



THE JOANNA BRIGGS INSTITUTE  
*Better evidence. Better outcomes.*

# JBI Model of Evidence-based Healthcare

Edoardo Aromataris  
Director, Synthesis Science  
The Joanna Briggs Institute

# Today

- Evidence-based healthcare
- Joanna Briggs Institute
- The JBI Model of Evidence based healthcare

# Why do we need EBHC?

- > Spiralling costs of healthcare in the developed and developing world
- > Practice varies considerably, many times unjustifiably so
- > Patients are not being given treatments based on the best available evidence
  - Up to 43% of patients do not receive the recommended care (Runciman et al, 2012)
  - 30% receive care that is unnecessary/potentially harmful (Schuster et al, 1998)

# In reality...

- > Many organisations do not have evidence based cultures
- > There is consistent evidence of a failure to translate evidence into clinical practice
  - Only 57% of patients in Australia receive appropriate care (Runciman et al 2012)

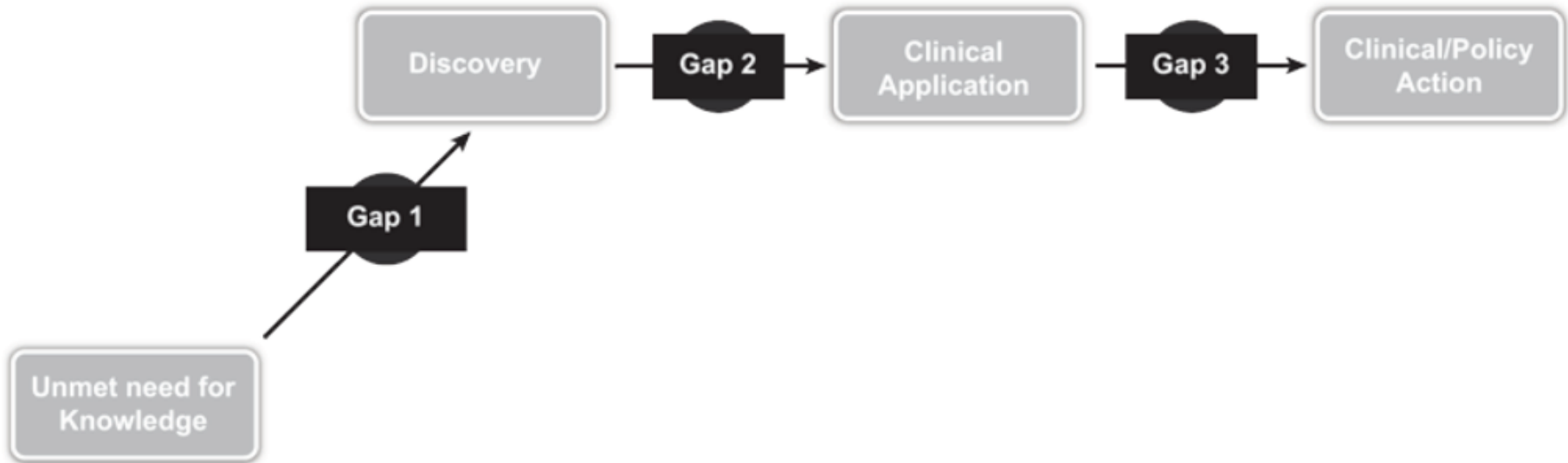
# The evidence-practice gap

- > The difference between what occurs in practice and what the research suggests
  - Time lag of 17 years to get research into practice

(Morris et al. 2011)

**Knowledge translation** = essentially the 'movement' of research, is a growing field of study to address gaps in knowledge

# Gaps in Knowledge



Pearson, Jordan, Munn (2011) *Translational Science and Evidence-Based Healthcare: A Clarification and Reconceptualization of How Knowledge Is Generated and Used in Healthcare, Nursing Research and Practice*

# Barriers to EBP

- > Most of the questions can be answered - but it is time consuming and expensive to do so
  - the perception that the information does not exist (Oliver, Nicholas & Oakley, 1996; Goldstein et al, 1998)
  - the time to find relevant research (Goldstein et al, 1998, Coiera, Westbrook & Rogers 2008)
  - the cost of finding relevant research (Goldstein et al, 1998)
  - the research does not always address the evidence interests of clinicians or policy makers (Goldstein et al, 1998)
  - availability and accessible language of academic reports (Bee Hoon et al, 2009)
  - limited skills of practitioners in accessing and appraising evidence (Oliver, Nicholas & Oakley, 1996).
- > **Information paradox** - Health professionals can be overwhelmed by the information provided for them yet cannot find the information they need (Sir Muir Gray)

# Addressing the problem

- > Can't be done by healthcare providers
- > To aid healthcare, organisations sort and bring together the findings of research
- > Groups established such as the Joanna Briggs Institute
- > Provide resources and tools to aid organisations to create an 'evidence-based culture
- > Combine and summarise evidence to support informed clinical decisions



# The Joanna Briggs Institute

- > Established in Adelaide, South Australia, 1996
- > Recognised global leader in EBHC
- > Focuses on the synthesis, transfer and implementation of evidence into practice



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# JBI Vision

A world in which the best available evidence is used to inform decision-making at the point of care to improve health outcomes in communities globally.



# The Joanna Briggs Collaboration



# Evidence-Based Healthcare

*‘Decision-making that considers the feasibility, appropriateness, meaningfulness and effectiveness of healthcare practices. The best available evidence, the context in which care is delivered, the individual patient and the professional judgement and expertise of the health professional inform this process.’*

(Jordan et al, 2016)

# JB| FAME

- > Health professionals require evidence to substantiate a wide range of activities and interventions.
- > **When making clinical decisions, health professionals are concerned with whether their approach is Feasible, Appropriate, Meaningful and Effective.**

# Feasibility

Feasibility is the extent to which an activity is practical and practicable. Clinical feasibility is about whether or not an activity or intervention is physically, culturally or financially practical or possible within a given context.

(Pearson et al, 2005)

# Appropriateness

Appropriateness is the extent to which an intervention or activity fits with or is apt in a situation. Clinical appropriateness is about how an activity or intervention relates to the cultural or ethical context in which care is given.

(Pearson et al, 2005)



# Meaningfulness

Meaningfulness refers to the meanings patients associate with an intervention or activity as a result of their experience of it. Meaningfulness relates to the personal experience, opinions, values, thoughts, beliefs, and interpretations of patients or clients

(Pearson et al, 2005)

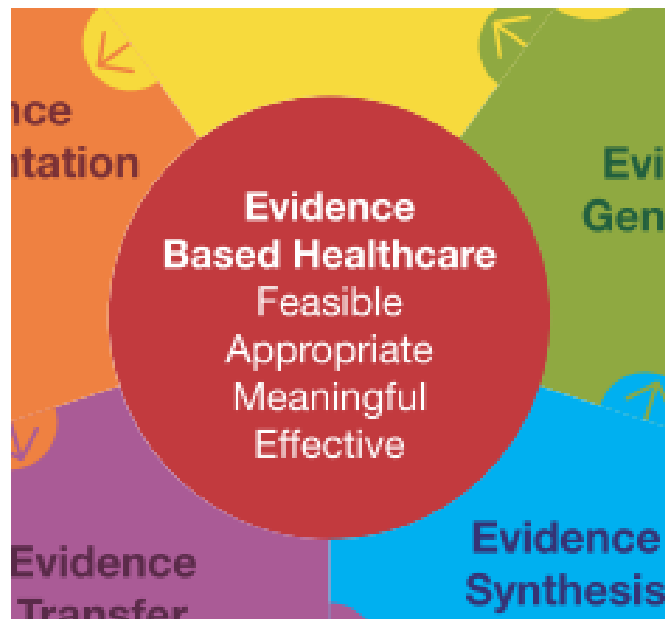
# Effectiveness

Effectiveness is the extent to which an intervention, when used appropriately, achieves the intended effect. Clinical effectiveness is about the relationship between an intervention and clinical or health outcomes.

(Pearson et al, 2005)

## **Pebble:**

EBCH is considered to be decision-making that considers the feasibility, appropriateness, meaningfulness and effectiveness of healthcare practices. The best available evidence, the context in which care is delivered, the individual patient and the professional judgement and expertise of the health professional inform this process.



# The JBI Model of Evidence-based Healthcare



## Overarching principles

Culture - Capacity - Communication - Collaboration

## Global Health:

Defined as collaborative, trans-national research and action that places a priority on improving health and achieving health equity for all people worldwide

(based on Koplan, 2009 & Beaglehole & Bonita, 2010)



# Global Health

- > *“the achievement of improved global health is conceptualised as both the goal and endpoint of any or all of the model components and the raison d’etre and driver of evidence-based healthcare”* (Pearson 2005)
- > **Sustainable Impact:** Often evidence implementation activities succeed in making a change to healthcare practices. Unfortunately, due to resourcing issues and the ever-changing nature of health services these changes may only be temporary. To truly address and improve healthcare, any positive improvements need to be lasting.

# Global Health

- > **Engagement** and collaboration: imperative to successfully address the significant issues we face in delivering evidence-based healthcare
- > **Knowledge need:** “Gathering knowledge of what people need, what resources are available, and what limits constrain their choices” is vital to an evidence informed approach to the delivery of healthcare (Jordan and Pearson, 2013), refer to the new proposed ‘gap’



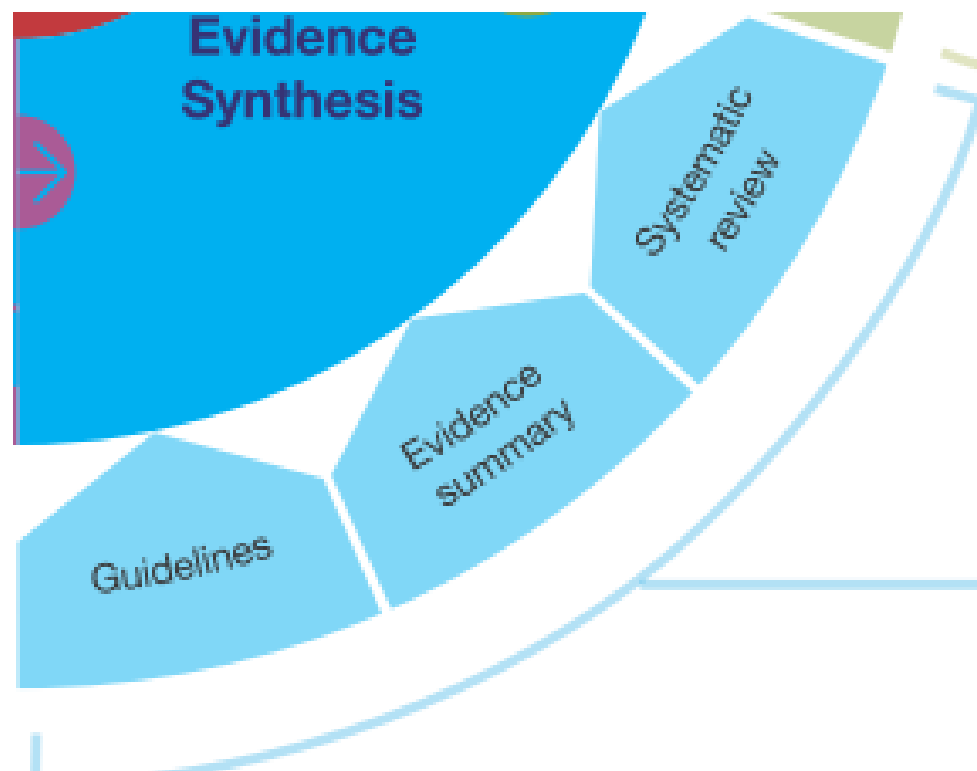
## **Evidence Generation:**

The results of well-designed research studies grounded in any methodological position, anecdotes or personal opinion and expertise are all deemed valid methods of generating evidence to inform policy and practice.



# Evidence generation

- > **Research:** It is broadly accepted now that evidence can take many forms and, in the real world of practice and policy making, decision makers are influenced by a variety of understandings and sources of evidence
- > **Experience:** the experience (including expertise and patient preferences/values)
- > **Discourse:** A broad term incorporating various types of communication or debate, including text and opinion



## **Evidence Synthesis:**

The evaluation (or analysis) and collation of research evidence and opinion on a specific topic to aid in decision-making in healthcare.

# Evidence synthesis

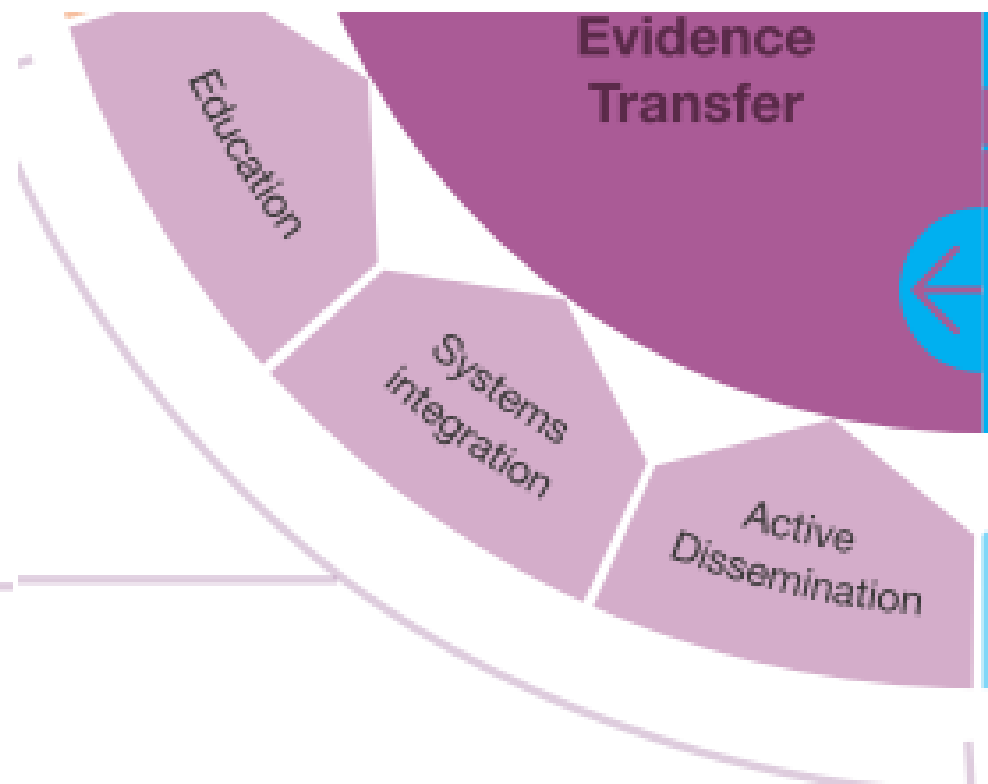
- > **Systematic reviews:** a structured approach to synthesising evidence
- > **Evidence summary:** Rapid review or streamlined approach to summarising evidence
- > **Guidelines:** trustworthy clinical guidelines include the use of a rigorous development methodology, clear reporting of recommendations linked to the evidence, include systematic reviews in their development, and are conducted using a transparent process including extensive external review. (Laine 2011)

# Types of Systematic Reviews

- ▶ 1. Effectiveness Reviews
- ▶ 2. Qualitative Reviews
- ▶ 3. Costs/Economics Reviews
- ▶ 4. Prevalence or Incidence Reviews
- ▶ 5. Diagnostic Test Accuracy Reviews
- ▶ 6. Etiology and Risk Reviews
- ▶ 7. Textual Synthesis Reviews
- ▶ 8. Mixed Methods Reviews
- ▶ 9. Umbrella Reviews
- ▶ 10. Scoping Reviews

## **Evidence Transfer:**

A coactive, participatory process to advance access to and uptake of evidence in local contexts. It is a causal phenomenon consisting of factors that enable, facilitate and support evidence implementation that is more than just a single interaction.

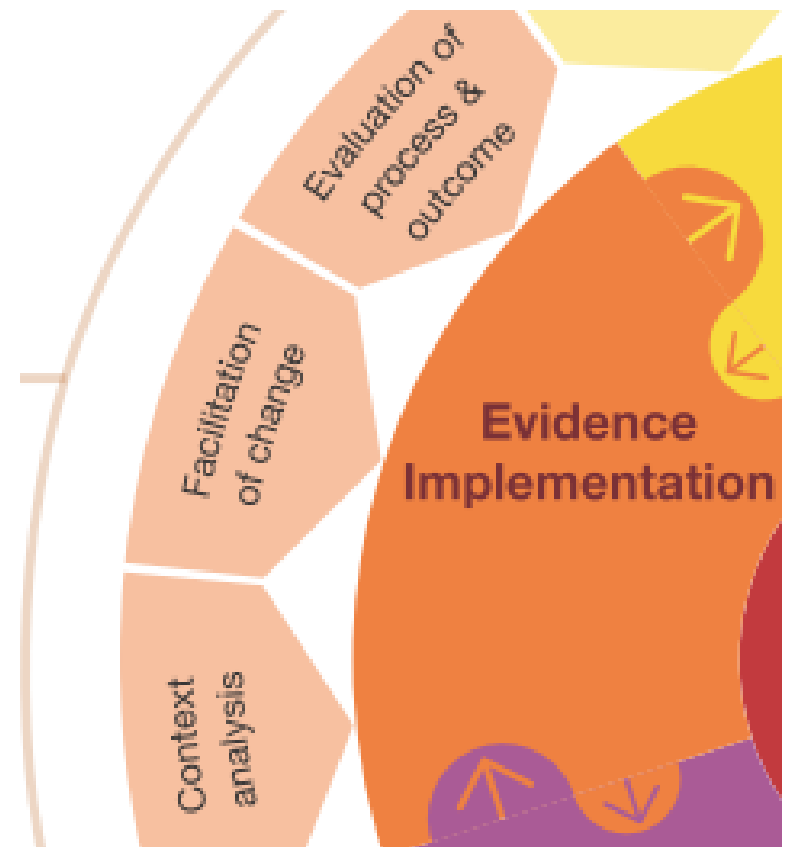


# Evidence transfer

- > **Active dissemination:** Active methods to spread information (email, social media), formats to encourage motivation/uptake (infographics, decision aids, icon arrays), knowledge spreaders (champions, thought leaders)
- > **Systems integration:** evidence in clinical decision support, policies and processes
- > **Education:** All forms of education (CPD, online, award level, in-services, etc)

## **Evidence Implementation:**

A purposeful and enabling set of activities designed to engage key stakeholders with research evidence to inform decision-making and generate sustained improvement in the quality of healthcare delivery.



# Evidence implementation

- > **Context analysis:** How ready is the organisation for change/implementation?
- > **Facilitation:** Change or implementation projects require a facilitator or driver of the change, in an engaged process
- > **Evaluation:** To determine the impact of change and inform future activities, data on processes and outcomes should be collected



# Implementation

- > Whatever strategy is used, some key points to consider:
  1. Assess and establish organisational (or individual) readiness to change
  2. Assess barriers and facilitators to change
  3. Use targeted strategies to address barriers
  4. Communicate and provide feedback to all parties

# The JBI Model of Evidence-based Healthcare



## Overarching principles

Culture - Capacity - Communication - Collaboration

# Summary

1. Focused on areas of need: Knowledge needs can be identified by key stakeholders through engagement
2. The role of experts: Expert opinion, or current practice, isn't always correct: we need research balanced with expert information
3. Need for research: We need research to address uncertainty in practice
4. Reviews and synthesised and appraised evidence is important: All the evidence needs to be evaluated, appraised and synthesised
5. Getting the message across: Importance of conveying knowledge in a format that can be easily understood or translated and (active dissemination) and education
6. Change is hard: Although difficult, there are strategies and guidance for implementing evidence
7. Change can happen: It is possible to make a change in healthcare practice and make huge improvement, through facilitation and leaders
8. Importance of collecting data routinely to evaluate service performance and identify areas for improvement/implementation