

De l'evidence-based practice

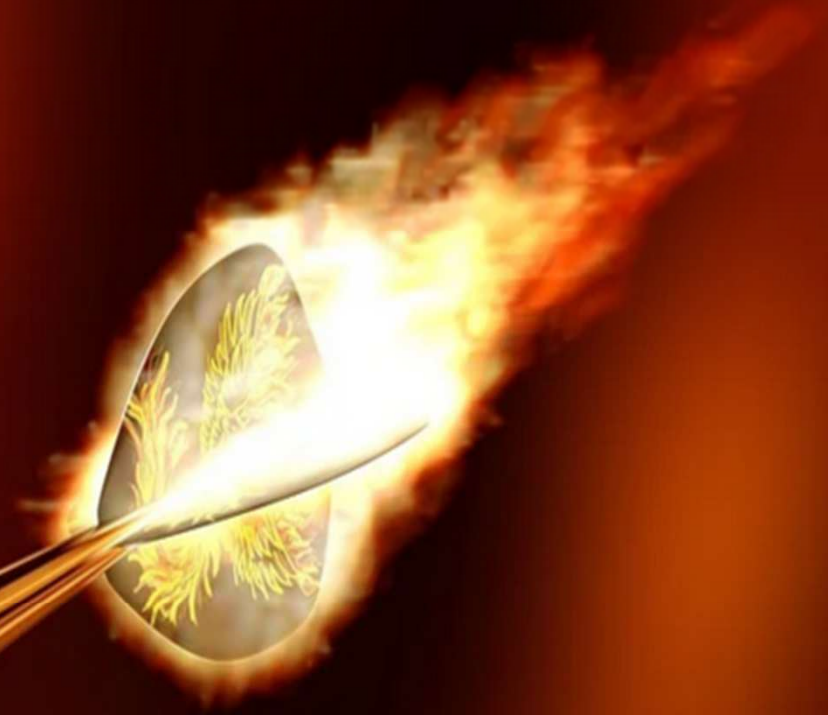
à l'evidence-based education

Durieux Nancy & Dachet Dylan

Liège, le 12 mai 2023



Evidence-based practice / EBP
Evidence-based education / EBE





wooclap

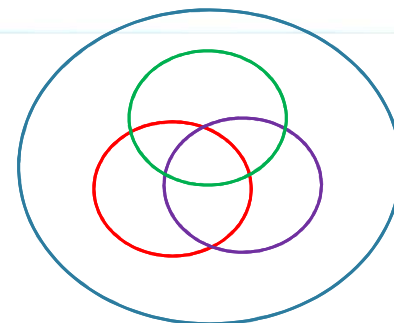


- Bref historique

- Notions théoriques

- Focus sur le pilier « recherche »

- Applications



Editorials

Evidence based medicine—an oral history

BMJ 2014 ; 348 doi: <https://doi.org/10.1136/bmj.g371> (Published 21 January 2014)

Cite this as: *BMJ* 2014;348:g371

- Expression EBM - début des années 1990
- Racines < 1990
 - Lacune de ce qui pourrait être appelé : « expert based medicine »
 - « Preuves » des interventions ?
 - « Preuves » des théories sur lesquelles les pratiques étaient fondées ?
 - « Faits à régurgiter » lors des examens en médecine
 - A la McMaster University : apprendre des problèmes des patients, l'épidémiologie, les statistiques - « l'évaluation critique »

■ Début des années 1990 - Université McMaster - Gordon Guyatt

November 4, 1992

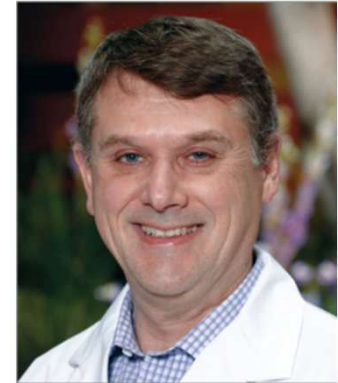
Evidence-Based Medicine

A New Approach to Teaching the Practice of Medicine

Gordon Guyatt, MD, MSc; John Cairns, MD; David Churchill, MD, MSc; [et al](#)

» [Author Affiliations](#)

JAMA. 1992;268(17):2420-2425. doi:10.1001/jama.1992.03490170092032



@JAMA, 2015

- diminue l'accent accordé à l'intuition, à l'expérience clinique non systématique...
- insiste sur l'examen des données probantes issues de la recherche clinique

- Par la suite, articles pionniers
 - L'examen clinique rationnel - Sackett & Rennie, 1992
 - Guides de l'utilisateur de la littérature médicale - Guyatt & Rennie, 1993

- Approche devenue rapidement populaire
(y compris en Europe)



- Critiques de l'EBM, telles que
 - manque d'importance accordée à l'expérience clinique
 - suprématie accordée aux résultats des essais contrôlés randomisés
 - impossibilité de pratiquer la démarche
 - EBP = livre de cuisine



Image tirée de Pixabay

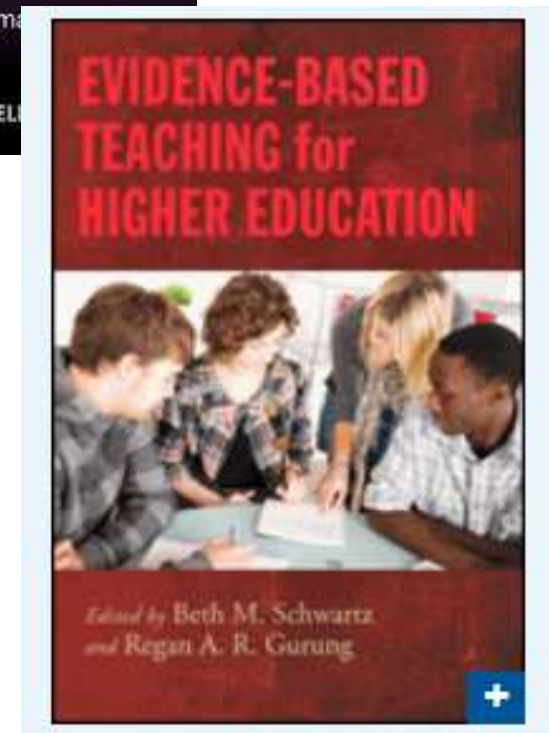
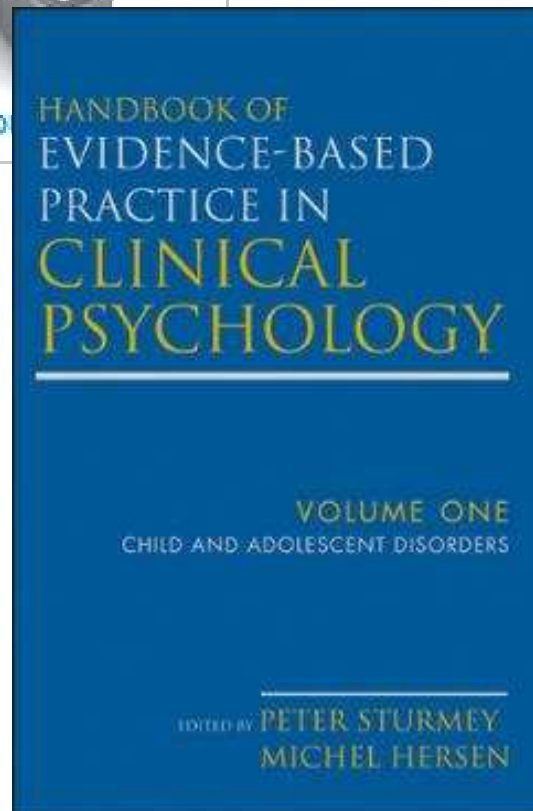
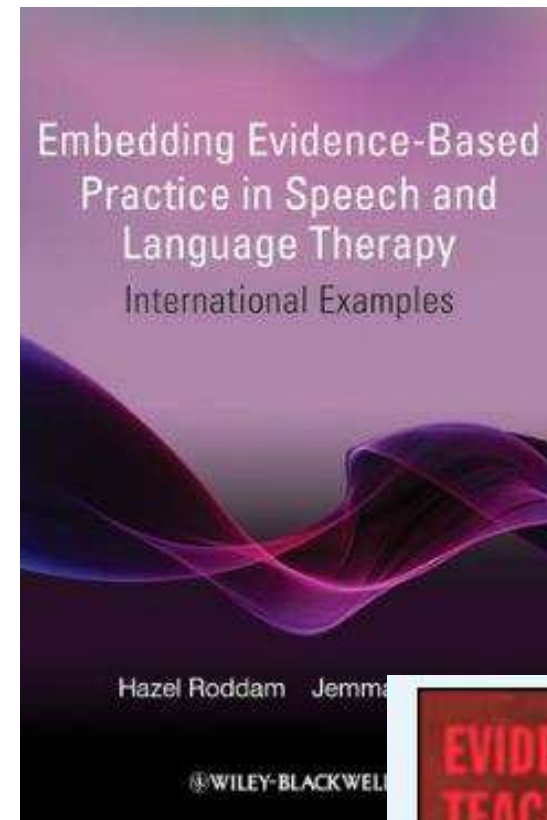
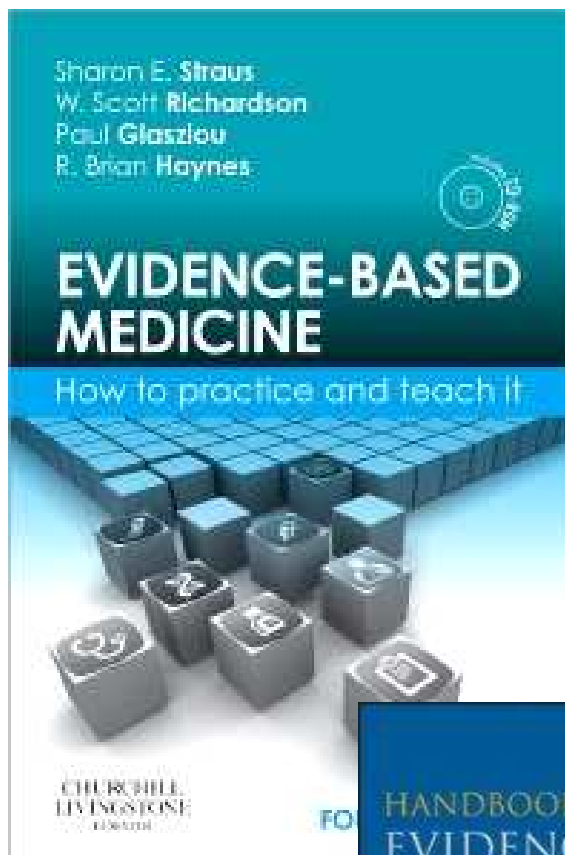


@BMJ, 2015

*Evidence based medicine:
what it is and what it isn't*

« Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. » (Sackett et al., 1996, p.72)

- Au fil des années : évolution du concept de l'EBM
 - Importance de l'expertise clinique, des valeurs et de la situation du patient (Guyatt, 2015; Howick, 2011)
 - Importance des autres *study designs*
“evidence-based practice is not exclusively about effectiveness; it is about basing practice on the best available evidence” (Pearson, 1998, p.25)
 - Adaptation à d'autres disciplines
 - *Evidence-based practice (EBP)*
 - Permet également de promouvoir une approche pluridisciplinaire des soins de santé (Dawes et al., 2005)



En éducation

USA

80' : mouvement du *Test-Based Accountability*

Herman (99) : seulement 20.8 % des programmes peuvent être considérés comme fondés sur des preuves

2001 : *No Child Left Behind*
2002 : WWC

2015 : *Every Student Succeeds Acts* (ESSA)

UK

90' : *New Labour, New life for Britain*
Hargreaves (1996) : faible qualité de la recherche causale en éducation

2000 : EPPI-Center
2000 : *National Educational Research Forum*

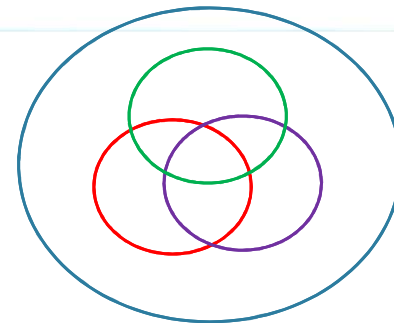


- Bref historique

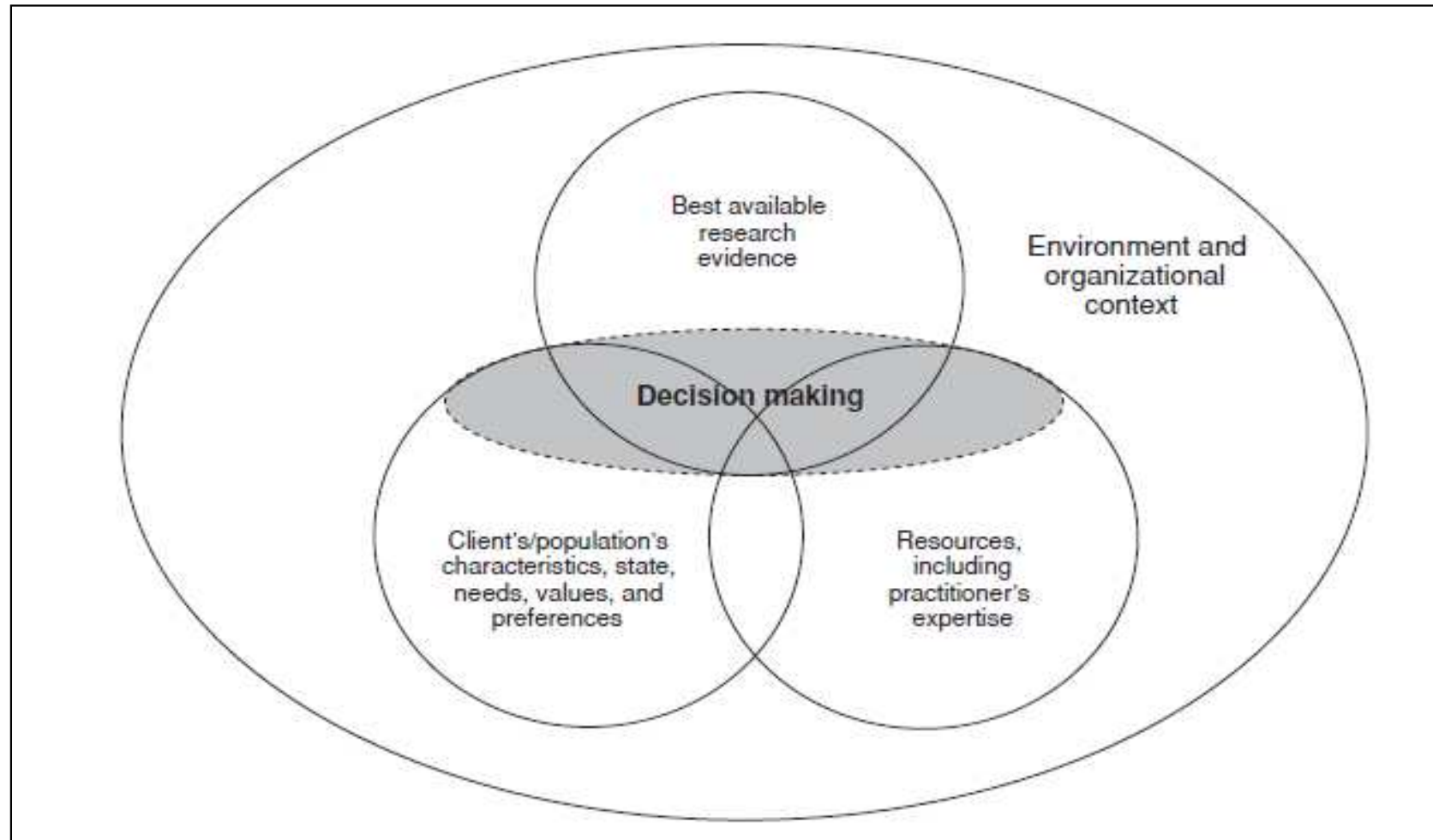
- Notions théoriques

- Focus sur le pilier « recherche »

- Applications



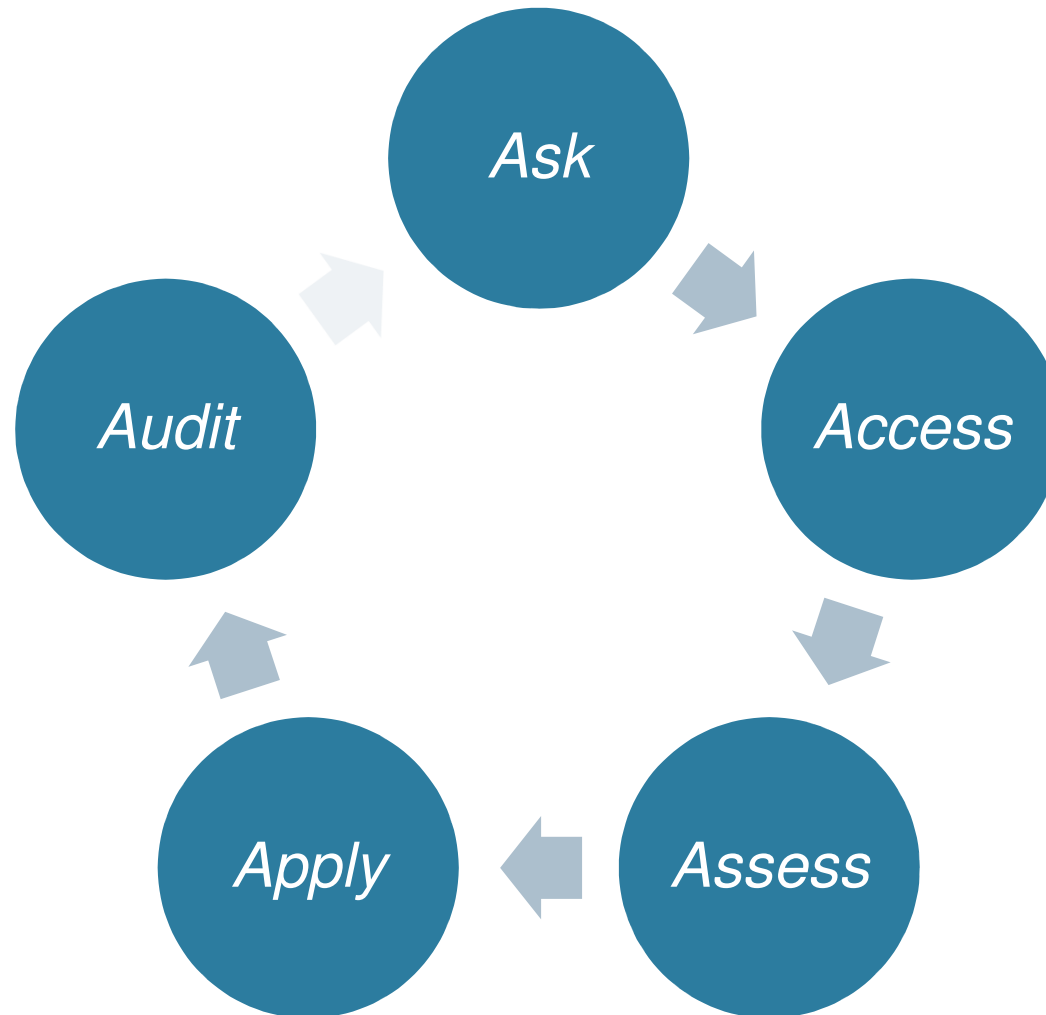
Toward a transdisciplinary model of evidence-based practice (tiré de Satterfield et al., 2009)



Prise de décision = processus complexe

Démarche *evidence-based practice* (EBP)

5 étapes

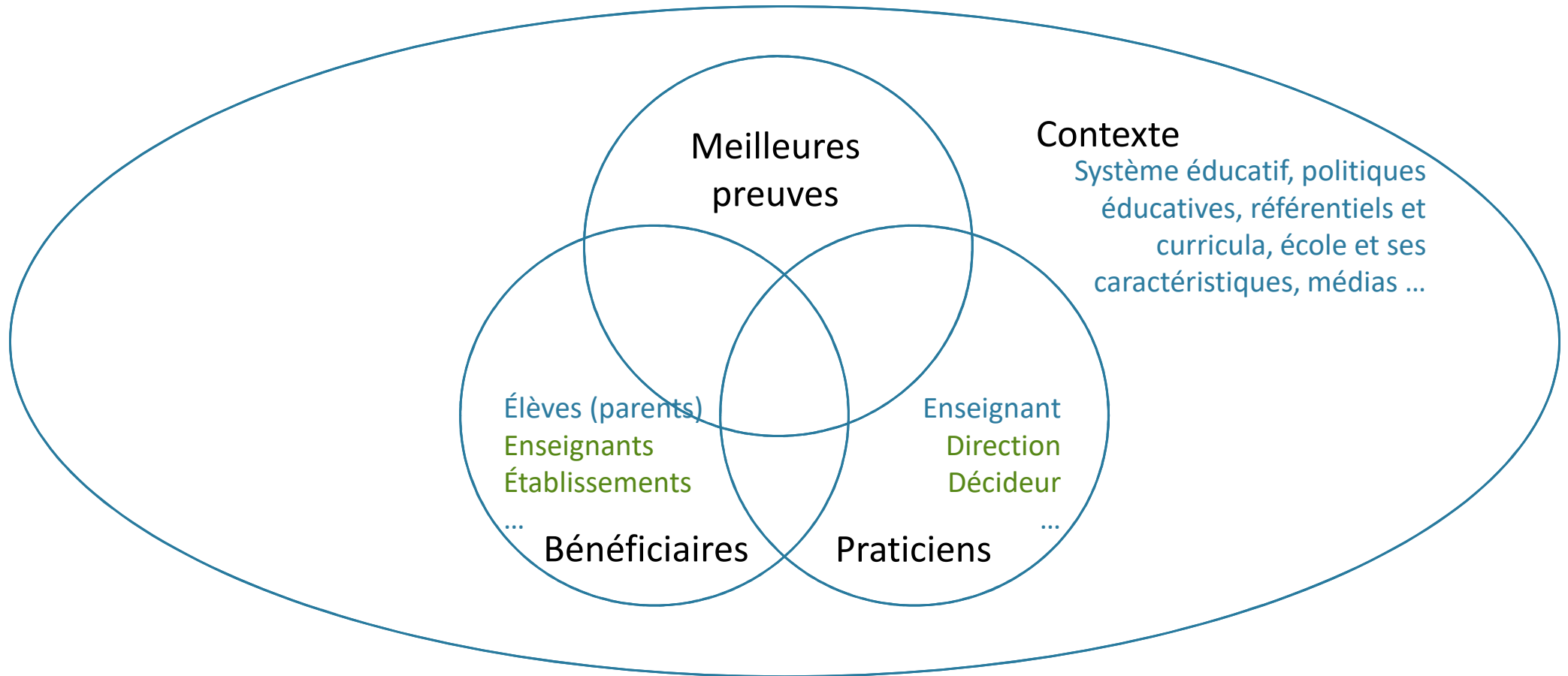


JBI Model of Evidence Based Healthcare



(Tiré de Jordan et al., 2019)

E-B Education, E-B Teaching, E-B Policy (in education)



Démarche EBE

Rendre les acteurs capables de :

- Poser une **question** (de recherche) pertinente.
- Savoir **où** et **comment** trouver les preuves nécessaires.
- Retrouver, lire ainsi qu'**évaluer et analyser** les preuves disponibles.
- Organiser et **classer** les preuves disponibles.
- **Déterminer** leur pertinence (// contexte, besoins, ...).

(Davies, 1999)

Caractéristiques d'une approche EB :

- Comprendre les preuves
- Tester le pourquoi
- Etre critique
- Prioriser l'évaluation
- Contrôler localement et de façon formative
- Changer avec les preuves
- Comprendre la méthodologie

(Coe & Kime, 2019)



- Bref historique



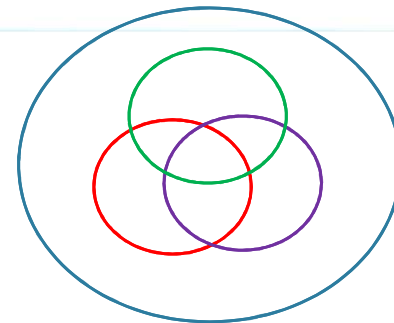
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- Applications



Un des piliers de l'EBP

■ *Best available research evidence*

- = Les (meilleurs et actuels) résultats valides et cliniquement pertinents de la recherche scientifique (Sackett et al., 2000)
- Traduction :
« Preuves » / faits (documentés) / données probantes
- A garder à l'esprit !!!
 - Les données probantes doivent servir à informer et à guider les intervenants et non à imposer le choix d'une intervention (Glasziou, 2005)

- Les moteurs de recherche sont maintenant aussi essentiels que les stéthoscopes ont pu l'être

(Glasziou *et al.*, 2008)

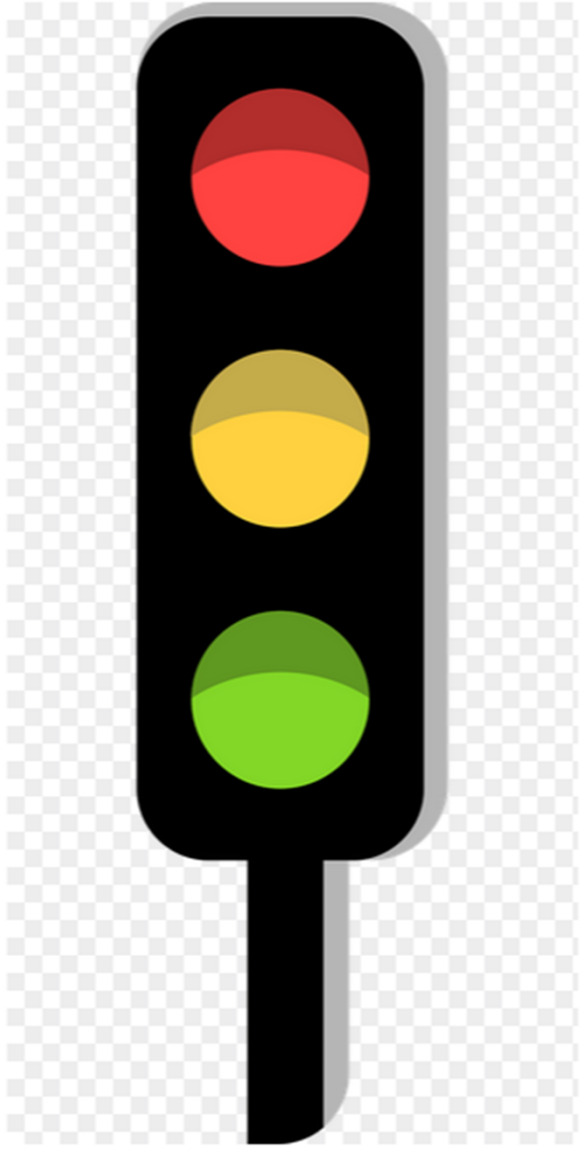


Image tirée de Pixabay

- Essentiel de savoir où chercher... et où il est peu utile de chercher

Campagne « *Don't Google it* »

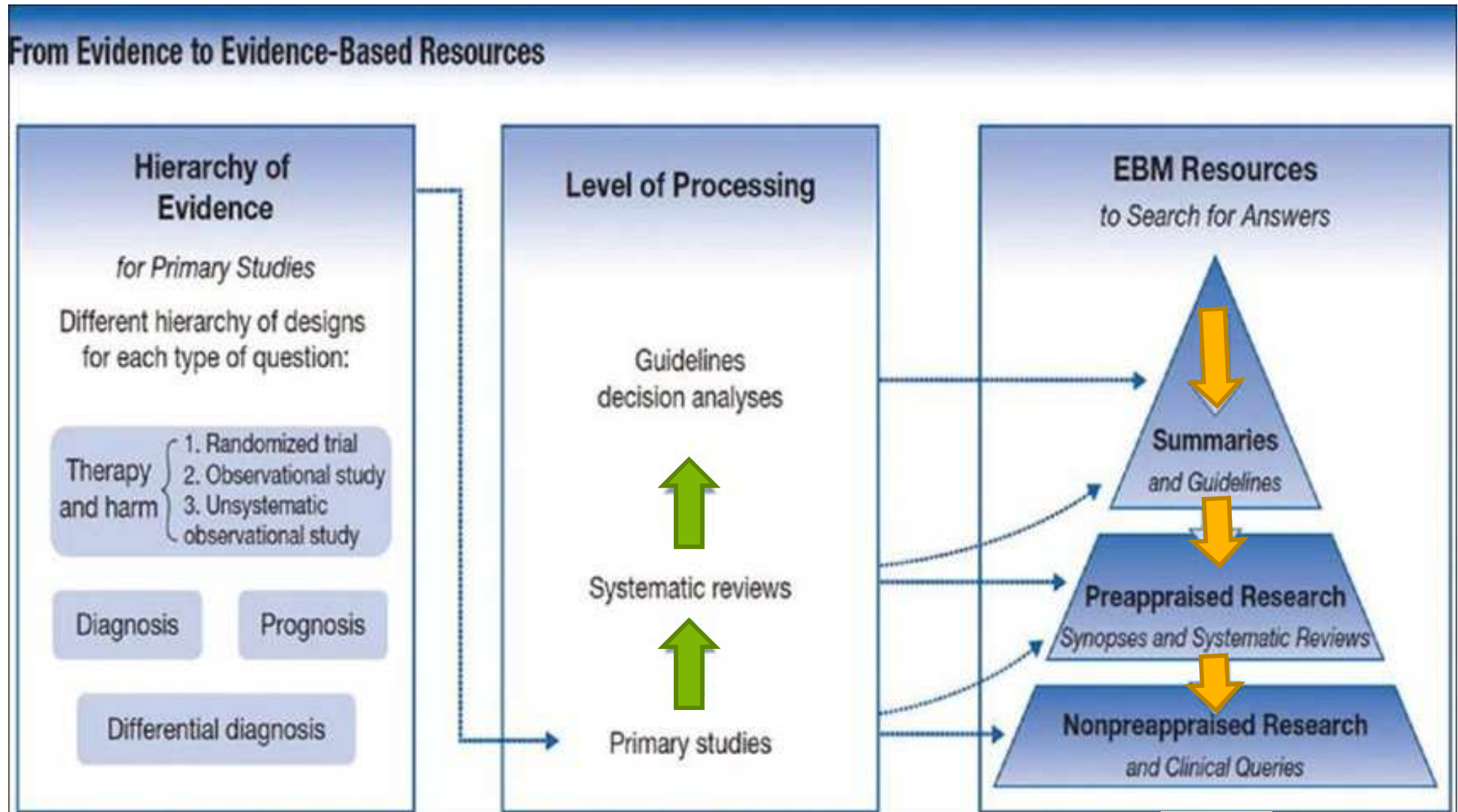
Vidéo disponible sur <https://www.cdih.be/fr>

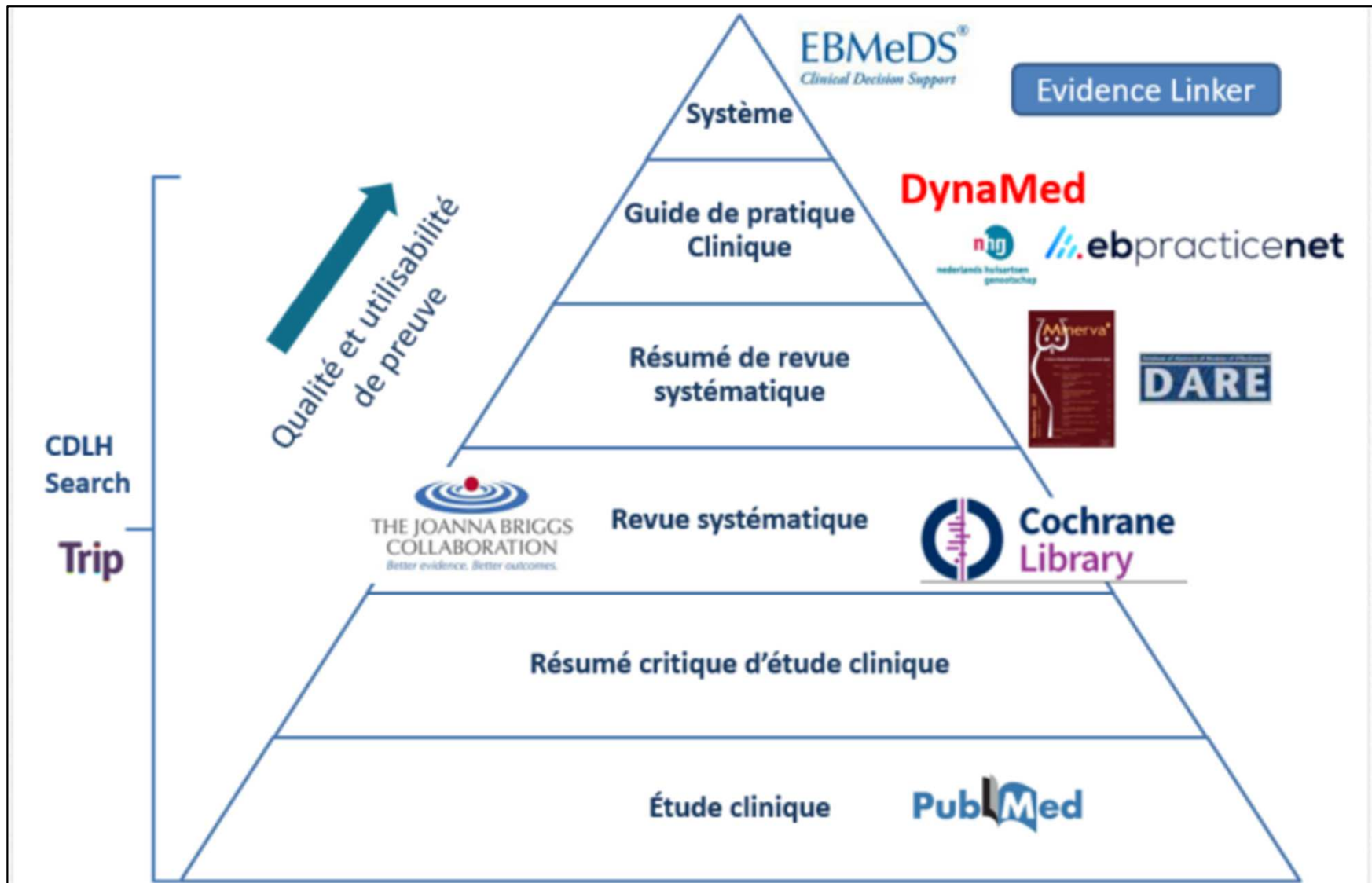


wooclap

Modèle théorique : 3 classements

tiré de Agoritsas, et al. (2015)







le Réseau EBP



<https://www.evikey.be/fr/>

Objectifs :

Améliorer la qualité et l'efficacité des soins de santé

Mettre à la disposition des praticiens de la santé des données probantes actualisées et validées

Promouvoir la pratique et la culture de l'Evidence-Based Practice en Belgique

<https://www.evikey.be/fr/a-propos/>



les parties prenantes

les partenaires-clés directement impliqués dans le processus scientifique EBP du réseau

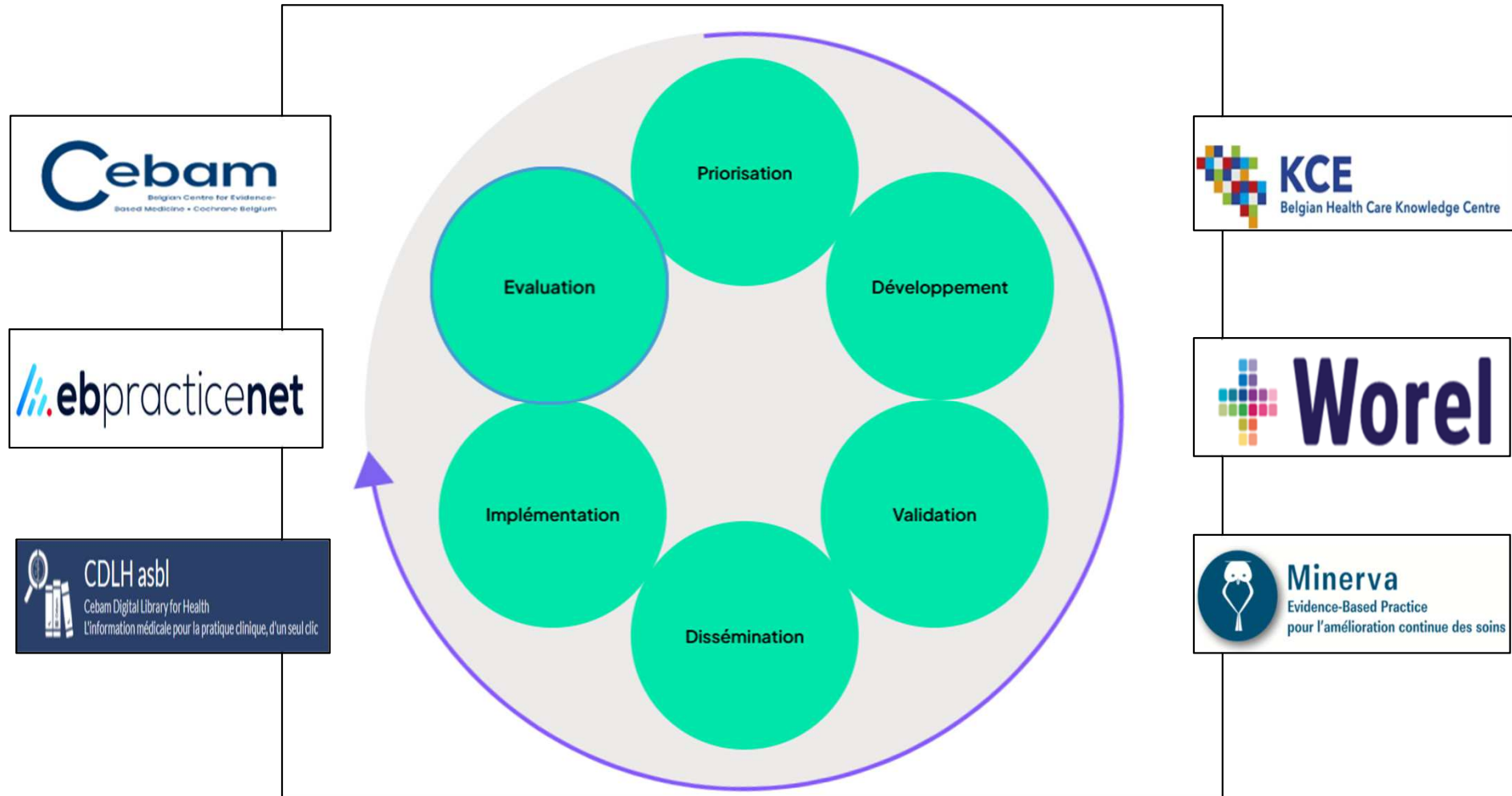
les membres financeurs qui participent aux activités du comité fédéral de pilotage

les représentants des praticiens, des patients, des mutuelles et des acteurs de l'EBP qui, en tant qu'acteurs de terrain, ont un rôle de conseil au sein du comité consultatif

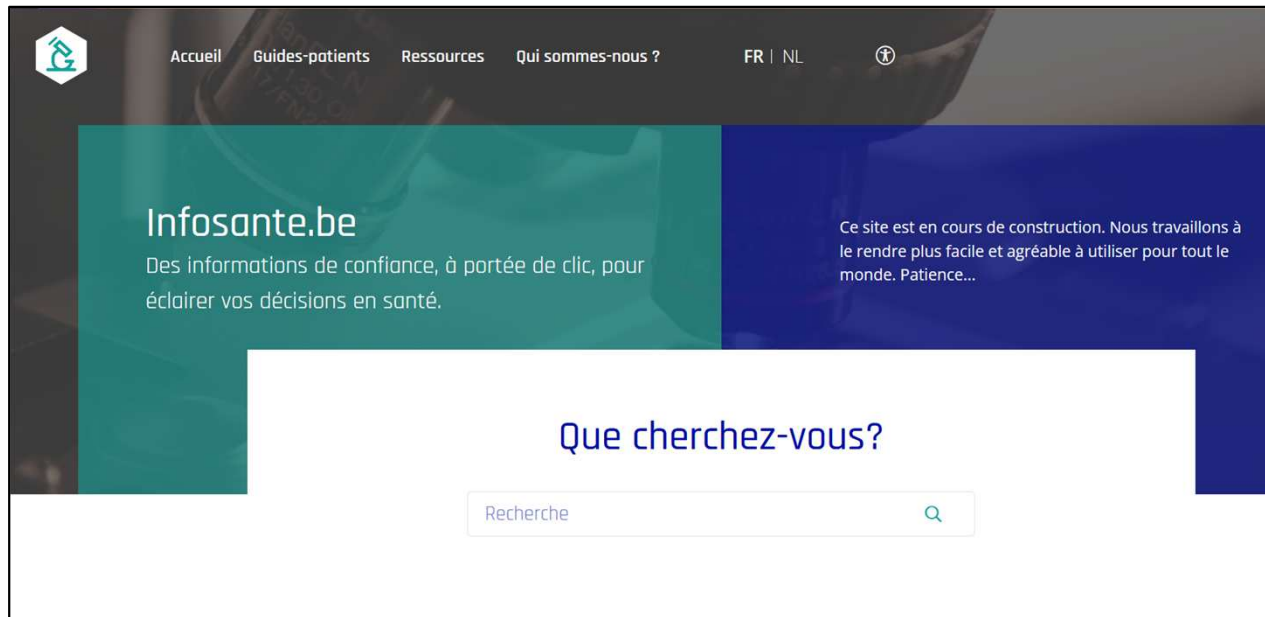
les organisations partenaires non membres du réseau avec lesquelles Evikey collabore étroitement



Comprendre le cycle de vie



Ressources aussi pour les patients



The screenshot shows the top section of the Infosante.be website. It features a dark navigation bar with a logo on the left and menu items: 'Accueil', 'Guides-patients', 'Ressources', 'Qui sommes-nous?', 'FR | NL', and a user icon. Below the navigation bar, there are two colored panels: a teal one on the left with the text 'Infosante.be' and 'Des informations de confiance, à portée de clic, pour éclairer vos décisions en santé.', and a dark blue one on the right with the text 'Ce site est en cours de construction. Nous travaillons à le rendre plus facile et agréable à utiliser pour tout le monde. Patience...'. In the center, there is a white search bar with the text 'Que cherchez-vous?' and a search button labeled 'Recherche' with a magnifying glass icon.



The screenshot shows the footer of the Infosante.be website. It features a teal background with a logo on the left and the text 'GEZONDHEID EN WETENSCHAP'. Below the logo and text, there is a navigation bar with the following links: 'Homepage', 'In de media', 'Patiëntenrichtlijnen', 'Ons project', 'Contacteer ons', 'Disclaimer & Copyright', and 'Privacy'.

En sciences de l'éducation

Processus de recherche spécifique en 6 étapes :

1. **Revue de la recherche** antérieure quant à l'efficacité d'interventions éducatives spécifiques et répondant à un besoin clairement identifié.
 - a. Priorisation des domaines d'intervention.
 - b. Définition des standards de qualité permettant la sélection des études.
 - c. Mise en place d'un centre d'expertise chargé de passer en revue les études disponibles.
2. **Communiquer** largement les informations disponibles sur les dispositifs efficaces.
3. **Développer** les programmes d'intervention (// adaptation socio-culturelle & critères d'évaluation).
 - a. Étude pilote de faisabilité à petite échelle.
 - b. Étude rigoureuse à grande échelle.
4. **Diffuser** les programmes d'intervention.
5. **Étendre le domaine** d'intervention.
6. **Évaluer l'impact** de la réforme **au niveau national**.

En sciences de l'éducation

- What Works Clearinghouse
 - Evidence for ESSA
 - Best Evidence Encyclopedia
 - Education Endowment Foundation
 - Evidence Based Education
 - EPPI-Centre
 - Campbell Collaboration
-
- Danish Clearinghouse for educational research
 - Swedish Institute for Educational Research
 - Top Institute for Evidence-Based Education Research

En sciences de l'éducation

WWC

WHY

The work of the WWC helps teachers, administrators, and policymakers make evidence-based decisions.



WHAT

The WWC reviews **evidence** of effectiveness of programs, policies, or practices by using a consistent and transparent set of standards. The WWC doesn't rank, evaluate, or endorse interventions.



HOW

The WWC creates products that present findings on what works in education, including:



INTERVENTION REPORTS



SINGLE STUDY REVIEWS



QUICK REVIEWS



PRACTICE GUIDES

WHERE

Summaries of the available research interventions are available at whatworks.ed.gov



En sciences de l'éducation

WWC

Find What Works based on the evidence

[Print](#)

Filter by topic

- Literacy
- Mathematics**
- Science
- Behavior
- Children and Youth with Disabilities
- English Learners
- Teacher Excellence
- Charter Schools
- Early Childhood

152 Results filtered by:

Mathematics x

Evidence of effectiveness ⁱ	Intervention ⁱ	Grades examined ⁱ	Compare ⁱ
	Knowledge is Power Program (KIPP)	5-12	<input type="checkbox"/>
	Teach for America (TFA)	K-12	<input type="checkbox"/>
	Cognitive Tutor® Algebra I	8-PS	<input type="checkbox"/>
	Pre-K Mathematics	PK	<input type="checkbox"/>
	Building Blocks for Math (SRA Real Math)	PK	<input type="checkbox"/>
	Lindamood Phoneme Sequencing® (LiPS®)	1-4	<input type="checkbox"/>
	Green Dot Public Schools	9-12	<input type="checkbox"/>
	The Expert Mathematician	8	<input type="checkbox"/>
	University of Chicago School Mathematics Project (UCSMP) Multiple Courses	7-10	<input type="checkbox"/>
	Literacy Express	PK	<input type="checkbox"/>
	Peer-Assisted Learning Strategies	K-6	<input type="checkbox"/>
	Ladders to Literacy	PK-K	<input type="checkbox"/>
	University of Chicago School Mathematics Project (UCSMP) Advanced Algebra		<input type="checkbox"/>
	University of Chicago School Mathematics Project (UCSMP) Functions, Statistics, and Trigonometry		<input type="checkbox"/>

3 logos // preuves d'efficacité

En sciences de l'éducation

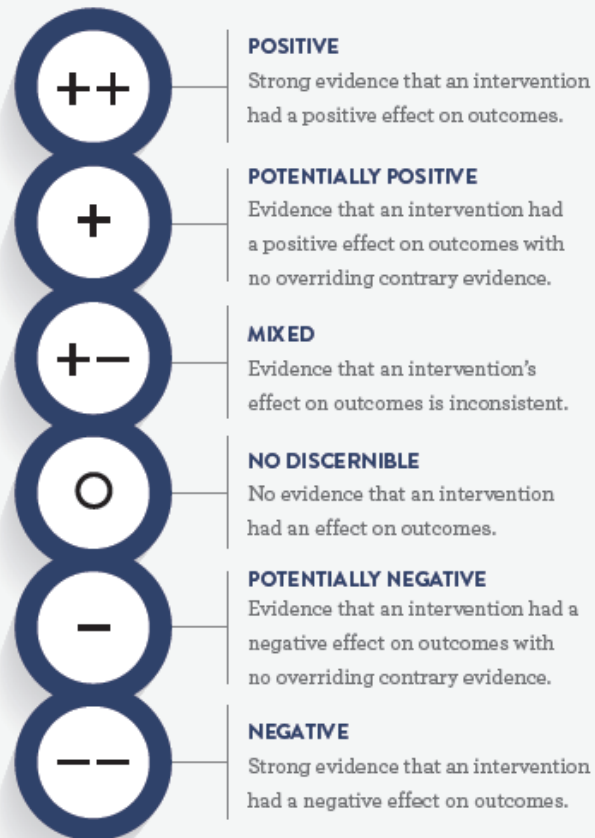
WWC

IMPROVEMENT INDEX

The expected change in percentile rank for an average comparison group student if the student had received the intervention. For example, an improvement index of 16 means that a student typically scoring at the 50th percentile would have scored at the 66th percentile if he or she had received the intervention.

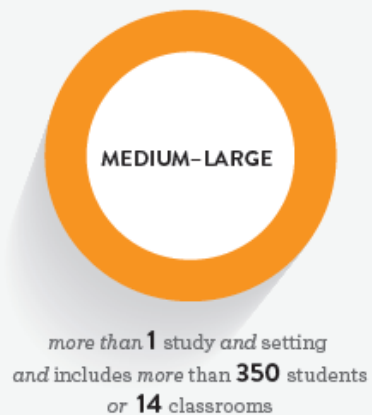


INTERVENTION EFFECTIVENESS RATINGS FOR EACH OUTCOME DOMAIN



EXTENT OF EVIDENCE

The number of studies that meet WWC standards and their sample sizes determine whether extent of evidence is small or medium-large.



En sciences de l'éducation

EEF

[The Big Picture](#)[Evidence summaries](#)[Practical Tools](#)[Projects and Evaluation](#)[Support for schools](#)[Covid-19 Resources](#)[News](#)[More](#) 

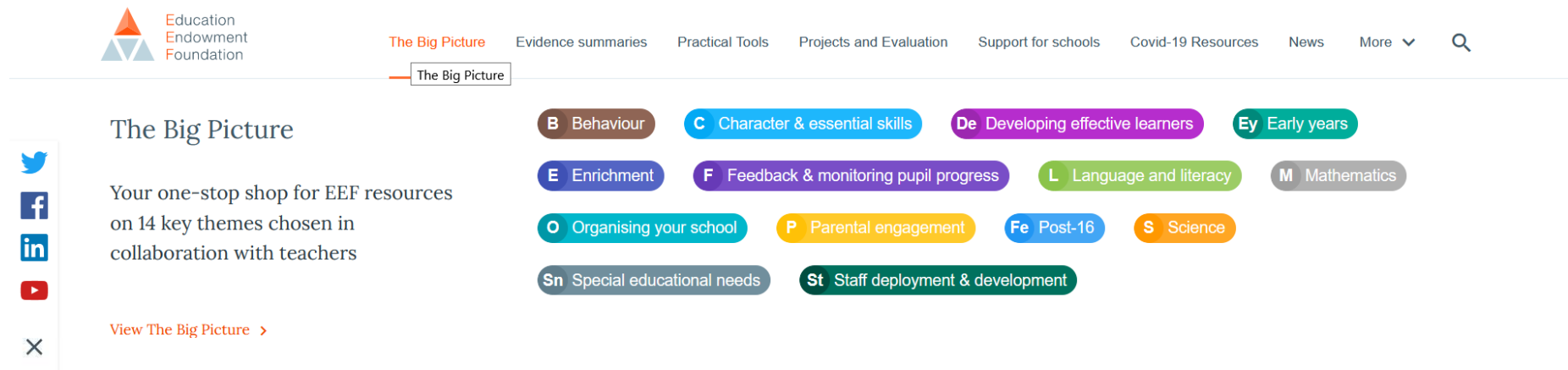
NEW: Eight evidence-based recommendations to support 5-7 year-olds' literacy

Our updated 'Improving Literacy in Key Stage 1' guidance report offers practical and actionable advice that is relevant to all pupils, but particularly to those struggling with their literacy.

[Read our report](#)

En sciences de l'éducation

EEF



Education Endowment Foundation

The Big Picture Evidence summaries Practical Tools Projects and Evaluation Support for schools Covid-19 Resources News More ▾ 🔍

The Big Picture

The Big Picture

Your one-stop shop for EEF resources on 14 key themes chosen in collaboration with teachers

[View The Big Picture >](#)

- B Behaviour
- C Character & essential skills
- De Developing effective learners
- Ey Early years
- E Enrichment
- F Feedback & monitoring pupil progress
- L Language and literacy
- M Mathematics
- O Organising your school
- P Parental engagement
- Fe Post-16
- S Science
- Sn Special educational needs
- St Staff deployment & development

offers practical and actionable advice that is relevant to all pupils, but particularly to those struggling with their literacy.

[Read our report](#)

En sciences de l'éducation

EEF

[The Big Picture](#)[Evidence summaries](#)[Practical Tools](#)[Projects and Evaluation](#)[Support for schools](#)[Covid-19 Resources](#)[News](#)[More](#) **F**

Feedback & monitoring pupil progress

Using assessment to understand pupils' strengths, weaknesses and progress, and how to address these through feedback.

Introduction

Providing high-quality feedback to pupils is integral to effective teaching. Equally, gathering feedback on how well pupils have learned a topic is important in enabling teachers to address any misunderstanding and provide the right level of challenge in future lessons.

This page is an overview of current evidence on how to use assessment to understand pupils' strengths, weaknesses and progress, and addressing these through feedback. It draws on:

- relevant topics from our Teaching and Learning Toolkit;
- findings from the EEF-funded projects that directly relate to feedback and monitoring pupil progress; and
- other evidence-based resources we hope will be useful.

En sciences de l'éducation

EEF



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Evidence summaries

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Projects and Evaluation

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Covid-19 Resources

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F

Feedback & monitoring pupil progress

Using assessment to understand pupils' strengths, weaknesses and progress, and how to address these through feedback.

Guidance Reports

Clear and actionable recommendations for teachers on a range of high-priority issues, based on the best available evidence.



Feedback
Primary & Secondary

To be published in summer 2021

Launching in one year

En sciences de l'éducation

EEF


[The Big Picture](#)
[Evidence summaries](#)
[Practical Tools](#)
[Projects and Evaluation](#)
[Support for schools](#)
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[News](#)
[More](#)

F

Feedback & monitoring pupil progress

Using assessment to understand pupils' strengths, weaknesses and progress, and how to address these through feedback.

Toolkit strands

Applicable strands from the Teaching & Learning Toolkit

Feedback

High impact for very low cost, based on moderate evidence.


+8

Evidence Summary

[Our Toolkit](#) suggests that the provision of high-quality [feedback](#) can lead to an average of eight additional months' progress over the course of a year. Feedback can take a range of different forms, including written feedback in the form of marking, oral feedback and peer feedback, while a teacher may also choose to vary the frequency, timing, focus and tone.



- Bref historique



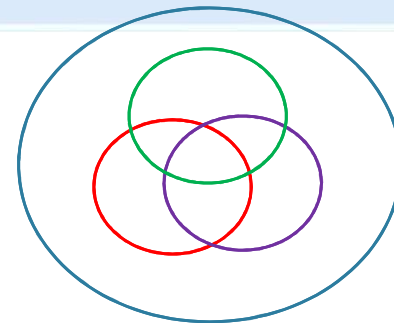
- Notions théoriques

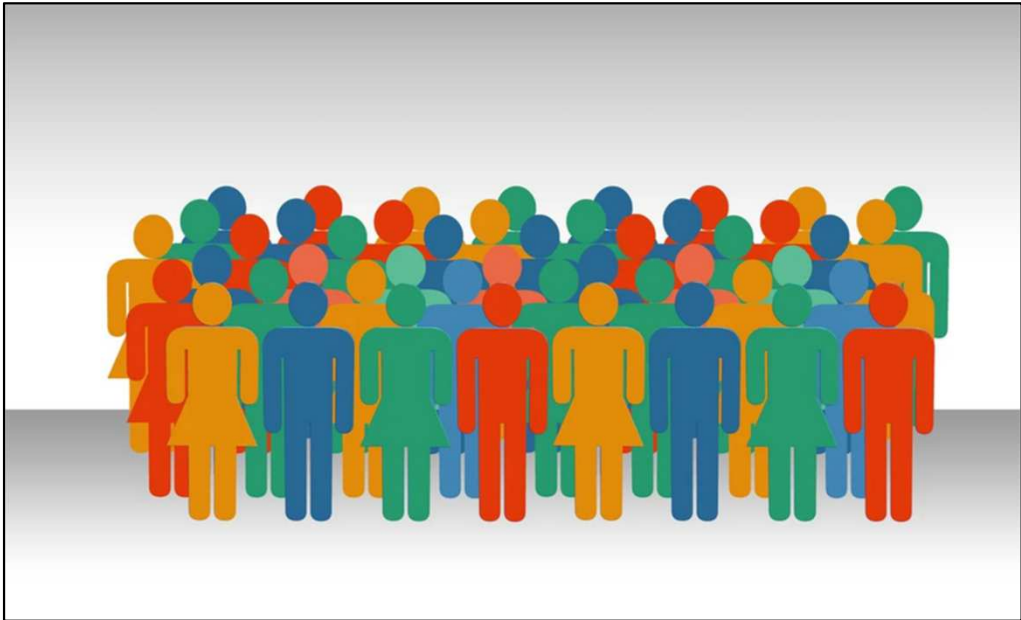


- Focus sur le pilier « recherche »



- Applications





JBI Model of Evidence Based Healthcare



METHODOLOGY PAPER

JBI's approach to evidence implementation: a 7-phase process model to support and guide getting evidence into practice

Porritt, Kylie; McArthur, Alexa; Lockwood, Craig; Munn, Zachary

[Author Information](#)

JBI Evidence Implementation 21(1):p 3-13, March 2023. | DOI: 10.1097/XEB.0000000000000361



JBI EVIDENCE IMPLEMENTATION

© JBI, 2023

(Porritt et al., 2023)

JBI EVIDENCE IMPLEMENTATION

Person-centered care approach to prevention and management of falls among adults and aged in a Brazilian hospital: a best practice implementation project

Albertini, Anna Carolina da Silva; Fernandes, Renato Pinheiro; Püschel, Vilanice Alves de Araújo; [More](#)

JBI Evidence Implementation. 21(1):14-24, March 2023.

 [Abstract](#)  [Favorite](#)  [PDF](#)  [Permissions](#)



[OPEN](#)

[SDC](#)

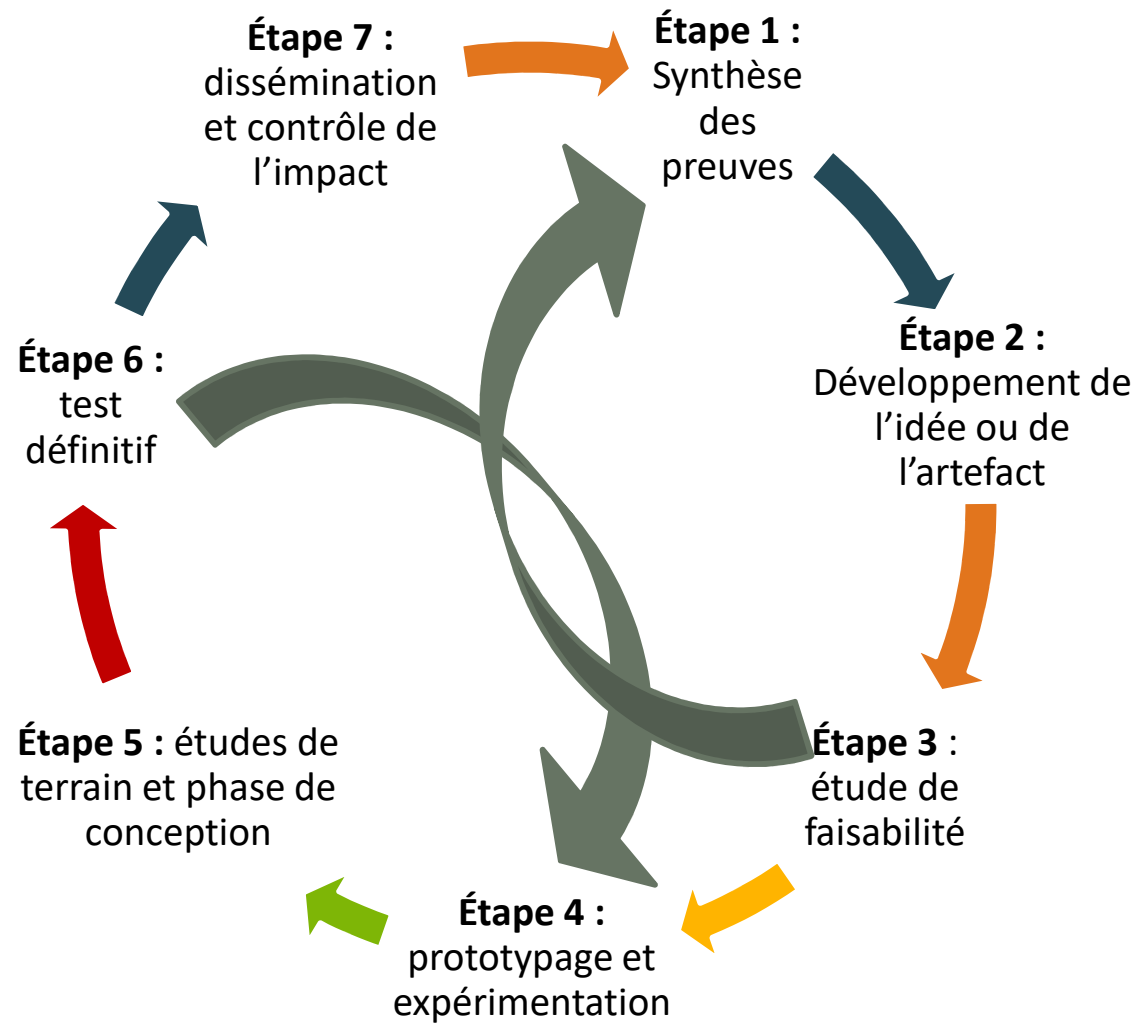
Promoting oral and dental healthcare among the elderly in a residential care home in Isfahan: a best practice implementation project

Vedaei, Amirhossein; Iranmanesh, Pedram; Tahani, Bahareh; [More](#)

JBI Evidence Implementation. 21(1):25-35, March 2023.

 [Abstract](#)  [Favorite](#)  [PDF](#)  [Permissions](#)

[BUY](#)





Evidence-based practice / EBP
Evidence-based education / EBE



Seven alternatives to evidence-based medicine



Basis of clinical practice

Basis for clinical decisions	Marker	Measuring device	Unit of measurement
Evidence	Randomised controlled trial	Meta-analysis	Odds ratio
Eminence	Radiance of white hair	Luminometer	Optical density
Vehemence	Level of stridency	Audiometer	Decibels
Eloquence (or elegance)	Smoothness of tongue or nap of suit	Teflometer	Adhesin score
Providence	Level of religious fervour	Sextant to measure angle of genuflection	International units of piety
Diffidence	Level of gloom	Nihilometer	Sighs
Nervousness	Litigation phobia level	Every conceivable test	Bank balance
Confidence*	Bravado	Sweat test	No sweat

*Applies only to surgeons.

(Isaacs et Fitzgerald, 1999)

Et vous qu'en pensez-vous ?



Image tirée de Pixabay

Durieux Nancy & Dachet Dylan



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