HEALTH FOR ALL BY ALL

Evidence Synthesis and Quality Assessment in Guideline Development in the East Mediterranean Region

Balancing Technical Rigor and Policy Impact

Lubna A Al-Ansary

Yasser S Amer

Institutionalizing Evidence-Informed Policy-Making for Delivery for Impact:
NEDtP Webinar Series 2025

World Health Organization

Eastern Mediterranean Region

"قُلْ هَاتُوا بُرْهَانَكُمْ إِنْ كُنْتُمْ صَادِقِينَ"

“Say, Bring your proof, if you are truthful”

Al-Baqara: 111


THANK YOU

Outline

World Health Organization
Eastern Mediterranean Region

- Introduction *(EBM, SRs, CPGs – Definitions and Evolution)*
- Technical Aspects of Evidence Synthesis
- Quality Assessment in Guideline Development
- The Bigger Picture: Political, Policy, and International Aspects
  - Moving from Evidence to Implementation
- Case Studies and Best Practices in EMR
- Key Takeaways and Future Directions
- Q & A and Discussion *(30 – 40 min)*

Disclosure of No Conflict of Interest

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Eastern Mediterranean Region

- We have no personal or financial interests to declare.
- We have no financial support for the current presentation.

جامعة الملك سعود
King Saud University

المدينة الطبية الجامعية
University Medical City

المجلس الصحي السعودي
Saudi Health Council

International Society for Evidence-Based Health Care

GIN
Guidelines International Network

Cochrane

GRADE

“Evidence-Based Medicine” in PubMed
(on *5/11/2023*)

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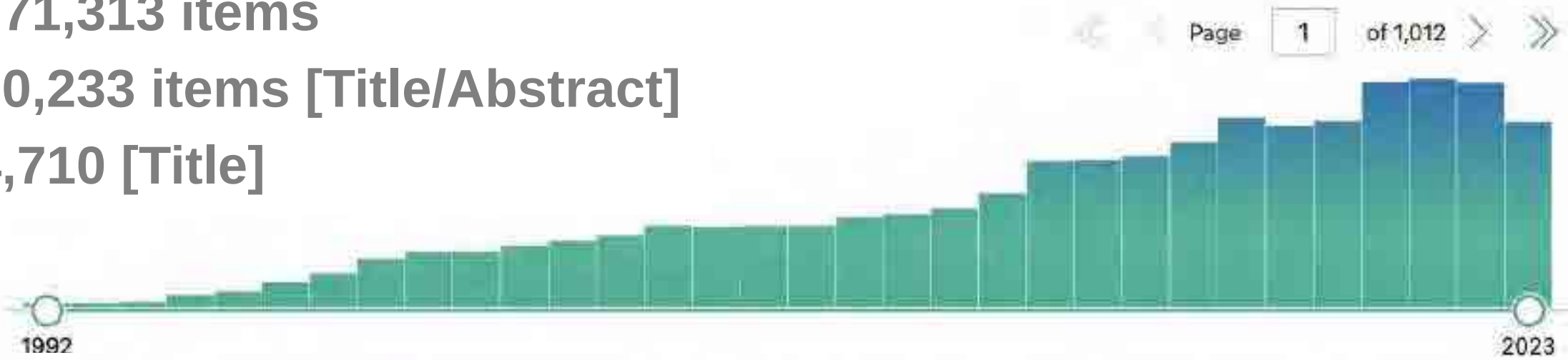
- 271,313 items
- 20,233 items [Title/Abstract]
- 4,710 [Title]



Evidence-based medicine. A new approach to teaching the practice of medicine.

Evidence-Based Medicine Working Group.

JAMA. 1992 Nov 4;268(17):2420-5. No abstract available.

PMID: 1404801

World Health Organization

Evidence-based medicine. A new approach to teaching the practice of medicine.

Evidence-Based Medicine Working Group.

JAMA. 1992 Nov 4;268(17):2420-5. No abstract available.

Gordon Guyatt, MD, MSc; John Cairns, MD; David Churchill, MD, MSc; Deborah Cook, MD, MSc; Brian Haynes, MD, MSc, PhD; Jack Hirsh, MD; Jan Irvine, MD, MSc; Mark Levine, MD, MSc; Mitchell Levine, MD, MSc; Jim Nishikawa, MD; **David Sackett**, MD, MSc; Patrick Brill-Edwards, MD; Hertzel Gerstein, MD, MSc; Jim Gibson, MD; Roman Jaeschke, MD, MSc; Anthony Kerigan, MD, MSc; Alan Neville, MD; Akbar Panju, MD; Allan Detsky, MD, PhD; Murray Enkin, MD; Pamela Frid, MD; Martha Gerrity, MD; Andreas Laupacis, MD, MSc; Valerie Lawrence, MD; Joel Menard, MD; Virginia Moyer, MD; Cynthia Mulrow, MD; Paul Links, MD, MSc; Andrew Oxman MD, MSc; Jack Sinclair, MD; Peter Tugwell, MD, MSc

3 Decades

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The Use of Evidence in Healthcare …

- Large and unjustified variation in clinical practice *(Wennberg et al, 2016)*
- Significant levels of inappropriate care *(Brook, 1994)*
- Evidence of overmedicalization and treatment-induced ill health *(Illich, 1974)*

Boaz A, Davies H, Fraser A and Nutley S: What Works Now? Evidence-Informed Policy and Practice . Policy Press. 2019

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The EBM Approach / Movement …

- Can be regarded as a **disruptive technology** – a new way of doing things that sought to overturn previous practices.
- Was **radical**, in that it challenged standard practice or policy and, more fundamentally, the assumed authority of the clinical professional and the centralised policy-making apparatus.
- Had the potential to **democratise** decision-making by making research evidence available for everyone.

Boaz A, Davies H, Fraser A and Nutley S: What Works Now? Evidence-Informed Policy and Practice . Policy Press. 2019

Estimates of Annual US HC Waste, by Category *$ in Billions*

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Annual Cost to US Health Care System in 2011			
	Low	Midpoint	High
Failures of care delivery	102	128	154
Failures of care coordination	25	35	45
Overtreatment	158	192	225
Administrative complexity	107	248	389
Pricing failures	34	131	178
Fraud and abuse	82	177	272
Total	***558***	***910***	***1263***
% of total Spending	***21***	***34***	***47***

(Berwick & Hackbarth 2012)

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DOI: 10.1111/wvn.12621

WORLDVIEWS ON EVIDENCE-BASED NURSING

REVIEW ARTICLE

Evidence-based practice improves patient outcomes and healthcare system return on investment: Findings from a scoping review

Linda Connor PhD, RN, CPN, EBP-C[1] | Jennifer Dean DNP, RN, APRN, EBP-C, AGACNP-BC[1] | Molly McNett PhD, RN, CNRN, FNCS, FAAN[1] | Donna M. Tydings DNP, RN, CNS-BC[2] | Amanda Shrout DNP, RN, CCNS, CEN[3] | Penelope F. Gorsuch DNP, RN, NEA-BC, FACHE[4,5] | Ashley Hole MSN, RN, FNP-BC, CPON[6] | Laura Moore DNP, RN, APRN, FNP-C[7] | Roy Brown MLIS, AHIP[8] | Bernadette Mazurek Melnyk PhD, APRN-CNP, EBP-C, FAANP, FNAP, FAAN[1] | Lynn Gallagher-Ford PhD, RN, EBP-C, NE-BC, DPFNAP, FAAN[1]

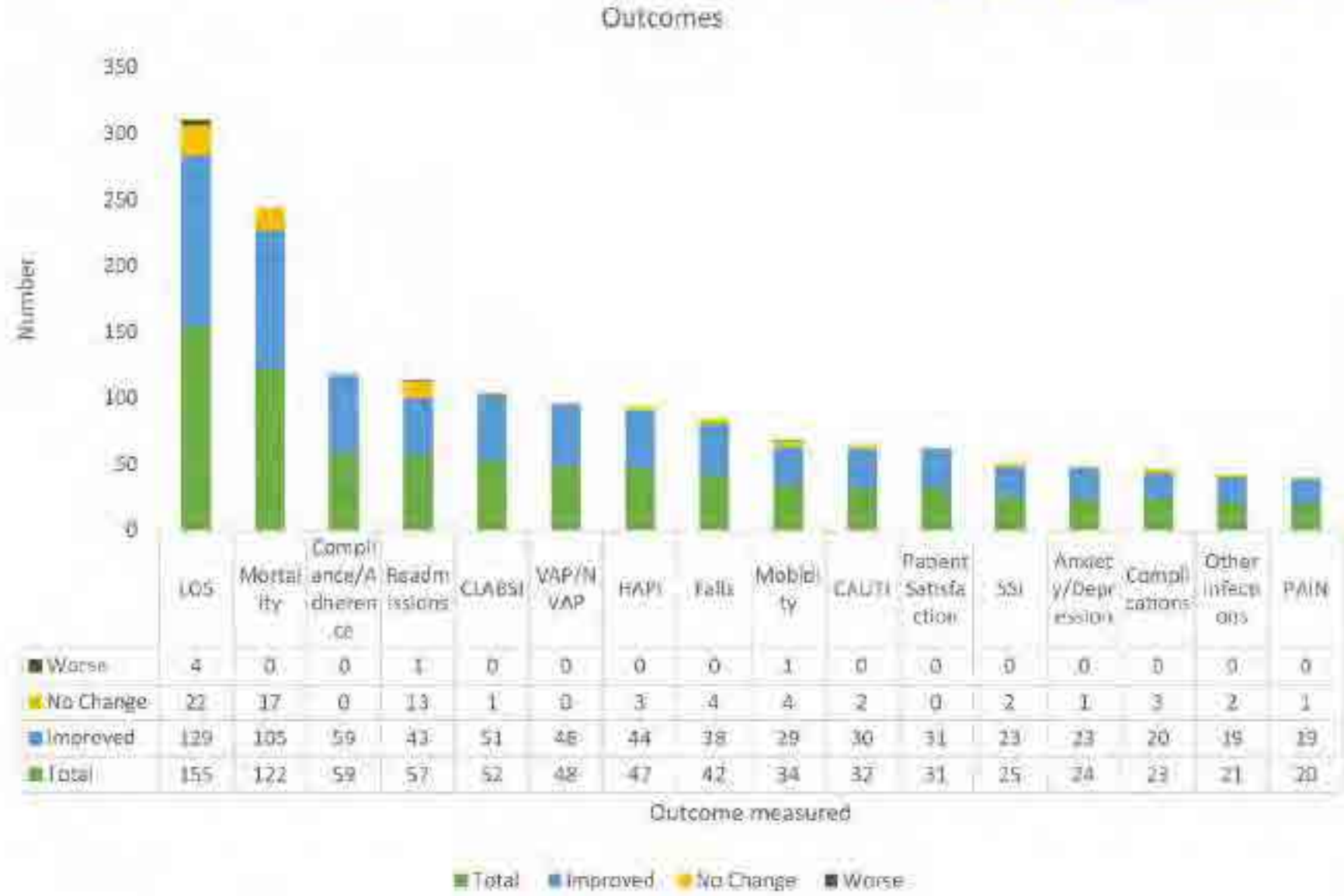

FIGURE 3 Impact of EBPs on patient outcomes

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This Issue Views 8,708 | Citations 8 | Altmetric 253

Editorial

October 7, 2019

Toward Evidence-Based Policy Making to Reduce Wasteful Health Care Spending

Karen E. Joynt Maddox, MD, MPH[1,2]; Mark B. McClellan, MD, PhD[3,4]

Author Affiliations

JAMA. 2019;322(15):1460-1462. d

This Issue Views 145,153 | Citations 448 | Altmetric 2959

Special Communication

October 7, 2019

Waste in the US Health Care System
Estimated Costs and Potential for Savings

William H. Shrank, MD, MSHS[1]; Teresa L. Rogstad, MPH[1]; Natasha Parekh, MD, MS[2]

Author Affiliations

JAMA. 2019;322(15):1501-1509. doi:10.1001/jama.2019.13978

- The authors estimate total annual waste to be $760 billion to $935 billion—smaller as a share of total spending than previous estimates. Yet this clearly shows a gulf between the current efficiency of the US healthcare system and what may be possible.
- However, the authors go further than previous studies to assess evidence on how much of this theoretical gulf could potentially be closed, and they conclude that approximately a quarter of that total ($190 billion to $286 billion) could be eliminated if evidence-based strategies to reduce waste were scaled nationally.

EBM: Is It Something New?

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- ✓ The term
- ✓ Formalization of the process
- ✓ The systems and technology
- x **THE ACTIVITIES**

Some milestones in the history of EBM

James Lind
publishes review & clinical trial in *Treatise on Scurvy*

Bradford-Hill
publishes *Principles of Medical Statistics &*
MRC trial of streptomycin

900 AD 1780 1840 1937/48 1967 1970's

Al-Rhazi

For I once saved one group by it, while I intentionally neglected another group. By doing that, I wished to reach a conclusion .

Pierre Louis
Develops his "numerical method" and changes blood letting practice in France

Alvan Feinstein
publishes his book *Clinical Judgement*

Systematic Reviews

Box 1. Early Systematic Reviews of the Effects of Health Care Interventions

- Stjernswärd J (1974) Decreased survival related to irradiation postoperatively in early breast cancer. Lancet 304: 1285-1286.
- Chalmers TC (1975) Effects of ascorbic acid on the common cold. An evaluation of the evidence. Am J Med 58: 532-536.
- Cochran WG, Diaconis P, Donner AP, Hoaglin DC, O'Connor NE, Peterson OL, Rosenoer VM (1977) Experiments in surgical treatments of duodenal ulcer. In: Bunker JP, Barnes BA, Mosteller F, eds. Costs, risks and benefits of surgery. Oxford: Oxford University Press. pp 176-197.
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- Hemminki E, Starfield B (1978) Routine administration of iron and vitamins during pregnancy: Review of controlled clinical trials. Br J Obstet Gynaecol 85: 404-410.
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- Chalmers I (1979) Randomized controlled trials of fetal monitoring, 1973–1977. In: Thalhammer O, Baumgarten K, Pollak A, eds. Perinatal medicine. Stuttgart: Georg Thieme. pp 260-265.
- Policy Research Incorporated (1979) Medical Practice Information Demonstration Project. Bipolar disorder, a state of the science report. Baltimore: Policy Research Incorporated.
- Editorial (1980) Aspirin after myocardial infarction. Lancet 1:1172-1173. [Published anonymously but written by Richard Peto.]
- Baum ML, Anish DS, Chalmers TC, Sacks HS, Smith H, Fagerstrom RM (1981) A survey of clinical trials of antibiotic prophylaxis in colon surgery: Evidence against further use of no-treatment controls. N Engl J Med 305:795-799.
- Hampton JR (1982) Should every survivor of a heart attack be given a beta-blocker? Part I: Evidence from clinical trials. BMJ 285:33-36.
- Stampfer MJ, Goldhaber SZ, Yusuf S, Peto R, Hennekens CH (1982) Effect of intravenous streptokinase on acute myocardial infarction: Pooled results from randomized trials. N Engl J Med 307: 1180-1182.
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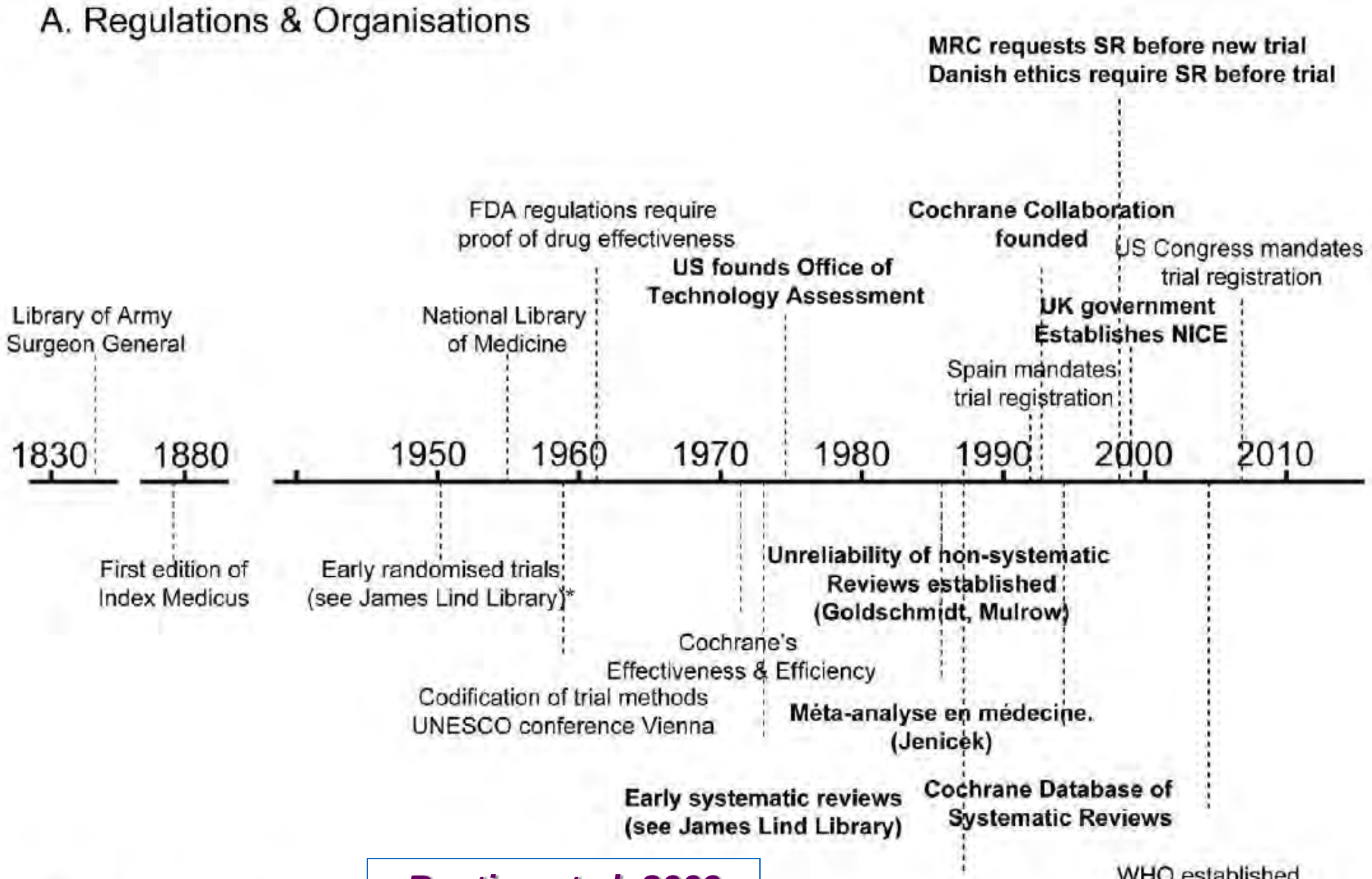
- Yusuf S, Peto R, Lewis J, Collins R, Sleight P (1985) Beta blockade during and after myocardial infarction: An overview of the randomized trials. Prog Cardiovasc Dis 27: 335-371.

Bastian et al, 2009


A. Regulations & Organisations
MRC requests SR before new trial
Danish ethics require SR before trial
FDA regulations require
proof of drug effectiveness
Cochrane Collaboration
founded
US Congress mandates
trial registration
US founds Office of
Technology Assessment
Library of Army
Surgeon General
National Library
of Medicine
UK government
Establishes NICE
Spain mandates
trial registration
1830
1880
1950
1960
1970
1980
1990
2000
2010
First edition of
Index Medicus
Early randomised trials
(see James Lind Library)*
Unreliability of non-systematic
Reviews established
(Goldschmidt, Mulrow)
Cochrane's
Effectiveness & Efficiency
Codification of trial methods
UNESCO conference Vienna
Méta-analyse en médecine.
(Jenicek)
Early systematic reviews
(see James Lind Library)
Cochrane Database of
Systematic Reviews
Bastian et al, 2009
B. Publications
Oxford Database of
Perinatal Trials
WHO established
International Trials
Registry

Article

July 8, 1992

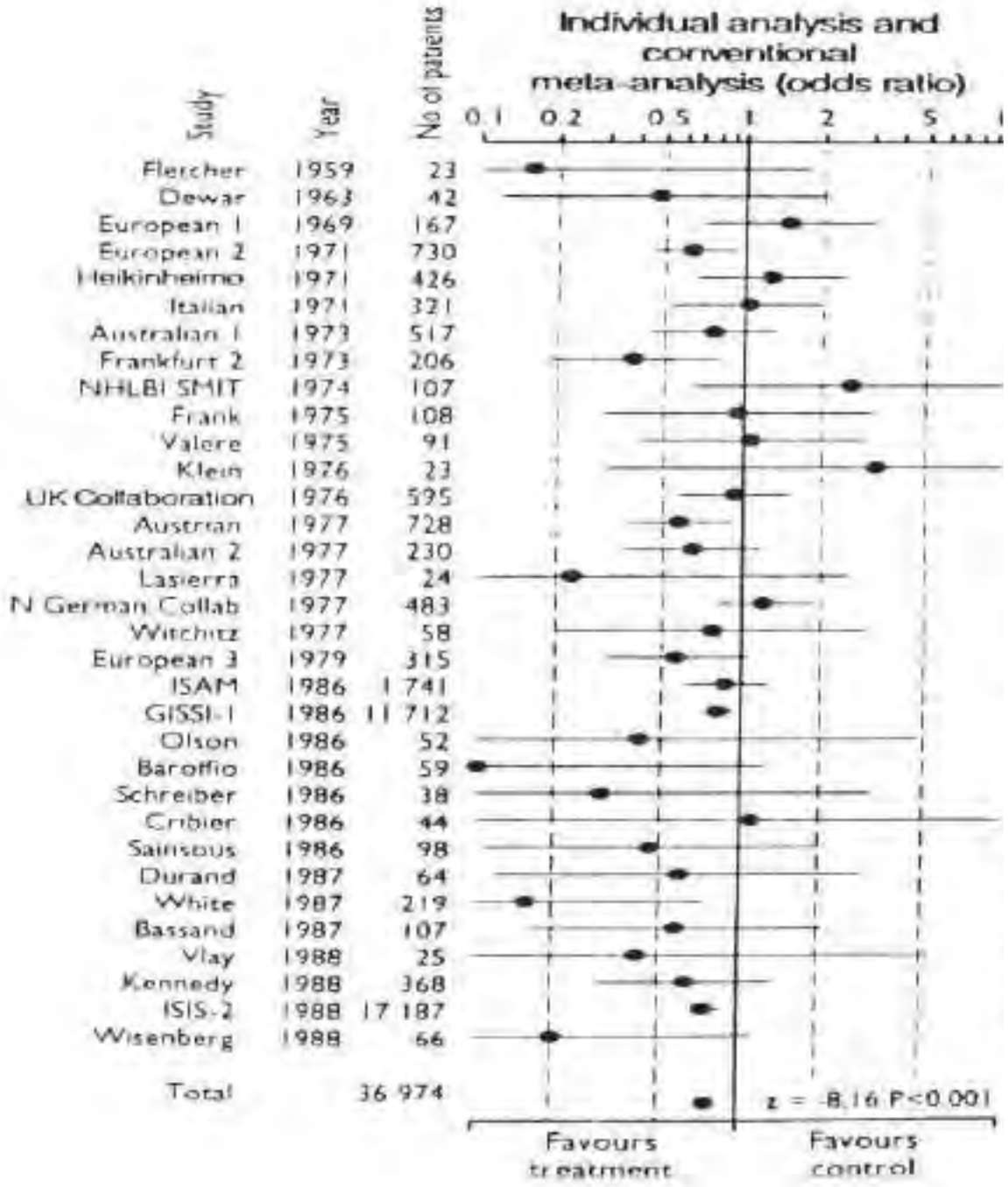
A Comparison of Results of Meta-analyses of Randomized Control Trials and Recommendations of Clinical Experts

Treatments for Myocardial Infarction

Elliott M. Antman, MD; Joseph Lau, MD; Bruce Kupelnick; et al

» Author Affiliations

JAMA. 1992;268(2):240-248. doi:10.1001/jama.1992.03490020088036


Individual analysis and conventional meta-analysis (odds ratio)
Study
Year
No of patients
0.1
0.2
0.5
1
2
5
Fletcher 1959 23
Dewar 1963 42
European 1 1969 167
European 2 1971 730
Heikinheimo 1971 426
Italian 1971 321
Australian 1 1973 517
Frankfurt 2 1973 206
NHLBI SMIT 1974 107
Frank 1975 108
Valere 1975 91
Klein 1976 23
UK Collaboration 1976 595
Austrian 1977 728
Australian 2 1977 230
Lasierra 1977 24
N German Collab 1977 483
Witchitz 1977 58
European 3 1979 315
ISAM 1986 1 741
GISSI-1 1986 11 712
Olson 1986 52
Baroffio 1986 59
Schreiber 1986 38
Cribier 1986 44
Sainsbus 1986 98
Durand 1987 64
White 1987 219
Bassand 1987 107
Vlay 1988 25
Kennedy 1988 368
ISIS-2 1988 17 187
Wisenberg 1988 66
Total 36 974
z = -8.16 P<0.001
Favours treatment
Favours control

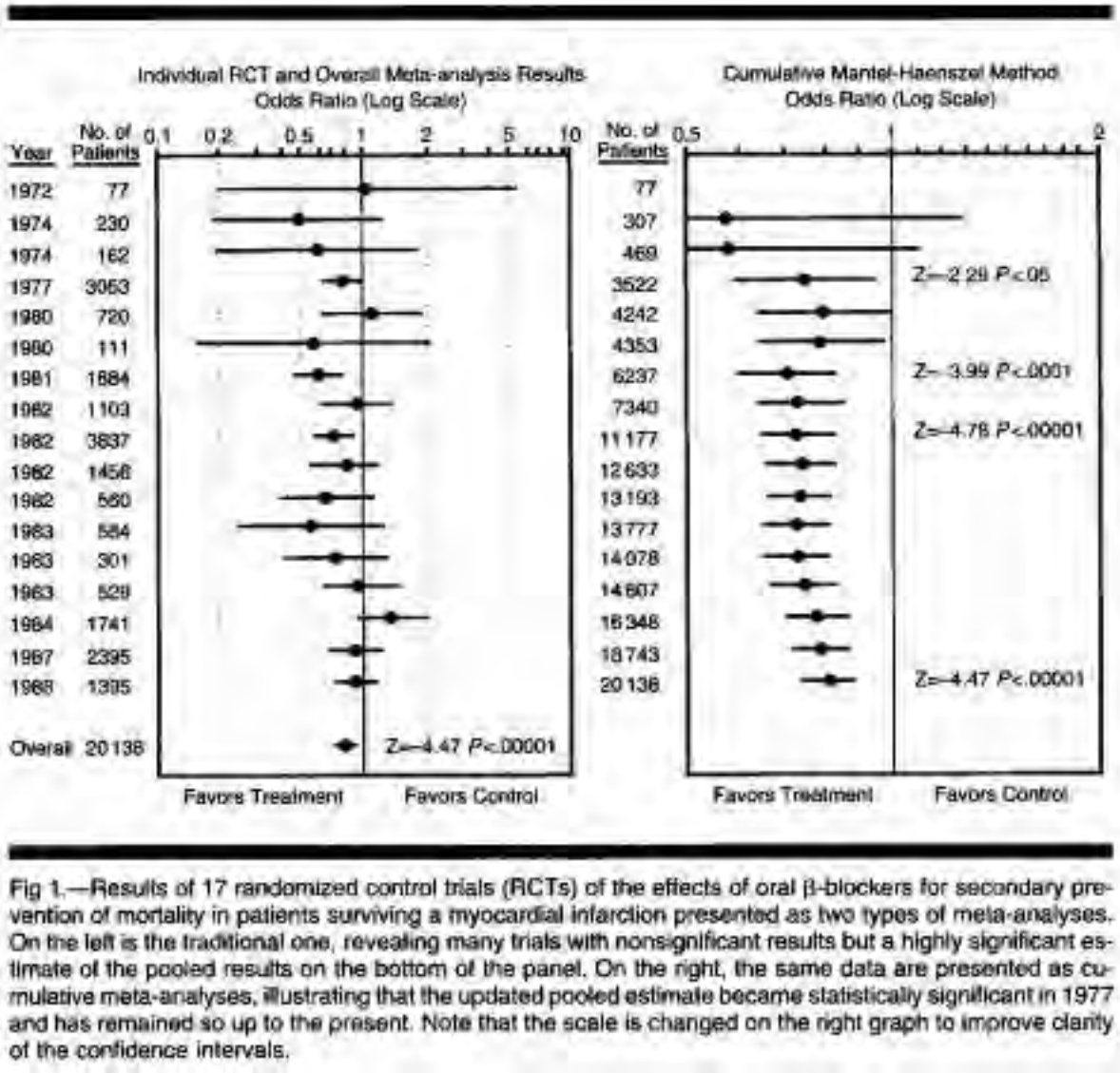


Fig 1.—Results of 17 randomized control trials (RCTs) of the effects of oral β-blockers for secondary prevention of mortality in patients surviving a myocardial infarction presented as two types of meta-analyses. On the left is the traditional one, revealing many trials with nonsignificant results but a highly significant estimate of the pooled results on the bottom of the panel. On the right, the same data are presented as cumulative meta-analyses, illustrating that the updated pooled estimate became statistically significant in 1977 and has remained so up to the present. Note that the scale is changed on the right graph to improve clarity of the confidence intervals.

Antman et al (1992): A Comparison of Results of Meta-analyses of RCTs and Recommendations of Clinical Experts. Treatments for Myocardial Infarction

JAMA 268 (2):240-8

https://jamanetwork.com/journals/jama/fullarticle/398415

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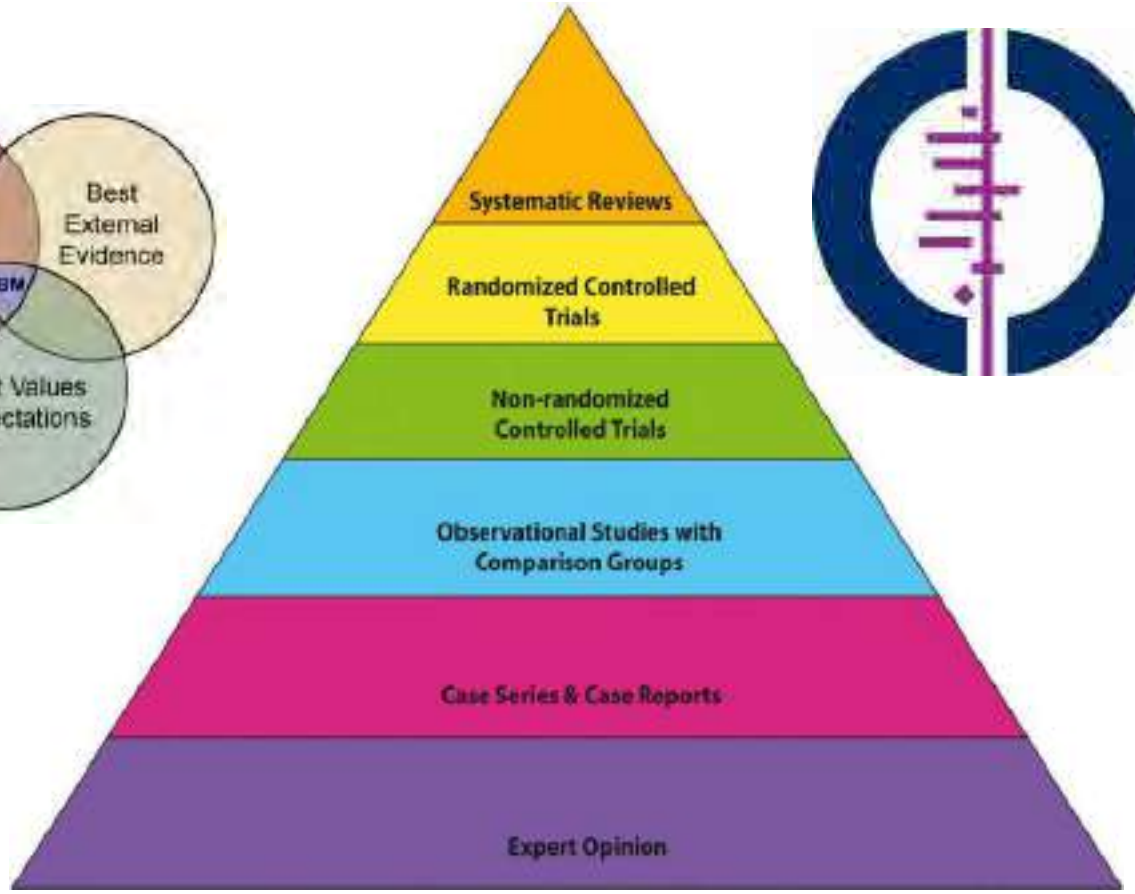
The EBM Approach … 1st Decade…



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How Old Are Clinical Practice Guidelines?

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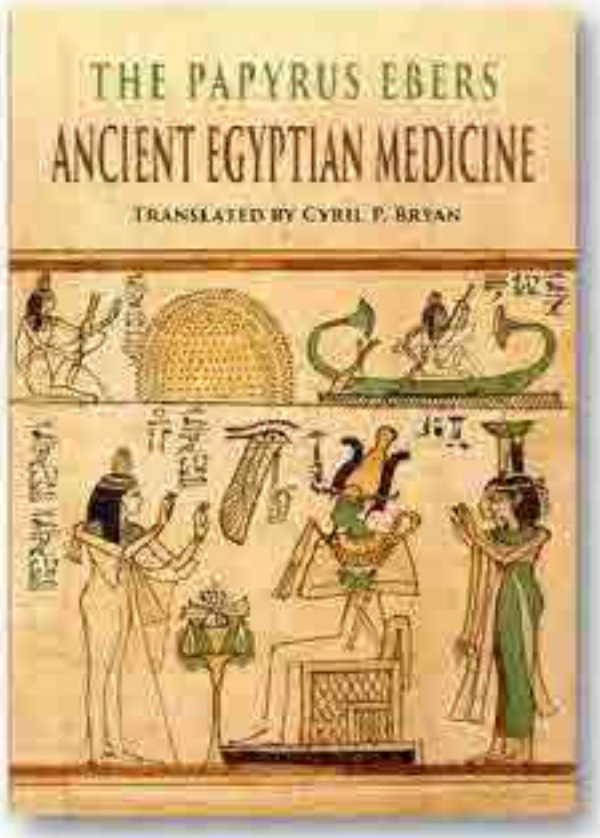
How Old Are Clinical Practice Guidelines?




ATLS = Level of Evidence GOBSAT
Good Old Boys Sitting Around a Table

@srrezaie

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The EBM Approach … 1st Decade…

Institute for Healthcare Improvement

1991

1995

NICE National Institute for Health and Care Excellence

1999

1993

JBI

1996

About NGC and NQMC

This resource, Guidelines and Measures, was set up by AHRQ to provide users a place to find information about its legacy guidelines and measures clearinghouses, National Guideline Clearinghouse (NGC) and National Quality Measures Clearinghouse (NQMC). This information was previously available on guideline.gov and qualitymeasures.ahrq.gov, respectively. Both sites were taken down on July 16, 2018 because federal funding though AHRQ was no longer available to support them.

National Guideline Clearinghouse (NGC)

NGC was an initiative of AHRQ, U.S. Department of Health and Human Services. NGC was originally created in 1997 by AHRQ in partnership with the American Medical Association and the American Association of Health Plans (now America's Health Insurance Plans [AHIP]). In January 1999, the database-driven Web site was made available to the public and it was maintained and improved by AHRQ for nearly twenty years.

Back to Top

1998 - 2018

Promoting effective guideline use in Ontario

Walter W. Rosser, Dave Davis, Erin Gilbart, on behalf of the Guideline Advisory Committee

The Ministry of Health and Long-Term Care and the Ontario Medical Association (OMA) negotiate 3-year agreements for funding medical services in Ontario. The quality of care provided to the population of Ontario and accountability regarding the utilization of services paid for by the system is of interest to both parties. During the 1997 negotiations, it was agreed that a committee with 3 representatives from the ministry, 3 from the OMA and 1 ex-officio member of the Institute for Clinical Evaluative Sciences should be formed to promote the adoption of evidence-based clinical practice guidelines in the province and to consult widely with the profession in the process. The Guideline Advisory Committee (GAC) was thus established; it reports to the Physician Services Committee, another joint initiative resulting from the negotiations.

In this article we describe the methods that have been developed over the last 4 years to identify well-developed guidelines and some of the strategies being proposed for

seldom have guidelines had any noticeable impact on clinical practice.[1] The large volume of guidelines creates confusion for practitioners, who often follow none of them because of the time required to assess the quality of each.[2] The GAC thus determined that its first priority was to identify the highest quality guidelines available on selected topics and then to promote their dissemination across the province.

In producing a list of priority topics for guideline assessment, the committee took the following factors into account: feedback from the OMA sections indicated that there was considerable confusion for practitioners over conflicting advice for appropriate practice; utilization data from the ministry demonstrated that the use of numerous procedures had increased rapidly over previous years; and feedback from practising physicians identified areas in which they felt that there was a need for guidelines to aid practice.

Literature searches were then conducted by librarians at the University of Toronto to find all English-language

EBM: 2nd Decade

The EBM Approach … 2nd Decade…

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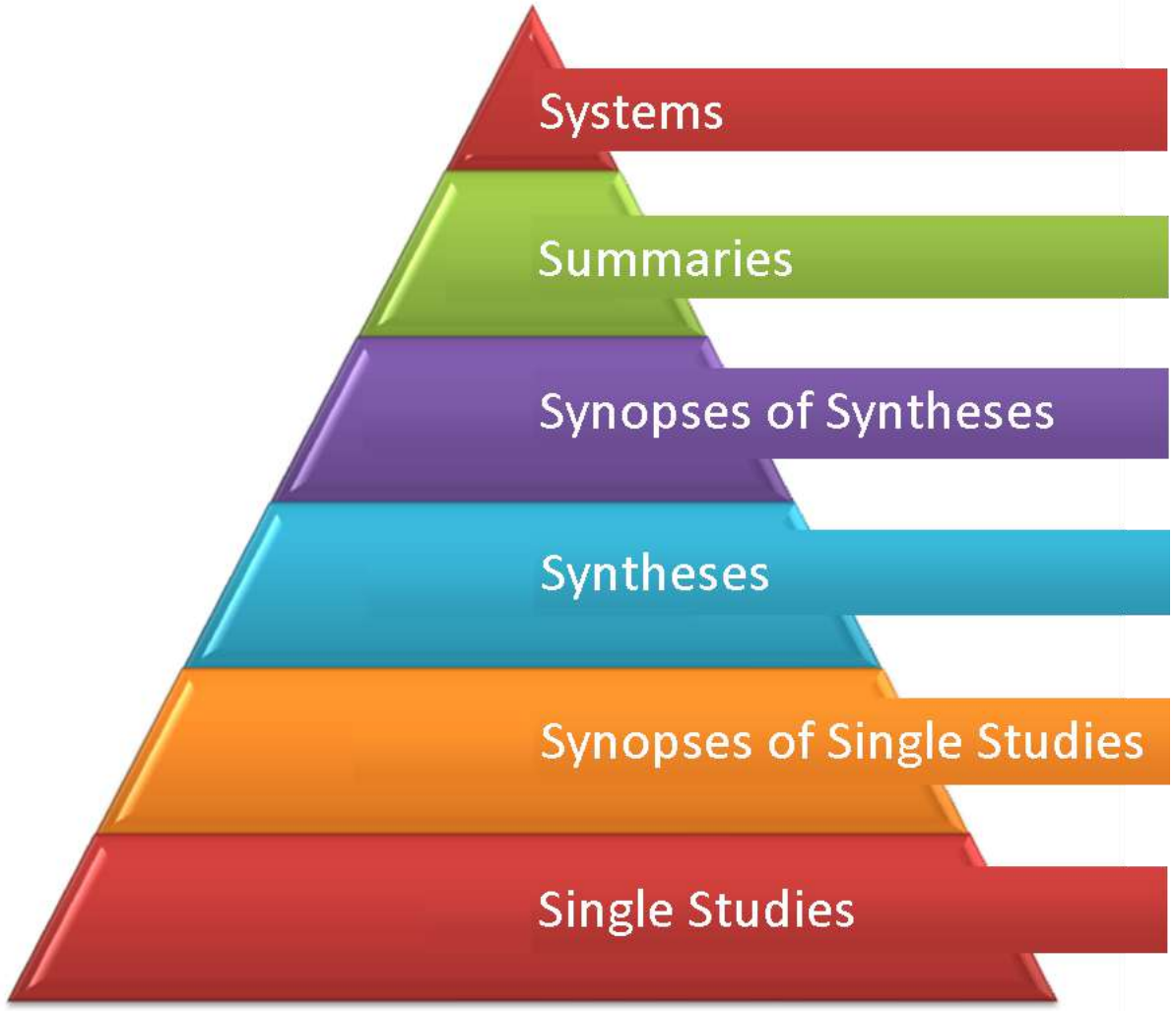

Guidelines International Network

2000

GRADE

2000

Campbell Collaboration

2000

EB- Clinical Practice Guidelines (CPGs)?*

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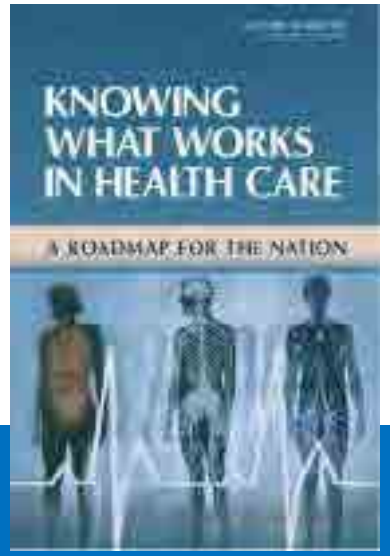
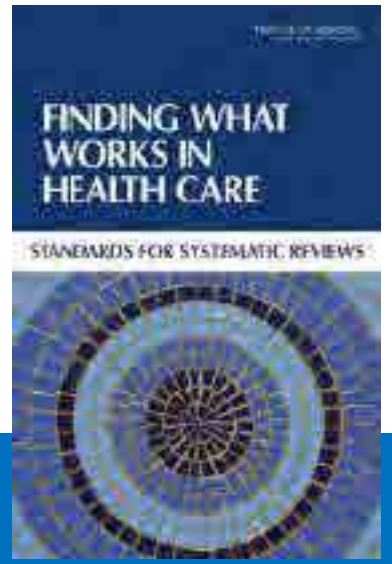
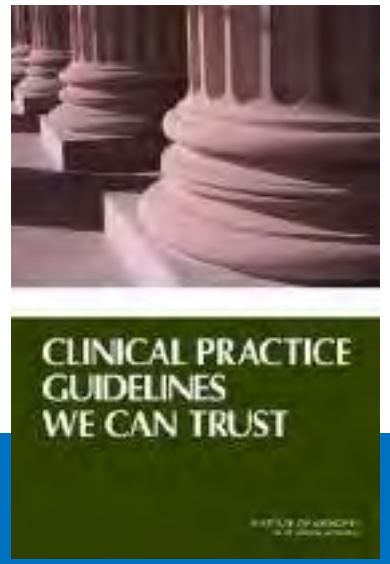
CPGs are statements that include recommendations intended to optimize patient care that are informed by:

- a systematic review of evidence
- an assessment of the benefits and harms of alternative care options.

*IOM, 2008







Annals of Internal Medicine | CLINICAL GUIDELINE

Guidelines International Network: Toward International Standards for Clinical Practice Guidelines

Amir Qaseem, MD, PhD, MHA; Frode Forland, MD, DPH; Fergus Macbeth, MD; Günter Ollenschläger, MD, PharmD, PhD; Sue Phillips, PhD; and Philip van der Wees, PhD, PT, for the Board of Trustees of the Guidelines International Network*

Guideline development processes vary substantially, and many guidelines do not meet basic quality criteria. Standards for guideline development can help organizations ensure that recommendations are evidence-based and can help users identify high-quality guidelines. Such organizations as the U.S. Institute of Medicine and the United Kingdom's National Institute for Health and Clinical Excellence have developed recommendations to define trustworthy guidelines within their locales. Many groups charged with guideline development find the lengthy list of standards developed by such organizations to be aspirational but infeasible to follow in entirety.

Founded in 2002, the Guidelines International Network (G-I-N) is a network of guideline developers that includes 93 organizations and 89 individual members representing 46 countries. The G-I-N board of trustees recognized the importance of guideline development processes that are both rigorous and feasible even for modestly funded groups to implement and initiated an effort toward consensus about minimum standards for high-quality guidelines. In contrast to other existing standards for guideline development at national or local levels, the key components proposed by G-I-N will represent the consensus of an international, multidisciplinary group of active guideline developers.

This article presents G-I-N's proposed set of key components for guideline development. These key components address panel composition, decision-making process, conflicts of interest, guideline objective, development methods, evidence review, basis of recommendations, ratings of evidence and recommendations, guideline review, updating processes, and funding. It is hoped that this article promotes discussion and eventual agreement on a set of international standards for guideline development.

Ann Intern Med. 2012;15[illegible]525-531. www.annals.org

For author affiliations, see end of text.

* For a list of members of the board of trustees of the Guidelines International Network, see the Appendix (available at www.annals.org).

IOM *and* GIN Standards *for* Clinical Practice Guidelines We Can Trust *(2011)*

- https://www.ncbi.nlm.nih.gov/books/NBK209539/

Component	Description
Composition of guideline development panel	Panel should be diverse and include relevant stakeholders.
Decision-making process	Process used to reach consensus among panel members should be described; need to establish prior to initiating guideline development.
Conflicts of interest	Include disclosure of financial and non-financial conflict.
Scope of guideline	Specify objectives and scope.
Methods	Clearly describe methods used.
Evidence reviews	Use systematic evidence review methods to identify and evaluate evidence.

IOM *and* GIN Standards *for* Clinical Practice Guidelines We Can Trust *(2011)*

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Component	Description
Guideline recommendations	Clearly state recommendations and the scientific evidence of benefits, harms and costs, if possible, on which they are based.
Rating evidence and recommendations	Use a rating system to communicate the quality and reliability of the evidence and the strengths of recommendations.
Peer review and stakeholder consultations	Include external review by stakeholders prior to publication.
Guideline expiration and updating	Include an expiration date and/or describe process for updating recommendations.
Financial support and sponsor	Disclose financial support.

World Health Organisation

Although established as a normative organization, its products were not necessarily EB

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Use of evidence in WHO recommendations

Andrew D Oxman, John N Lavis, Atle Fretheim

Summary

Background WHO regulations, dating back to 1951, emphasise the role of expert opinion in the development of recommendations. However, the organisation's guidelines, approved in 2003, emphasise the use of systematic reviews for evidence of effects, processes that allow for the explicit incorporation of other types of information (inclu… values), and evidence-informed dissemination and implementation strategies. We examined the u… particularly evidence of effects, in recommendations developed by WHO departments.

Methods We interviewed department directors (or their delegates) at W… reviewed a sample of the recommendation-containing reports… background documentation). Two individuals inde… reports and background documentation…

Findings Systematic reviews and concise summaries of findings are rarely used for developing recommendations. Instead, processes usually rely heavily on experts in a particular specialty, rather than representatives of those who will have to live with the recommendations or on experts in particular methodological areas.

…entation of recommendations for … undertake these processes in a transparent …ging research literature related to these processes.

Lancet 2007; 369: …

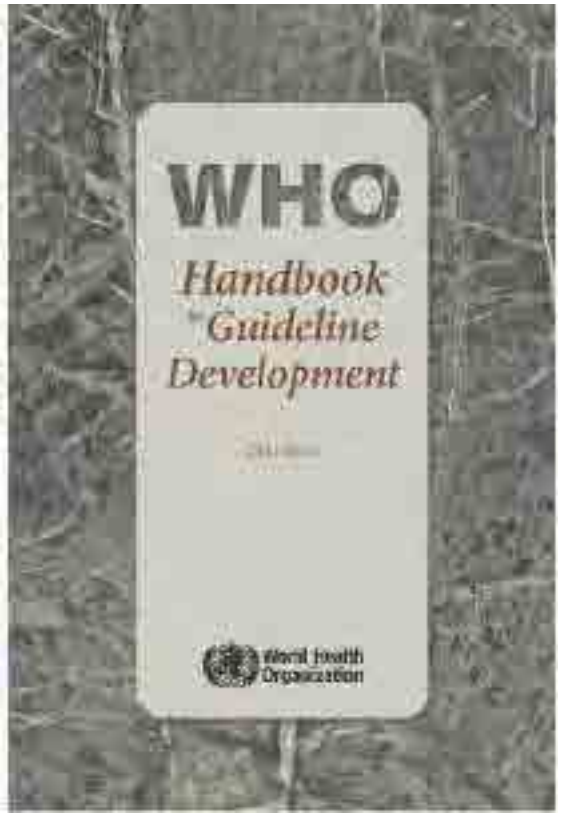
…Political …, and Member of the Centre for Health Economics and Policy Analysis, McMaster University, Hamilton, Canada (J N Lavis MD)

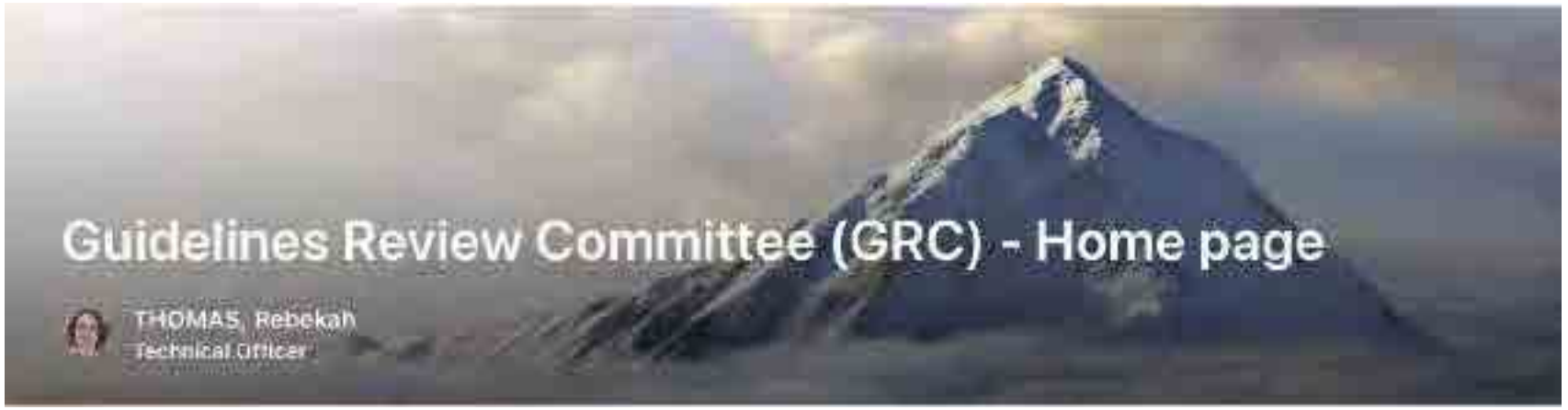
Correspondence to: Dr Andy Oxman

… a large number of … aimed at many different target …, including the general public, healthcare professionals, managers working in health facilities (eg,

collection, analysis, and interpretation of the results. However, systematic reviews are only as good as the evidence that they summarise. There might be no evidence. When there is evidence, judgments are still needed about the quality and, especially for public

WHO Handbook and GRC





Establishing Evidence-Informed Policy Network (EVIPNet), 2005

World Health Organization

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Home / Publications / Overview / EVIPNet in action: 10 years, 10 stories

EVIPNet in action: 10 years, 10 stories

31 January 2016 | Publication

Overview

This report marks 10 years of painstaking and determined effort by EVIPNet in Africa, the Americas, Asia, the Eastern Mediterranean and now in eastern Europe , and describes 10 examples of the significant impact EVIPNet has had on local or national health policy. The wealth of achievement and learning generated by EVIPNet's activities to date is being drawn on by policy-makers, researchers and civil society groups worldwide.

EVIPNet in action - Executive Summary

WHO TEAM

Chief Scientist and Science Division (SCI), Evidence to policy & Impact (ERP), EVIPNe

EDITORS

World Health Organization

NUMBER OF PAGES

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Available

WHO and
Guidel

Evidence Informed Policy Network (EVIPNet)

E

Evidence Informed Policy Network (EVIPNet)

1. Evidence Informed Policy Network (EVIPNet)

The Evidence Informed Policy Network (EVIPNet) is a network established by the Wo
systematic use of evidence in the development of health policies in order to strengt
appropriate programs, services and interventions to those who need them.

It is present in all WHO regions and is coordinated at the regional and global level. EV
teams at the country level, which include policy makers, researchers, and representa
development and implementation by using the best global and local evidence availa

EVIPNet builds capacity in countries to develop policy synopsis and mechanisms to

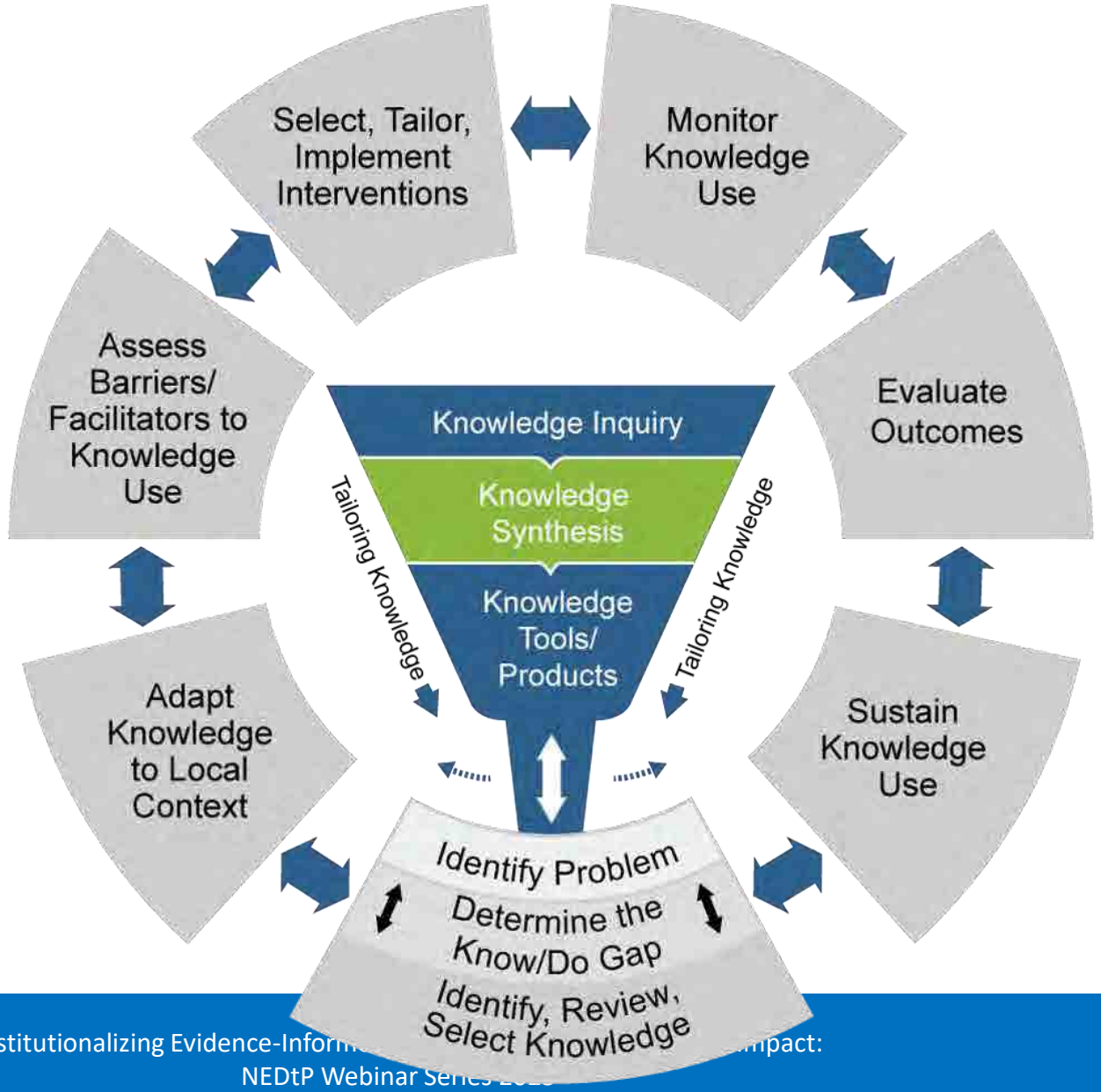
EVIPNet in action

EVIPNet in action: 10 years, 10 stories


KNOW
DO

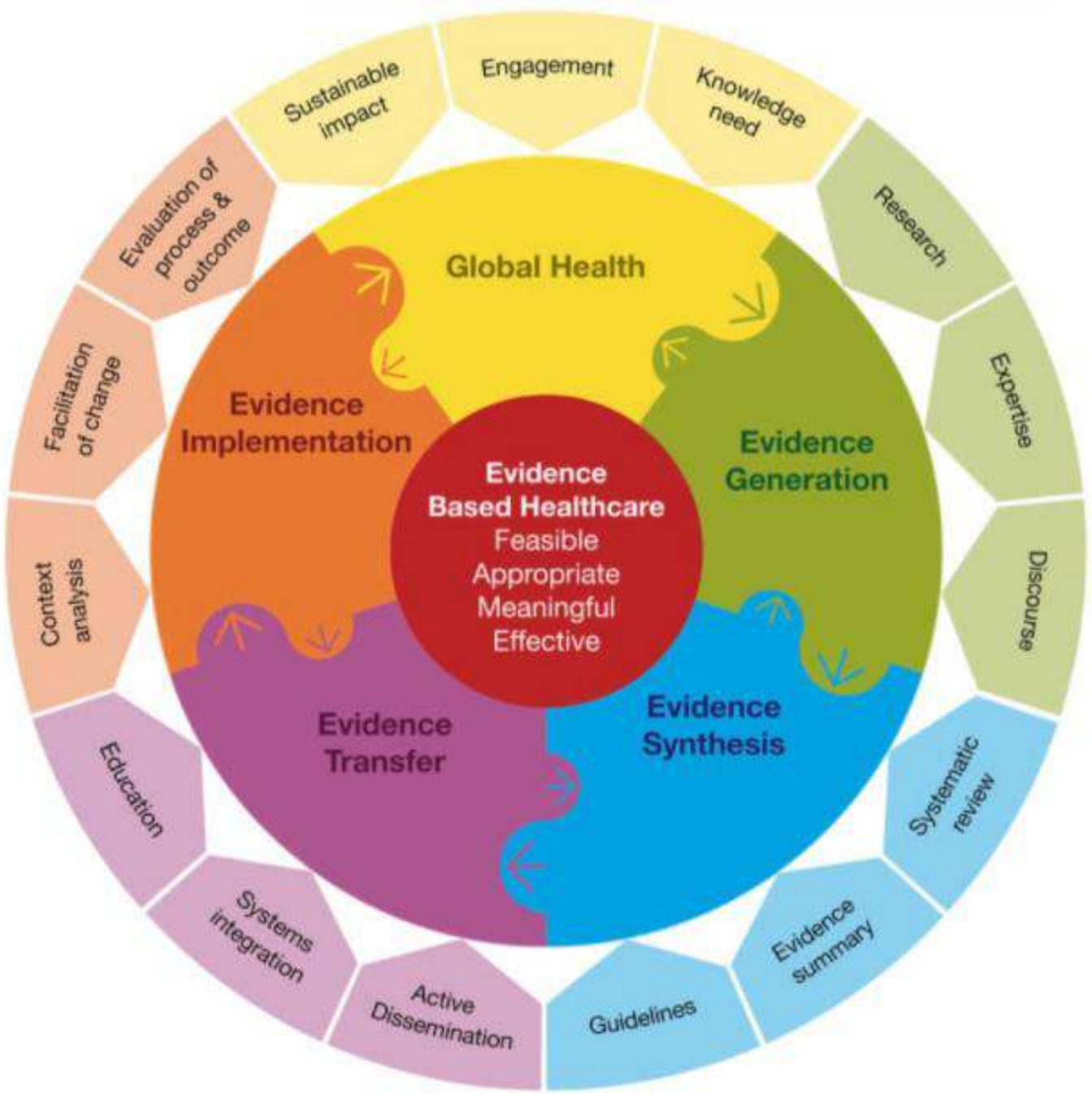
Knowledge-To-Action Framework

World Health Organization
Eastern Mediterranean Region



Source: Graham et al. (2006) — https://www.ncbi.nlm.nih.gov/pubmed/16557505

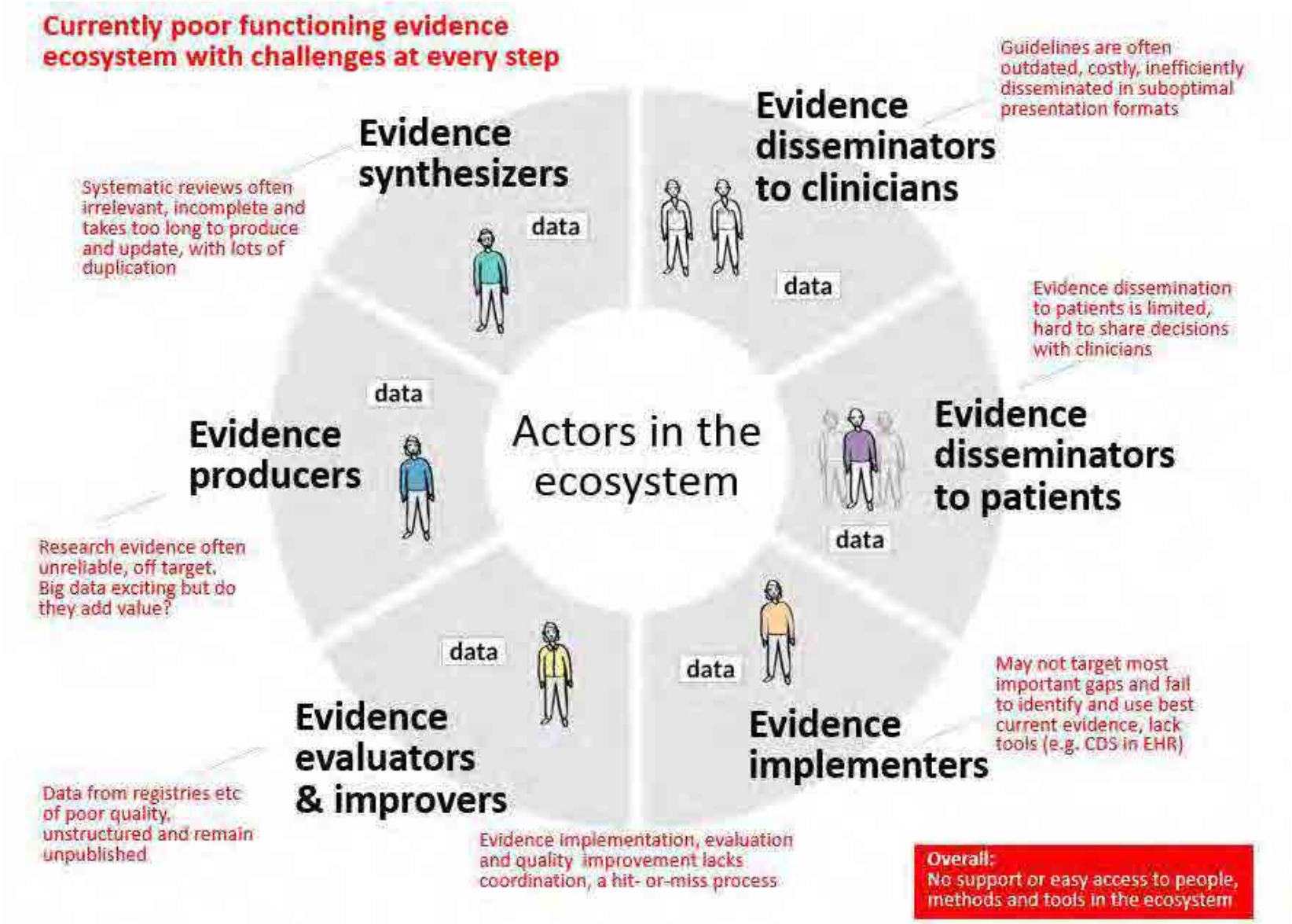
Evidence Wheel:
JBI Model of EBHC



https://www.linkedin.com/pulse/evidence-ecosystem-wheel-zachary-munn/

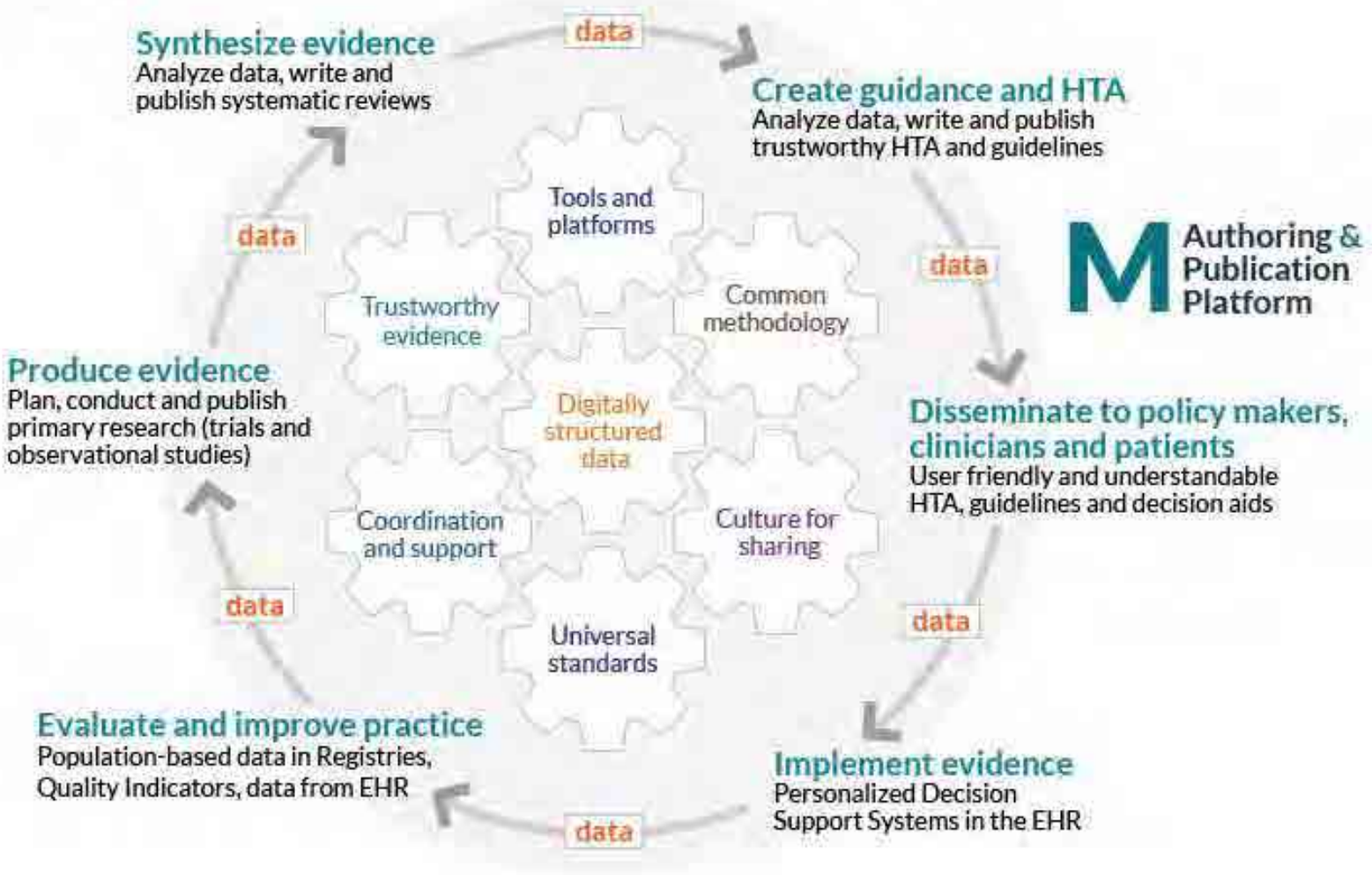
World Health Organization
Eastern Mediterranean Region

Currently poor functioning evidence ecosystem with challenges at every step



World Health Organization
Eastern Mediterranean Region

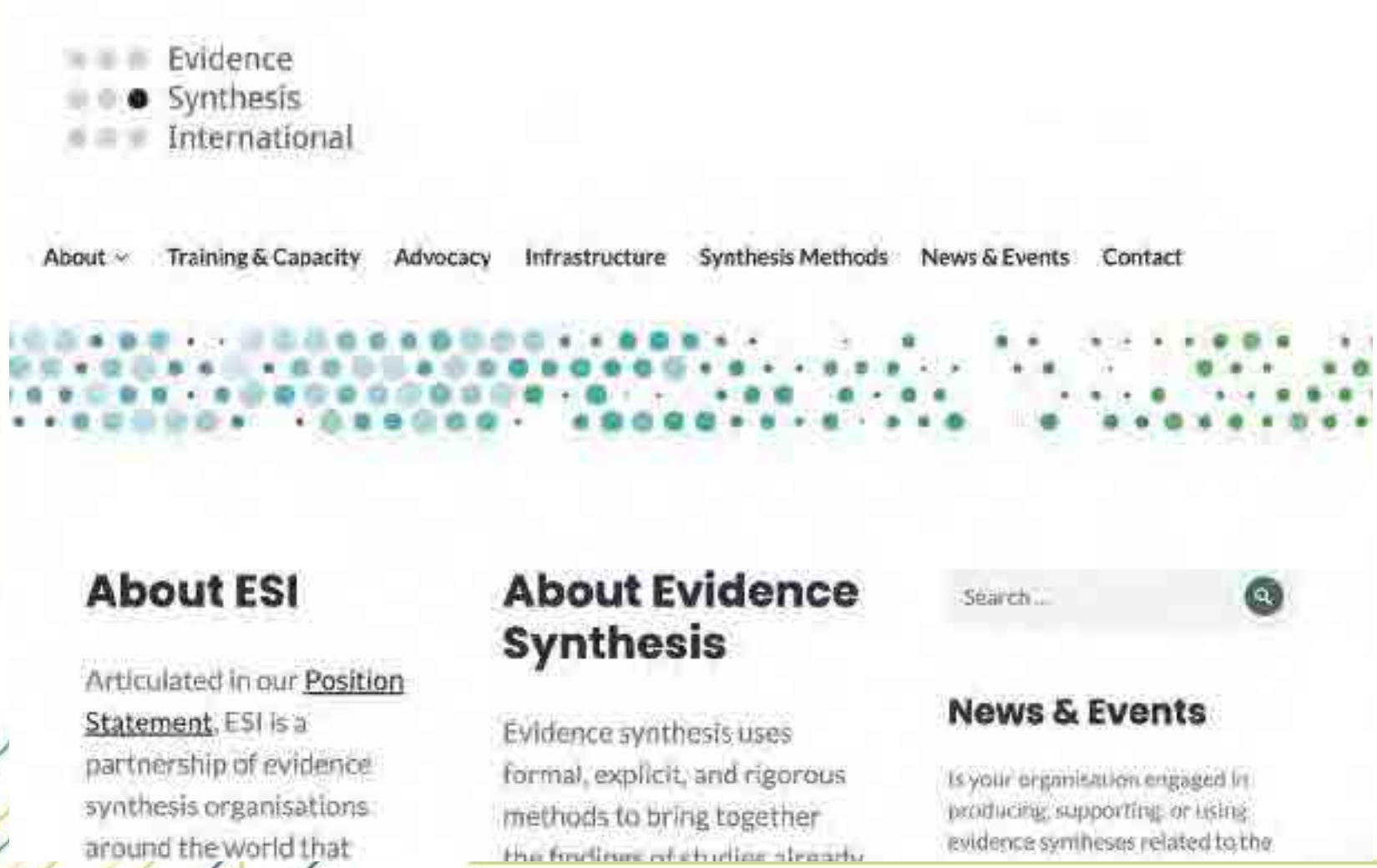
The Digital and Trustworthy Evidence Ecosystem



Partnerships

3º PAINEL INTERNACIONAL de Prática Baseada em Evidências

Desenvolvimento e implementação de Guidelines Baseados em Evidências



Unimed Brasil

Unimed Fesp

ANS Nº 319996

Better evidence for a better world

Improving societal outcomes through the production and use of timely, trustworthy and affordable evidence.

Join our commitment

Our collaborative model produces better evidence on a topic because of four core attributes

1. **Living production → Up-to-date**

   Living synthesis produces evidence that is always available and always up-to-date, enabling evidence users to share evidence irrespective of their timing needs. This is important because mismatched timing needs have been a major barrier to effective collaboration.

2. **User collaboration → Affordable**

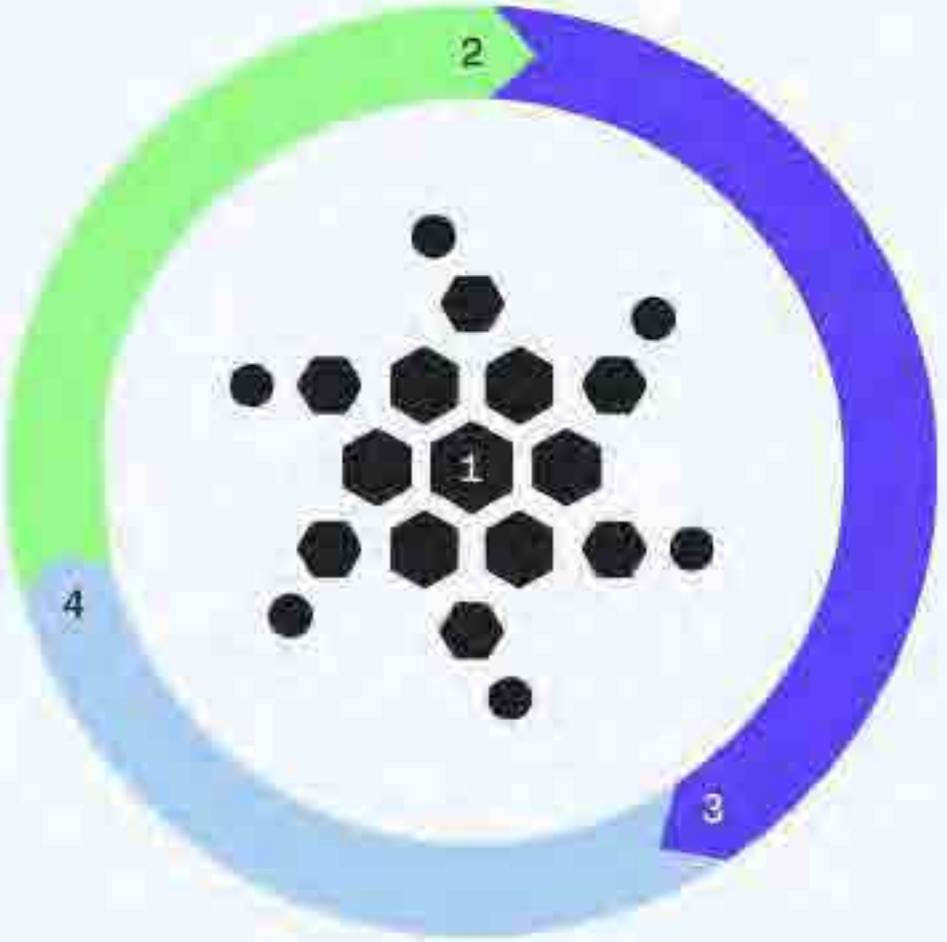
   Evidence users with common evidence needs source evidence as a consortium to reduce their individual costs of evidence and enable more widespread use of evidence in decision-making.

3. **Supply coordination → Trustworthy**

   Shared procurement coordinates evidence production so evidence is "produced once, used many times" and consolidates funding so producers can afford the resources to comprehensively synthesise large quantities of research.

4. **Better evidence → More impact**

   Attracts more evidence users, which further improves the affordability and trustworthiness of the evidence and amplifies its impact.



Get in touch to learn more about our model and how it works


10 - 13 September 2024
Global Evidence Summit
2024
PRAGUE, CZECH REPUBLIC

World Health Organization
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BMJ Journals

BMJ Evidence-Based Medicine

Evid Based Med. 2016 Jun 23;21(4):125–127. doi: 10.1136/ebmed-2016-110401

New evidence pyramid

M Hassan Murad [1], Noor Asi [1], Moulaz Alsawas [1], Fares Alahdab [1]

Author information • Article notes • Copyright and License information

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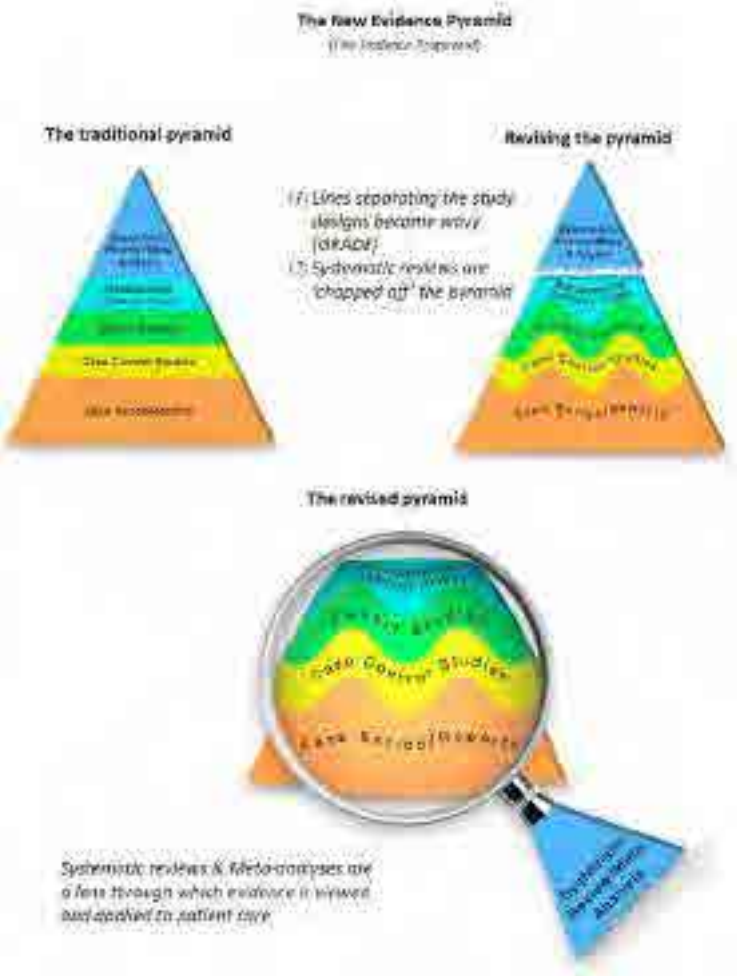
PMCID: PMC4975798 PMID: 27339128



Hierarchy of evidence in decision-making: The Evidence Pyramid Problem

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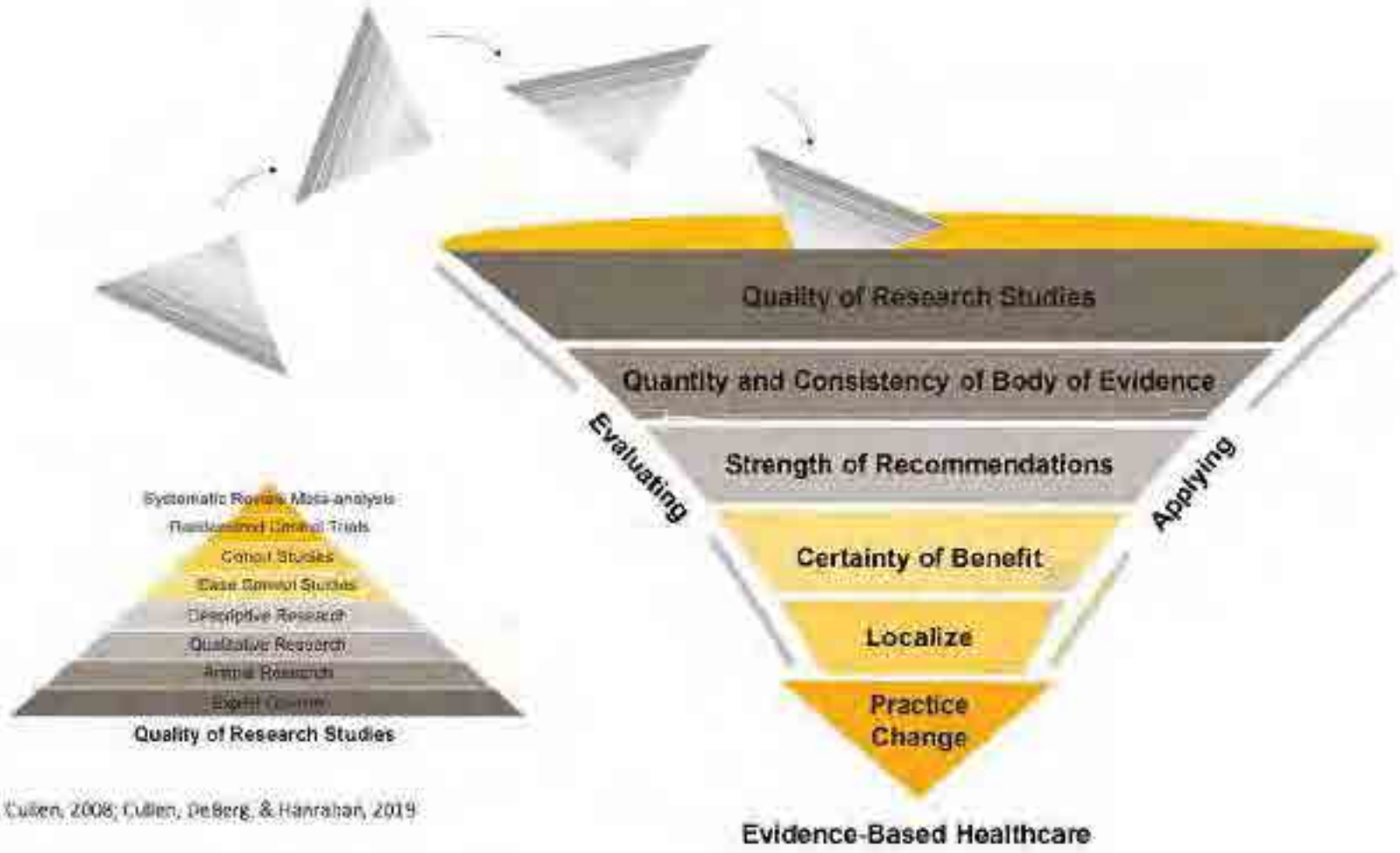

Cullen, 2008; Cullen, DeBerg, & Hanrahan, 2019

FIGURE 5.3 Evidence Funnel Approach

Cullen, L., Hanrahan, K., Farrington, M., Tucker, S., & Edmonds, S. (2023). Evidence-based practice in action: Comprehensive strategies, tools, and tips from University of Iowa Hospitals & Clinics (2nd ed.). Sigma Theta Tau International.


New
Old
NORMAL

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Technical Aspects of Evidence Synthesis

What is the Role of Evidence Synthesis in Guideline Development?

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- Systematic collection and evaluation of research to inform recommendations.
- Importance of minimizing bias and ensuring transparency and reproducibility.

Importance of Evidence-based Guidelines in Healthcare

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- Standardize care, reducing variability in treatment approaches.
- Improve patient outcomes by relying on high-quality research.
- Empower healthcare providers to make informed decisions.
- Optimize resource allocation and enhance efficiency.
- Foster a culture of continual improvement and patient safety.

CPG Production

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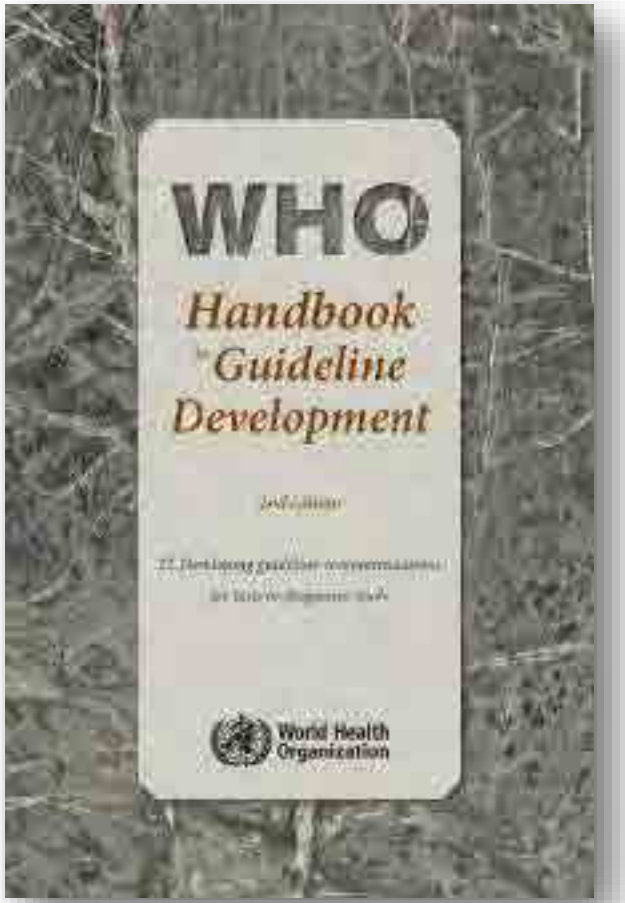
1. Adoption
2. Adaptation/ Contextualization
3. De-novo development
4. Adolopment

} Evidence Synthesis

WHO handbook for guideline development, 2nd Edition (2014)

1. Introduction
2. Planning guidelines
3. Contributors and their role in guideline development
4. Preparing the planning proposal
5. Incorporating equity, human rights, gender and social determinants into guidelines
6. Declaration and management of interests
7. Formulating questions and selecting outcomes
8. Evidence retrieval and synthesis
9. Evidence assessment
10. Developing recommendations



WHO handbook for guideline development, 2nd Edition (2014) (cont'd)

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11. **Rapid advice guidelines in the setting of a public health emergency**
12. **Producing and publishing the guideline**
13. **Adaptation, implementation, and evaluation**
14. **Strong recommendation when the evidence is low-quality**
15. **Using evidence from qualitative research to develop WHO guidelines**
16. **Decision-making for guideline development at WHO**
17. **Developing guideline recommendations for tests or diagnostic tools**
18. **Incorporating a complexity perspective into WHO guidelines**

Supplement: Criteria for use of evidence to inform recommendations

Translations: Arabic, Chinese, Spanish

What is Evidence Synthesis?

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- **The process of systematically gathering, analyzing, and summarizing findings from multiple studies on a specific topic.**
- This approach helps to provide a comprehensive understanding of the evidence, often used to inform decision-making in healthcare, policy, and research.
- It includes methods like systematic reviews, meta-analyses, and scoping reviews

Key Steps in Evidence Synthesis

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- Formulating a PICO (**P**opulation, **I**ntervention, **C**omparator, and **O**utcome) health question.
  - *Other models: PICOTS, PIPOH, PICAR.*
- Literature search strategies.
- Data extraction and synthesis.

Key Steps – Systematic Search Strategies

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- Defining inclusion/exclusion criteria.
- Selecting databases (PubMed, Cochrane, Embase, etc.).
- Using Medical Subject Headings (MeSH) and Boolean operators.
- Grey literature and unpublished data.
- *Role of Healthcare and Medical Librarians*

Role & Benefits of a Medical & Healthcare Librarian in Evidence Synthesis

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- ✓ Expert Searching – Develops precise, comprehensive search strategies.
- ✓ Database Navigation – Identifies key sources (PubMed, Cochrane, etc.).
- ✓ Grey Literature Retrieval – Finds unpublished studies to reduce bias.
- ✓ Reference Management – Organizes citations efficiently.
- ✓ Quality Assurance – Ensures rigor, transparency, and reproducibility.
- ✓ Collaboration – Saves time, enhances research quality, and supports teams.

Key Steps –
Critical Appraisal of Systematic Reviews

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- **Tools for assessing systematic reviews:**
  - AMSTAR-2
  - ROBIS (Risk of Bias in Systematic Reviews)
- Identifying high-quality systematic reviews for guidelines.

Types of reviews

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Type of Review	
Narrative reviews	A broad synthesis of literature without a structured methodology, often summarizing existing knowledge on a topic.
Systematic Review	A rigorous, structured review that follows a predefined protocol to identify, appraise, and synthesize all relevant studies on a specific question to generate a robust conclusion.
Meta-Analysis	A statistical approach that combines data from multiple studies in a systematic review to produce a pooled effect estimate.
Scoping Review	A preliminary assessment of the breadth and depth of research on a topic, mapping available evidence without detailed critical appraisal.
Rapid Review	An accelerated form of systematic review using streamlined methods to provide timely evidence synthesis for decision-making.
Umbrella	A review of systematic reviews or meta-analyses on a broad

Types of reviews (cont'd)

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Type of Review	
Umbrella Review	A review of systematic reviews or meta-analyses on a broad question, summarizing high-level evidence.
Integrative Review	A method that includes diverse study designs (qualitative and quantitative) for a holistic synthesis of evidence.
Realist Review	Focuses on understanding how and why interventions work in different contexts by synthesizing qualitative and quantitative evidence.
Living Review	A continuously updated systematic review incorporating new evidence as it becomes available.

Reporting Guidelines

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Welcome to the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) website

Here you can access information about the PRISMA reporting guidelines, which are designed to help authors transparently report why their systematic review was done, what methods they used, and what they found.

The main PRISMA reporting guideline (the PRISMA 2020 statement) primarily provides guidance for the reporting of systematic reviews evaluating the effects of interventions. PRISMA 2020 is complemented by various PRISMA extensions, which provide guidance for the reporting of different types or aspects of systematic reviews and other types of evidence synthesis (e.g. scoping reviews).

Development, updating and implementation of the PRISMA reporting guidelines is overseen by the PRISMA Executive, which is currently co-chaired by Prof Joanne McKenzie and Dr Matthew Page at Monash University.

Key documents

PRISMA 2020 checklist

PRISMA 2020 flow diagram

PRISMA 2020 statement paper

PRISMA 2020 Explanation and Elaboration paper

PRISMA

Reporting Guidelines

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GRADE (Grading of Recommendations, Assessment, Development, and Evaluation)

- Why GRADE?
- How GRADE differs from traditional evidence grading.
- Components of GRADE assessment.

The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) working group

- It began in the year 2000 as an informal collaboration of people interested in addressing the shortcomings of grading systems in health care.
- The working group developed a common, sensible, and transparent approach to grading the quality (or certainty) of evidence and strength of recommendations.
- Many international organizations have provided input into developing the GRADE approach, which is now considered the standard in guideline development (e.g., WHO, NICE, AHRQ, CDC, BMJ, UpToDate, etc.).

Domains of GRADE – Quality of Evidence

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1. Risk of bias.
2. Inconsistency of results.
3. Indirectness of evidence.
4. Imprecision in results.
5. Publication bias.

Assessing Risk of Bias in Studies

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- **Tools:**
  - Cochrane Risk of Bias 2.0 for RCTs.
  - ROBINS-I for non-randomized studies.

Meta-Analysis and Data Synthesis in Guidelines

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- Quantitative synthesis of results.
- Heterogeneity (I^2 statistic).
- Fixed vs. random-effects models.
- Forest plots: interpretation and application.

GRADE System

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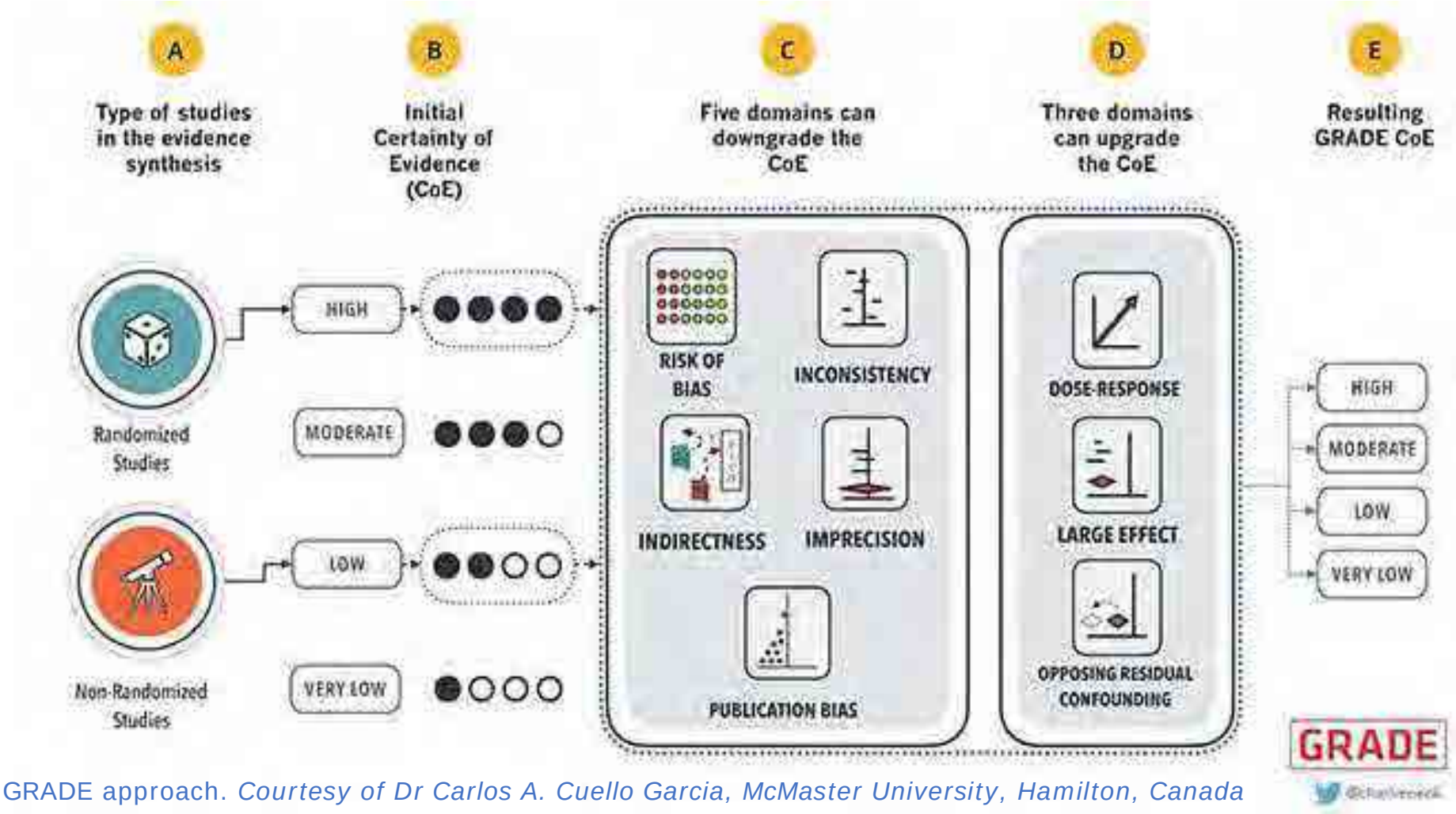

Figure. The GRADE approach. *Courtesy of Dr Carlos A. Cuello Garcia, McMaster University, Hamilton, Canada*

GRADE Evidence Profile Table

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Structure and key components:

- Study design
- Effect size
- GRADE domains
- Final quality rating

Example – GRADE Evidence Profile Table

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IDSA Guideline on the Treatment and Management of COVID-19

Table 5. GRADE evidence profile, Recommendation 5

Question: Glucocorticoids compared to no glucocorticoids for critically ill patients with COVID-19

Last reviewed and updated 9/25/2020

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	corticosteroids	no corticosteroids	Relative (95% CI)	Absolute (95% CI)		
Mortality (follow up: 28 days)												
8 [1]	randomized trials	not serious	not serious	not serious	not serious	none	280/749 (37.4%)	485/1095 (44.3%)	**OR 0.66** (0.54 to 0.82)	**99 fewer per 1,000** (from 143 fewer to 48 fewer)	⨁⨁⨁⨁ HIGH	CRITICAL
Hospital discharge (follow up: 28 days)												
1 [2]	randomized trials	not serious [a]	not serious	serious [b]	not serious	none	1360/2104 (64.6%)	2639/4321 (61.1%)	**RR 1.11** (1.04 to 1.19)	**67 more per 1,000** (from 24 more to 116 more)	⨁⨁⨁◯ MODERATE	IMPORTANT
Serious adverse events												
6 [1]	randomized trials	not serious	not serious	not serious	serious [c]	none	6 trials reported 64 events among 354 patients randomized to corticosteroids and 80 events among 342 patients randomized to standard care (Stern 2020).				⨁⨁⨁◯ MODERATE	CRITICAL

CI: Confidence interval; **OR:** Odds ratio; **RR:** Risk ratio

Explanations

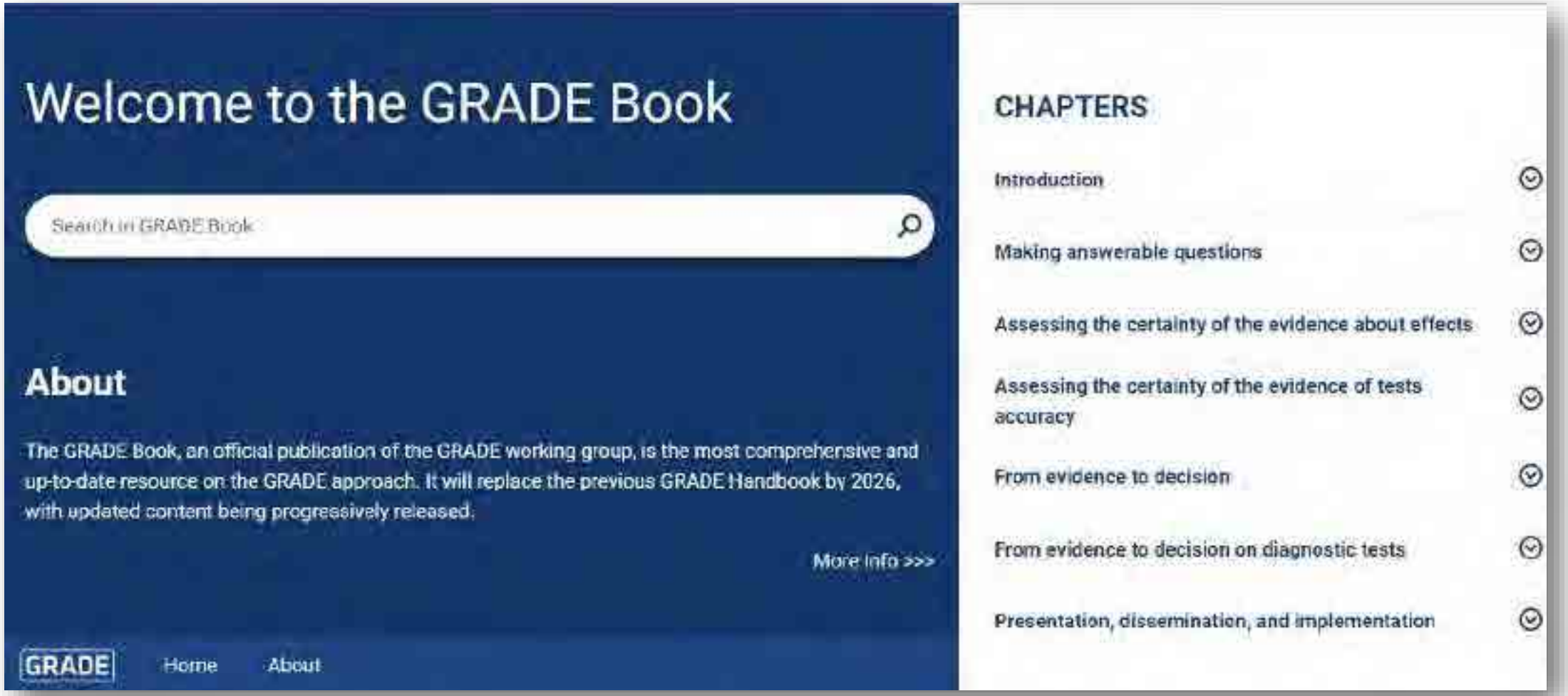
a. Analysis adjusted for baseline age.
b. Indirectness due to different health care system (allocation of intensive care resources in an unblinded study). Indirectness to other corticosteroids.
c. The 95% CI includes the potential for both harm as well as benefit. Few events reported do not meet the optimal information size and suggest fragility in the estimate.

References

1. WHO Rapid Evidence Appraisal for COVID-19 Therapies Working Group, Sterne JAC, Murthy S, et al. Association Between Administration of Systemic Corticosteroids and Mortality Among Critically Ill Patients With COVID-19: A Meta-analysis. JAMA **2020**; 324(13): 1330-41.
2. RECOVERY Collaborative Group, Horby P, Lim WS, et al. Dexamethasone in Hospitalized Patients with Covid-19. N Engl J Med **2021**; 384: 693-704.

GRADE Book

https://book.gradepro.org/



GRADE GPT

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GRADE Knowledgebase

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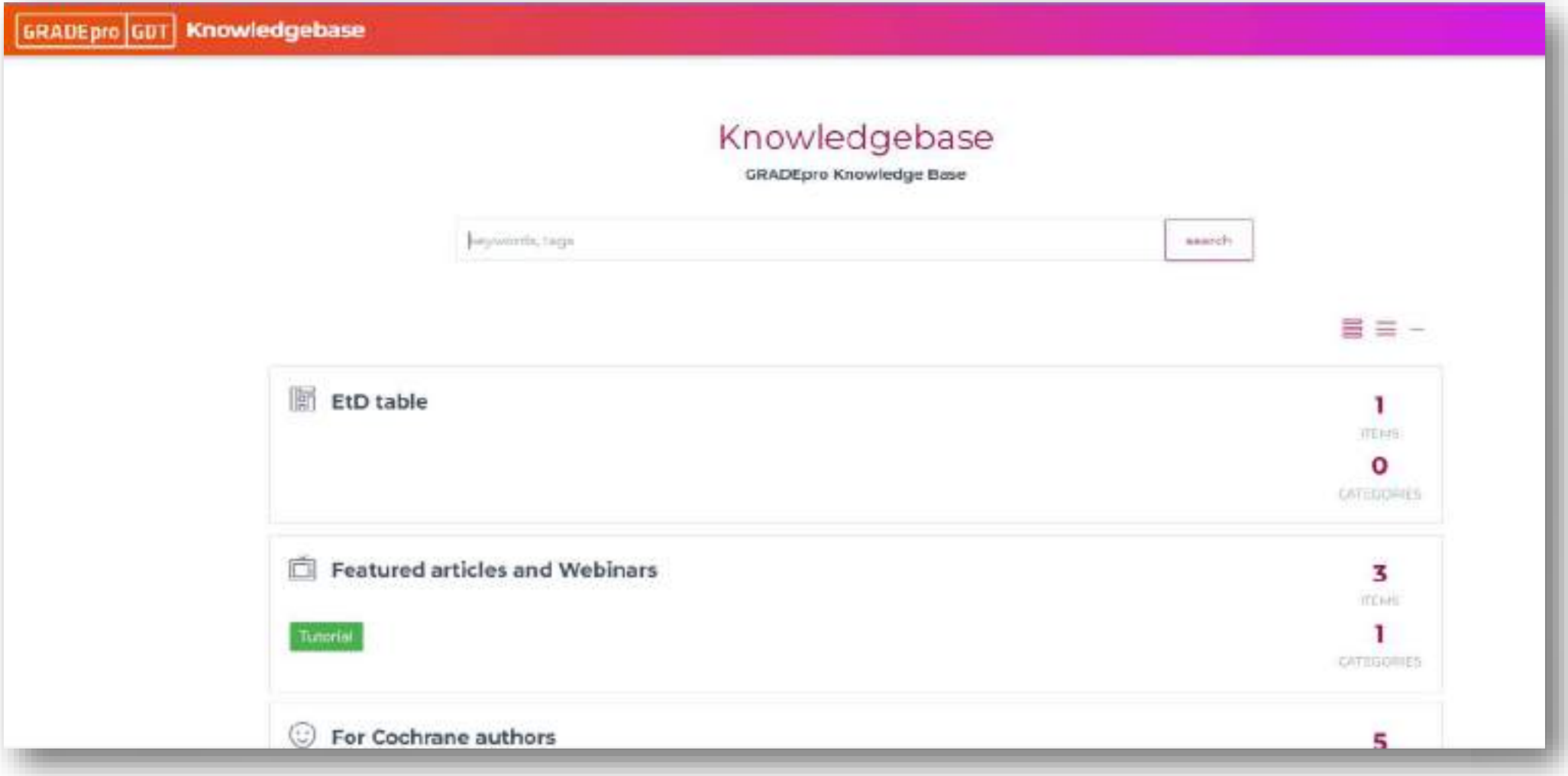

Making Recommendations with GRADE

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- Strong vs. conditional recommendations.
- **Factors influencing recommendation strength:**
  - Balance of benefits and harms.
  - Quality of evidence.
  - Values and preferences.
  - Resource use and feasibility.

Evidence-to-Decision (EtD) Framework

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- WHO-INTEGRATE EtD framework V1.0 (Rehfuess et al 2019)
- GRADE EtD framework (Alonso-Coello et al 2016).

Structured decision-making for guideline panels.

GRADE Software and Online Platforms:
GRADEpro/GDT and MAGICapp

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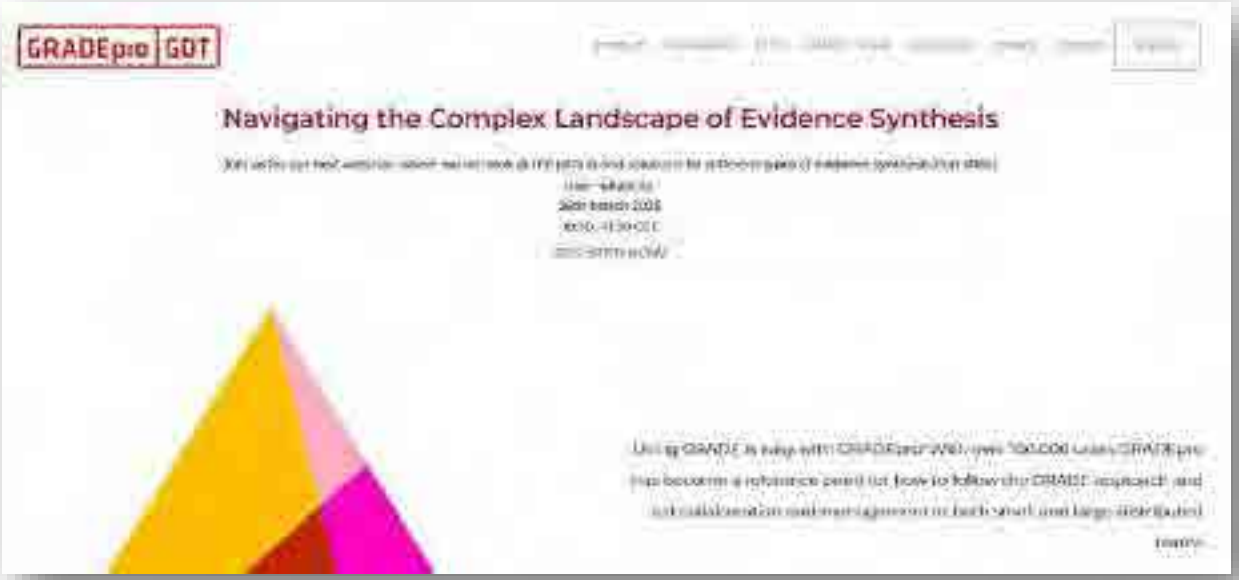

Quality Assessment in Guideline Development

Quality Assessment in Guideline Development

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Why quality assessment matters?

- Poor-quality guidelines can lead to ineffective or harmful medical practices.
- Ensuring transparency, reducing bias, and improving trust in recommendations.

Tools for Assessing the Quality of Guidelines: Guideline Appraisal Tools *(Yao et al. 2022)*

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1. **AGREE II Instrument** (Appraisal of Guidelines for Research and Evaluation)
2. **AGREE-GRS** (**AGREE-**Global Rating Scale)
3. **iCAHE Guideline Quality Checklist** (International Centre for Allied Health Evidence).
4. **NEATS instrument** (National Guideline Clearinghouse Extent of Adherence to Trustworthy Standards).
5. **AGREE-REX** (**AGREE-**Recommendations Excellence)
6. **PANELVIEW Instrument**

AGREE Tools

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iCAHE Guideline Quality Checklist

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Technical advance | Open access | Published: 10 May 2014

Efficient clinical evaluation of guideline quality: development and testing of a new tool

Karen Grimmer, Janine Margarita Dizon, Steve Milanese, Ellena King, Kate Beaton, Olivia Thorpe, Lucylynn Lizarondo, Julie Luker, Zuzana Machotka & Saravana Kumar

BMC Medical Research Methodology 14, Article number: 63 (2014) | Cite this article

10k Accesses | 6 Altmetric | Metrics

NEATS Tool


Annals of Internal Medicine
Search Journal
LATEST ISSUES IN THE CLINIC FOR HOSPITALISTS JOURNAL CLUB MULTIMEDIA SPECIALTY COLLECTIONS CME / MOC AUTHORS
Developing and Testing the Agency for Healthcare Research and Quality's National Guideline Clearinghouse Extent of Adherence to Trustworthy Standards (NEATS) Instrument
Authors:
AUTHOR ARTICLE & DISCLOSURE INFORMATION
Publication:
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PANELVIEW

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Moving from Evidence to Implementation

Do CPGs Lead to Developing National Health Policies and Strategies?

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- Many of the WHO guidelines have led to national policies.
- EBPM is not like EBM/guidelines
  - The focus remains on research (evidence synthesis) over policy impact
- New collaborations between scientists and policymakers are needed.


CAPACITY
BUILDING

Moving from Evidence to Implementation

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Advocating for Institutional and Political Support

- ✓ There is a need for **national policies** that mandate evidence-based guidelines.
- ✓ Overcoming **resistance** from professional societies and industry influences.
- ✓ The role of advocacy groups and patient organizations in pushing for better guideline adoption.

LEGITIMACY

LEADERSHIP


VISION
MARKETING
COMMUNICATION
STRATEGY
IDEA
TEAMWORK
GOAL
SUCCESS
DEVELOPMENT
GROWTH
PLAN

WHO Leadership Role

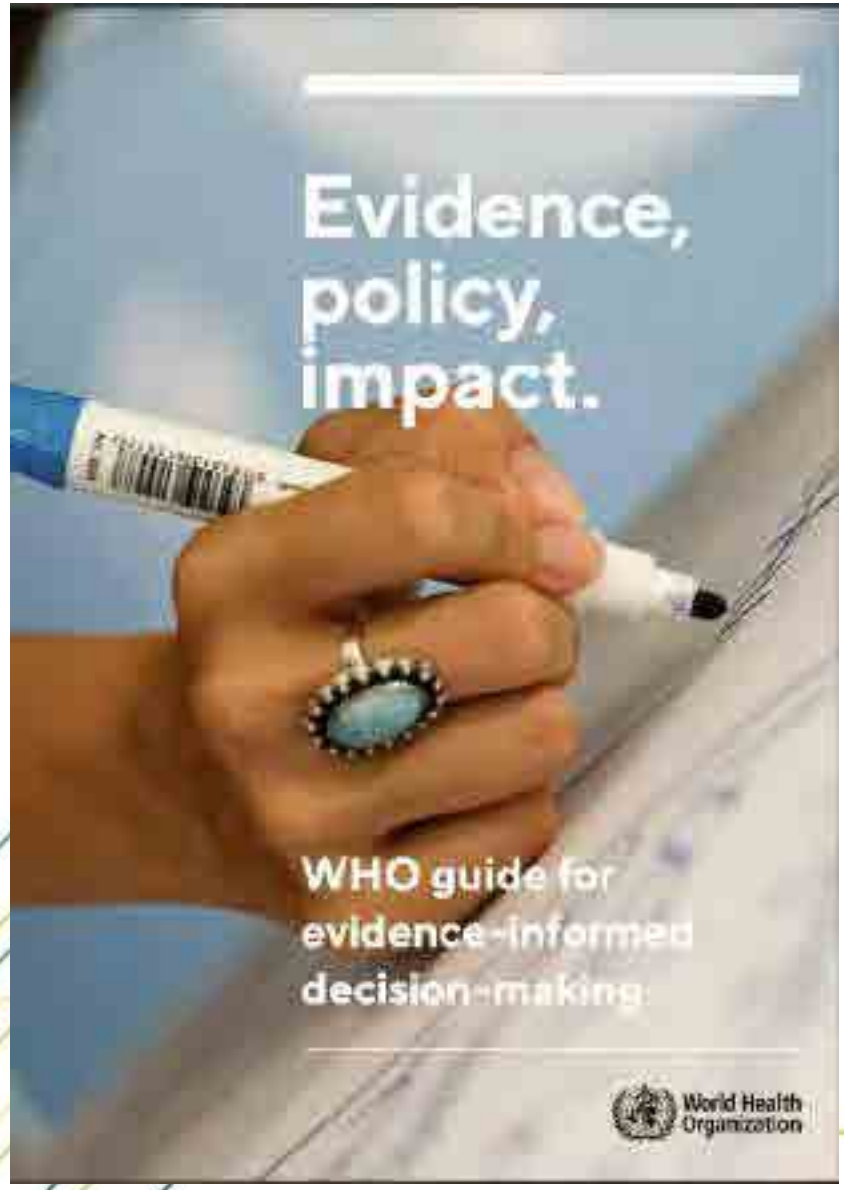
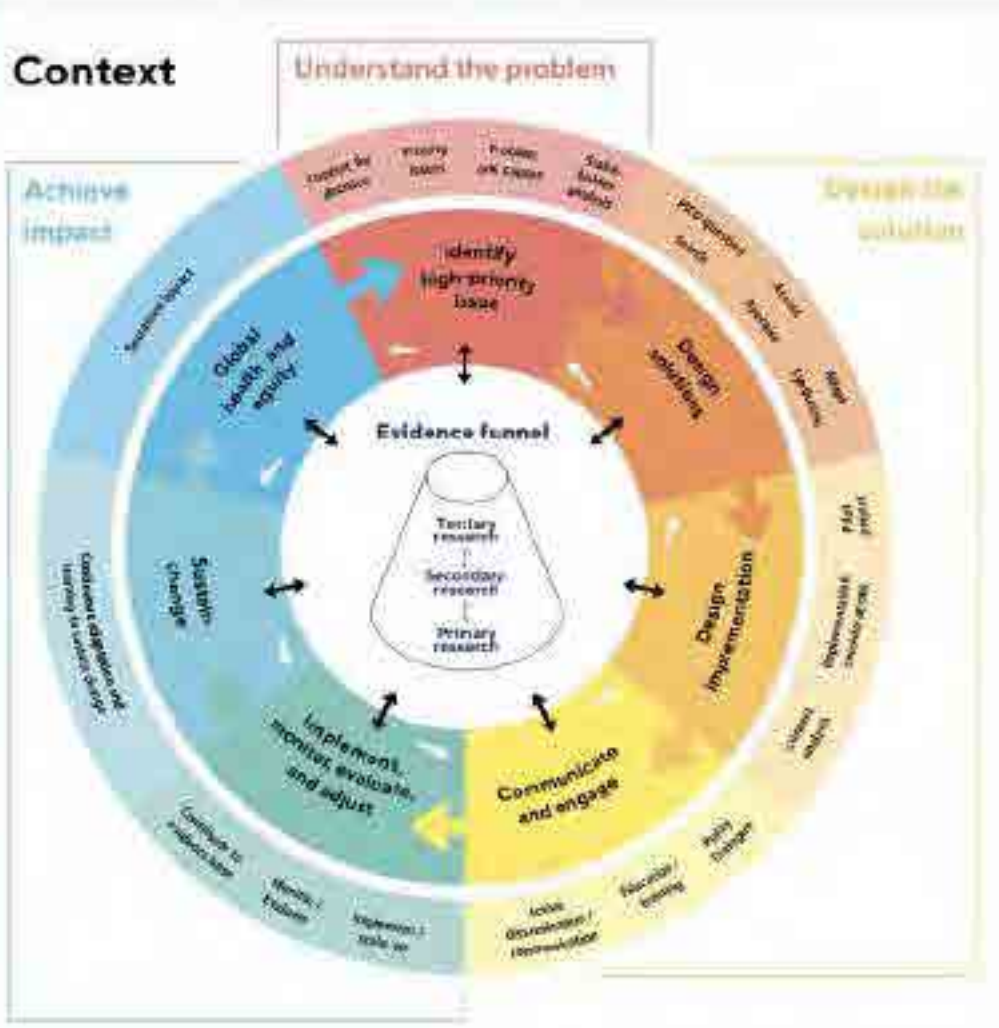


Fig. 2.2. "Evidence ecosystem for impact" framework*



*The framework includes the evidence funnel, the policy/action cycle, context, cross-cutting issues and principles

Organisation mondiale de la Santé
Bureau régional de la Méditerranée orientale

World Health Organization
Regional Office for the Eastern Mediterranean

منظمة الصحة العالمية
المكتب الإقليمي لشرق المتوسط

قـــرار

Resolution

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

EM/RC66/R.5
October 2019

Sixty-sixth Session
Agenda item 3(d)

Developing national institutional capacity for evidence-informed policy-making for health

The Regional Committee,

Having reviewed the technical paper on developing national institutional capacity for evidence-informed policy-making for health;[1]

Organisation mondiale de la Sa
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Sixty-sixth Sessio
Agenda item 3(d)

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4.8 Report on pr
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Annex 1. Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region

	Country categories	Country action	Support from WHO and other development partners
A	All countries	• Establish mechanisms to regulate and manage conflicts of interests in policy-making • Enhance the capacity of the ministry of health planning department for critical appraisal of knowledge products and evidence synthesis reports (i.e. policy briefs, health technology assessments, guidelines and systematic reviews) • Ensure access of the ministry of health to sources of research evidence for health (e.g. through the WHO HINARI programme) • Improve cause of death reports and national observatory for national health indicators including surveillance reports	• Provide technical support for selection of appropriate national institutional methods for evidence-informed policy making • Provide technical support for key national capacity-building for evidence-informed policy-making • Support the development of policy briefs of regional importance • Support the adaptation of global WHO guidelines to the regional context for high priority topics • Support the development of multicountry or regional guidelines for high priority topics • Establish a regional network of institutions that actively supports evidence-informed policy-making at the national level
B	Countries with limited economic resources	In addition to A: • Ensure a minimum capacity (epidemiology and cost analysis) for development of policy reports • Focus on adaptation of high priority evidence synthesis reports to the national setting • Include resource funds for evidence-to-policy activities in donor requests to enhance national capacity	In addition to A: • Support the development of policy briefs and adaptation of WHO guidelines for national priorities
C	Countries affected by protracted or acute emergencies	In addition to A: • Ensure a minimum capacity (epidemiology and cost analysis) for development of policy reports • Include resource funds for evidence-to-policy activities in donor requests to enhance national capacity	In addition to A and B: • Support rapid processes for adaptation or development of policy synthesis products for the country's needs
D	Countries with large academic capacity/resources and small populations	In addition to A: • Establish programmes for national health technology assessments and guideline adaptation/development in collaboration with academic institutions • Establish formalized evidence-to-policy processes, including for developing policy briefs and conducting policy dialogues • Establish an evidence-to-policy team within the ministry of health including all key areas of expertise • Develop plans for mid-term (e.g. 10 year) national household surveys • Establish an effective cancer registry and pharmacovigilance programme	As in A
E	Countries with large academic capacity/resources and large populations	In addition to A and D: • Establish institutes affiliated with the ministry of health (e.g. NIPH; NIHR; NICE) tasked with commissioning, developing, appraising or adapting national guidelines, health technology assessments and policy briefs • Enhance the capacity of academic institutions to cover all areas needed for evidence-to-policy processes	As in A

NIPH: National Institute for Public Health; NIHR: National Institute for Health Research; NICE: National Institute of Health and Clinical Excellence

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Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region

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D	Countries with large academic capacity/resources and small populations	In addition to A: • Establish programmes for national health technology assessments and guideline adaptation/development in collaboration with academic institutions • Establish formalized evidence-to-policy processes, including for developing policy briefs and conducting policy dialogues • Establish an evidence-to-policy team within the ministry of health including all key areas of expertise • Develop plans for mid-term (e.g. 10-year) national household surveys • Establish an effective cancer registry and pharmacovigilance programme	As in A
E	Countries with large academic capacity/resources and large populations	In addition to A and D: • Establish institutes affiliated with the ministry of health (e.g. NIPH; NIHR; NICE) tasked with commissioning, developing, appraising or adapting national guidelines, health technology assessments and policy briefs • Enhance the capacity of academic institutions to cover all areas needed for evidence-to-policy processes	As in A

NIPH: National Institute for Public Health; NIHR: National Institute for Health Research; NICE: National Institute of Health and Clinical Excellence

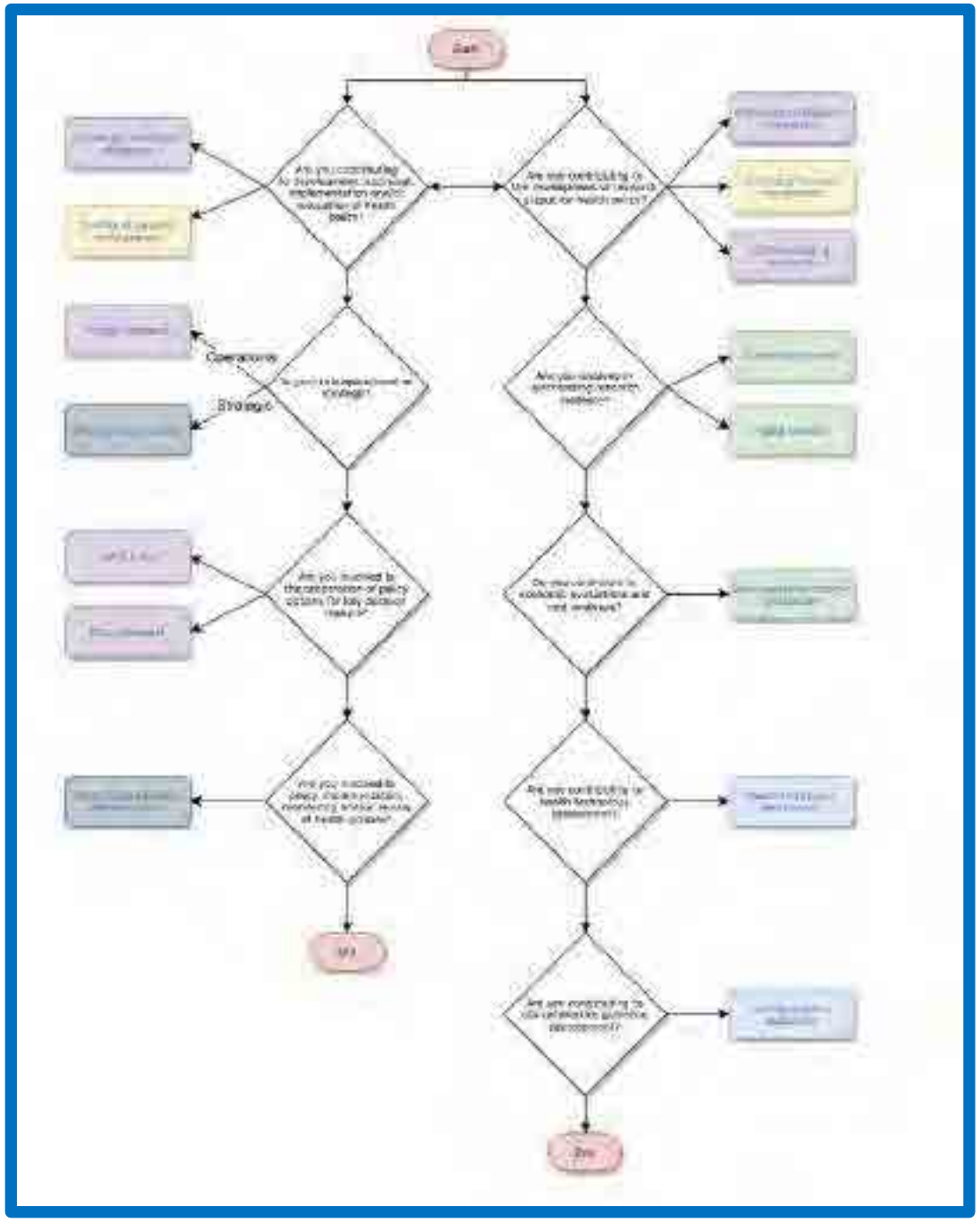
Taken from document EM/RC66/6 – agenda item 3(d)
http://applications.emro.who.int/docs/RC_Technical_Papers_2019_6_en.pdf

WHO-EM/SID/001/E

Integrated multi-concept approach to evidence-informed policy-making for health

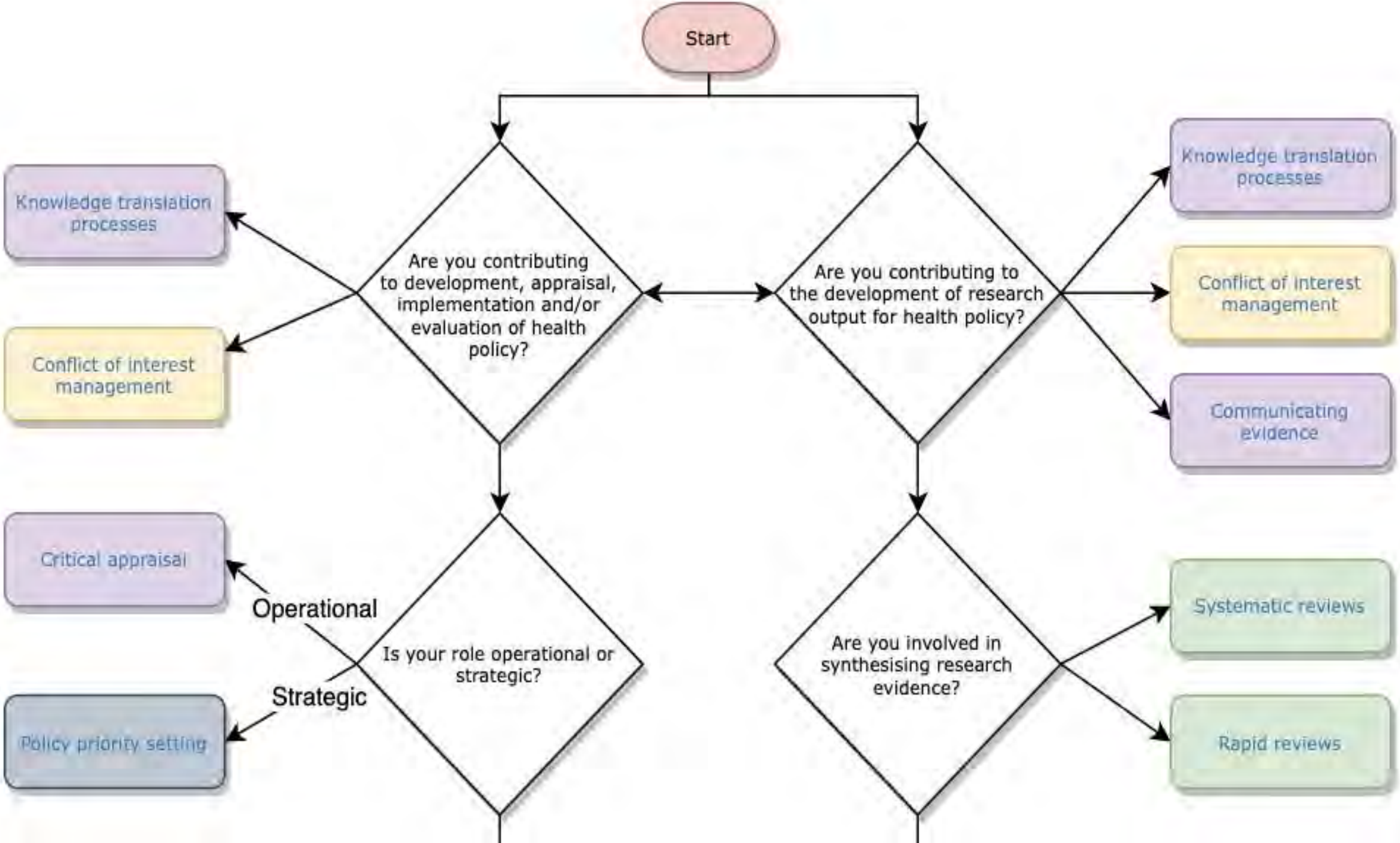
Sources of evidence and knowledge products to address policy questions

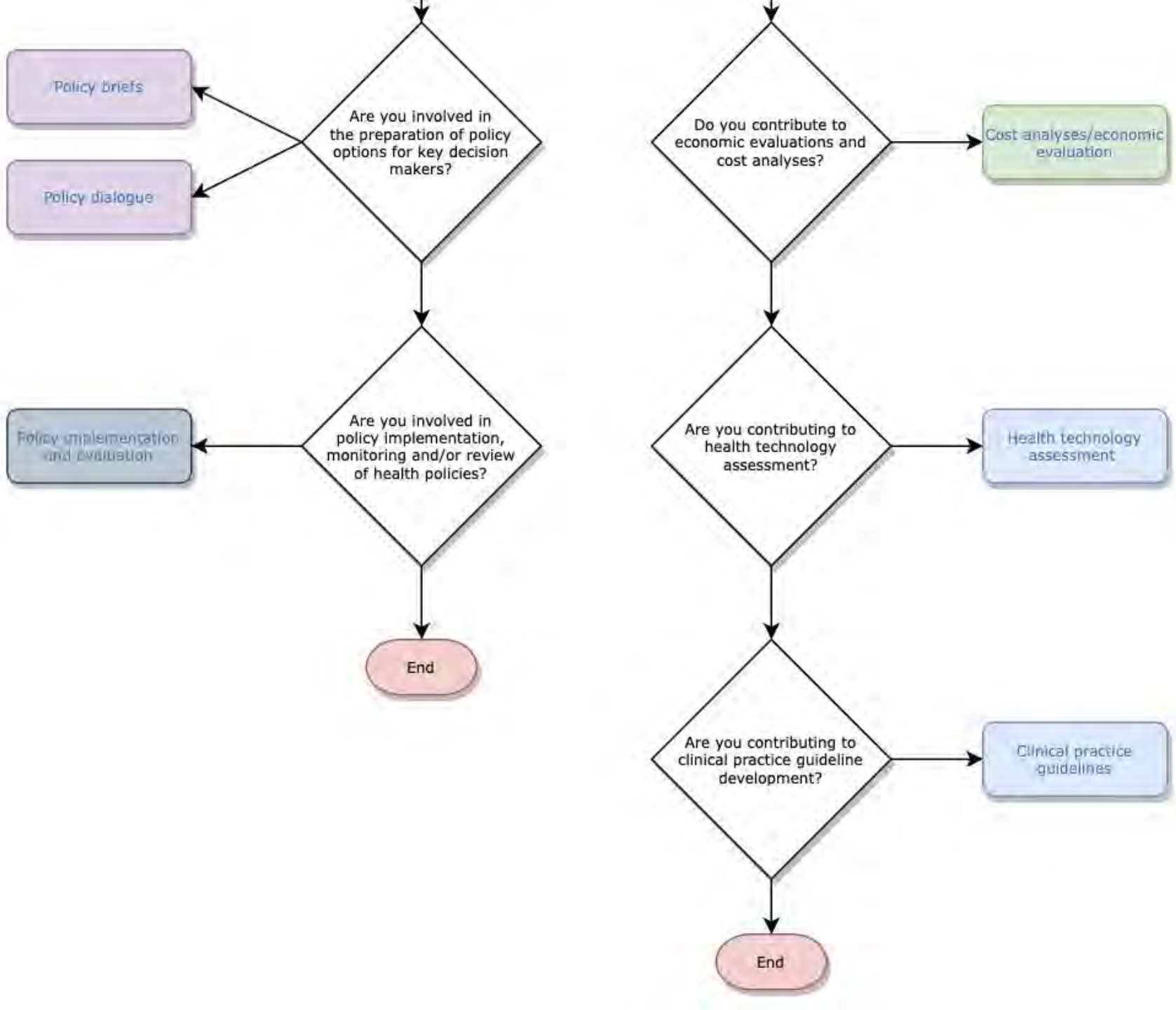
Main policy question	Usual sources of evidence	Main knowledge products that address the policy question
What are the main priority issues/problems for decision-making?	Household and facility surveys Surveillance studies Routine health information Cause of death and burden of disease studies	Policy briefs Data fact sheets Health information observatories
What can be done (potential policy interventions and their safety and effectiveness)?	Systematic reviews of interventional studies Interventional studies Surveillance studies (for safety)	Clinical or public health guidelines Health technology assessment studies Policy briefs
Are the policy options cost-effective?	Systematic reviews of cost–effectiveness studies Economic modelling and cost analyses	Health technology assessment studies Clinical or public health guidelines Policy briefs
How feasible are the policy options (sustainability, affordability, acceptability and implementation strategies)?	Systematic reviews of qualitative studies Economic modelling and cost analyses Qualitative studies Process evaluations User and provider surveys	Policy briefs Policy dialogue Health technology assessment studies Clinical or public health guidelines



Evidence-informed policy-making (EIPM) training package

WHO EMRO Training Package


Start
Are you contributing to development, appraisal, implementation and/or evaluation of health policy?
Knowledge translation processes
Conflict of interest management
Are you contributing to the development of research output for health policy?
Knowledge translation processes
Conflict of interest management
Communicating evidence
Is your role operational or strategic?
Operational
Strategic
Critical appraisal
Policy priority setting
Are you involved in synthesising research evidence?
Systematic reviews
Rapid reviews


Are you involved in the preparation of policy options for key decision makers?
Policy briefs
Policy dialogue
Are you involved in policy implementation, monitoring and/or review of health policies?
Policy implementation and evaluation
End
Do you contribute to economic evaluations and cost analyses?
Cost analyses/economic evaluation
Are you contributing to health technology assessment?
Health technology assessment
Are you contributing to clinical practice guideline development?
Clinical practice guidelines
End

Regional action plan

for the implementation of the framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

Regional action plan

for the implementation of the framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region

(2020–2024)

World Health Organization
Eastern Mediterranean

Table of contents

Evidence for Action

Available evidenc

WHO and PAHO Guidelines

PAHO databases

Recommendations and

PIE

Compilation of documents that contribute to health policy decision-making based on the best available evidence. Tra knowledge exchange processes between managers, policymakers, researchers, and civil society representatives in th management of services and systems are included.

Visit

BRISA

Americas regional database for health technology assessment reports.

Visit

Lilacs

Lilacs is the most important and comprehensive database in Latin America and the Caribbean. It gathers more than 8 thousand records of peer-reviewed journal articles, theses and dissertations, government documents, conference pro and books, published since 1982.

Visit

BIGG-REC

BIGG-REC is the database that collect all clinical, public health, and health policy recommendations issued by WHO a that follow the GRADE system, organized according to the SDG-3 targets

Visit

Global Coalition for Evidence Launched
Prague, September 2024

World Health Organization
Eastern Mediterranean Region

WORLD
EVIDENCE-BASED
HEALTHCARE DAY
20 OCTOBER

ebhc

WORLD EVIDENCE-BASED HEALTHCARE DAY 20 OCT 2024

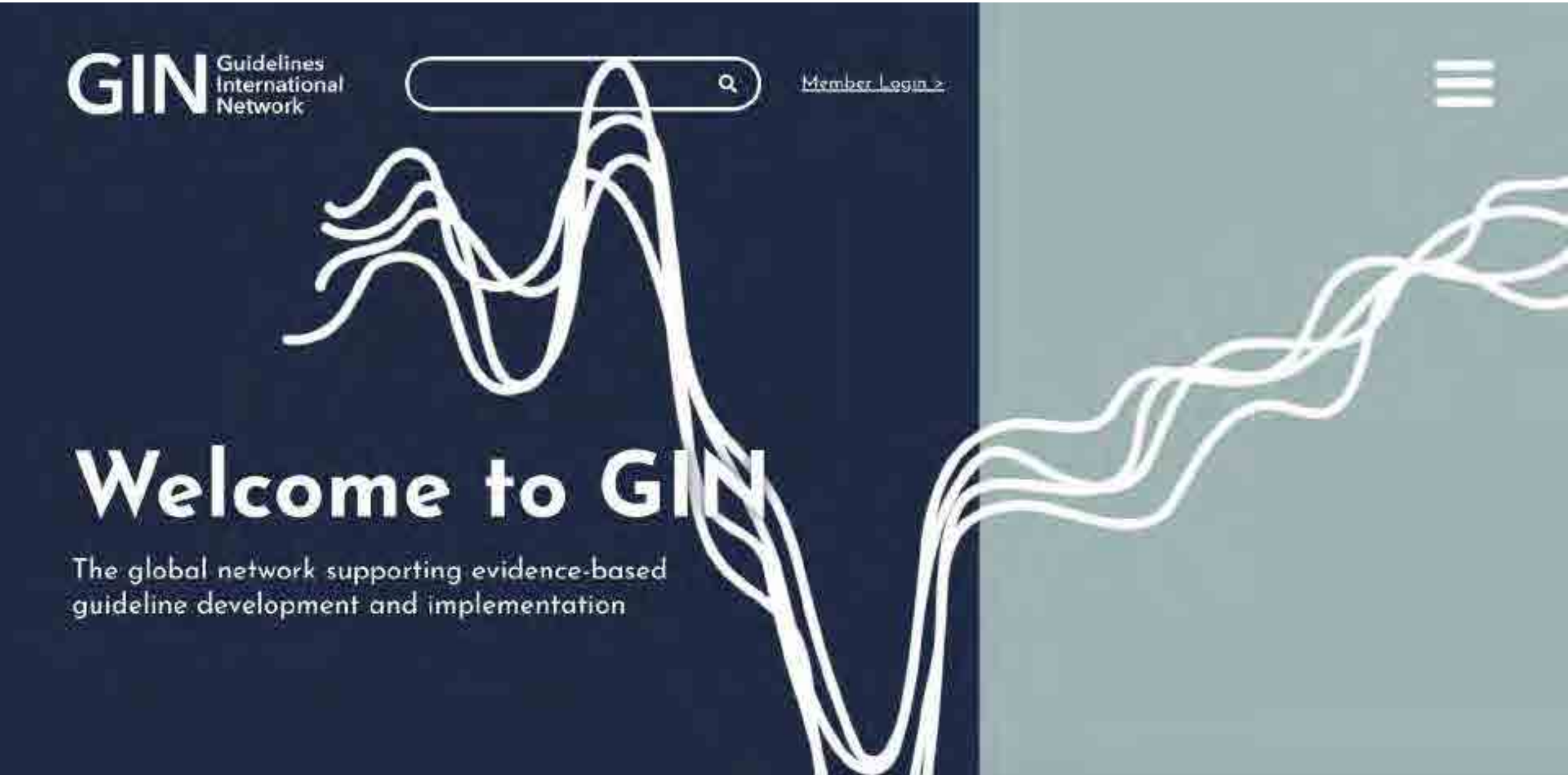
#WorldEBHCDay

2024 CAMPAIGN

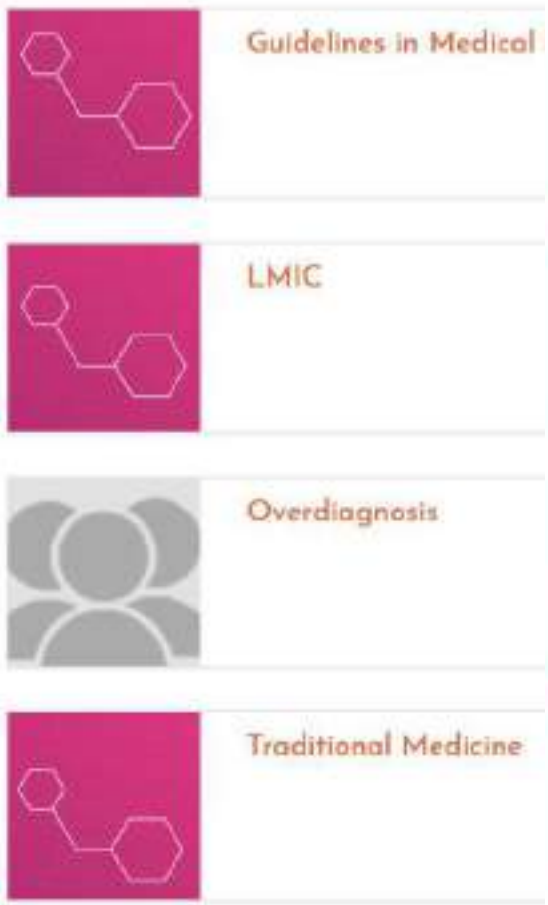
TAKE ACTION

RESOURCES

2024 CAMPAIGN: HEALTH AND BEYOND: FROM EVIDENCE TO ACTION


GIN Guidelines International Network
Member Login
Welcome to GIN
The global network supporting evidence-based guideline development and implementation

16 GIN Working Groups (WGs)



7 GIN Regional Communities (RCs)

Africa

Arab

Asia

Australia & New Zealand (ANZ)

Iberoamerica

Nordic

North America (NA)

WG & RC Chairs

GIN Guidelines International Network

Description

About GIN Arab

Welcome to the GIN Arab Regional Community web pages. With the movement towards evidence-based health care and accreditation of health care institutions, many of the Arab countries have become increasingly interested in clinical practice guidelines as the way to provide evidence-based health care and thereby satisfying the accreditation standards. GIN, as the international body that connects all guidelines developers, implementers, researchers, students, and other stakeholders, has a pivotal role to play in pushing forwards this guideline activity throughout the region.

The Arab states occupy an area stretching from the Atlantic Ocean in the west to the Arabian Sea in the east, and from the Mediterranean Sea in the north to the Horn of Africa and the Indian Ocean in the southeast. The Arab world has a combined population of around 422 million people, with over half under 25 years of age. The 22 Arab countries (members of the Arab league) in alphabetical order are: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen. Despite the similarities and differences in the disease morbidity patterns and health care systems in these countries, the use of clinical practice guidelines has never been a feature in the delivery of health care resulting in a wide variation of practice.

Aims & Objectives

World Health Organization
Eastern Mediterranean Region

1. Provide a **network** for Arab guideline users, developers, and other stakeholders.
2. To form **partnerships** and discuss regional guideline issues.
3. Enhance and promote relationships between GIN and the Arab guideline community.
4. Collaborate with regional and international clinical guidelines stakeholders to facilitate local adaptation of guidelines.
5. Provide an ongoing framework to translate significant research findings into appropriate policies and practices.
6. Expand the **GIN membership** by engaging individuals and organizations in the Arab world.
7. Interact with GIN groups to encourage feedback and avoid duplicating efforts.
8. Organize and promote regional events and an annual satellite conference that is non-competitive with the annual GIN conference.
9. Improve the efficiency and effectiveness of evidence-based guideline development, adaptation, dissemination, and implementation in the Arab world.

workshops to teach its methodologies and tools.

GIN Arab Regional Community: *Great Expectations!*

World Health Organization
Eastern Mediterranean Region

Overall Global Impact of EBM Initiatives

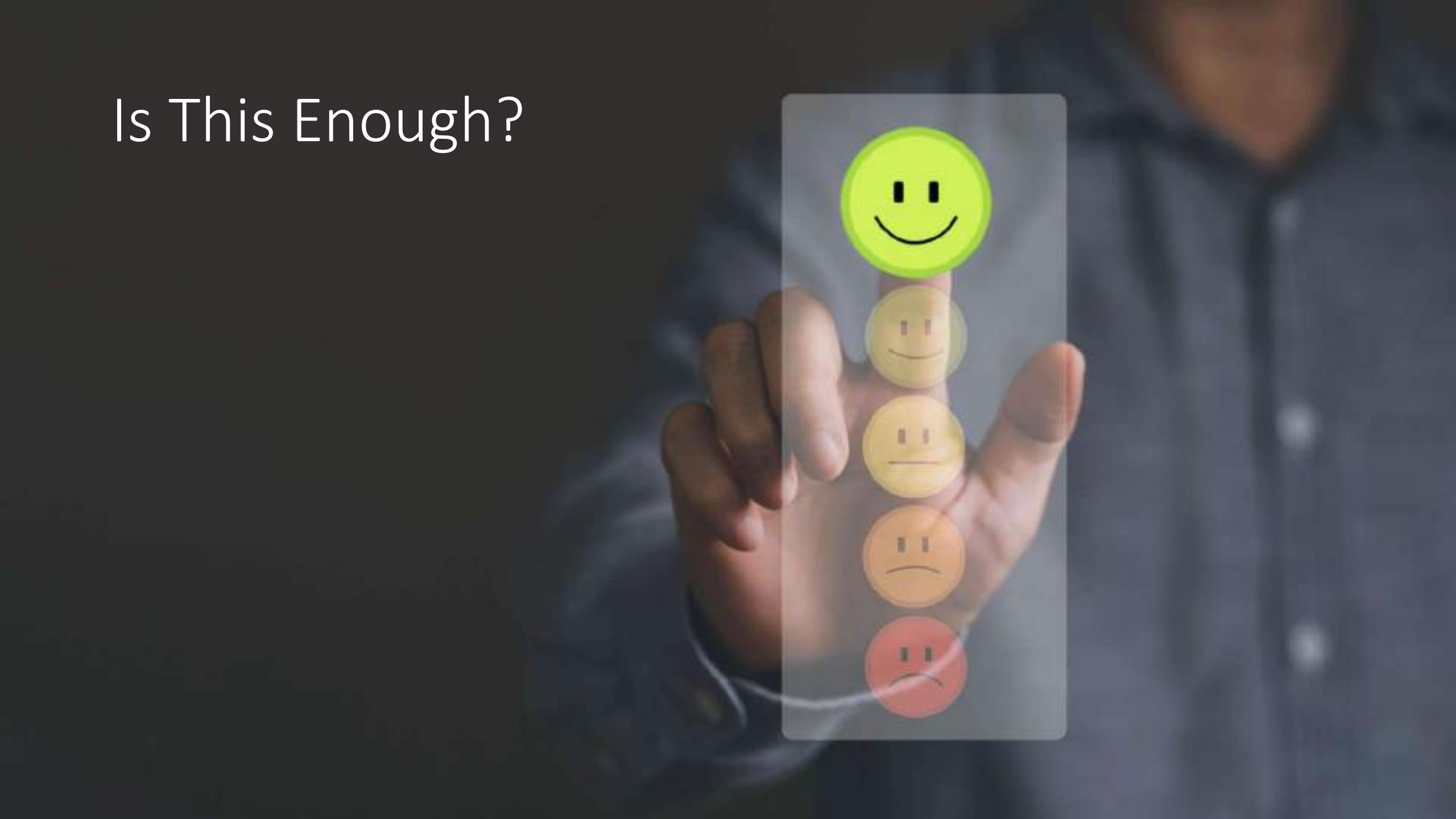
World Health Organization
Eastern Mediterranean Region

Overall Global Impact of EBM Initiatives

- ✓Improved Patient Outcomes
- ✓Harmonization of Guidelines
- ✓Health Equity
- ✓Reduction in Healthcare Costs
- ✓Partnerships and coalitions

Voluntary basis?!

Is This Enough?



Challenges Remain…

Challenges Faced By Global EBM Initiatives

World Health Organization
Eastern Mediterranean Region

1. Variability in Healthcare Systems and Resources
2. Limited Access to Evidence and Guidelines
3. Cultural and Contextual Differences
4. Political and Regulatory Challenges
5. Resistance to Change and Professional Autonomy

Challenges Faced By Global EBM Initiatives

World Health Organization
Eastern Mediterranean Region

6. Updating Guidelines and Keeping Pace with New Evidence
7. Fragmentation and Lack of Coordination
8. Implementation and Adherence Challenges
9. Sustainability and Long-Term Adoption
10. Technological Barriers

Challenges Faced by EMR/MENA Countries: Evidence Syntheses

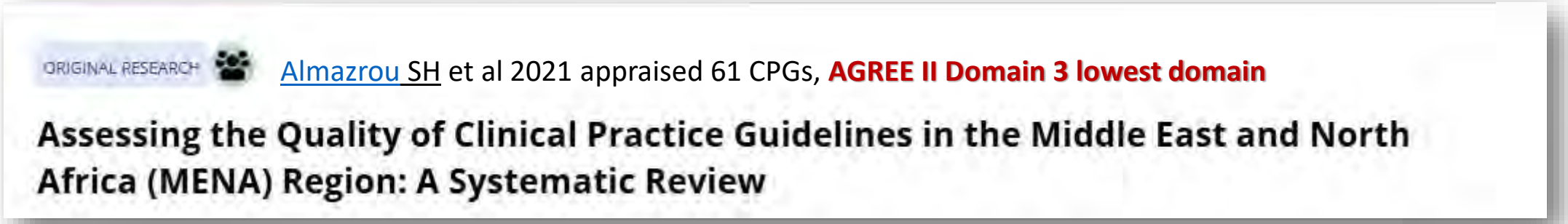
World Health Organization
Eastern Mediterranean Region

1. Limited access to quality regional research
2. Integrating real-world data
3. Improving transparency in evidence appraisal
4. Underrepresentation of the EMR population in global research
5. Variability in research capacity and data reporting
6. Enhancing global collaboration in CPG development

Common Challenges in EMR Guidelines Quality EMR/MENA

World Health Organization
Eastern Mediterranean Region

- Guidelines often lack methodological transparency.
- Heavy reliance on expert consensus rather than systematic evidence synthesis.
- Limited training in quality assessment tools (for studies or for guidelines).


ORIGINAL RESEARCH

Almazrou SH et al 2021 appraised 61 CPGs, **AGREE II Domain 3 lowest domain**

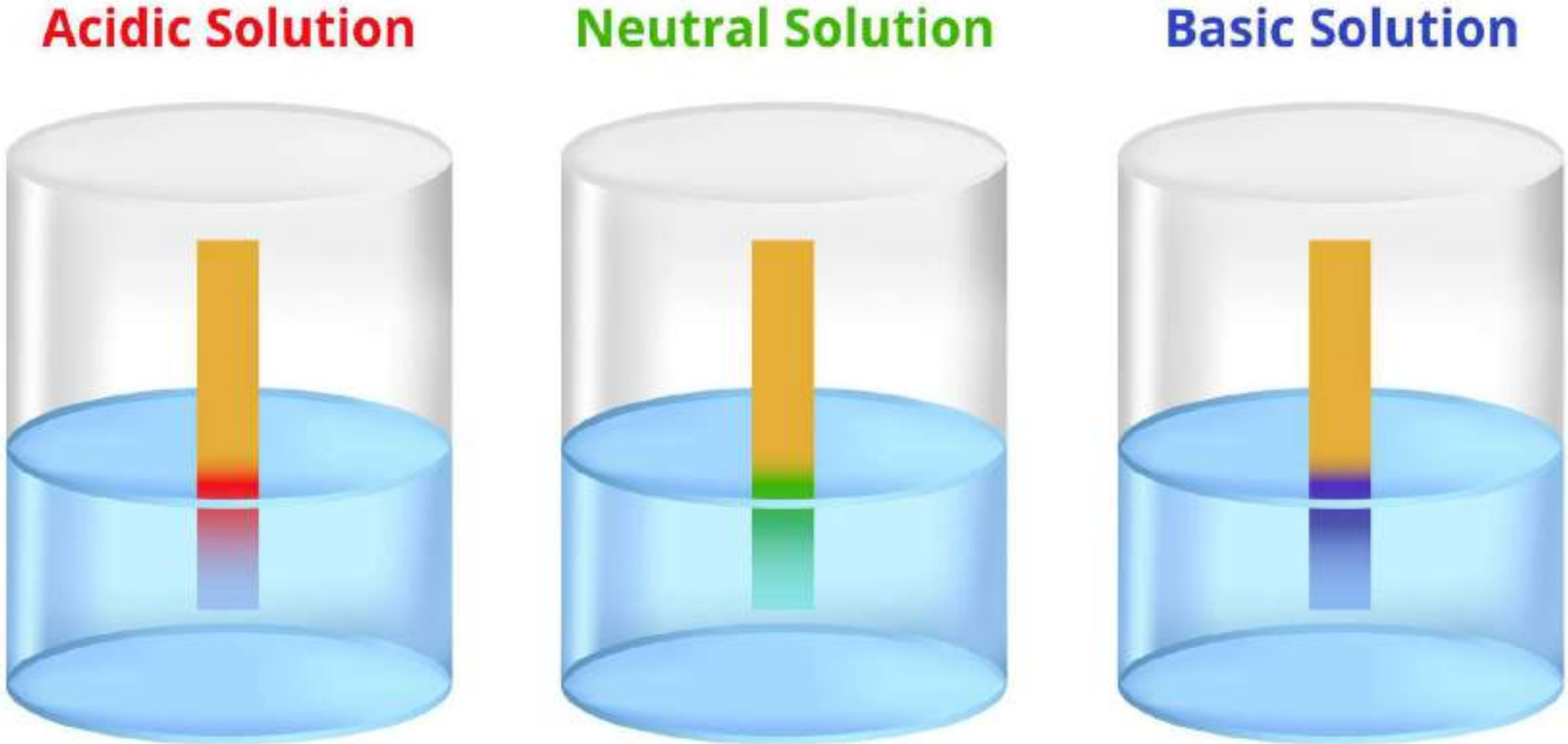
Assessing the Quality of Clinical Practice Guidelines in the Middle East and North Africa (MENA) Region: A Systematic Review

https://doi.org/10.2147/JMDH.S284689

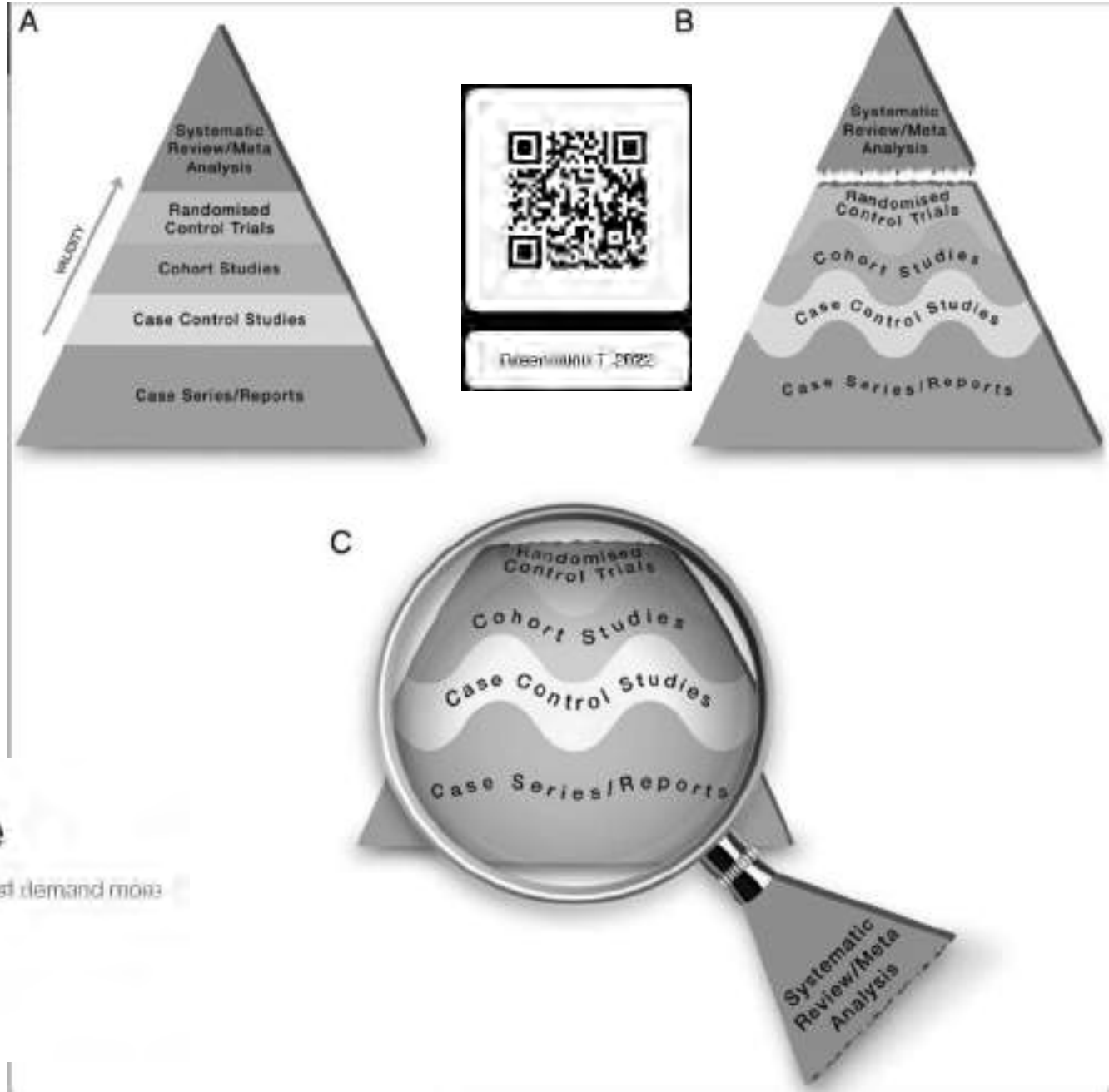
Political and Economic Barriers to Evidence-Based Guidelines in EMR/MENA

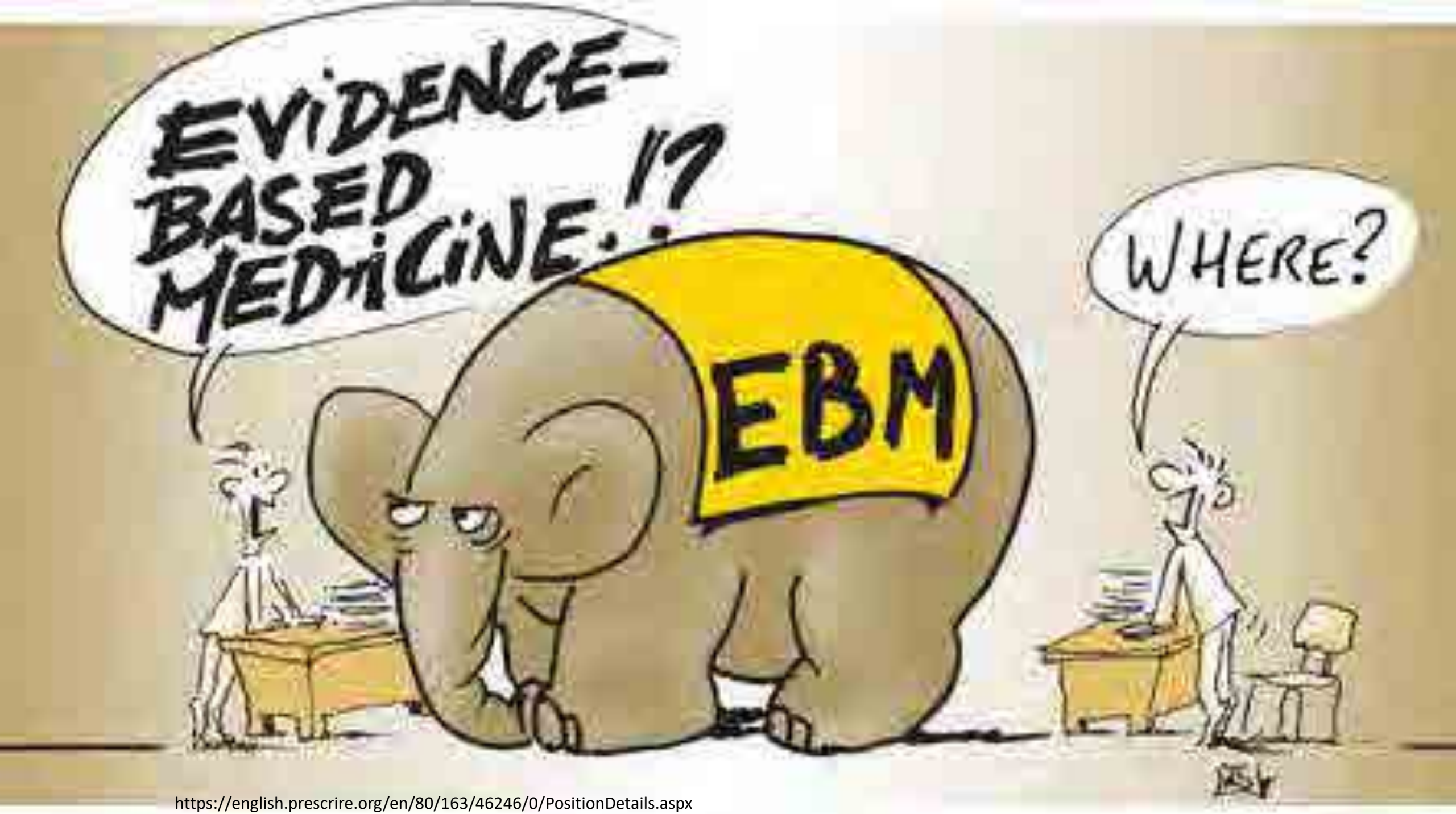
- **Resistance to change** from policymakers and healthcare professionals
- **Political instability** and **funding constraints.**
- The role of **international organizations and donors** in facilitating guideline implementation.

PH PAPER INDICATORS



COVID-19 and EIPM

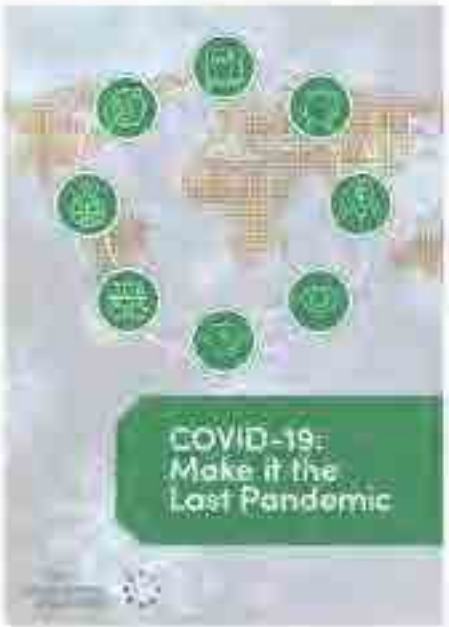




https://english.prescrire.org/en/80/163/46246/0/PositionDetails.aspx

The Independent Panel

The Independent Panel for Pandemic Preparedness and Response



The Independent Panel for Pandemic Preparedness and Response was Co-Chaired by Her Excellency Ellen Johnson Sirleaf and the Right Honourable Helen Clark.

The Independent Panel began its work in September 2020, and submitted its main report, **COVID-19: Make it the Last Pandemic**, to the World Health Assembly in May 2021.

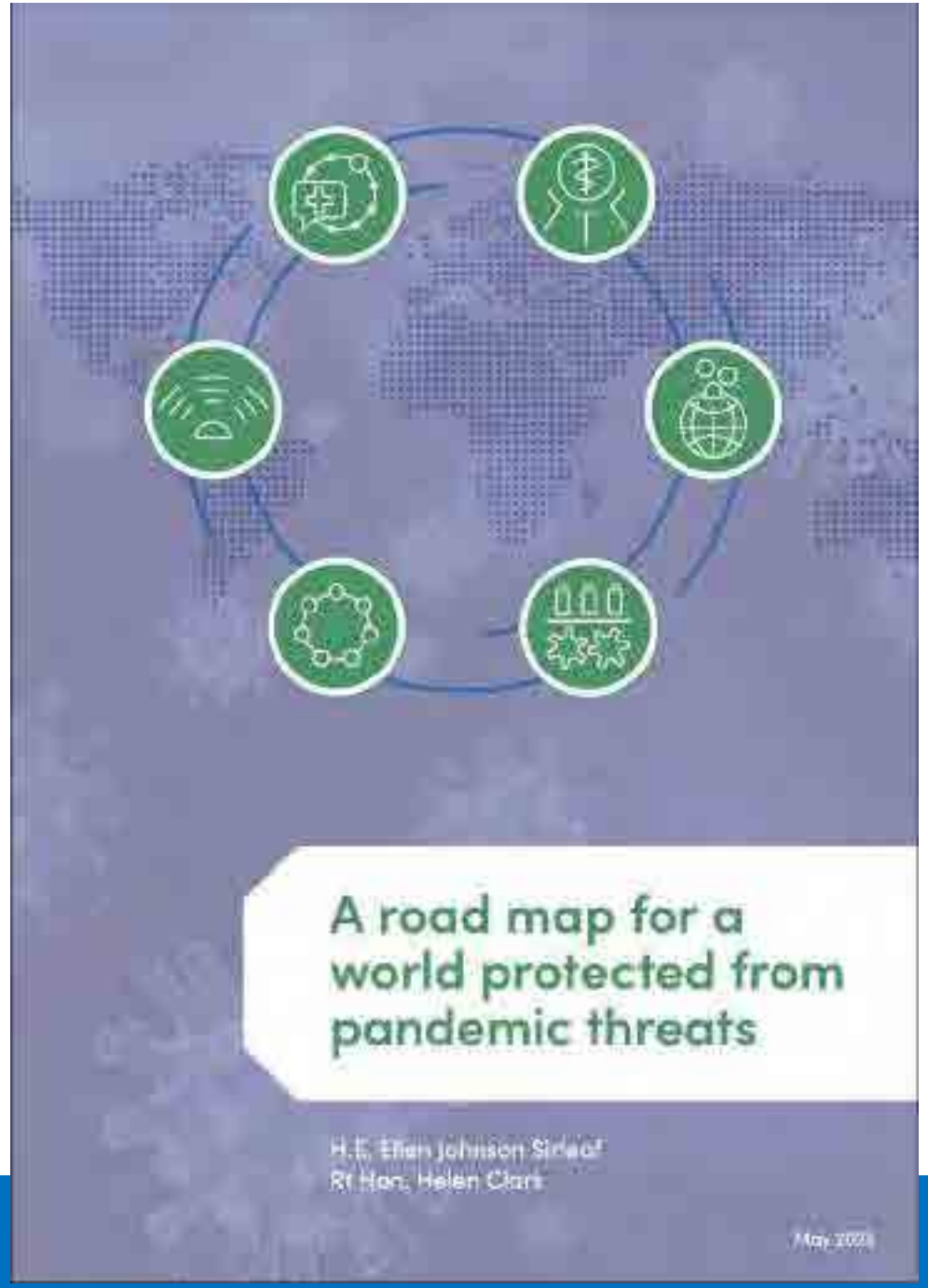
The report contained the Panel's findings and recommendations for action to curb the COVID-19 pandemic and to ensure that any future infectious disease outbreak would not become another catastrophic pandemic.

Following the release of the main report, the Co-Chairs and Panel members continued to support discussions focussed on implementing their package of recommendations.

In November 2021, the former Co-Chairs released a six-month accountability report, entitled **Losing Time: End this Pandemic and Secure the Future**.

In May 2022, the former Co-Chairs released a one-year assessment report, **Transforming or Tinkering? Inaction lays the groundwork for another pandemic.**

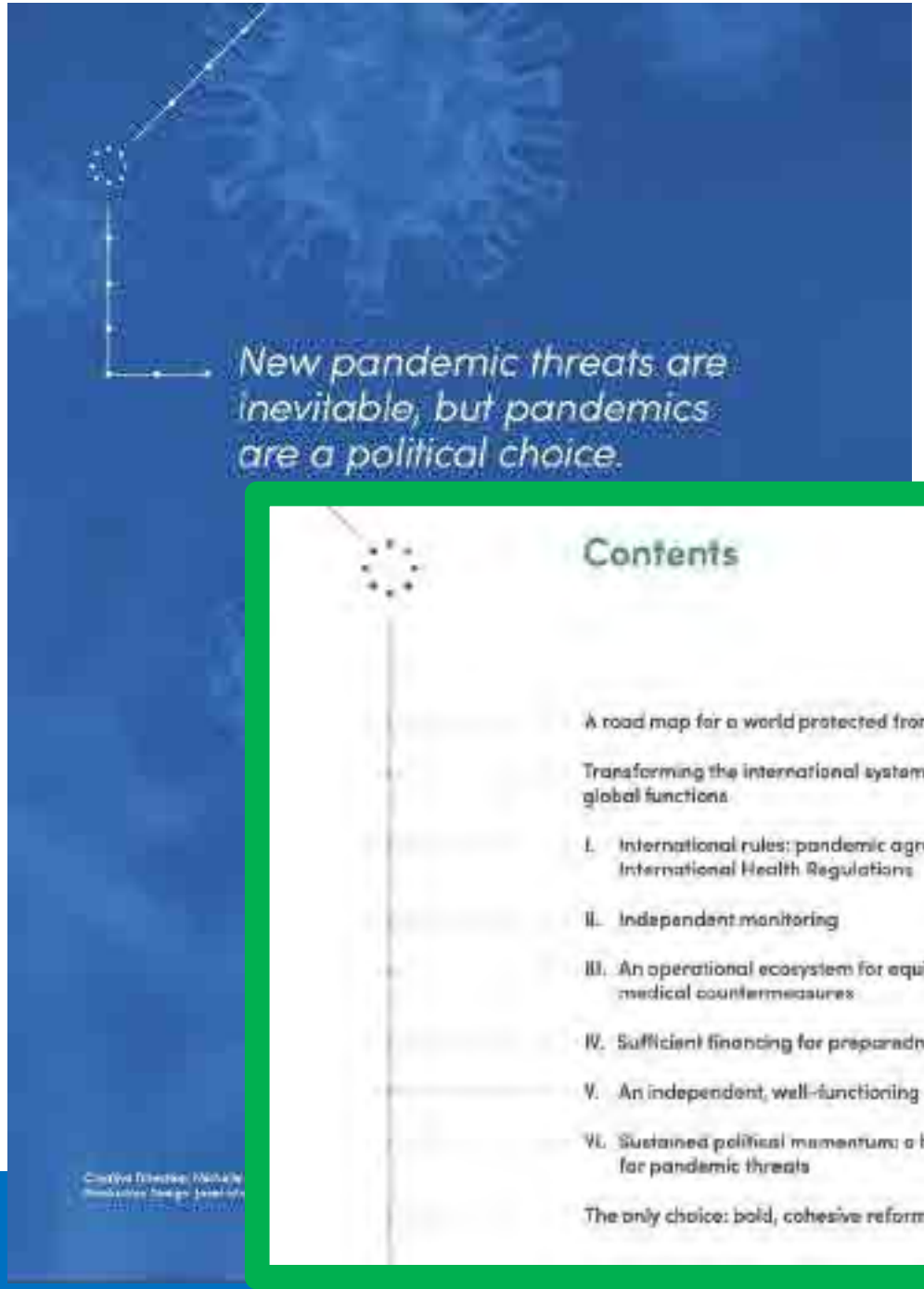
In May 2023, the former Co-Chairs released **A Road Map**



A road map for a world protected from pandemic threats

H.E. Ellen Johnson Sirleaf
Rt Hon. Helen Clark

May 2021



New pandemic threats are inevitable, but pandemics are a political choice.

World Health Organization

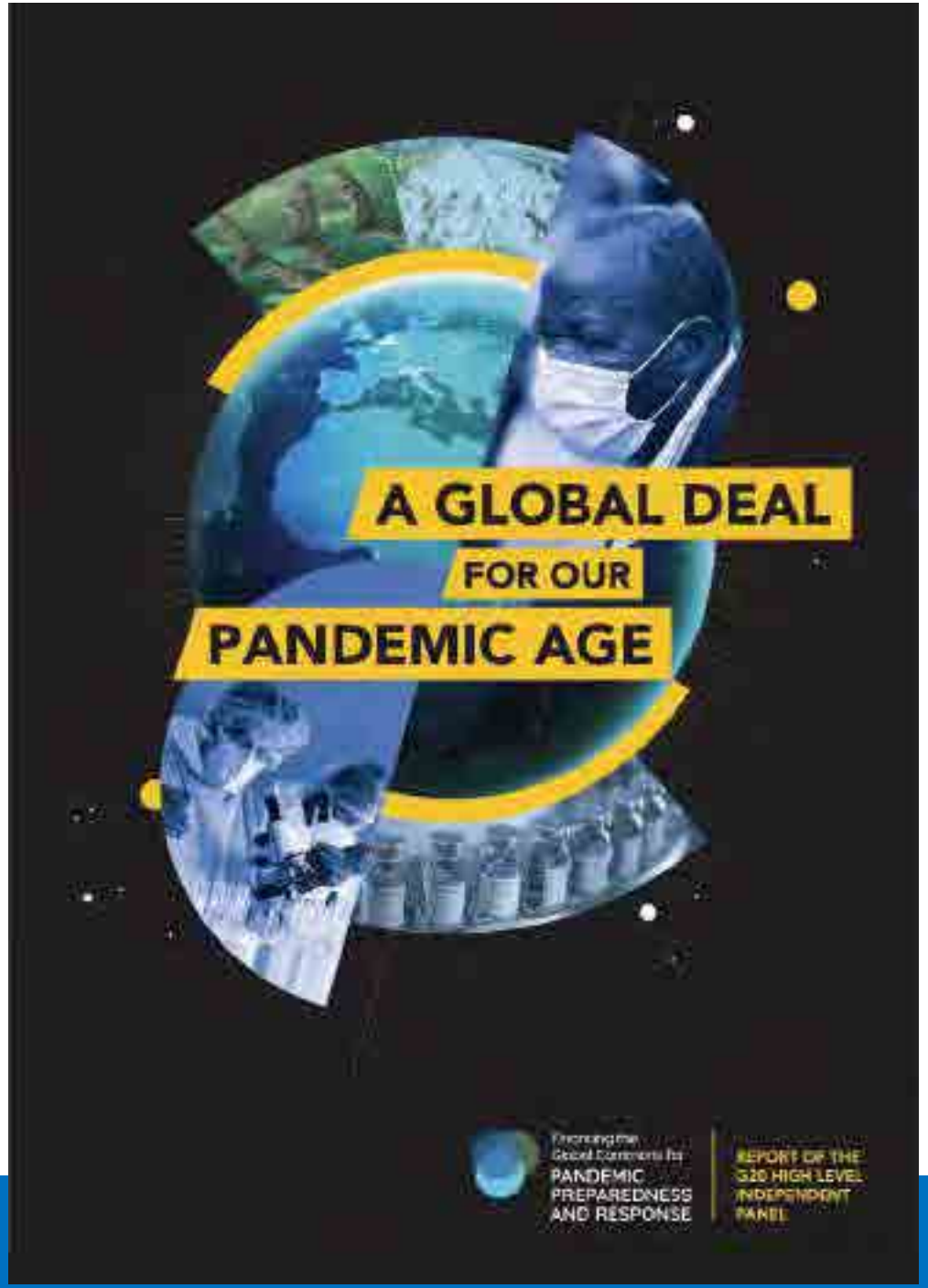
Eastern Mediterranean Region

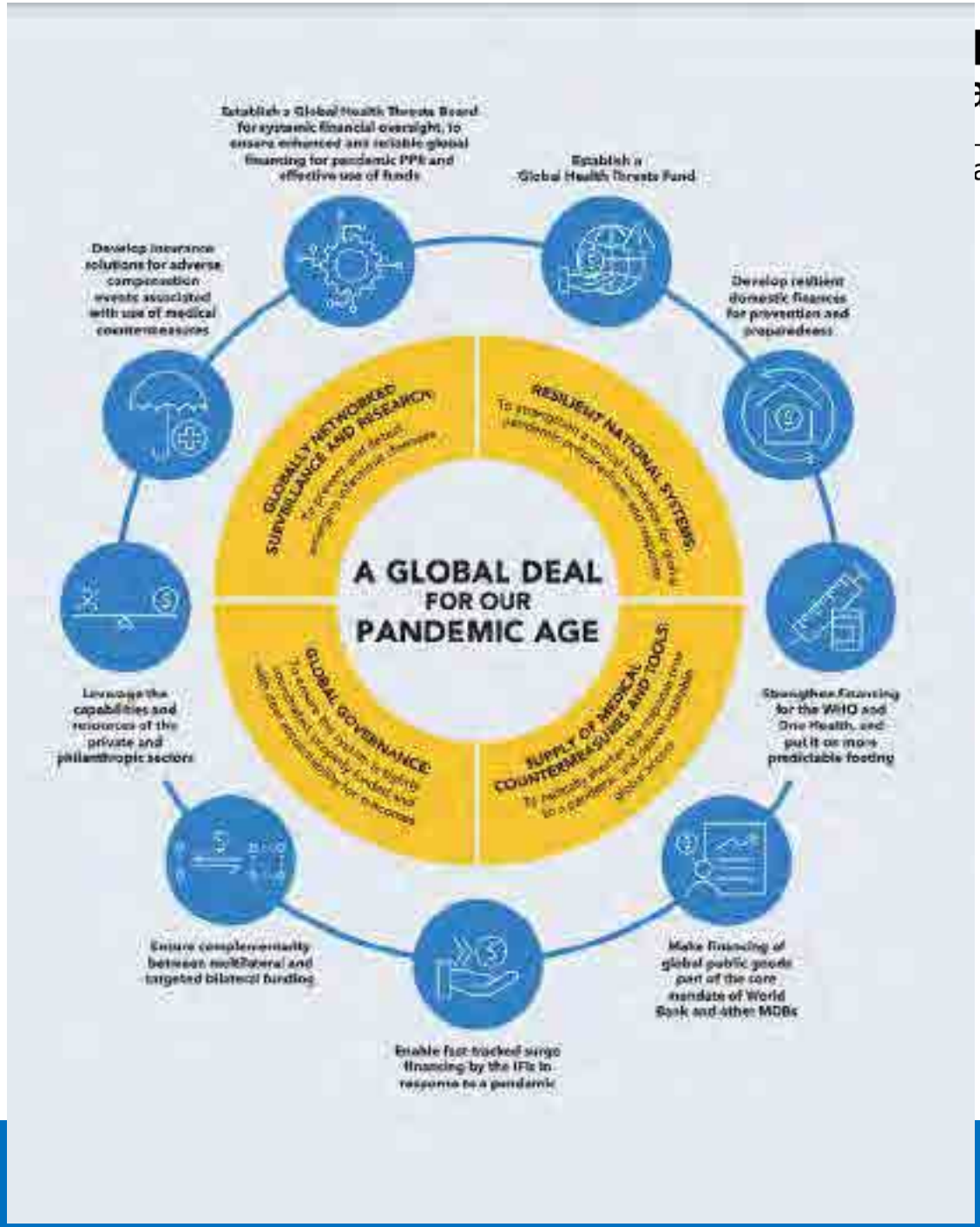
The Independent Panel

Contents

G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response

A G20 High Level Independent Panel (HLIP) on Financing the Global Commons for Pandemic Preparedness and Response was established on 26 January 2021..





ld Health
anization

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The Lancet Commissions

The Lancet Commission on lessons for the futur COVID-19 pandemic

[illegible]

COVID-19 response: a massive global failure

Widespread failures at multiple levels worldwide have led to millions of pr and a reversal in progress towards sustainable development for many cou

At a national level, most governments...

When US prepared and unable to adequately respond

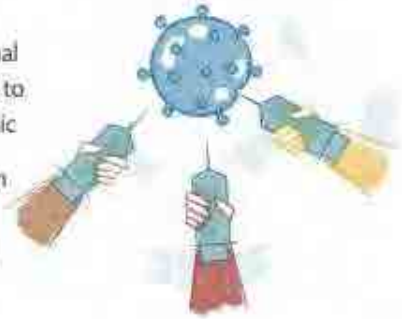
Were too slow in their response to the outbreak of SARS-CoV-2

Paid too little attenti to the most vulnerab groups in their societ

The Lancet *COVID-19 Commission* makes 11 recommendations in three key areas of interest

Practical steps to control and understand the current pandemic

- Establish global and national vaccination-plus strategies to end the COVID-19 pandemic
- An intensified investigation into possible origins of SARS-CoV-2, both natural and laboratory-related



Necessary investments to strengthen the defence against future pandemics

- Strengthen national health systems and increase investments in primary health care and public health
- National pandemic preparedness plans
- Financing for sustainable development and green recovery plans

Ambitious proposals to enhance multilateralism

- Maintain WHO as the lead institution for the response to emerging infectious diseases
- Establish a global pandemic agreement and strengthen the International Health Regulations
- Reform of WHO governance
- Regulations for the prevention of pandemics
- G20 support for finance, research and development, and the production capacities of low-income and middle-income countries
- New Global Health Fund to ensure Sustainable Development Goal 3 (Health for All), universal health coverage, and functioning health systems

Illustrations by Elfy Chiang

Read the full *Lancet COVID-19 Commission* for more details

Cochrane Library

Trusted evidence.
Informed decisions.
Better health.

Review language : English

Title Abstract Key

Cochrane reviews | Searching for trials | Clinical Answers | About | Help

Cochrane Database of Systematic reviews Review - Intervention

Physical interventions to interrupt or reduce the spread of respiratory viruses

Tom Jefferson, Liz Dooley, Eliana Ferroni, Lubna A Al-Ansary, Mieke L van Driel, Ghada A Bawazeer, Mark A Jones, Tammy C Hoffmann, Justin Clark, Elaine M Beller, Paul P Glasziou, John M Conly Authors' declarations of interest

Version published: 30 January 2023 Version history

https://doi.org/10.1002/14651858.CD006207.pub6

Collapse all Expand all

Abstract

Available in English | Español | فارسی | Français | ภาษาไทย

Data collection and analysis

We used standard Cochrane methodological procedures.

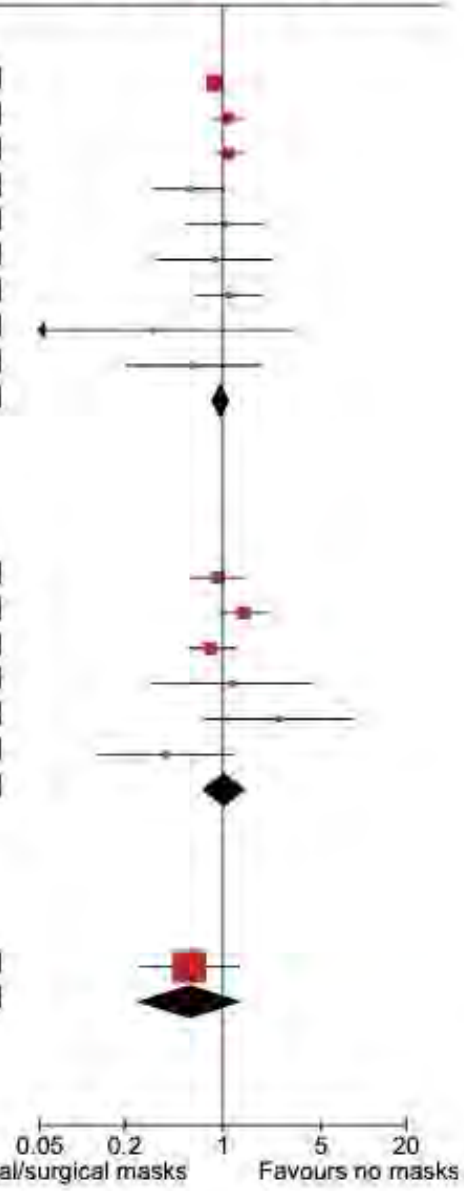
Main results

We included 11 new RCTs and cluster-RCTs (610,872 participants) in this update, bringing the total number of RCTs to 78. Six of the new trials were conducted during the COVID-19 pandemic; two from Mexico, and one each from Denmark, Bangladesh, England, and Norway. We identified four ongoing studies, of which one is completed, but unreported, evaluating masks concurrent with the COVID-19 pandemic.

Many studies were conducted during non-epidemic influenza periods. Several were conducted during the 2009 H1N1 influenza pandemic, and others in epidemic influenza seasons up to 2016. Therefore, many studies were conducted in the context of lower respiratory viral circulation and transmission compared to COVID-19. The included studies were conducted in heterogeneous settings, ranging from suburban schools to hospital wards in high-income countries; crowded inner city settings in low-income countries; and an immigrant neighbourhood in a high-income country. Adherence with interventions was low in many studies.

The risk of bias for the RCTs and cluster-RCTs was mostly high or unclear.

Study or Subgroup	log[Risk Ratio]	SE	Medical/surgical masks Total	No masks Total	Weight	Risk Ratio IV, Random, 95% CI
1.1.1 Influenza/COVID-like illness						
Abaluck 2022 (1)	-0.135	0.036	111525	155268	41.4%	0.87 [0.81 , 0.94]
Aiello 2012	0.095	0.115	392	370	19.8%	1.10 [0.88 , 1.38]
Alfelali 2020	0.095	0.105	3864	3823	21.9%	1.10 [0.90 , 1.35]
Barasheed 2014	-0.55	0.3	75	89	4.6%	0.58 [0.32 , 1.04]
Canini 2010	0.025	0.342	148	158	3.6%	1.03 [0.52 , 2.00]
Cowling 2008	-0.128	0.483	61	205	1.9%	0.88 [0.34 , 2.27]
MacIntyre 2009	0.1	0.28	186	100	5.2%	1.11 [0.64 , 1.91]
MacIntyre 2016	-1.139	1.16	302	295	0.3%	0.32 [0.03 , 3.11]
Suess 2012	-0.494	0.571	26	30	1.4%	0.61 [0.20 , 1.87]
Subtotal (95% CI)			**116579**	**160338**	**100.0%**	**0.95 [0.84 , 1.09]**
Heterogeneity: Tau² = 0.01; Chi² = 11.44, df = 8 (P = 0.18); I² = 30%						
Test for overall effect: Z = 0.71 (P = 0.48)						
1.1.2 Laboratory-confirmed influenza or SARS-cov-2						
Aiello 2012	-0.083	0.223	392	370	25.9%	0.92 [0.59 , 1.42]
Alfelali 2020	0.34	0.215	3864	3823	26.7%	1.40 [0.92 , 2.14]
Bundgaard 2021 (2)	-0.2	0.208	2392	2470	27.4%	0.82 [0.54 , 1.23]
Cowling 2008	0.148	0.674	61	205	5.8%	1.16 [0.31 , 4.34]
MacIntyre 2009	0.92	0.6225	186	100	6.6%	2.51 [0.74 , 8.50]
Suess 2012	-0.942	0.57	26	30	7.7%	0.39 [0.13 , 1.19]
Subtotal (95% CI)			**6921**	**6998**	**100.0%**	**1.01 [0.72 , 1.42]**
Heterogeneity: Tau² = 0.07; Chi² = 8.52, df = 5 (P = 0.13); I² = 41%						
Test for overall effect: Z = 0.07 (P = 0.95)						
1.1.3 Laboratory-confirmed other respiratory viruses						
Bundgaard 2021	-0.55	0.42	2392	2470	100.0%	0.58 [0.25 , 1.31]
Subtotal (95% CI)			**2392**	**2470**	**100.0%**	**0.58 [0.25 , 1.31]**
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.31 (P = 0.19)						



Footnotes

(1) Covid-like-illness

(2) SARS-cov-2

Authors' conclusions

The high risk of bias in the trials, variation in outcome measurement, and relatively low adherence with the interventions during the studies hampers drawing firm conclusions. There were additional RCTs during the pandemic related to physical interventions but a relative paucity given the importance of the question of masking and its relative effectiveness and the concomitant measures of mask adherence which would be highly relevant to the measurement of effectiveness, especially in the elderly and in young children.

There is uncertainty about the effects of face masks. The low to moderate certainty of evidence means our confidence in the effect estimate is limited, and that the true effect may be different from the observed estimate of the effect. The pooled results of RCTs did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks. There were no clear differences between the use of medical/surgical masks compared with N95/P2 respirators in healthcare workers when used in routine care to reduce respiratory viral infection. Hand hygiene is likely to modestly reduce the burden of respiratory illness, and although this effect was also present when ILI and laboratory-confirmed influenza were analysed separately, it was not found to be a significant difference for the latter two outcomes. Harms associated with physical interventions were under-investigated.

There is a need for large, well-designed RCTs addressing the effectiveness of many of these interventions in multiple settings and populations, as well as the impact of adherence on effectiveness, especially in those most at risk of ARIs.

ELSEVIER

Journal of Clinical Epidemiology 142 (2022) 333–370

Journal of Clinical Epidemiology

ORIGINAL ARTICLE

International alliance and AGREE-ment of 71 clinical practice guidelines on the management of critical care patients with COVID-19: a living systematic review

Yasser S. Amer[a,b,c,1], Maher A. Titi[b,d,1], Mohammad W. Godah[e,2], Hayfaa A. Wahabi[b,f], Layal Hneiny[g,4], Manal Mohamed Abouelkheir[h,5], Muddathir H. Hamad[i,1], Ghada Metwally ElGohary[j,k,3], Mohamed Ben Hamouda[l,6], Hella Ouertatani[m,6], Pamela Velasquez-Salazar[n,7], Jorge Acosta-Reyes[o,8], Samia M. Alhabib[p,q,9], Samia Ahmed Esmaeil[b,3], Zbys Fedorowicz[r,10], Ailing Zhang[s,11], Zhe Chen[s,11], Sarah Jayne Liptrott[t,12], Niccolò Frungillo[u,13], Amr A. Jamal[b,f,3], Sami A. Almustanyir[v,14], Newman Ugochukwu Dieyi[w,15], John Powell[x,y,16,17], Katrina J. Hon[w,z,18], Rasmieh Alzeidan[aa,3], Majduldeen Azzo[bb,19], Sara Zambrano-Rico[cc,20], Paulina Ramirez-Jaramillo[cc,20], Ivan D. Florez[dd,ee,21,*]

Journal of Clinical Epidemiology 142 (2022) 199–199

Journal of Clinical Epidemiology

COMMENTARY

Guidelines developed under pressure. The case of the COVID-19 low-quality "rapid" guidelines and potential solutions

Ivan D. Florez[a,b,*], Yasser Sami Amer[c,d,e,f], Michael McCaul[g], John N Lavis[h,i], Melissa Brouwers[j]

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[e] Research Chair for Evidence-Based Health Care and Knowledge Translation, Deanship of Scientific Research, King Saud University, Riyadh, Saudi Arabia
[f] Alexandria Center for Evidence-Based Clinical Practice Guidelines, Alexandria University Medical Council, Alexandria University, Alexandria, Egypt
[g] Centre for Evidence-based Health Care, Division of Epidemiology and Biostatistics, Department of Global Health, Stellenbosch University, South Africa
[h] McMaster Health Forum and Department of Health Research Methods, Evidence and Impact, McMaster University, Hamilton, Ontario, Canada
[i] Africa Centre for Evidence, University of Johannesburg, Johannesburg, South Africa
[j] School of Epidemiology and Public Health, University of Ottawa, Ottawa, Ontario, Canada

Received 25 October 2021; Accepted 6 November 2021; Available online 13 November 2021

Global Commission on Evidence

To Address Societal Challenges

World Health Organization
Eastern Mediterranean Region

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John Lavis
Director

Jeremy Grimshaw
Co-lead, RISE (Ottawa Hospital Research Institute)

Funders

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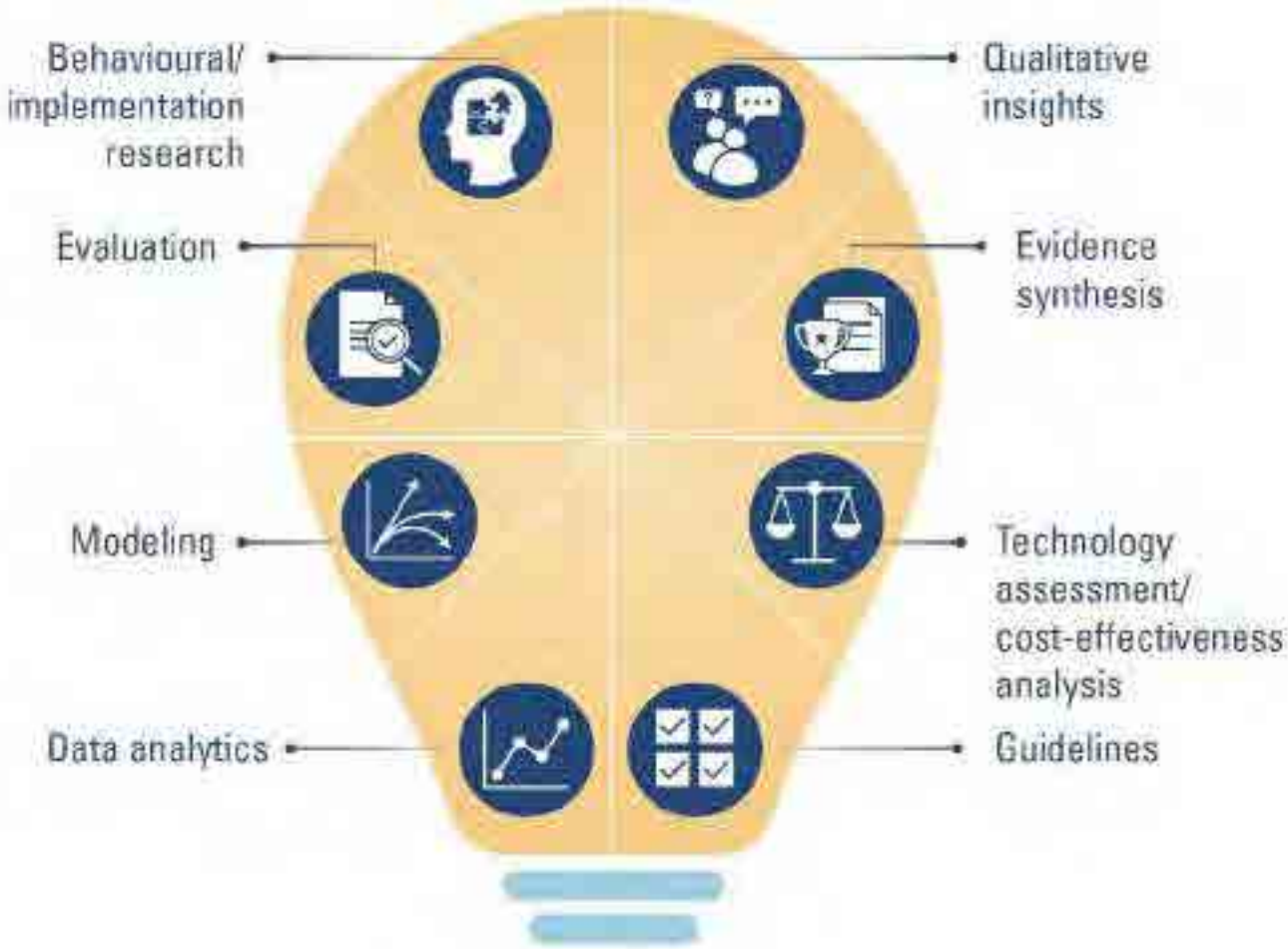
- American Institutes for Research
- Canadian Institutes of Health Research through a grant to the McMaster Health Forum on behalf of the COVID-19 Evidence Network to support Decision-making (COVID-END)
- CMA Foundation / Fondation AMC
- Healthcare Excellence Canada
- Health Research Board
- Michael Smith Health Research BC.

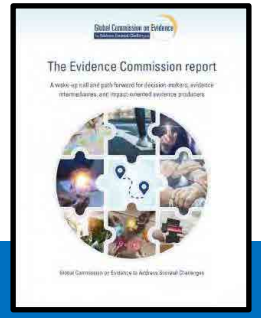
Organizations may join this effort to take the work of the Global Evidence Commission farther, faster. Our independent panel of commissioners has produced a report with recommendations and is pursuing a variety of pathways to influence (throughout 2022 and 2023) to strengthen the use of evidence by decision-makers in addressing societal challenges, both in routine times and in future global crises.

World Health Organization
Eastern Mediterranean Region

Eight Different Forms of Evidence



2023



Four Types of Decision Makers

2023

Government policymakers

Need to be convinced there's a compelling problem, a viable policy and conducive politics

Professionals

(e.g., doctors, engineers, police officers, social workers and teachers)

Need the opportunity, motivation and capability to make a professional decision or to work with individual clients to make shared decisions

Organizational leaders

(e.g., business and non-governmental organization leaders)

Need a business case to offer goods and services

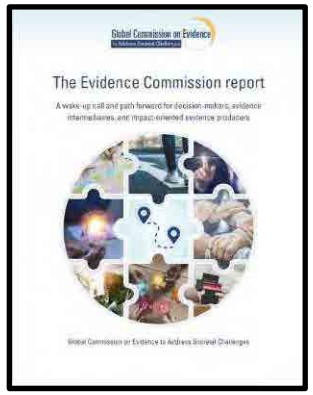
Citizens

(e.g., patients, service users, voters and community leaders)

Need the opportunity, motivation and capability to make a personal decision, take local action or build a social movement

Vantage point	Forms of evidence
Local (national or sub-national) evidence	Data analytics; Modeling; Evaluation; Behavioural/ implementation research; Qualitative insights
Global evidence	Evidence synthesis: An evidence synthesis uses a systematic and transparent process to identify, select, appraise and synthesize the findings from all studies that have addressed the same question. The objective is to come to an overall understanding of what is known, including how this may vary by groups (e.g., girls and young women) and contexts (e.g., low- and middle-income countries). For questions about options, part of what is known can be about what works for whom in what contexts.
Local (national or sub-national) recommendations or evidence support informed by local and global evidence	Technology assessments; Guidelines

The Need for Local and Global Evidence



Use of Evidence During COVID-19 Pandemic

World Health Organization
Eastern Mediterranean Region

World Health Organization

Eastern Mediterranean Region

This (first) annual update is focused on three implementation priorities:

- Formalize and strengthen domestic evidence-support systems
- Enhance and leverage the global evidence architecture
- Put evidence at the centre of everyday life

2023

Global Commission on Evidence to Address Societal Challenges

The Global Evidence Commission began as a grassroots effort to improve the use of research evidence, both in routine times and in future global crises. In January 2024, we released our second annual update (Update

Read the features, report and update 2024

- SHOW ME the evidence: features of an approach to reliably getting research evidence to those who need it (preprint)
- Also available in French (Français) and Spanish (Castellano)

Global Commission on Evidence
to Address Societal Challenges

SHOW ME the evidence:
Features of an approach to reliably getting research evidence to those who need it

(Last updated 11 September 2024)

The world is poised for a step-change improvement in how we use evidence to address societal challenges.

Given the speed at which plans are being made to support this once-in-a-generation transformation, the Implementation Council of the Global Commission on Evidence to Address Societal Challenges developed a working version of the features of an approach to reliably getting research evidence to those who need it and achieved consensus among leaders drawn from the Implementation Council, as well as the Alliance for Living Evidence (Alive) Council and Evidence Synthesis International (ESI).

Drawing an acronym from the first letter of each feature, the 'SHOW ME the evidence' features are:

1) Support systems locally that use many forms of research evidence to help address local priorities
2) Harmonized efforts globally that make it easier to learn from others around the world
3) Open-science approaches that make it the norm to build on what others have done
4) Waste-reduction efforts that make the most of investments in evidence support and in research
5) Measured communications that clarify what we know from existing evidence and with what caveats
6) Equity and efficiency in all aspects of this work.

The 100+ contributing authors from across the 'evidence synthesis and support' world want to ensure that our future

‘SHOW ME the evidence’ features

World Health Organization
Eastern Mediterranean Region

1. **S**upport systems locally that use many forms of research evidence to help address local priorities
2. **H**armonized efforts globally that make it easier to learn from others around the world
3. **O**pen-science approaches that make it the norm to build on what others have done
4. **W**aste-reduction efforts that make the most of investments in evidence support and research
5. **M**easured communications that clarify what we know from existing evidence and with what caveats
6. **E**quity and efficiency in all aspects of this work.

Join our call to action

We are keen to work with any groups interested in contributing to our three implementation priorities.

- Formalize and strengthen domestic evidence-support systems → conduct or participate in a rapid evidence-support system assessment for your country and find ways to act on the lessons learned if one has already been conducted.
- Enhance and leverage the global evidence architecture → encourage funders and donors – both in your own country and those operating globally – to be part of the solution and encourage impact-oriented evidence producers – especially those producing global public goods like living evidence syntheses – to work in more coordinated ways and to build connections to domestic evidence-support networks and units.
- Put evidence at the centre of everyday life → support citizen-serving NGOs and citizen leaders to take action in your country.

The Global Evidence Commission's secretariat and Implementation Council also welcome expressions of interest from any groups interested in complementing what we are doing – with the three implementation priorities, with recommendations that do not fall within these current priorities, or with formally monitoring progress against each recommendation.

About us

The Global Evidence Commission secretariat engages with the following four groups in addressing the Global Evidence Commission's implementation priorities:

- Our Implementation Council promotes, contributes to and/or leads efforts to implement the report's 24 recommendations and three implementation priorities.
- The Rapid Evidence-Support System Assessment (RESSA) Country Leads Group advances the Global Evidence Commission's implementation priority to strengthen domestic evidence-support systems by sharing lessons learned from participating countries and taking action based on what is learned.
- The Global Evidence Producers Group advances the Global Evidence Commission's implementation priority

Versions available now:

- Update 2024
- Update 2023
- Online executive summary
- Online full report
- Online chapters and sections (or infographics)
- Print-on-demand full report (at cost through Amazon)

Case Studies and Best Practices in EMR

Examples of Evidence Synthesis Initiatives / Programs in EMR

World Health Organization
Eastern Mediterranean Region

GRADE Guidelines	Systematic Reviews
AUB GRADE Center, Lebanon https://www.aub.edu.lb/fm/CRI/Pages/GRADE.aspx	**Cochrane Iran (Associate Center):** National Institute for Medical Research Development (NIMAD) http://iran.cochrane.org/
National EBM Center, SHC, Saudi Arabia https://shc.gov.sa/Arabic/Evidences/Pages/default.aspx	**Cochrane Pakistan (Associate Center):** Launched 25 Feb 2025 https://community.cochrane.org/news/announcing-launch-cochrane-pakistan
INEAS, Tunisia https://www.ineas.tn/fr	

Lebanon: AUB GRADE Center

Tunisia: INEAS (National Authority for Health Evaluation and Accreditation)

World Health Organization
Eastern Mediterranean Region

Tunisia

Research | Open access | Published: 13 May 2021

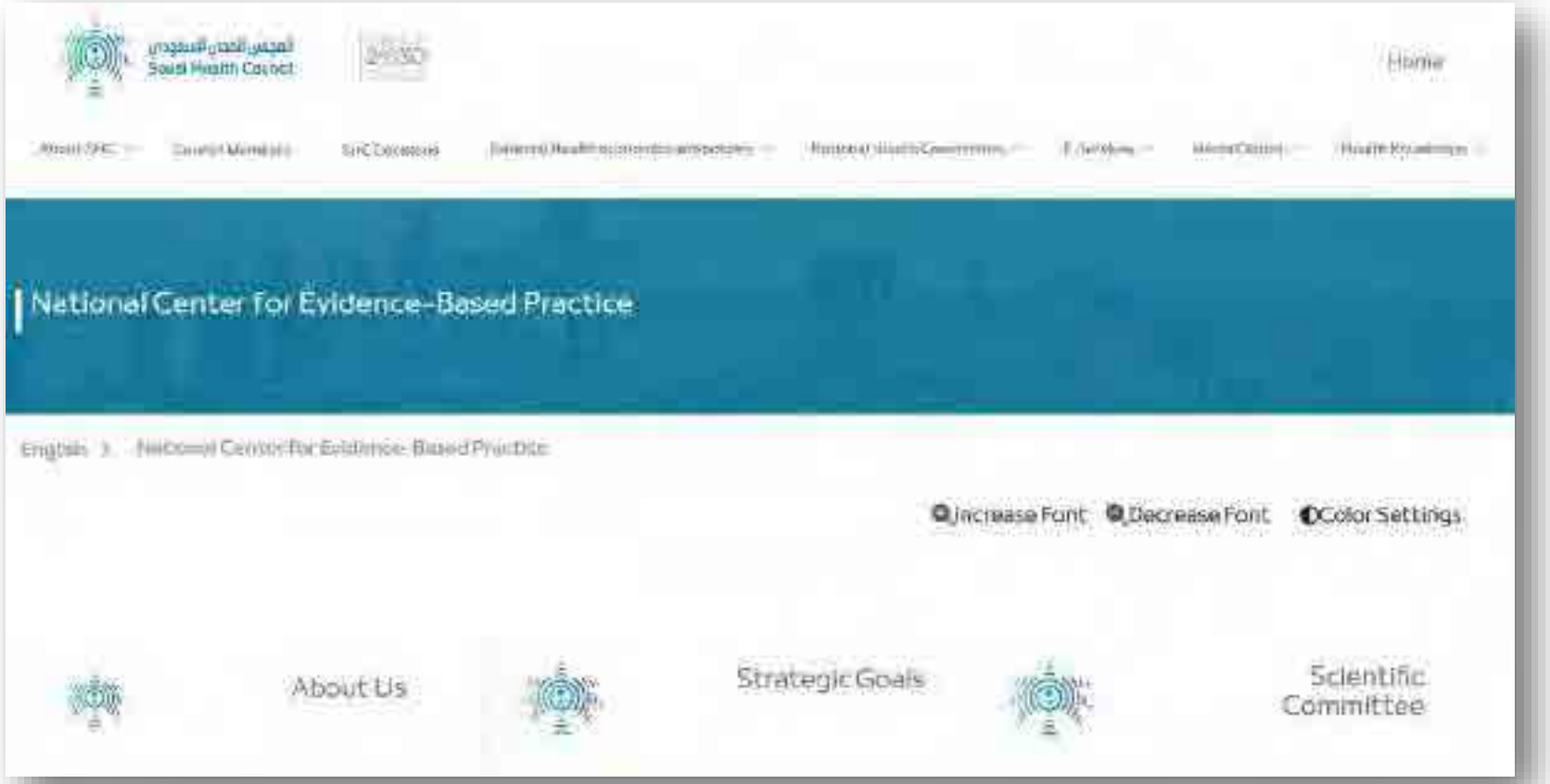
Contextual differences considered in the Tunisian ADOLOPMENT of the European guidelines on breast cancer screening

Lara A. Kahale, Hella Ouertatani, Asma Ben Brahem, Hela Grati, Mohammed Ben Hamouda, Zuleika Saz-Parkinson & Elie A. Akl

Health Research Policy and Systems **19**, Article number: 80 (2021) | Cite this article

Saudi Arabia: Saudi Health Council (SHC): National Center for Evidence-Based Practice

World Health Organization
Eastern Mediterranean Region



National Center for Evidence-Based Practice

Perspective | Open Access | Published: 28 November 2022

A New Era of National Guideline Development in Saudi Arabia

Ziad A. Memish ✉, Abdulrahman S. Alqahtani, Nahar Al-Azemi, Nebras Abu Alhamayel, Mohammad Saeedi, Shatha Abuzinada, Rayan G Albarakati, Subramaniasivam Natarajan, Ximena Alvira, Khushnam Bilimoria & Klara Brunnhuber

Journal of Epidemiology and Global Health **12**, 373–379 (2022) | Cite this article

Abstract

Saudi Arabia's ambitious Vision 2030 project was launched in 2016 as a strategy for economic development and national growth, with 11 Vision Realization Programs put in charge of its

Table 1 Transferrable lessons learnt from Saudi guideline projects to date grouped by the National Guidelines Center's four design principles for guideline development

From: A New Era of National Guideline Development in Saudi Arabia

Lessons learnt	Solution implemented at the National Guidelines Center in Saudi Arabia
Design principle 1: high quality	
Ensure comprehensive conflict of interest declaration	All clinical experts involved in voting sessions (in addition to all people involved in any part of guidelin of the process in accordance with the Guideline Center's COI policy based on GIN's 9 Guiding Princip
Apply rigorous evidence-based methodology	Guidelines are developed using methodologies developed by the GRADE Working Group and GIN (such Evidence to Decision frameworks developed by the GRADE Working Group) [9,10,11] Guidelines are developed in partnerships with companies with known experience in creating methodolog rigorous international guidelines (for example, Elsevier [https://www.elsevier.com/] and Epistemonikos Foundation [https://www.epistemonikos.cl/]) All active Task Force (expert panel) members are given the opportunity to complete a INGUIDE Level 1 Guideline Group or Panel Member Certification Course jointly developed by GIN and McMaster University's Department of Health Research Methods, Evidence, and Impact (https://inguide.org/)
Design principle 2: relevance	
Involve key stakeholder groups	In line with global best practice, stakeholder buy-in and ownership has been sought from the earliest stage of the project via extensive stakeholder consultation in the form of 3 workshops, 2 surveys, and 10 post-survey interviews for alignment with over 60 key stakeholders during formulation of foundational Guidelines Center documents, policies and processes (Vision, Mission, Charter, Design principles, Guideline Development Processes, Conflict of Interest Policies, Governance Structure, Guideline Topic Selection etc.) [12] End users and representatives of key stakeholder organizations involved in the healthcare process or guideline implementation are invited to participate in peer review

4 Design Principles:

1. High quality
2. Relevance
3. Implementation
4. Sustainability

Design principle 2: relevance	
Involve key stakeholder groups	In line with global best practice, stakeholder buy-in and ownership has been sought from the earliest stage of the project via extensive stakeholder consultation in the form of 3 workshops, 2 surveys, and 10 post-survey interviews for alignment with over 60 key stakeholders during formulation of foundational Guidelines Center documents, policies and processes (Vision, Mission, Charter, Design principles, Guideline Development Processes, Conflict of Interest Policies, Governance Structure, Guideline Topic Selection etc.) [12] End users and representatives of key stakeholder organizations involved in the healthcare process or guideline implementation are invited to participate in peer review
Utilize local expertise	Guideline development is undertaken (with the help of a methodology and administrative support team) by multidisciplinary panels ("Task Forces") of around ten people each, comprised of local healthcare professionals across the specialties relevant to the guideline The selection of clinical questions by guideline task forces is informed by local clinical priorities and needs for each topic and usually covers several settings and/or areas across the care continuum such as prevention, diagnosis, treatment, discharge, and follow-up
Focus on local needs and value	The selection and prioritization of guideline topics is based a multi-component framework comprised of guideline impact indicators (such as local or regional epidemiology and disease burden) and effort parameters (e.g. availability and maturity of local care pathways, national guideline centers or teams) Value is built into the very fabric of the project and the Center, for example through Close involvement of the Center for Improving Value in Health (https://cvalue.sa) Input on topic selection and other strategic decisions from insurer and payer organizations Systematic consideration of cost as one of the contextual factors when formulating guideline recommendations
Design principle 3: practical implementation	
Develop a varied and timely dissemination and implementation strategy	The guidelines produced by the Guidelines Center will be disseminated to end users through online and offline channels including a website, mobile apps, publications, and educational events Order sets in electronic patient record systems at selected pilot sites are being aligned with the new national guidelines, enabling automated monitoring of clinical adoption and impact Key performance indicators are being co-developed for selected recommendations to provide starting points for local audits and quality improvement initiatives to drive guideline use and adherence

Design principle 4: sustainability	
Identify the optimal long-term host for the National Guidelines Center	HHC has conducted interviews with 18 stakeholder organizations across the Saudi guideline landscape to establish the most effective future governance model for the Center that resulted in consensus for a National Guidelines Center to move to the SHC and its National Center for EBM
Spread the workload	To ensure methodological consistency across all guideline developing organizations in Saudi Arabia, the SHC National Center for EBM has developed a booklet outlining the key principles of guideline development based on the GIN standards and aligned with the methodology used for the first 12 guidelines developed by the Center [5]
Build strategic partnerships and collaborations	Entering the next phase of the Center under the aegis of the SHC, one key focus will be on (re-)establishing good working relationships with local guideline expert methodologists and earlier local guideline initiatives inside Saudi Arabia (e.g. with the Guideline Adaptation Program at the King Saud University, National Gulf EBM Center in the National Guard, Jeddah EBM Group, BORHAN [Saudi Society for EBHC], the Saudi Commission for Health Specialties) The Center is keen to engage in dialogue with guideline centers worldwide for continuous exchange, learning and improvement about best practices in guideline development and implementation, with several sites visits in planning Once fully functional, the Center will aim to become a hub or resource/reference center at regional and international levels for collaborations and networking in the areas of guideline development, evidence-based healthcare, and knowledge translation projects (e.g. with WHO-EMRO, WHO Collaborating Centers, GIN, Arab Regional Community, International Society for Evidence-Based Health Care [ISEHC], the GRADE Working Group, JBI, Cochrane)
Utilize digital tooling for transparent documentation and audit	HHC and SHC are using advanced digital tooling to support and document various steps of guideline development, to facilitate participation of the Task Force members, and to ensure ease of review and updating of all captured information and data
Ensure regular and timely guideline updates	The timing of guideline review (and if required, updating) will be informed by continuous evidence scanning with a guideline expiry date 5 years following publication

COI Conflicts of Interest, *EBM* Evidence-Based Medicine, *GIN* Guidelines International Network, *GRADE* Grading of Recommendations Assessment, Development and Evaluation, *HHC* Health Holding Company, *SHC* Saudi Health Council


MOU between SHC
and KSU, June 2022

MOU between SHC and KSU, June 2022

MOU between SHC and KSU, June 2022


MOU between SHC
and KSU, June 2022
PLANAR
PLANAR

(Former) Cochrane Bahrain (2005-2017)

World Health Organization
Eastern Mediterranean Region

Bahrain MOH established the first Branch for Cochrane center in the Arab World: ***Bahrain Branch of the UK Cochrane Centre (2005-2017).***

Closure of Cochrane Bahrain

Cochrane Bahrain has closed. Zbys Fedorowicz, Director of the Associate Centre, has decided to step down from his role and no replacement leadership or associated funding could be found. We thank Zbys and his team for all their work over many years.

If you have any questions, please email Veronica Bonfigli, Governance & Administrative Support Officer.

18 December 2017

Cochrane Iran

World Health Organization
Eastern Mediterranean Region

Cochrane Pakistan *(Launched 25 Feb 2025)*

World Health Organization
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World Health Organization
Eastern Mediterranean Region

Health topics | Data and statistics | Media centre | Information resources | Countries | Programmes | About Us

Eastern Mediterranean Health Journal | All issues | Volume 29 2023 | Volume 29 issue 7 | Methodological frameworks for adapting global pr
context in the Eastern Mediterranean Region

Eastern Mediterranean Health Journal

About the journal

All issues

Information for authors

Information for reviewers

Articles in press

Methodological frameworks for adapting global practice guidelines to national context in the Eastern Mediterranean Region

Abrar Alshehri,[1,2] Saja Almazrou[3] and Yasser Amer[2,4-7]

PDF version

[1]Clinical Pharmacy Department, Umm Al-Qura University College of Pharmacy, Makkah, Saudi Arabia. [2]Adaptation Working Group, Guidelines International Network, Perth, Scotland, UK. [3]Clinical Pharmacy Department, King Saud University College of Pharmacy, Riyadh, Saudi Arabia. [4]Pediatrics Department, King Saud University Medical City, Riyadh, Saudi Arabia (Correspondence to Y. Amer: yassersamiamer@gmail.com; yamer@ksu.edu.sa). [5]Clinical Practice Guidelines and Quality Research Unit, Quality Management Department, King Saud University Medical City, Riyadh, Saudi Arabia.

Approaches for Developing Adapted or Adopted CPGs

World Health Organization
Eastern Mediterranean Region

Most incorporated one or more existing methodological frameworks/ appraisal tools, such as ADAPTE, AGREE II, and/or GRADE, including:

1. **ADAPTE**
2. **CAN-IMPLEMENT**
3. **Adapted ADAPTE**
4. **RAPADAPTE**
5. **GRADE-ADOLOPMENT (2017)**
6. **KSU-Modified-ADAPTE (2019)**

- 6 Methodologies were used in our Eastern Mediterranean Region.
- 2 were born in KSA & one born in Egypt

ELSEVIER

CrossMark

Journal of Clinical Epidemiology 81 (2017) 101–110

Journal of Clinical Epidemiology

GRADE Evidence to Decision (EtD) frameworks for adoption, adaptation, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT

Holger J. Schünemann[a,b,*], Wojtek Wiercioch[a], Jan Brozek[a,b], Itziar Etxeandia-Ikobaltzeta[a], Reem A. Mustafa[a,c,d], Veena Manja[e,f], Romina Brignardello-Petersen[g,h], Ignacio Neumann[a,i], Maicon Falavigna[j,k], Waleed Alhazzani[a,b], Nancy Santesso[a], Yuan Zhang[a], Jörg J. Meerpohl[l,m], Rebecca L. Morgan[n], Bram Rochwerg[a], Andrea Darzi[o], Maria Ximenas Rojas[p], Alonso Carrasco-Labra[a,r], Yaser Adi[o], Zulfa AlRayees[p], John Riva[a,q], Claudia Bollig[l], Ainsley Moore[a,q], Juan José Yepes-Nuñez[a], Carlos Cuello[a,t], Reem Waziry[s,d], Elie A. Akl[a,s]

[a]*Department of Clinical Epidemiology and Biostatistics, McMaster University, 1280 Main Street West, Hamilton, Ontario L8N 4K1, Canada*

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issues that may not be fully known or suspected to vary across settings, during centralized guideline processes [11].

Transparently laying out the judgments that a guideline panel makes when formulating recommendations would facilitate their later adaptation. However, existing guidelines often do not provide the necessary details about this process and other decisions necessary to work on their adaptation and adoption [12,13]. Unfortunately, this makes de novo recommendation development often unavoidable because evidence syntheses are not appropriately developed or do not cover all criteria that are relevant for local decision-making [4]. Thus, proper adoption or adaptation of recommendations requires transparent description of the processes used by the original guidelines, including the methodology used and how conflicts of interest were managed.

Development of de novo recommendations, on the other hand, involves formulating new questions and seeking to answer them in guidelines that contain recommendations not included in original guidelines [14–16]. This approach can be based on existing evidence synthesis such as systematic reviews or health technology assessments (HTAs) that the guideline developer identifies as relevant for their questions. Original guidelines may still play a role in de novo development by making evidence syntheses available that may lead to recommendations that the original guideline developer did not consider. It should follow good practice to produce trustworthy guidelines described by several

and culture of a specific jurisdiction or country.

We developed and tested an approach for adoption, adaptation, and de novo guideline development based on the GRADE EtD frameworks. To complete this work, we applied prior work on adaptation of guidelines to address the challenges guideline developers face [2]. The main objective of this article is to describe this approach based on applying elements of it to 22 guidelines as part of a new national guideline program by the Ministry of Health in Saudi Arabia. We call this approach "GRADE-ADOLOPMENT" of guidelines, expressing the combined use of adoption, adaptation, and de novo recommendations to provide trustworthy guidelines.

2. Methods

2.1. General organization and planning

We developed GRADE-ADOLPMENT as a result of establishing a new national guideline program by the Ministry of Health in the Kingdom of Saudi Arabia (KSA). Our work began by creating a handbook for guideline production that described the approach and built on our prior work [2,12,24]. The project planning began in June 2012 and implementation of the guideline development started in July 2013. "Wave 1" included generating practice guidelines on 10 different topics in 2013, and "wave 2" included generating 12 practice guidelines from 2014 to 2015 [25].

Saudi Arabia: KSUMC CPG program

KSU-Modified-ADAPTE

Received: 12 March 2018 | Accepted: 14 March 2018
DOI: 10.1111/jep.12927

ORIGINAL PAPER

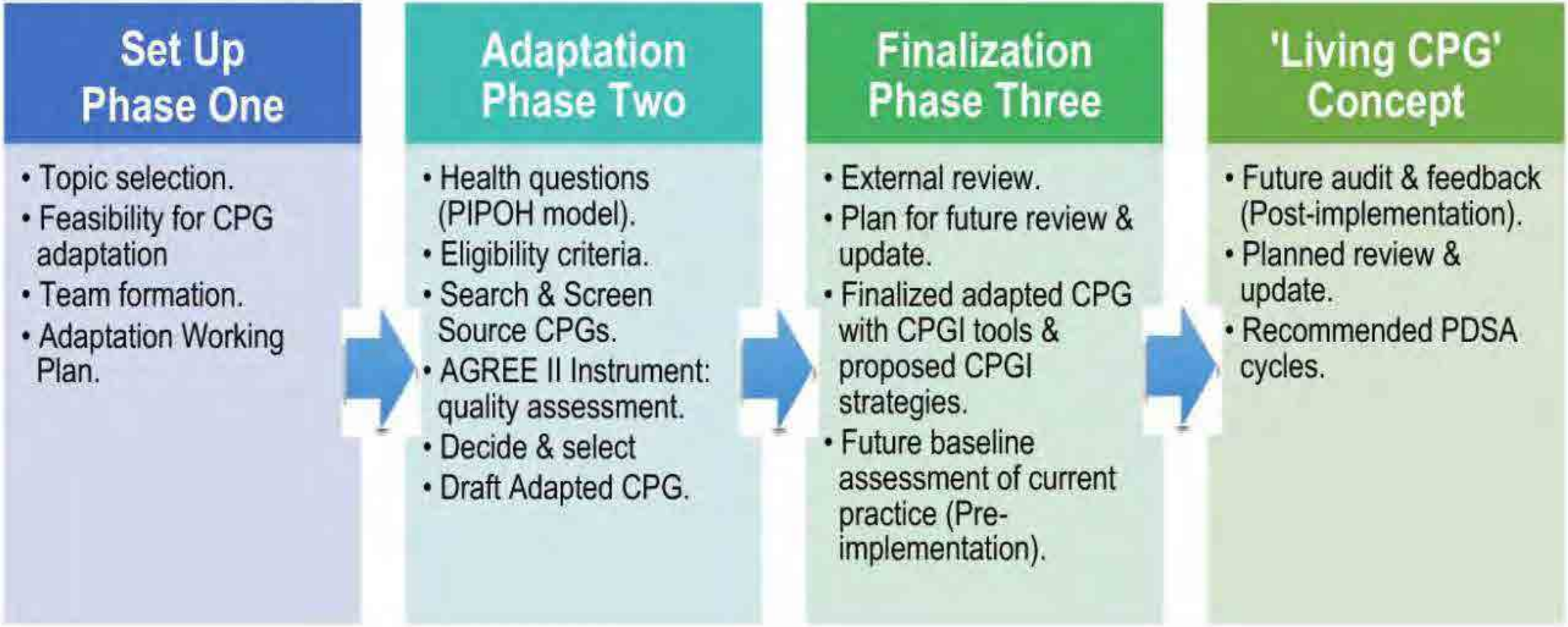
WILEY Journal of Evaluation in Clinical Practice

Adapting evidence-based clinical practice guidelines at university teaching hospitals: A model for the Eastern Mediterranean Region

Yasser S. Amer MBBCh, MPed, MHI, CPHQ, FISQua, Dr[1,2,3,4] | Hayfaa A. Wahabi PhD, FRCOG, FRCS (Ed.), MMedSci(ART), MMedEdu, Associate Professor[2,5] | Manal M. Abou Elkheir PharmD, BCPS, Dr[6] | Ghada A. Bawazeer MSc, PharmD, BCPS, Dr[2,6] | Shaikh M. Iqbal FRCPCH, Dr[7,8] | Maher A. Titi RN, MSN, CPHQ, FISQua[2,9] | Aishah Ekhzaimy MBBS, FRCPC, FACE, Dr[10] | Khalid A. Alswat MD, FACP, MRCP, Dr[10] | Rasmieh A. Alzeidan MSc, PhD, Dr[11] | Lubna A. Al-Ansary MBBS, MSc, MRCGP, FRCGP, Professor[2,4,5,12]

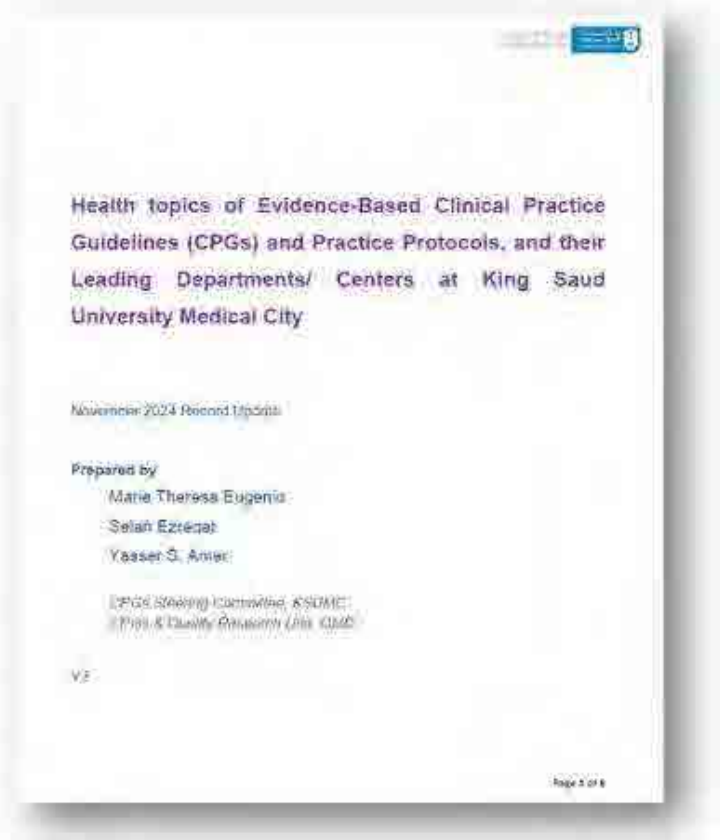
World Health Organization
Eastern Mediterranean Region

KSU-Modified ADAPTE Methodology



DATABASE (CPGs & PPs)

- CPGs: 51
- Protocols (PPs): 24
- Ongoing CPGs & PPs: 17


Health topics of Evidence-Based Clinical Practice Guidelines (CPGs) and Practice Protocols, and their Leading Departments/ Centers at King Saud University Medical City

November 2024 Record Update

Prepared by

Marie Theresa Eugenio

Selah Ezzeqat

Yaaser S. Amer

CPGs Steering Committee, KSUMC

Pros & Quality Research Unit, QMD

V.2

Scientific Production

- **Full-text articles: 55**
- **Conference papers (national & Int'l): 30+**

Scientific production

Full-text publication

(The list is not exclusive)

Article title/ Year	Journal title/ Comment	Citations
2024		
1. Saudi Arabian evidence-based clinical practice guideline for the management of children with autism spectrum disorder: A national guideline adaptation using the *KSU-modified-ADAPTE* methodology	Clinical and Public Health Guidelines/ National Guideline	0
2. Adapting Clinical Practice Guidelines for Chronic Kidney Disease Blood Pressure Management and Kidney Replacement Therapy in Adults and Children in the Saudi Arabian Context Using the Grading of Recommendations Assessment, Development, and Evaluation *(GRADE)-ADOLOPMENT* Methodology	Saudi Journal of Kidney Diseases and Transplantation National Guideline	0
3. GRADE guidance 39: using *GRADE-ADOLOPMENT* to adopt, adapt or create contextualized recommendations from source guidelines and evidence syntheses.	Journal of Clinical Epidemiology	5
4. Reporting Conflicts of Interest and Funding in Health Care Guidelines: The RIGHT-COI&F Checklist	Annals of internal medicine	0
5. A protocol for adapting a clinical practice guideline for the treatment of paediatric asthma for the Egyptian Pediatric Clinical Practice Guidelines Committee.	Clinical and Public Health Guidelines	1
6. Ten Quality Improvement Initiatives to Standardize Healthcare Processes (Chapter)	Intechopen	1
2023		
7. Using evidence to decision frameworks led to guidelines of better quality and more credible and transparent recommendations	Journal of Clinical Epidemiology	5
8. Assessing Barriers and Facilitators for Implementing Clinical Practice Guidelines in Middle Eastern and North African Region Delphi Study	Journal of Clinical Medicine	0
9. Methodological frameworks for adapting global practice guidelines to national context in the Eastern Mediterranean Region.	Eastern Mediterranean Health Journal	2
10. Adapting global evidence-based practice guidelines to the Egyptian healthcare context: the Egyptian Pediatric Clinical Practice Guidelines Committee (EPG) initiative	Bulletin of the National Research Centre	6
11. Development of an international glossary for clinical guidelines collaboration.	Journal of Clinical Epidemiology	3
12. Clinical practice guidelines for neonatal hypoxic-ischemic encephalopathy: A systematic review using the appraisal of guidelines for research and evaluation (AGREE) II instrument.	Frontiers in Pediatrics	6

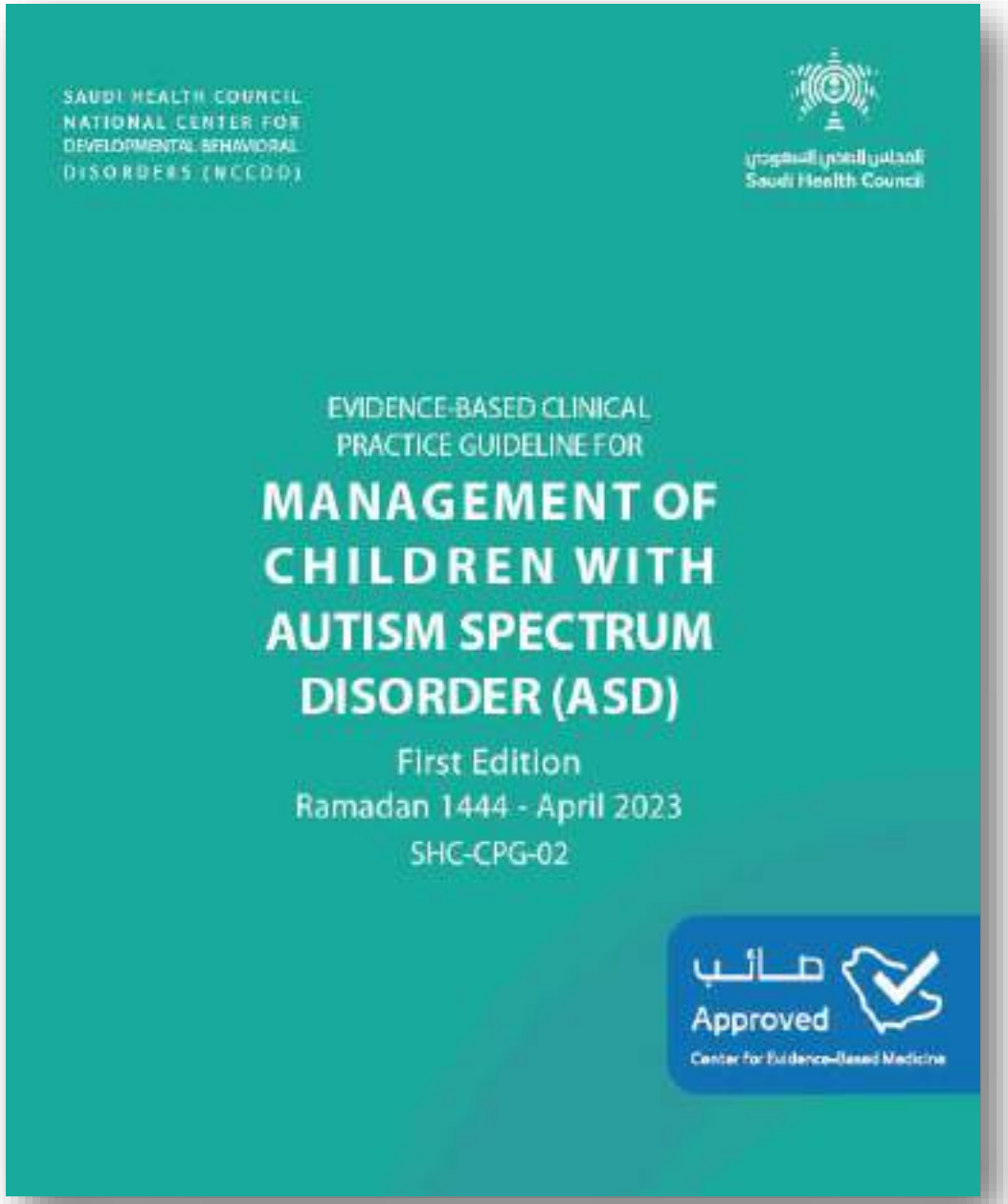
Saudi Arabia

Bashiri *et al.*
Child Adolesc Psychiatry Ment Health (2021) 15:6
https://doi.org/10.1186/s13034-020-00351-5

Child and Adolescent Psychiatry and Mental Health

RESEARCH ARTICLE Open Access

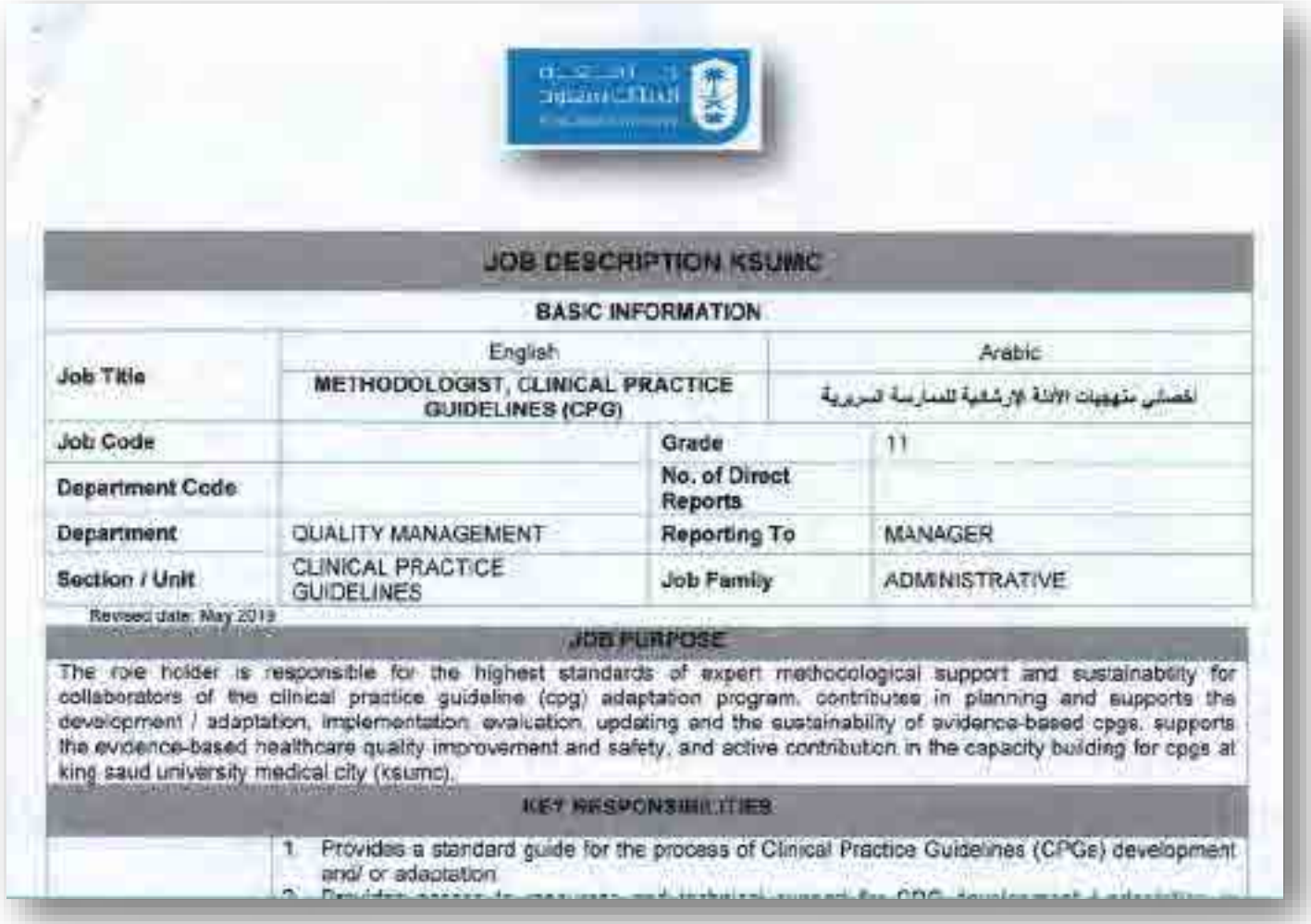
Adapting evidence-based clinical practice guidelines for people with attention deficit hyperactivity disorder in Saudi Arabia: process and outputs of a national initiative



World Health Organization
Eastern Mediterranean Region

Job description: "Guideline Methodologist"

World Health Organization
Eastern Mediterranean Region



JOB DESCRIPTION KSUMC

BASIC INFORMATION

	English		Arabic
Job Title	**METHODOLOGIST, CLINICAL PRACTICE GUIDELINES (CPG)**		اخصائي منهجيات الأدلة الإرشادية للممارسة السريرية
Job Code		**Grade**	11
Department Code		**No. of Direct Reports**	
Department	QUALITY MANAGEMENT	**Reporting To**	MANAGER
Section / Unit	CLINICAL PRACTICE GUIDELINES	**Job Family**	ADMINISTRATIVE

Revised date: May 2019

JOB PURPOSE

The role holder is responsible for the highest standards of expert methodological support and sustainability for collaborators of the clinical practice guideline (cpg) adaptation program, contributes in planning and supports the development / adaptation, implementation, evaluation, updating and the sustainability of evidence-based cpgs, supports the evidence-based healthcare quality improvement and safety, and active contribution in the capacity building for cpgs at king saud university medical city (ksumc).

KEY RESPONSIBILITIES

1. Provides a standard guide for the process of Clinical Practice Guidelines (CPGs) development and/ or adaptation

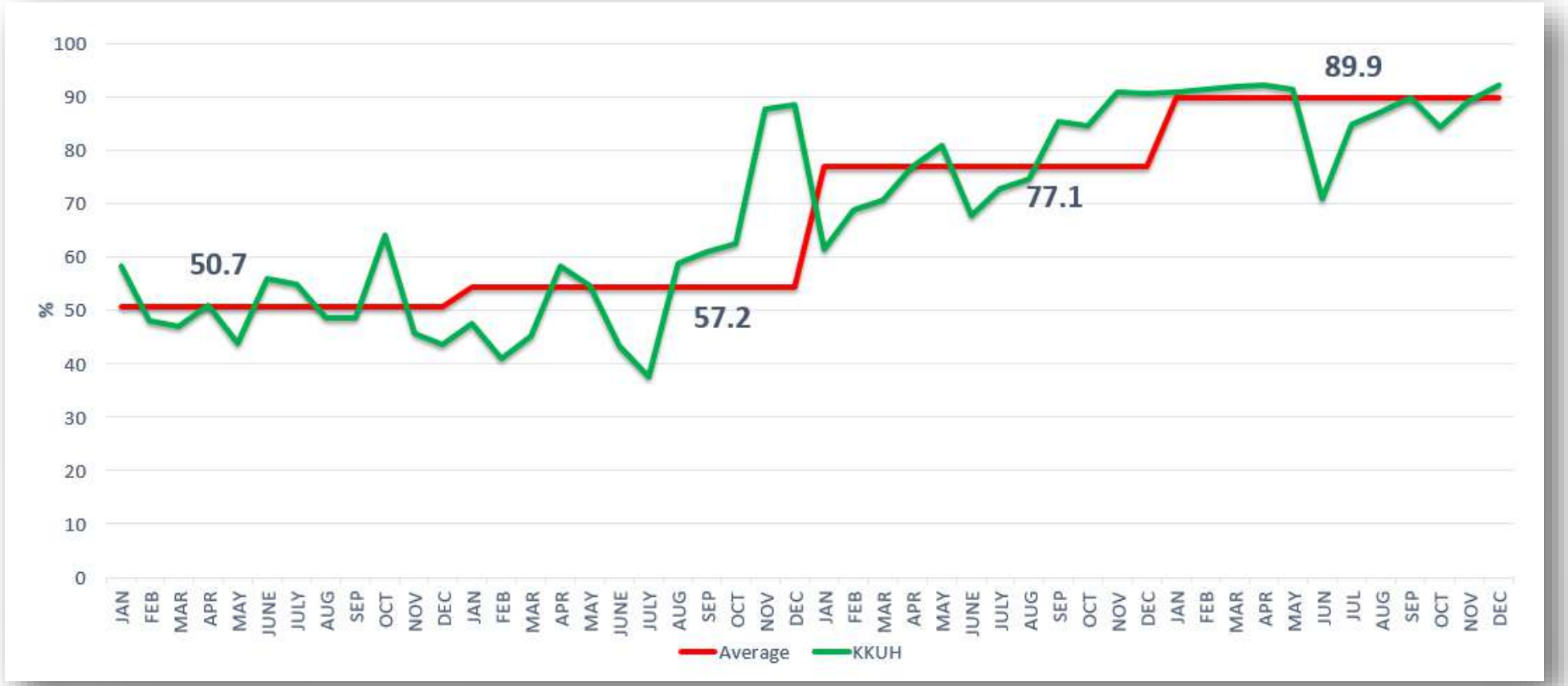
Training and Education

World Health Organization
Eastern Mediterranean Region

CPG Implementation

World Health Organization
Eastern Mediterranean Region

% Patients receiving appropriate VTE Prophylaxis according to the adapted CPG recommendations (39% ↑)



Regional & International Collaborations

World Health Organization
Eastern Mediterranean Region

1. **Guidelines International Network:**
   - Board of Trustees
   - Working Groups
   - Regional Community: Establishing Arab GIN
   - Conference Scientific and Abstract Review Committees
2. **WHO (Main):** Guidelines Review Committee
3. **International Society for Evidence-Based Health Care (ISEHC):** Founding member
4. Collaborations mediated via **WHO-EMRO:**
   - **Tunisia:** INEAS (Capacity Building) (2015 / 2016)
   - **Qatar:** Methodological support for a National CPG
   - **Afghanistan:** Methodological support for a set of National CPGs

- **Others:** RIGHT, INGUIDE, GELA, etc.


KEY TAKEAWAYS

Key Takeaways

World Health Organization
Eastern Mediterranean Region

Key points to remember:

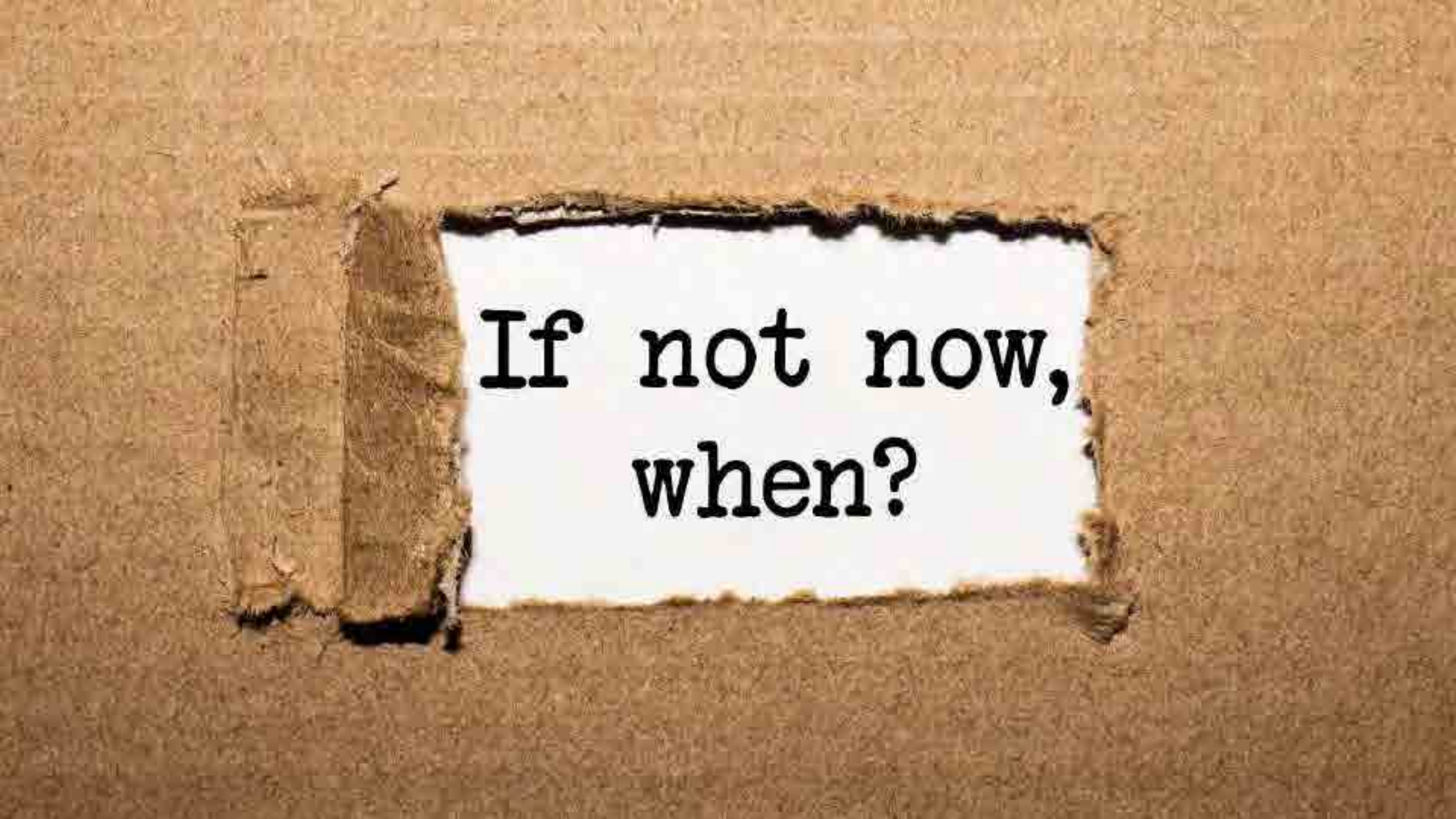
1. Evidence synthesis is the foundation of guideline development.
2. Quality assessment tools (GRADE, AMSTAR-2, ROBIS, AGREE II, etc.) are essential.
3. Systematic, transparent decision-making is crucial for strong recommendations.


WHAT'S
NEXT?

Future Directions

World Health Organization
Eastern Mediterranean Region

- More in-depth training is needed in systematic reviews and guideline development in EMR/MENA countries.
- The role of policymakers, funders, and international collaboration in advancing guideline development.
- Call to action for more substantial institutional support and capacity building.


If not now,
when?


Thank you…
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