# Evidence Synthesis: Navigating an Evolving Landscape



**NIHR Complex Reviews Support Unit** 









Journal of Clinical Epidemiology

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#### **EVIDENCE SYNTHESIS ECOSYSTEM SERIES**

Future of evidence ecosystem series: 1. Introduction Evidence synthesis ecosystem needs dramatic change

Isabelle Boutron<sup>a,b,c,d,\*</sup>, Perrine Créquit<sup>a,c,e</sup>, Hywel Williams<sup>f</sup>, Joerg Meerpohl<sup>g</sup>, Jonathan C. Craig<sup>h</sup>, Philippe Ravaud<sup>a,b,c,d,i</sup>

#### **EVIDENCE SYNTHESIS ECOSYSTEM SERIES**

Future of evidence ecosystem series: 2. current opportunities and need for better tools and methods

Perrine Créquit<sup>a,b,c</sup>, Isabelle Boutron<sup>a,b,d,e</sup>, Joerg Meerpohl<sup>f</sup>, Hywel C. Williams<sup>g</sup>, Jonathan Craig<sup>h</sup>, Philippe Ravaud<sup>a,b,c,d,i,\*</sup>

#### **EVIDENCE SYNTHESIS ECOSYSTEM SERIES**

Future of evidence ecosystem series: 3. From an evidence synthesis ecosystem to an evidence ecosystem

Philippe Ravaud<sup>a,b,c,d,e,\*</sup>, Perrine Créquit<sup>a,c,f</sup>, Hywel C. Williams<sup>g</sup>, Joerg Meerpohl<sup>h</sup>, Jonathan C. Craig<sup>i</sup>, Isabelle Boutron<sup>a,b,c,d</sup>

Living disclosing the « quality and Living Mapping of research to transparency results » A living community help the planning of by funders, journals, responsible for one condition universities... future trials Systematic reviewers, Researchers, Clinicians, Living Patients, Living Trialists, Network **Guidelines** Methodologists, **Meta-Analysis** Statisticians, **Guidelines experts Health policy-makers** Health systems managers **Living monitoring of trials** Living monitoring conducting quality of trials transparency

Fig. 1. Developing a culture of continuous improvement of clinical research for a specific disease.



### **Best Research for Best Health: The Next Chapter**

**Our Operational Priorities** 



Funded by



NIHR research will need to become much more integrated across disciplines and better serve the more holistic research questions that we will increasingly be asked to address in years to come.

## Funding high quality, timely research... that benefits the NHS, public health and social care

New methodologies, better use of 'real-world' evidence and the involvement of a wider range of disciplines (including the social sciences and implementation science)...

Support the NHS's Accelerated Access Collaborative... to align research, manufacturing and deployment activities, ensuring the rapid delivery of necessary clinical trials and investigations

### Programme

10:00 – 10.15 am	Welcome and Introductions to the Day Oliviα Wu   NIHR Complex Reviews Support Unit
10:15 – 10:45 am	Reflections from the NIHR Complex Reviews Support Unit Terry Quinn, Neil Hawkins, Alex Sutton   NIHR Complex Reviews Support Unit
10:45 – 11:00 am	Q & A
BREAK	
11:15– 11:45 am	Evolution and Revolution: the future of global evidence synthesis  Karla Soares-Weiser   Cochrane Editor in Chief
11:45 – 12:15 pm	Synthesising Evidence for Complex Questions: the NICE Perspective Joshua Pink   Senior Technical Advisor (Methodology), NICE
12:15 – 12:30 am	Q & A
LUNCH	

### Programme

1:15 – 1:45 pm	The Challenges of Evidence Synthesis Ahead: the Industry Perspective Christine Fletcher   Vice President, Specialty & Primary Care Statistics, GlaxoSmithKline
1:45 – 2:15 pm	Future of Evidence Synthesis: the NIHR Perspective Lesley Stewart   Programme Director, NIHR Evidence Synthesis Programme
2:15 – 2:30 pm	Q & A
2:30 – 2:45 pm	Closing Statement

#### **NIHR Complex Reviews Support Unit**





#### REMIT

To support and encourage successful delivery of complex reviews of importance to the NHS, whilst building capacity and capability within the research community

#### **OBJECTIVES**

- To advise on appropriate design and methodological approaches to undertaking complex reviews
- To explore potential solutions to unexpected challenges arising in complex reviews
- To advise on the interpretation of findings of complex reviews
- To highlight areas of unmet need and to support the NIHR in setting future research priorities
- To build capability and capacity within the research community through advice and support
- To build capability and capacity within the research community through training and workshops

### NIHR CRSU in Numbers

**10** Cochrane Programme Grants

**61** Cochrane Reviews

NMA, cNMA, DTA, Sequential analysis, Survival data, Value of Information, Realist Synthesis, Critical Interpretive Synthesis

27

**17** Grant applications

NIHR-funded evidence synthesis

1 NICE technology appraisal

### 15 publications

**Methodological focus** 

**14** Cochrane reviews

7 Other publications (editorials, protocols, monographs)

4 APPS

MetaInsight (COVID), MetaDTA (Primer)

**31** Training events

35 Conference presentations

**12** Invited talks

### **Key Achievements and Lessons Learned**

- "Complexity" has many meanings
- Changing mindsets and building relationships
- Shaping review questions
- Defining relevant evidence (continuum)
- Explore different, but not necessarily state-of-the-art methods
- "Heterogeneity is your friend"
- Maximising the value of the data
- Fast-moving landscape