The role of burden of disease analysis in evidence-informed policy-making
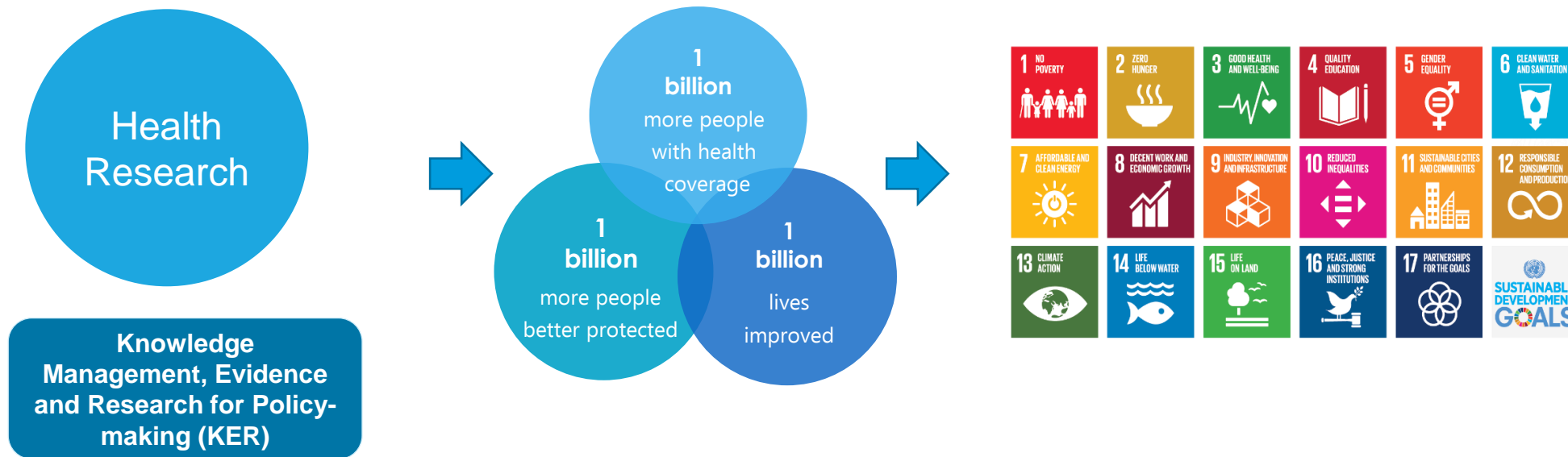
World Health Organization
REGIONAL OFFICE FOR Europe

Tarang Sharma, Tjede Funk, Tanja Kuchenmüller

Knowledge Management, Evidence and Research for Policy-making, Division of Information, Evidence, Research and Innovation
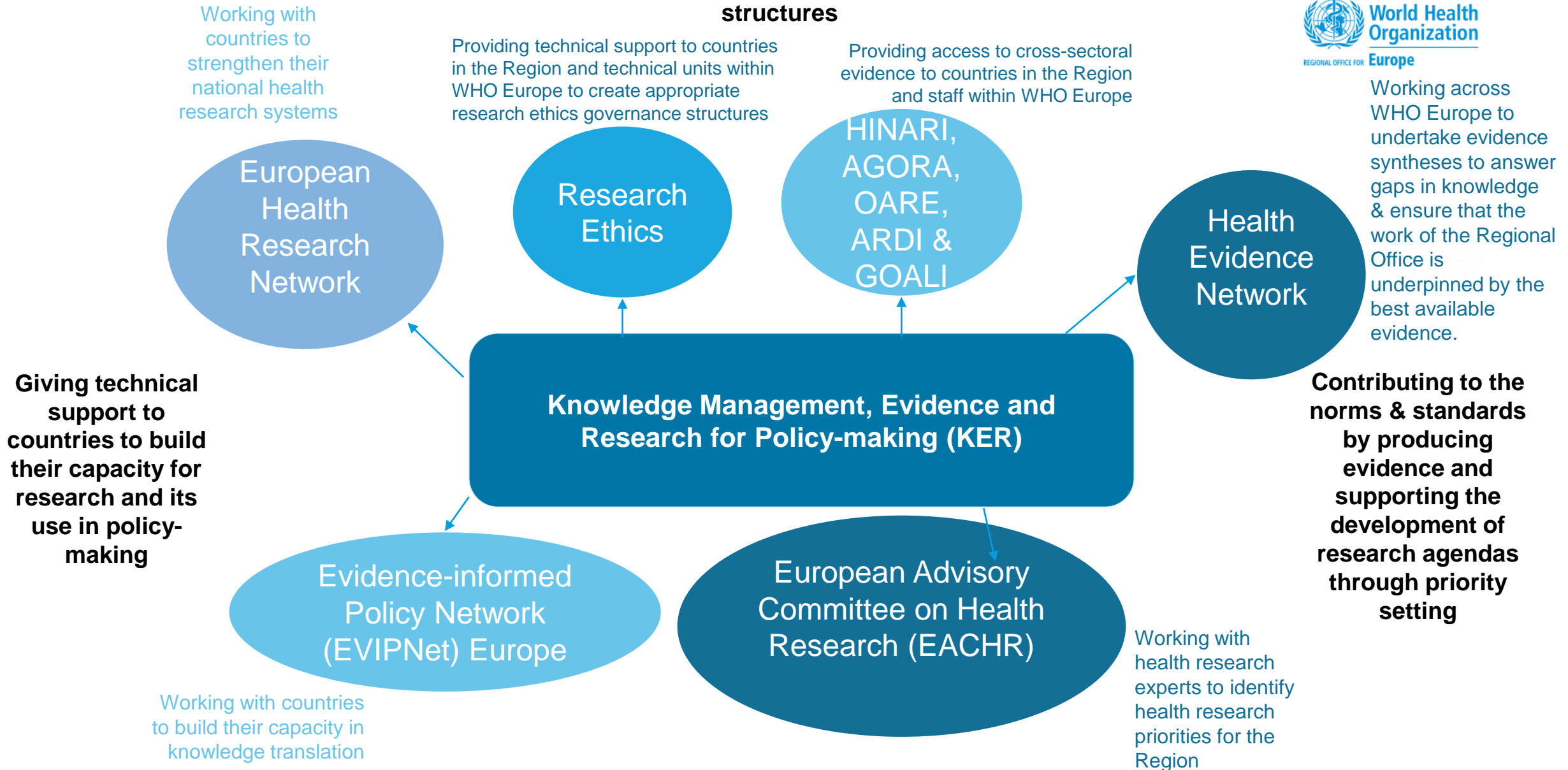
19 February 2020

Fostering Health Research and knowledge translation in the WHO European Region to deliver impact

Health Research

Knowledge Management, Evidence and Research for Policy-making (KER)

1 **billion** more people with health coverage

1 **billion** more people better protected

1 **billion** lives improved

KER is propelling the Region towards achieving the 2030 SDGs goals through the 'triple billion' approach by **fostering health research and knowledge translation** in the WHO European Region

Serving countries & WHO Europe through access to research evidence & providing research ethics structures

Working with countries to strengthen their national health research systems

Providing technical support to countries in the Region and technical units within WHO Europe to create appropriate research ethics governance structures

Providing access to cross-sectoral evidence to countries in the Region and staff within WHO Europe

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Working across WHO Europe to undertake evidence syntheses to answer gaps in knowledge & ensure that the work of the Regional Office is underpinned by the best available evidence.

European Health Research Network

Research Ethics

HINARI, AGORA, OARE, ARDI & GOALI

Health Evidence Network

Knowledge Management, Evidence and Research for Policy-making (KER)

Giving technical support to countries to build their capacity for research and its use in policy-making

Contributing to the norms & standards by producing evidence and supporting the development of research agendas through priority setting

Evidence-informed Policy Network (EVIPNet) Europe

European Advisory Committee on Health Research (EACHR)

Working with countries to build their capacity in knowledge translation

Working with health research experts to identify health research priorities for the Region

Collaborating with Member States towards evidence-informed policy-making in the WHO European Region (adopted in 2016)

Available from:
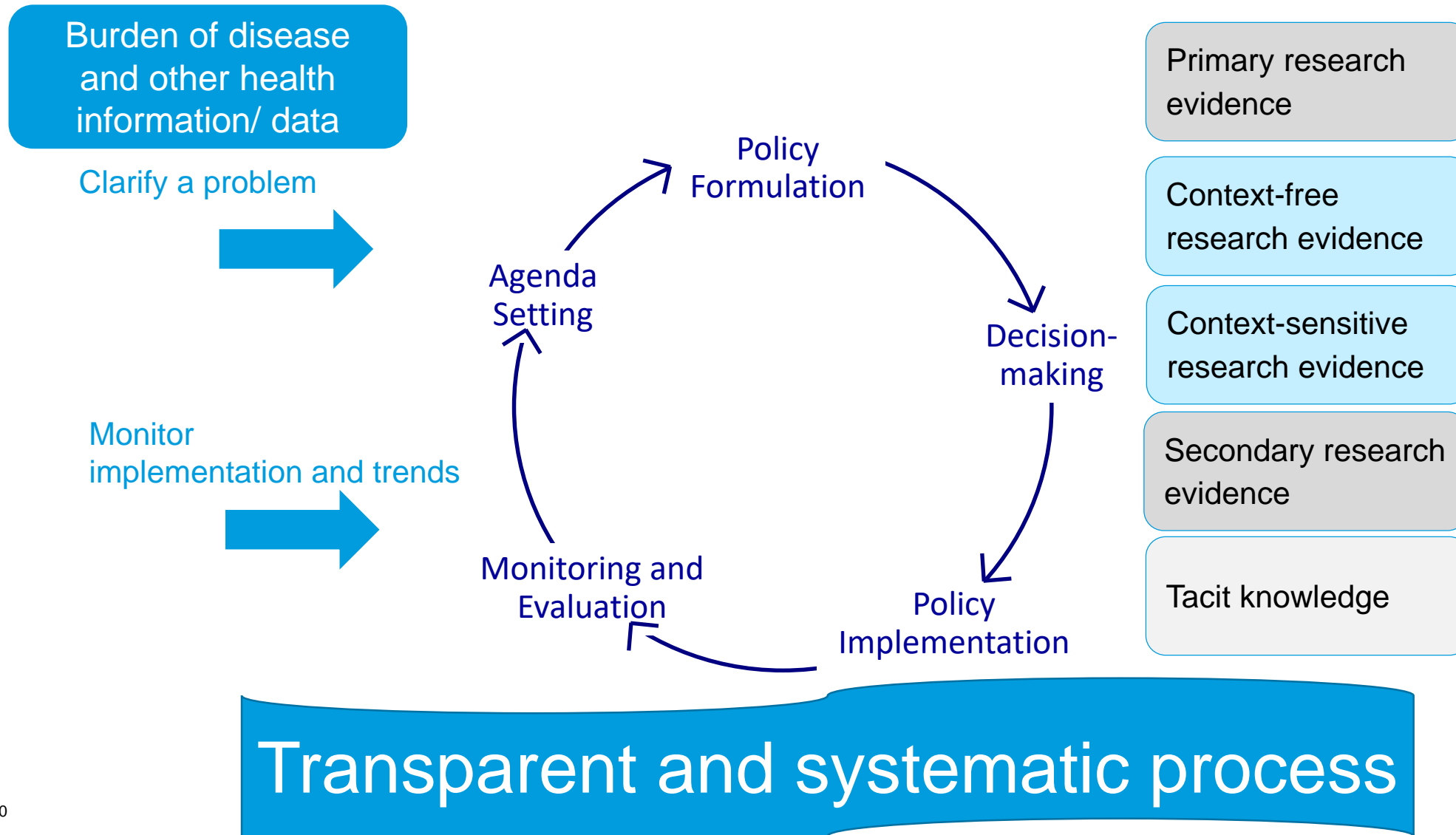*https://tinyurl.com/evidencebaseddecisionmaking*

REGIONAL COMMITTEE FOR EUROPE 66TH SESSION
Copenhagen, Denmark, 12–15 September 2016

Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region

25/02/2020

HEN synthesis reports

HEN is an information service for public health decision-makers in the WHO European Region

- Provides summaries of what is known about a given policy issue, any evidence gaps and areas of debate, and outline policy considerations based on the best available evidence.

- Operating since 2003; is an ISSN/ISBN series/ publication, which is indexed on MEDLINE

HEN49: Narrative synthesis in health, Winner of British Medical Association Award: Highly commended (2017), UK

HEN67: Arts & Health, Winner of The Global Aesthetic Achievement of the Year prize (2019), Finland

Downloads by month of the past 6 months
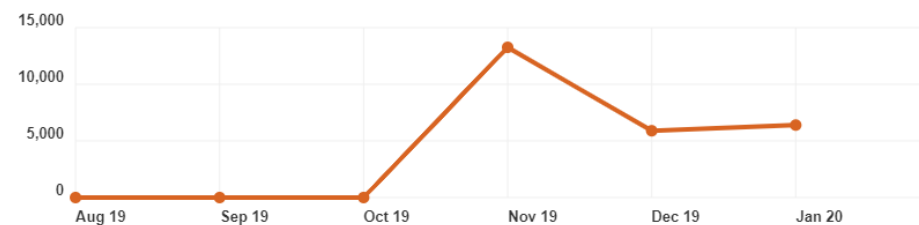
HEN67 published in November 2019 - the most downloaded WHO Europe publication (over 26,000 times)

Popular works by World Health Organization. Regional Office for Europe based on downloads of the past 6 months

Item	⬇
What is the evidence on the role of the arts in improving health and well-being? A scoping review	26,606
Social determinants of health : the solid facts / edited by Richard Wilkinson and Michael Marmot	8,087
Strengthening health systems through nursing: evidence from 14 European countries	6,230
Alcohol policy impact case study: the effects of alcohol control measures on mortality and life expectancy in the Russian Federation	5,820
Healthy, prosperous lives for all: the European Health Equity Status Report	5,080

HEN54: *Evidence on mechanisms and tools for use of health information for decision-making (2017)*


Blessing V, Davé A, Varnai P. Evidence on mechanisms and tools for use of health information for decision-making. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evidence Network (HEN) synthesis report 54)

Background

The availability of health information does not inherently lead to its increased use in policy- and decision-making/ evidence informed policy-making (EIP).

Various tools and mechanisms can help to increase the use of health information in policy development by making policy-makers appreciate, understand and incorporate health information into policy decisions.

The issue:

Health Information → Health policy-making

Solution:

Health Information (including BoD) → Tools → Health policy-making
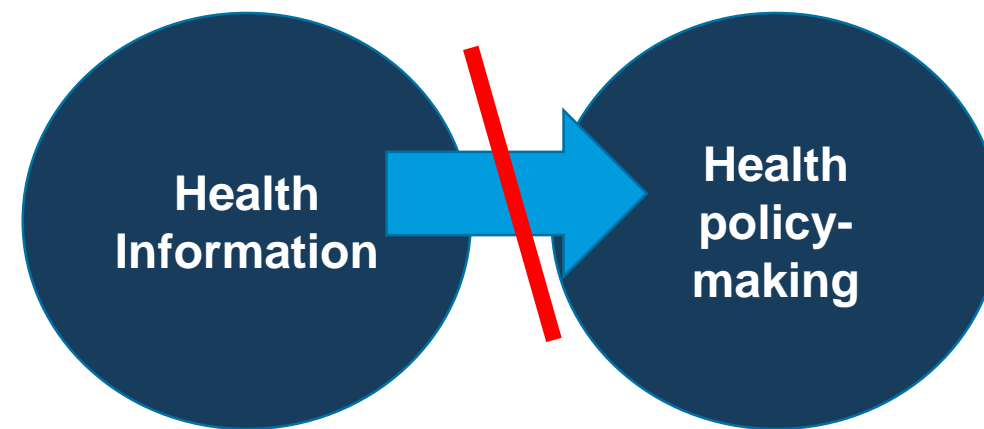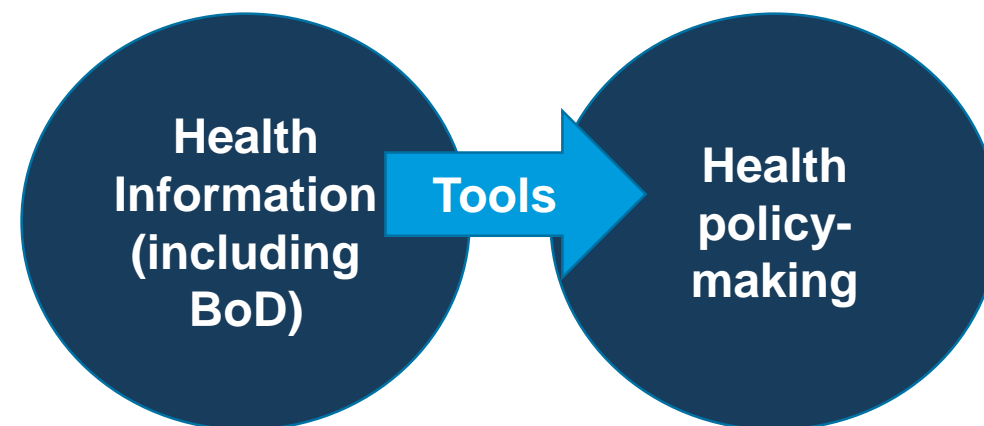
Synthesis question of HEN report

What is the evidence on mechanisms and tools for the use of health information for decision-making?

Methods

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Literature search (conducted in July 2016)**:**
Included literature from 2005 to July 2016

Databases:

Peer-reviewed articles:

- o PubMed and Scopus (including Embase)

Grey literature:

- o Virtual Health Library,
- o Grey Literature Database,
- o Health Systems Evidence,
- o Evidence-informed Policy Network and the Canadian Foundation for Healthcare Improvement

Methods

Inclusion criteria:

o a paper that discussed mechanisms and tools for using health information to influence/formulate health policy and change behaviour of policy-makers
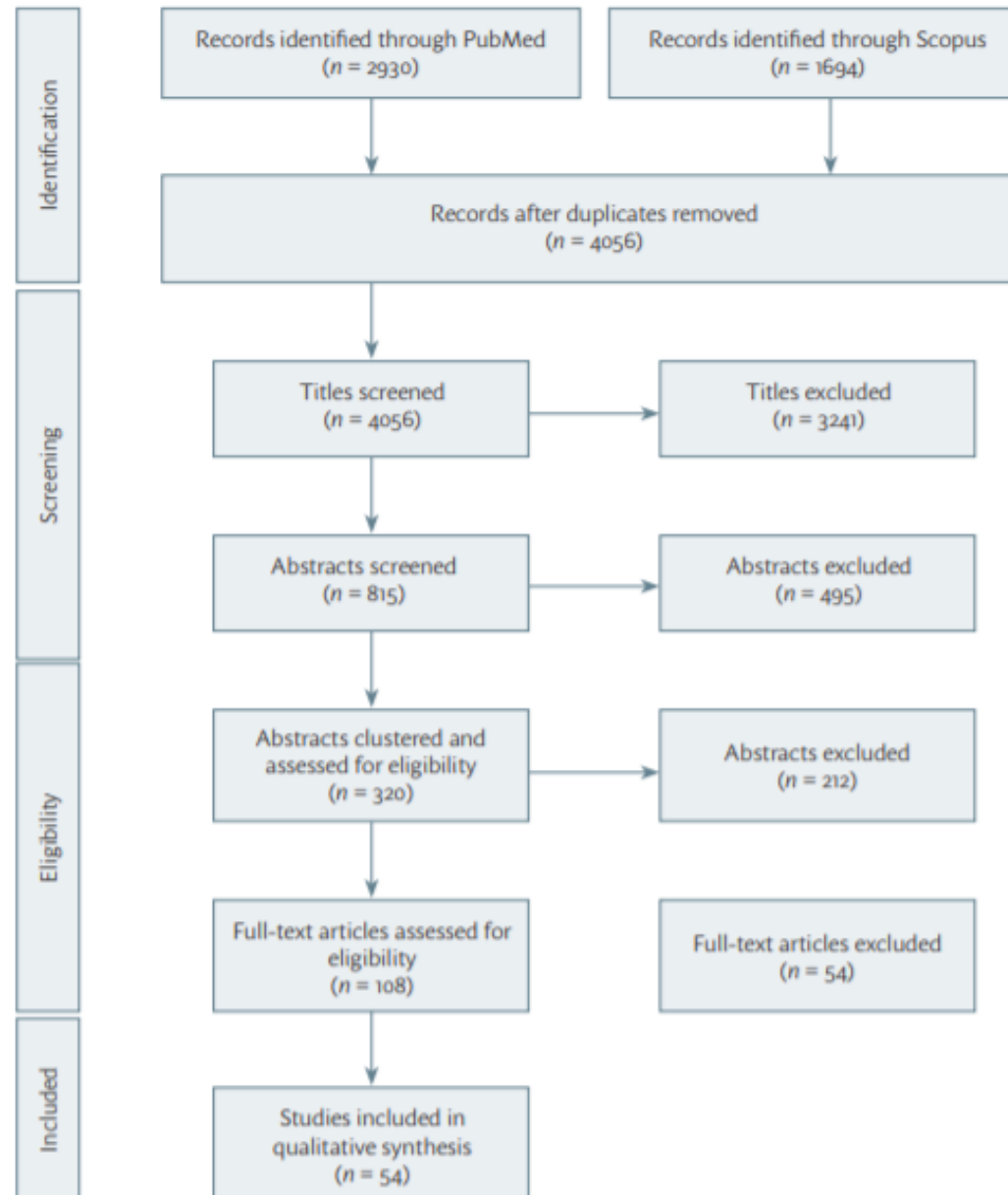
Exclusion criteria:

o tools aimed at directly changing clinical practice or behaviour of health professionals rather than policy-makers unless the health professionals acted as health information providers for new policy formulation or changing existing policy
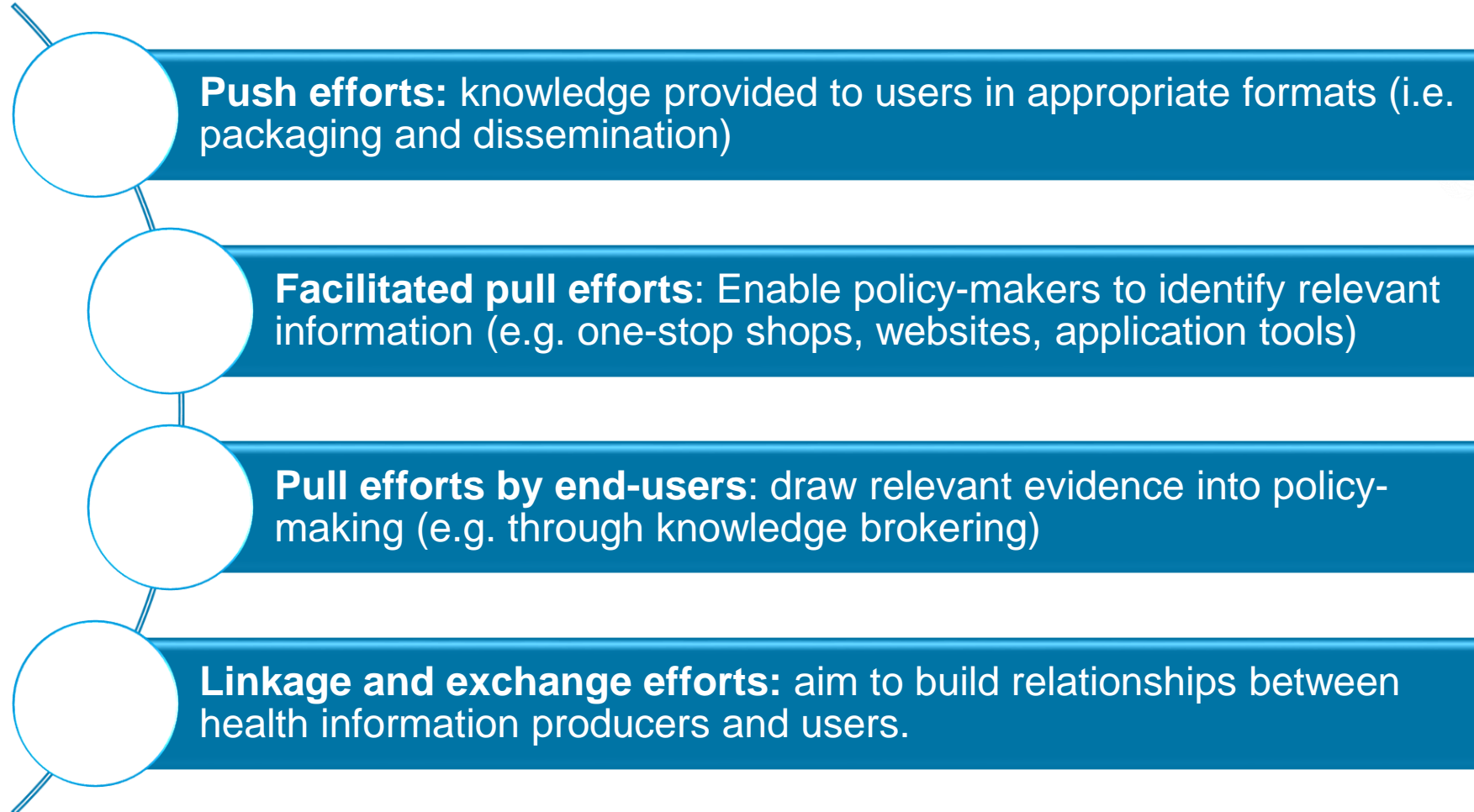
Results

A total of 4056 articles were identified and 108 full text articles were analyzed in detail with 54 included in this review

Fig. A1. PRISMA flow diagram for the systematic literature review

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Available tools and knowledge translation mechanisms

Push efforts: knowledge provided to users in appropriate formats (i.e. packaging and dissemination)

Facilitated pull efforts: Enable policy-makers to identify relevant information (e.g. one-stop shops, websites, application tools)

Pull efforts by end-users: draw relevant evidence into policy-making (e.g. through knowledge brokering)

Linkage and exchange efforts: aim to build relationships between health information producers and users.

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Tools facilitating use for policy-making

① Health information packaging

② Applications

③ Dissemination and communication

④ Linkage and exchange tools

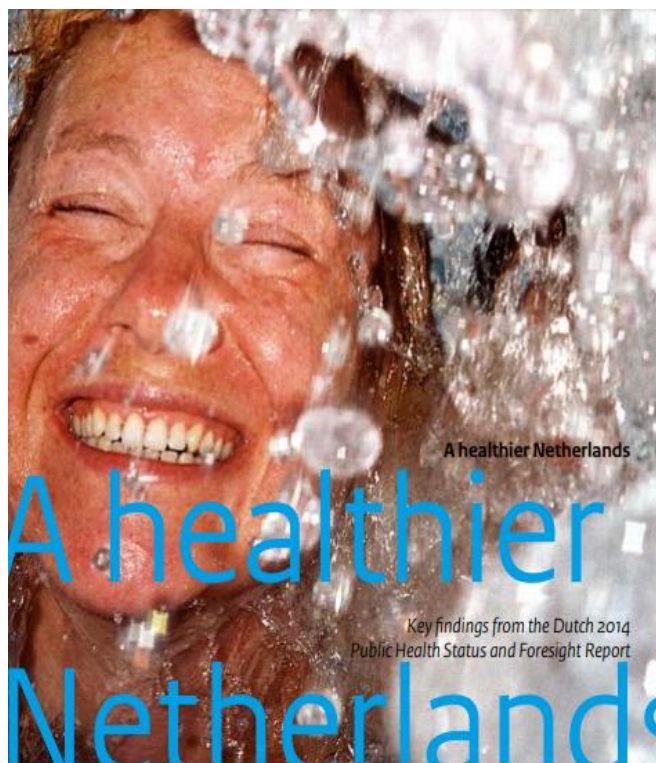# ① Health information packaging tools

Evidence brief for policy (EBP) / policy briefs

- Concise evidence summary of a high-priority issue that is *often determined by BoD analysis*: the EBP explores ways to address an issue and provides suitable policy options and implementation considerations for policy-makers in an objective way

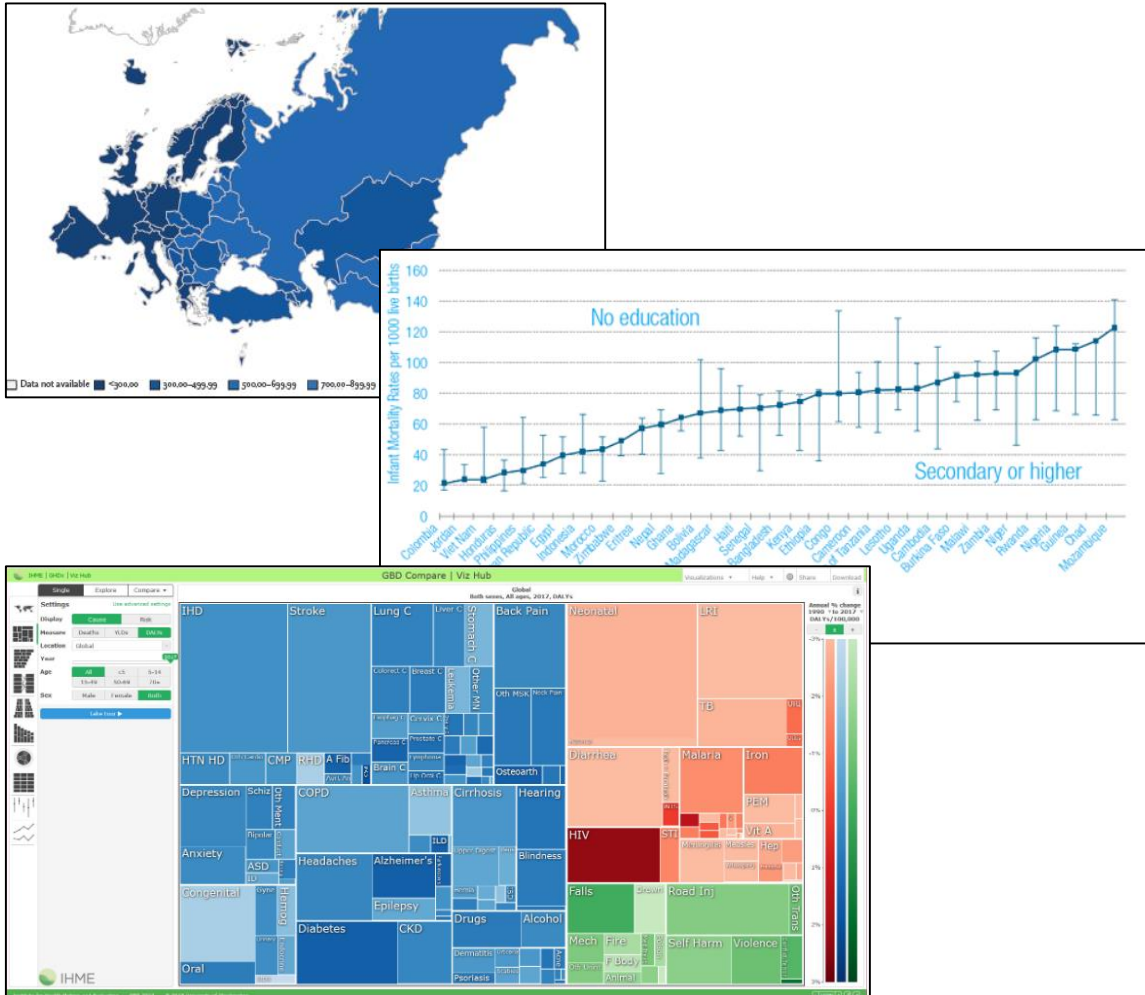- Brings together best available global and local evidence and data together to inform policy options

① Health information packaging tools

Local Health memoranda

○ The local health memoranda included information from epidemiological analysis *including BoD* and policy recommendations tailored to the local health situation.

○ Case Study from Netherlands highlighted that a set of local health messages were created for 48 municipalities based on key messages of the National public health status *including BoD* and forecast report but they all were adapted to the local setting.

A healthier Netherlands

A healthier Netherlands

Key findings from the Dutch 2014
Public Health Status and Foresight Report

① **Health information packaging tools**

Visualization

- For health information to be useful, it needs to be analyzed and communicated in a way that is easy to use and practical, allowing both specialists and non-specialists to understand and use it

- Intended outcome: provide access to or package health information in a user-friendly way

- Different mechanisms of *visualizing BoD data* that allow for easier access for policy-makers

(2) Application Tools

Modelling and Simulation Tools

- Models explain a complex phenomenon and serve as the basis for simulations to predict the course of an event or help to assess the efficacy (or cost–benefit implications) of interventions.
- *BoD models* help to highlight the most burdensome conditions, injuries, and risk factors

Integrated public health surveillance systems

- Public health surveillance programmes often part of national public health systems. *Monitoring BoD* is part of this surveillance.
- Provide a platform for ongoing systematic collection, analysis and interpretation of health data, coupled with timely dissemination to support public health action.

Intended outcomes: Make health information more accessible and use an institutionalized setting to facilitate effective integration of key stakeholders

③ Dissemination and Communication Tools

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|	
Electronic Tools for dissemination of data	• Platforms for sharing health information allow users to select and access health information electronically. • Some provide information to users, others let users link up with each other in networks to share information.
Automated electronic delivery systems	• Health information can be electronically delivered to stakeholders directly. • Newsletters, email messages, tweets or phone messages are all tools that can be used to disseminate information in this way.
Person to Person	• Health information can also be disseminated through personal contacts. • By exchanging knowledge on a personal level, trust can be created between stakeholders, which, that, increases the likelihood of health information being used.
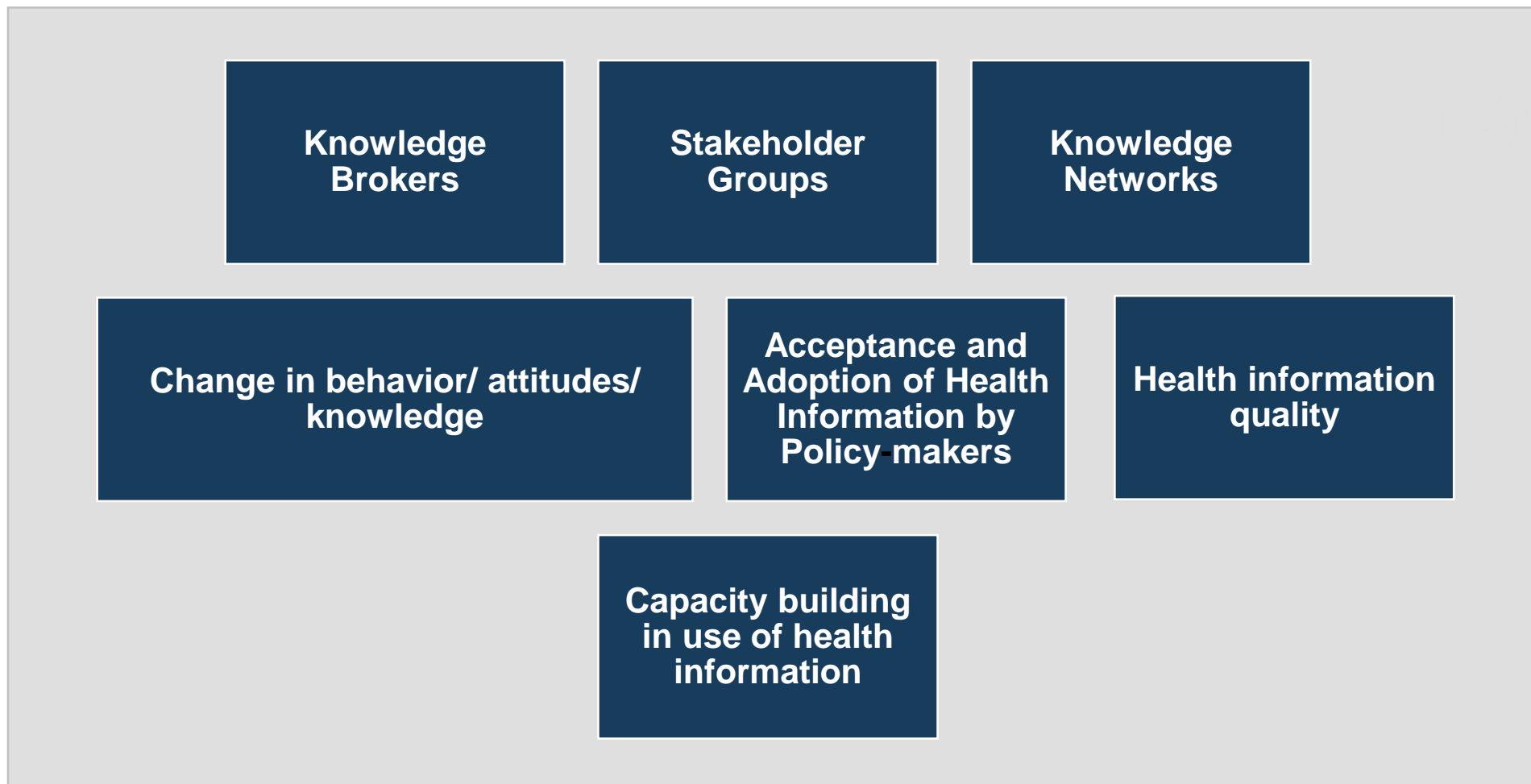
Policy Considerations

Health information/ BoD data producers might consider:

- ensuring that the health information produced meets the needs of, and is relevant to, the end-users through engagement.

- establishing personal contact with brokers and end-users to build trust and partnerships

- fostering the use of packaging tools in conjunction with dissemination and communication tools

- adding value by using application tools like models

Knowledge brokers might consider:

- establishing relationships with and acting as an active link between producers and users of health information to build a value chain.

- presenting suitably packaged health information, both on their own initiative (push) as well as when prompted by end-users (pull)

- advocating a key role for knowledge brokers in increasing the capacity of policy-makers to use health information for decision-making

Users might consider:

- ensuring effective strategic oversight over information integration and production;

- establishing personal contacts to learn about available health information and its potential uses,

- working with health information providers to identify needs and fill gaps;

- institutionalizing links to ensure an adequate coverage and timeliness.

25/02/2020

Strengths and Limitations

o First systematic review on the topic and has highlighted several tools and also case studies of good practices

o Has a bias towards English literature (though also searched in Russian)

o No formal critical appraisal of the literature was done

o Gaps in evidence were found regarding specific mechanisms for incorporating health information to policy (were the same as evidence in general) and similar for behavior change

Current and future work

o Report is currently being updated (includes literature since 2016-2020)
    o Currently screening ~2500 titles and abstracts

o Developing a framework for knowledge translation of health information with a focus on BoD as a case study to support its use in policy-making

Thank you

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