–18]	Initiated in hospital, community or post-discharge. Interventions included discharge planning, care coordination and plans, patient education, assessment, home visits, improve medication adherence, technology-based integrated counselling, care coordination, advocacy for options and services, involvement with family members	Intervention: Case manager/ specialist nurses, clinical nurse specialists, registered nurses, registered nurses and other professions Comparison: GPs, nurses, physiotherapists, caregivers, discharge planning nurses (not consistently reported)	Patients with various acute conditions (e.g. after cancer surgery, heart failure, elderly, high-risk pregnant women) or chronic illness [17,18]	CA, CN, DE, DK, ES, HK, IL, IT, LB, NL, Taiwan, UK, USA	<ul style="list-style-type: none"> Improved treatment adherence [15], and medication adherence [16] Risk of death significantly reduced by 50% in cancer patients [15] Increased satisfaction for postpartum mothers and for heart failure patients after discharge [15] Depression symptoms for caregivers in elderly care reduced [15] Improved patient satisfaction and quality of life [17] Mixed results for psychological outcomes [18] 	<ul style="list-style-type: none"> Readmission rates reduced (RR 0.51, 95% CI 0.29–0.91, $P = 0.02$) [15], (OR 0.74, 95% CI 0.60–0.92) [14] Hospital stay reduced [14,15,18], (MD 1.28 days [14]) No difference for ED / outpatient visits [14] Primary care visits reduced [15] Hospital readmissions [17,18], ED visits [18], duration of readmission and mortality reduced [17] No reduction in index admission stay [17] <p>Resource use:</p> <ul style="list-style-type: none"> Cost saving (case management) [14] and lower maternal and infants care costs [15] Discharge planning reduced total and readmission costs [17] Mixed results for costs [18] 	

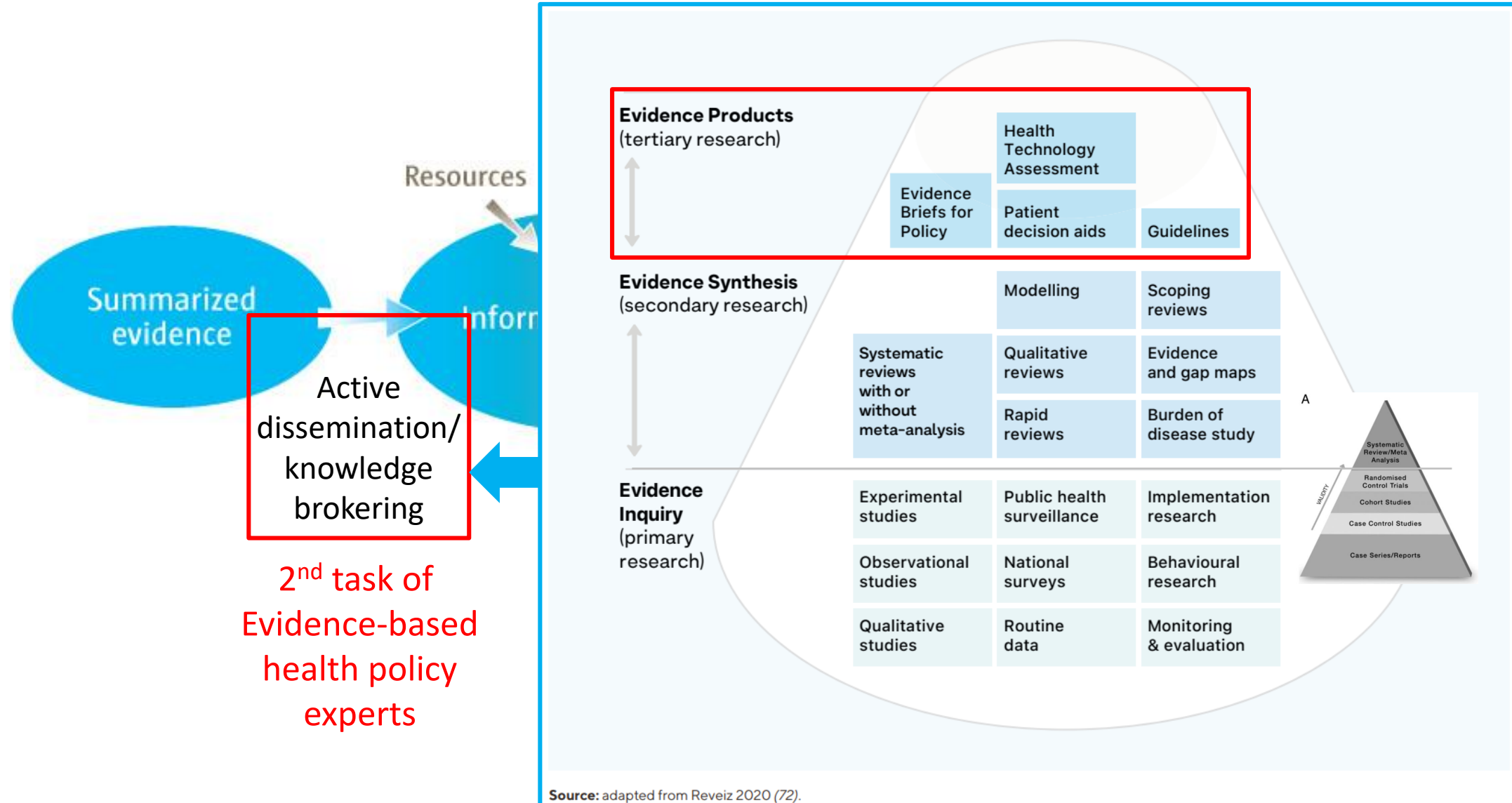


“Evidence” for evidence-based health policy: How is it supposed to influence policy-making?



2nd task of
Evidence-based
health policy
experts

“Evidence” for evidence-based health policy: Decision-makers need “tertiary” research products



Recent examples of the European Observatory's "policy briefs" on health workforce issues



HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 54

What steps can improve and promote investment in the health and care workforce?

Enhancing efficiency of spending and rethinking domestic and international financing

Barbara McPake
Prarthna Dayal
Julia Zimmermann
Gemma A Williams

World Health Organization

European Observatory on Health Systems and Policies
a partnership hosted by WHO

HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 53

What can intersectoral governance do to strengthen the health and care workforce?

Structures and mechanisms to improve the education, employment and retention of health and care workers

Margaret Caffrey
Tara Tancred
Michelle Falkenbach
Joanna Raven

World Health Organization

European Observatory on Health Systems and Policies
a partnership hosted by WHO

HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 52

Global Health Workforce responses to address the COVID-19 pandemic

What policies and practices to recruit, retain, reskill, and support health workers during the COVID-19 pandemic should inform future workforce development?

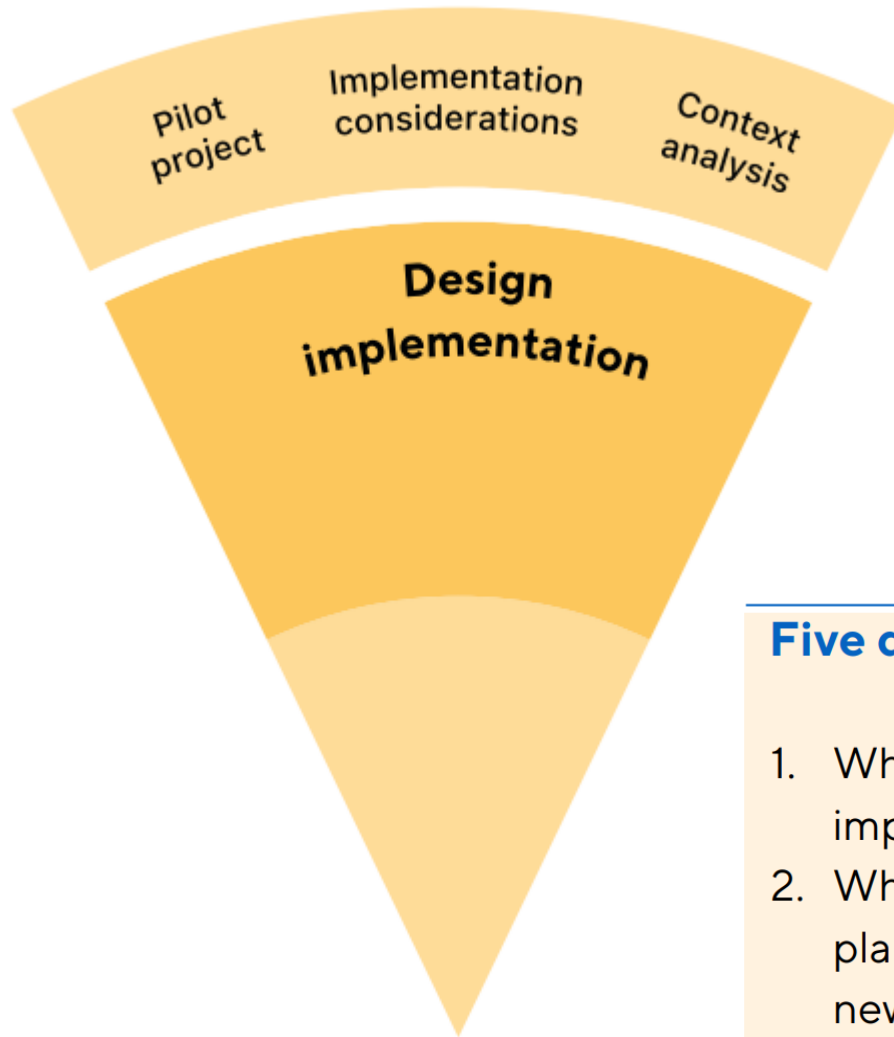
Margaret Ziemann
Candice Chen
Rebecca Forman
Anna Sagan
Patricia Pittman

World Health Organization

European Observatory on Health Systems and Policies
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... one from the Magnet project to come

Time to decide, time to act ...



For interventions that are implemented for the first time in a given context, or where there is little good evidence available, first conduct or commission a pilot project including a formal evaluation, which can be performed under the routine operating conditions and existing resource constraints of the health system(s).

Five questions to frame implementation considerations:

1. What are the barriers to implementation?
2. What are the strategies used in planning the implementation of a new policy to facilitate behavioural changes among users?
3. ... and behavioural changes of providers?
4. ... and organizational changes?
5. ... and system changes?

Remember: in the EBM pyramid, evidence coming from observation only is placed relatively low (*no matter how convincing you might find it*)



Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study

Linda H Aiken, Douglas M Sloane, Luk Bruyneel, Koen Van den Heede, Peter Griffiths, Reinhard Busse, Marianna Diomidous, Juha Kinnunen, Maria Kózka, Emmanuel Lesaffre, Matthew D McHugh, M T Moreno-Casbas, Anne Marie Rafferty, Rene Schwendimann, P Anne Scott, Carol Tishelman, Theo van Achterberg, Walter Sermeus, for the RN4CAST consortium*

Summary

Lancet 2014; 383: 1824-30
Published Online
February 26, 2014
[http://dx.doi.org/10.1016/S0140-6736\(13\)62631-8](http://dx.doi.org/10.1016/S0140-6736(13)62631-8)
See [Comment](#) page 1789

*Members are listed at end of paper

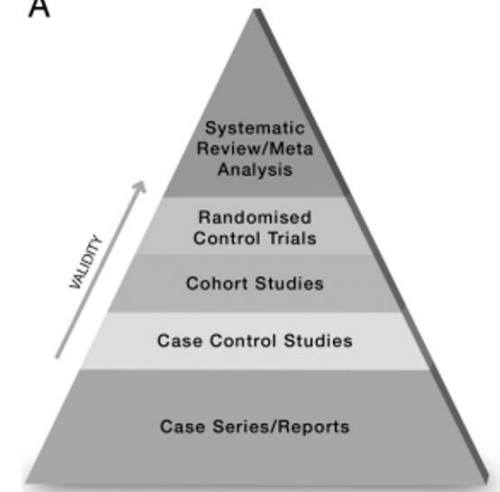
Center for Health Outcomes and Policy Research, University of Pennsylvania School of Nursing, Philadelphia, PA, USA (Prof L H Aiken PhD, D M Sloane PhD, M D McHugh PhD); Centre for Health Services and Nursing Research, Catholic University Leuven, Leuven, Belgium (L Bruyneel MS, K Van den Heede PhD, Prof W Sermeus PhD); Faculty of Health Sciences, University of Southampton, Southampton, UK (Prof P Griffiths PhD); Department of Health Care

Background Austerity measures and health-system redesign to minimise hospital expenditures risk adversely affecting patient outcomes. The RN4CAST study was designed to inform decision making about nursing, one of the largest components of hospital operating expenses. We aimed to assess whether differences in patient to nurse ratios and nurses' educational qualifications in nine of the 12 RN4CAST countries with similar patient discharge data were associated with variation in hospital mortality after common surgical procedures.

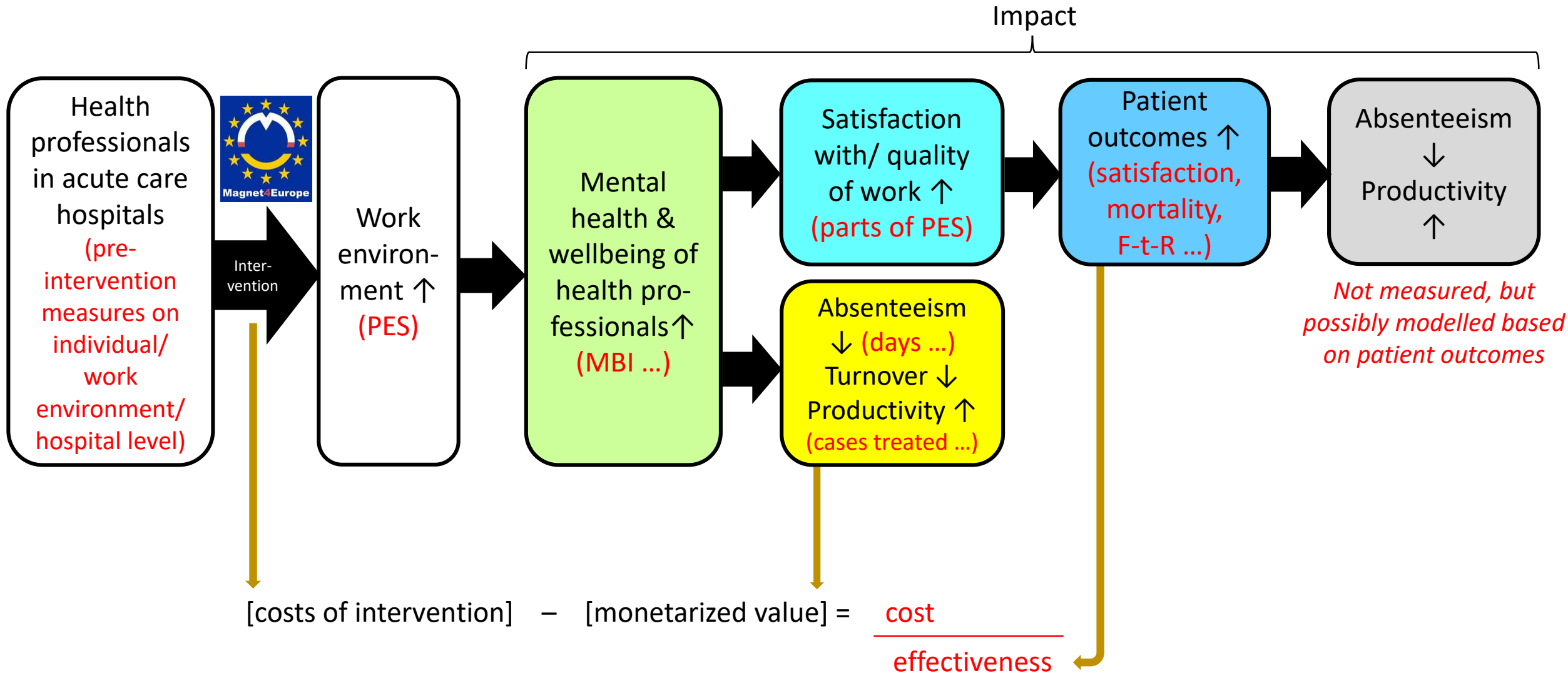
Methods For this observational study, we obtained discharge data for 422730 patients aged 50 years or older who underwent common surgeries in 300 hospitals in nine European countries. Administrative data were coded with a standard protocol (variants of the ninth or tenth versions of the International Classification of Diseases) to estimate 30 day in-hospital mortality by use of risk adjustment measures including age, sex, admission type, 43 dummy variables suggesting surgery type, and 17 dummy variables suggesting comorbidities present at admission. Surveys of 26516 nurses practising in study hospitals were used to measure nurse staffing and nurse education. We used generalised estimating equations to assess the effects of nursing factors on the likelihood of surgical patients dying within 30 days of admission, before and after adjusting for other hospital and patient characteristics.

Findings An increase in a nurses' workload by one patient increased the likelihood of an inpatient dying within 30 days of admission by 7% (odds ratio 1.068, 95% CI 1.031-1.106), and every 10% increase in bachelor's degree nurses was associated with a decrease in this likelihood by 7% (0.929, 0.886-0.973). These associations imply that patients in hospitals in which 60% of nurses had bachelor's degrees and nurses cared for an average of six patients would have almost 30% lower mortality than patients in hospitals in which only 30% of nurses had bachelor's degrees and nurses cared for an average of eight patients.

A



That's why we aimed higher for our M4E project: a prospective intervention, again in different countries and hospitals

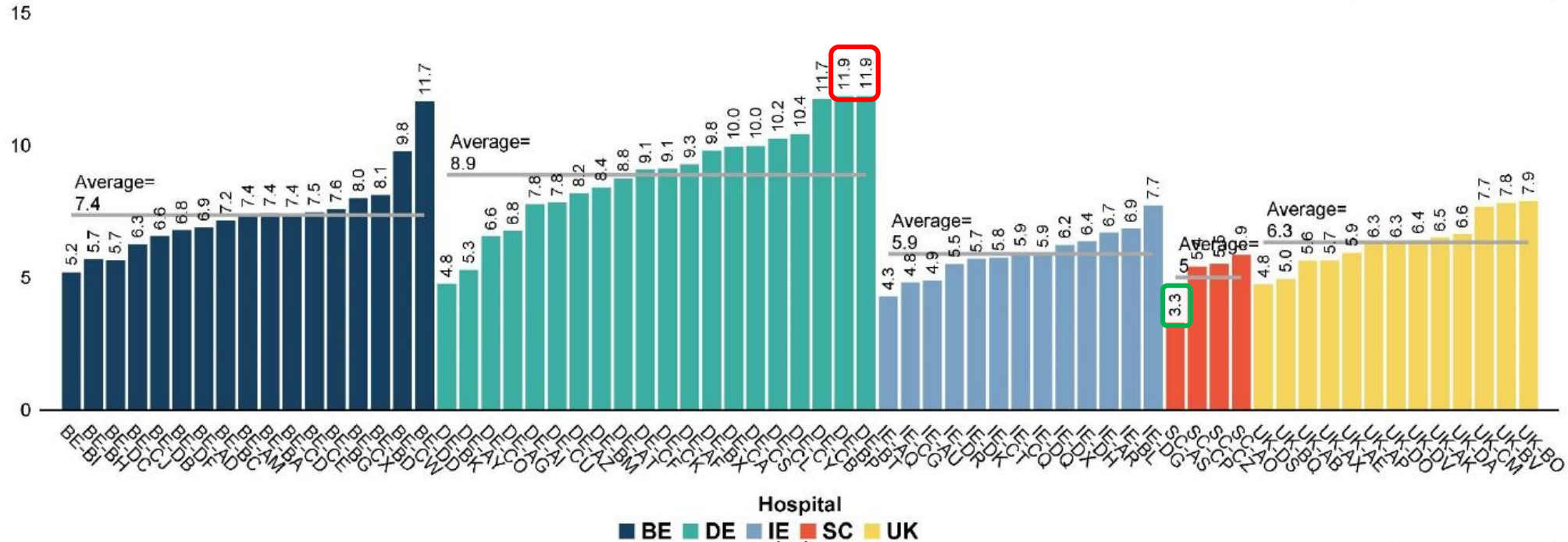


Considering that context differs (and might make a difference)

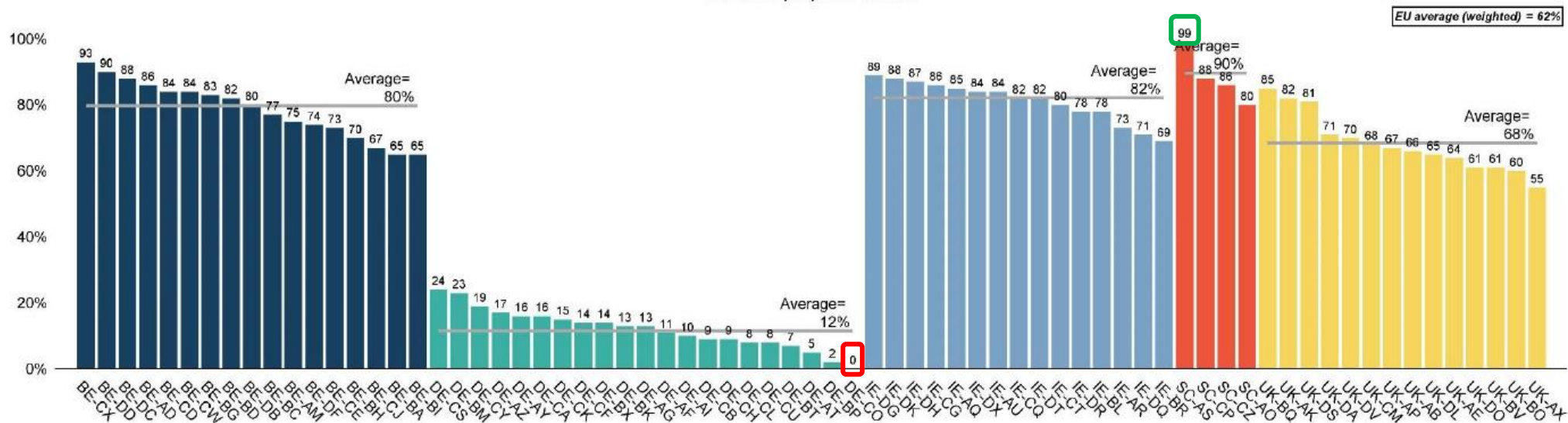


EU average (weighted) = 7.2

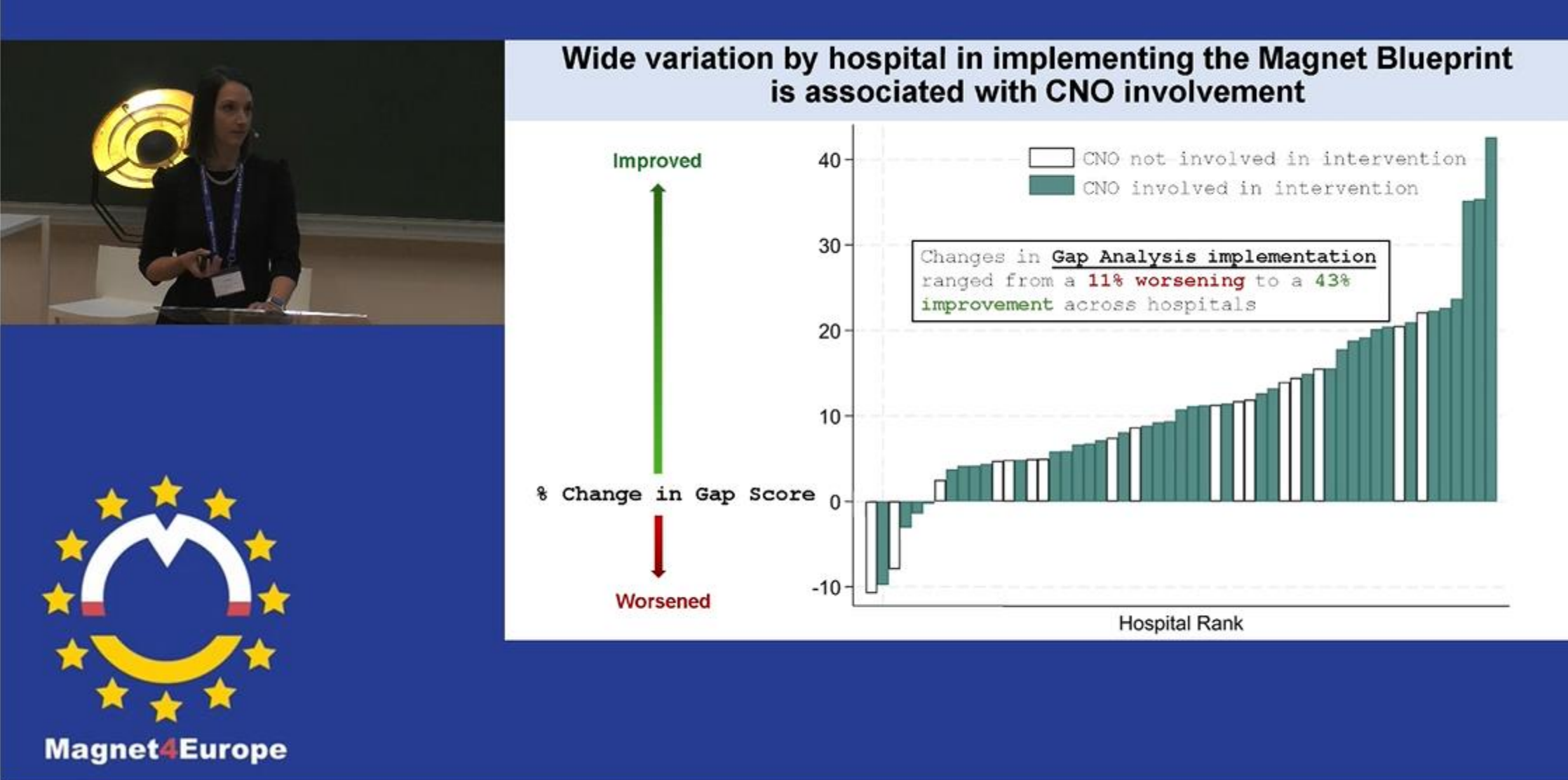
Patient-to-nurse ratio (varying 3.3 – 11.9)



Bachelor-educated (varying 0 – 99%)



As we saw, it mainly worked – but the control group design was impeded by pandemic, i.e. only a small step upwards in pyramid

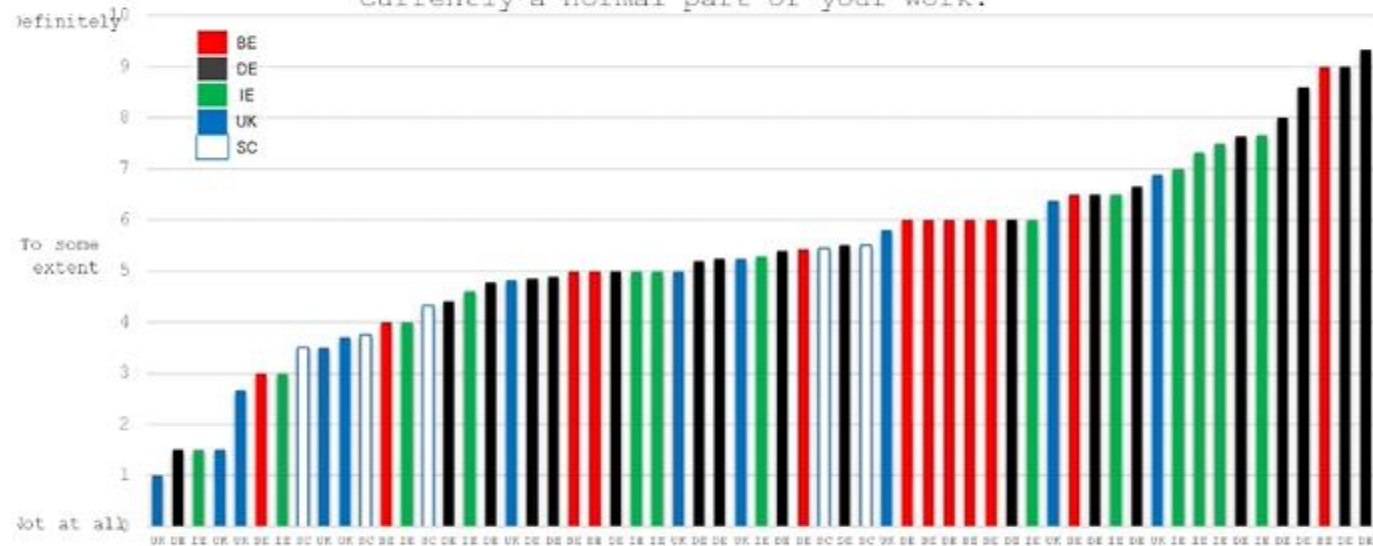


However, reassuringly, results are not dependent on country



Where next? - Normalisation of Magnet (NoMAD)

Q: Do you feel the Magnet Hospital intervention is currently a normal part of your work?



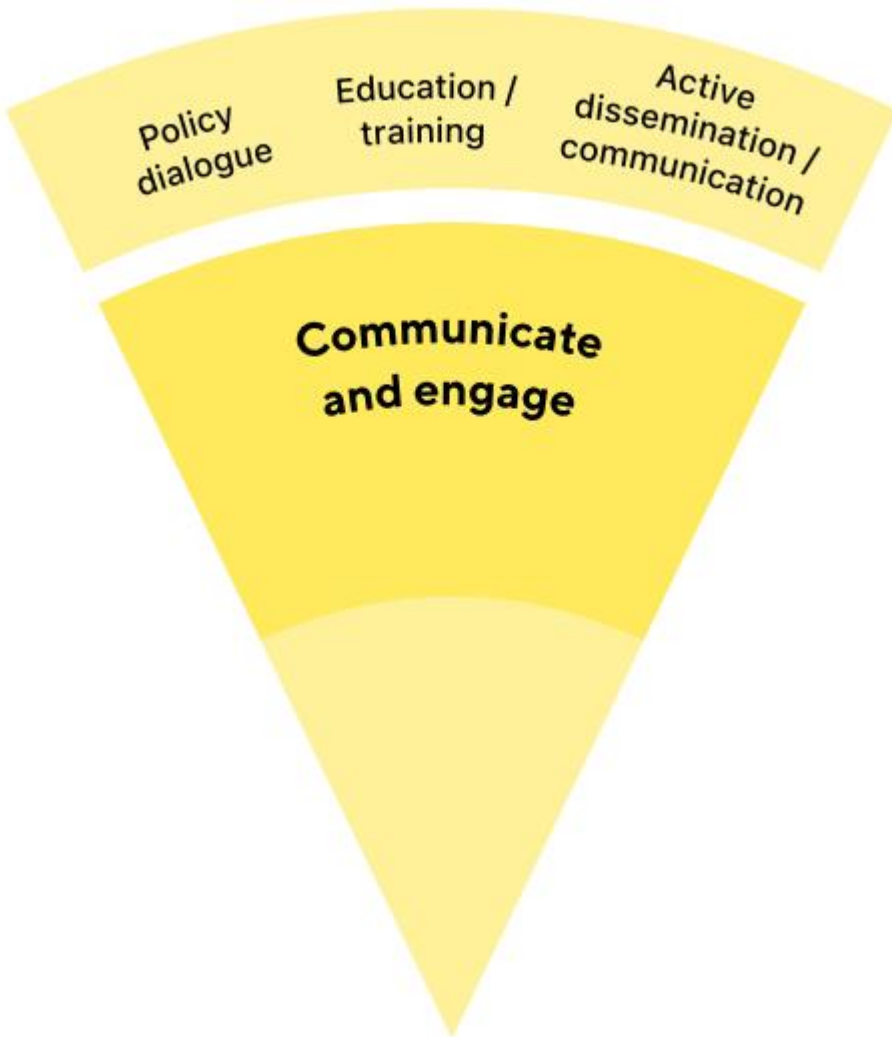
Magnet4Europe Celebration 2024

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Magnet4Europe

For further scaling-up, we need policy-makers on board

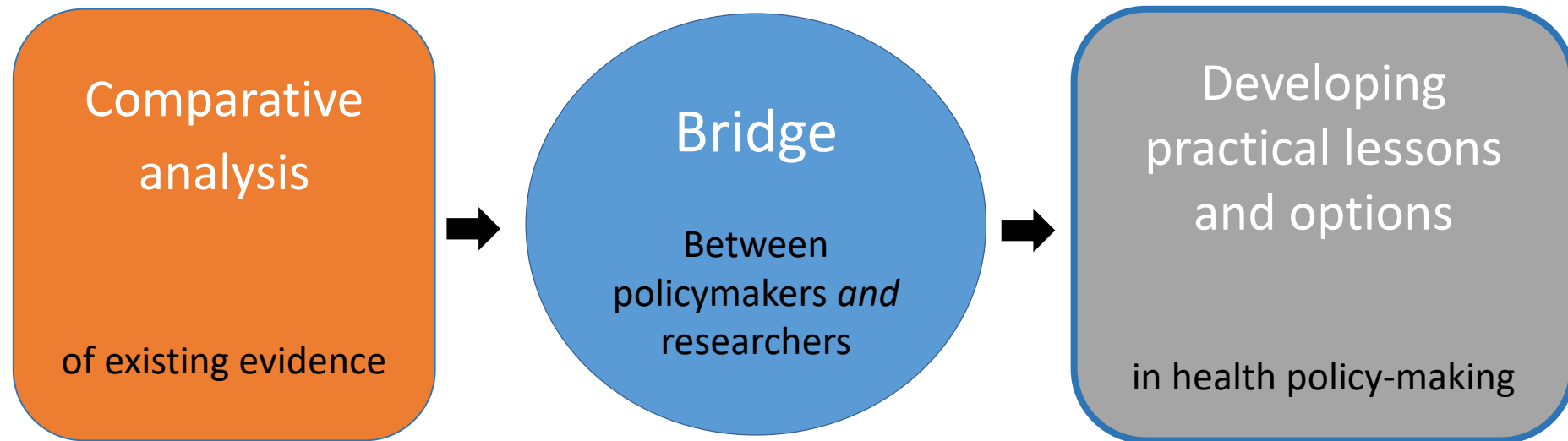


Key questions for strategic communication

- What is the objective and desired effect of communicating evidence and research findings? (With what aim should research knowledge be transferred?)
- What are the key messages to be communicated to decision-makers?
- Who is the target audience? (To whom should research knowledge be transferred?)
- What is the best format (channel, means and style) to communicate key messages to the target audience? (How should research knowledge be transferred?)
- Who is best placed (credibility, reputation and individual network) to convey and amplify the communication? (By whom should research knowledge be transferred?)



That is the mission of the European Observatory on Health Systems and Policies



Core Mission: to support and promote evidence-based health policy-making
informed

Observatory key principles to knowledge brokering

The European Observatory on Health Systems and Policies is a high-quality knowledge broker based on following principles:

Translate

Reorganise the evidence in a way that appeals to policy makers and in a language they understand

Trust

High-quality evidence and a neutral stance recognising the real context and pressures of health systems

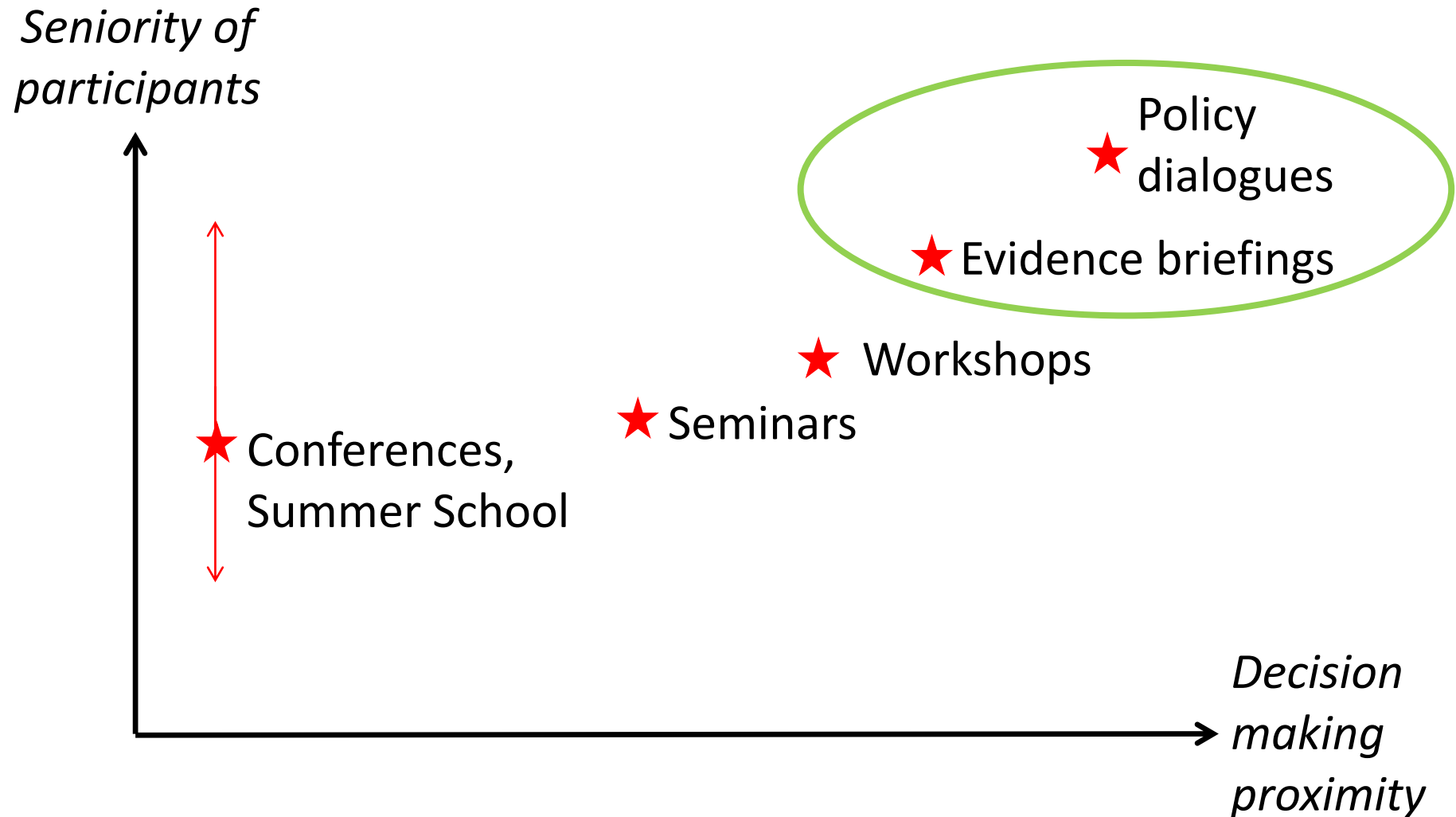
Tailored

to the specific needs of policy makers

Timely

response to policy maker's needs and requests

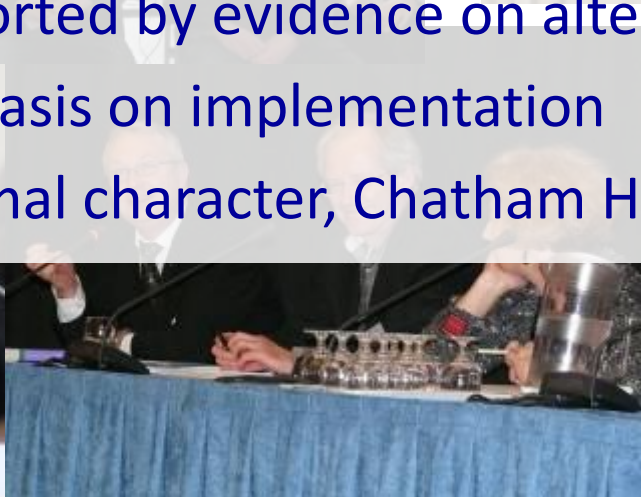
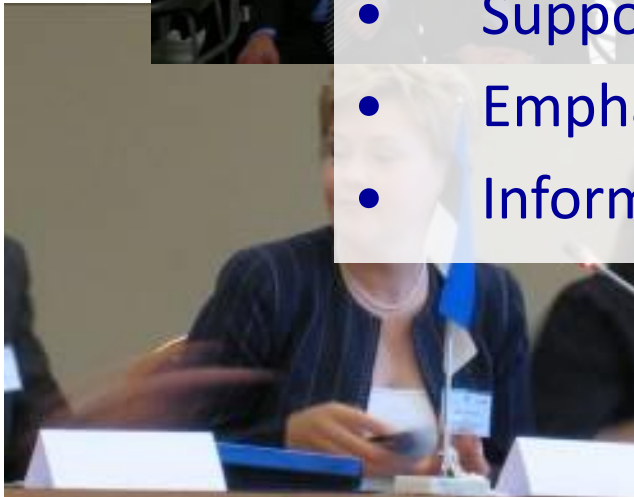
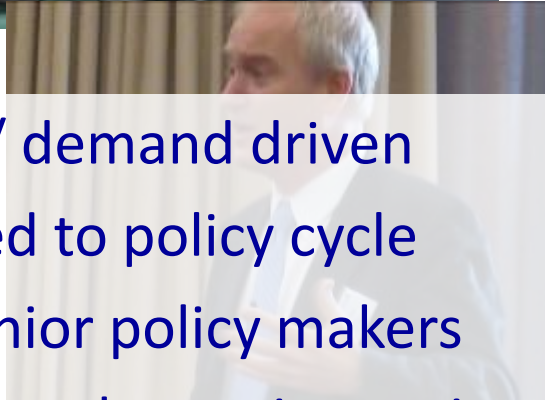
Observatory range of face to face dissemination formats



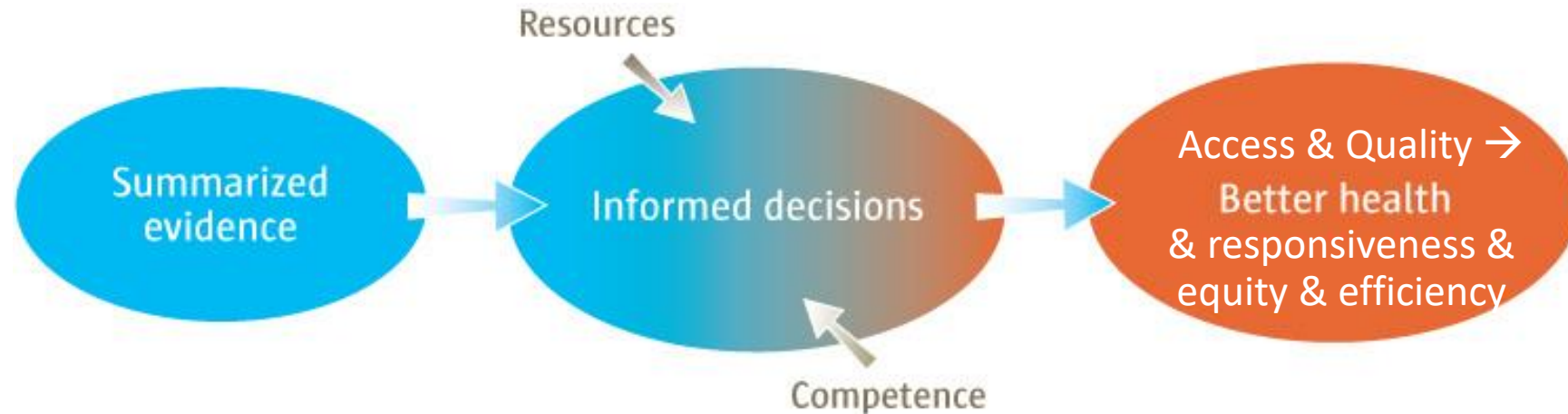


Policy dialogues

- Key strategic questions / demand driven
- Rapid response / adapted to policy cycle
- Target small group of senior policy makers
- Supported by evidence on alternative options
- Emphasis on implementation
- Informal character, Chatham House rules, neutral platform

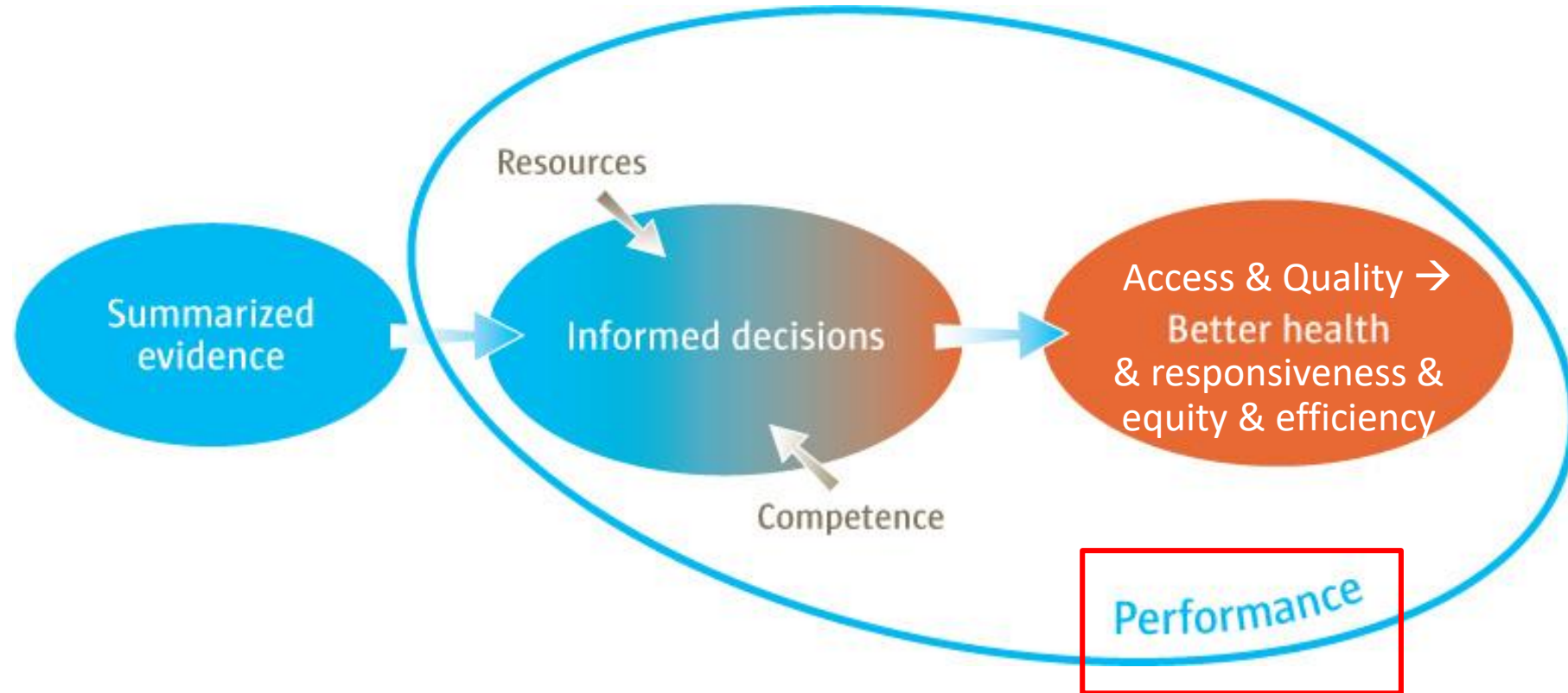


But a scaled-up approach should also contribute to widening the evidence-base (and the range of outcomes beyond the originally defined) for even better policy-making



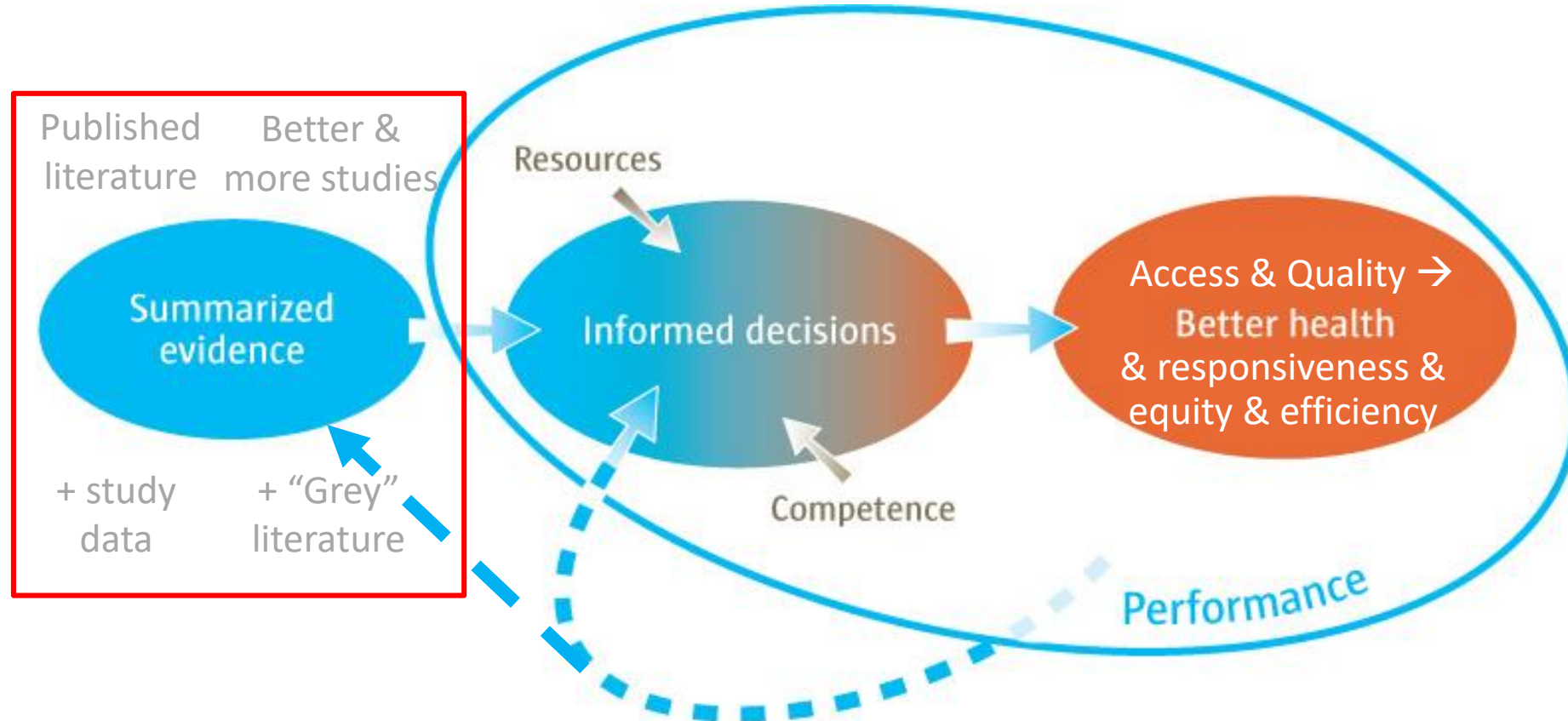
What is “evidence” for evidence-based health policy?

The importance of a feed-back loop (& non-RCT evidence)



3rd task of Evidence-informed
health policy experts
(CAVE: usually no control group
→ causal interference?)

What is “evidence” for evidence-based health policy? The importance of a feed-back loop (& non-RCT evidence)

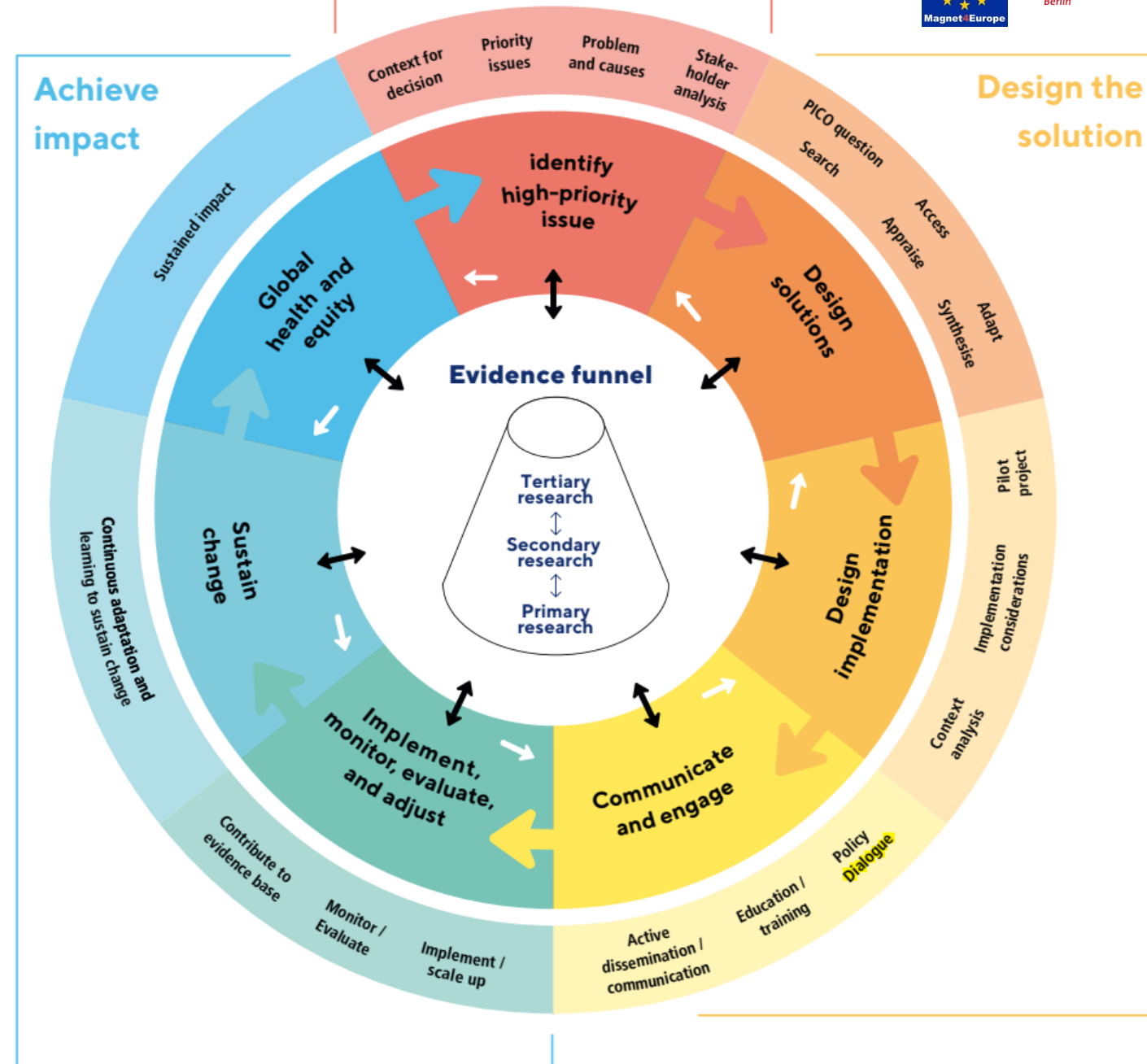


Performance assessment as evidence
(“evidence-generating health system”)

Bringing the puzzle pieces together

Context

Understand the problem



Source:



In conclusion,

1. “Evidence-informed” health policy requires an agreed understanding of “evidence”,
2. should be built on a framework designed around health priorities and policy-makers’ needs, i.e. evidence for a particular problem, considering a wide range of outcomes, and policies based on evidence again contributing to the evidence base,
3. use a range of formats to reach policy-makers – and improve policies, and thus health system performance.
4. A useful case study is the Magnet4Europe study, based on promising cross-sectional data, tested in an intervention study, now ready for broader scaling-up ... over to you, policy-makers!