# Knowledge Translation: Cochrane Strategy to disseminate evidence

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Trusted evidence.
Informed decisions.
Better health.

# Outline

EBM and EBCP

Knowledge Translation (KT)

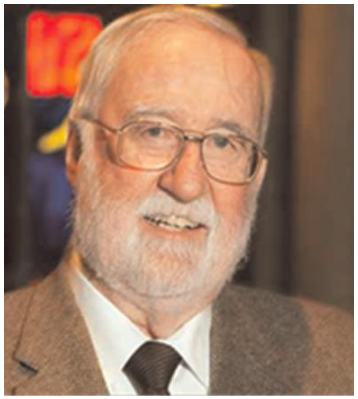
Cochrane Strategy to KT

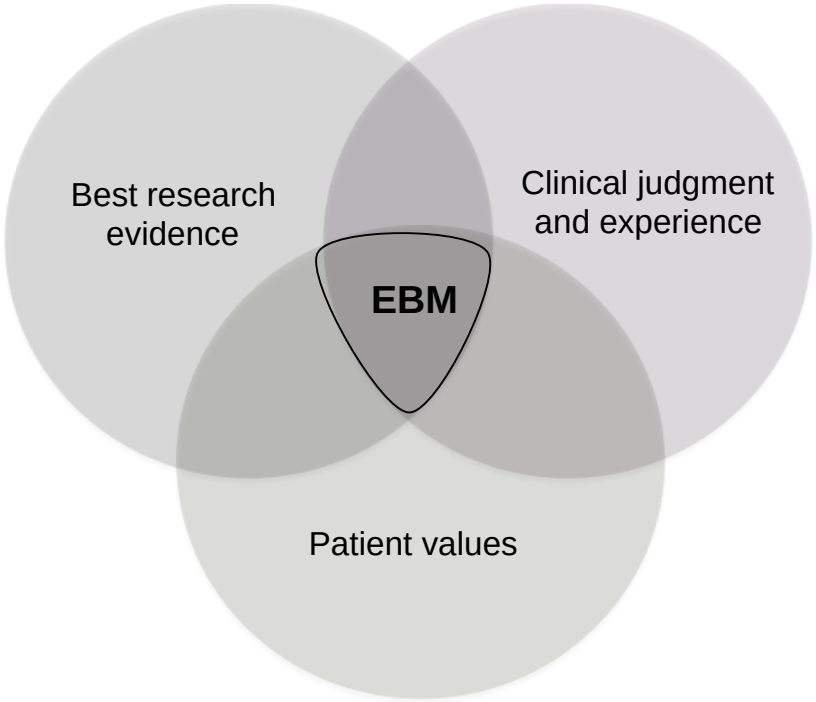
Cochrane Rehabilitation Strategy to KT

# What is EBM?

Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.

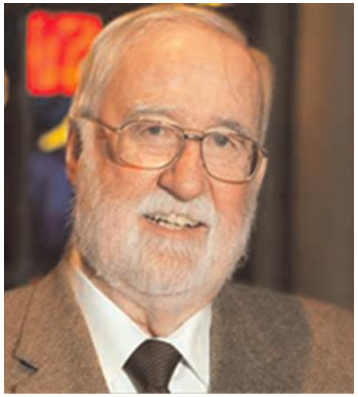
*Sackett, et al. BMJ 1996.*





# What is not EBM?

- What we have always done
- “Cookbook medicine”
- Only a cost-cutting trick
- Only randomized trials



*Sackett, et al. BMJ 1996.*

Photo by Dan Gold on Unsplash

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# EBCP process

- P — Patient Population
- I — Intervention or Issue
- C — Comparison intervention (optional)
- O — Outcome of interest

Ask

Formulating the clinical question

Acquire

Searching the Evidence

Appraise

Appraising the Evidence

Apply

Incorporating Evidence to decision-making

Assess

Evaluating the Process

Patient for whom we are uncertain about therapy, diagnosis , or prognosis

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# The Know-Do Gap

## *"All breakthrough, no follow through"*

High quality evidence is not consistently applied in practice[1]

Examples in clinical practice:

- Statins decrease mortality and morbidity in post-stroke, but they are underprescribed[2]
- Antibiotics are overprescribed in children with upper respiratory tract symptoms[3]

Examples in health system policies:

- Evidence was not frequently used by WHO[4] (not true for last rehabilitation guidelines)
- Out of 8 policymaking processes in Canada[5]
  - Only 1 was fully based on research
  - Other 3 were partially based on research

*1. Majumdar SR et al. J Am Coll Cardiol. 2004. 2. LaRosa JC et al. JAMA. 1999. 3. Arnold S et al. Cochrane Database Syst Rev. 2005:. 4. Oxman A et al. Lancet. 2007. 5. Lavis J et al. Milbank Q. 2002.*

*Courtesy of Stefano Negrini*

# Evidence in the management of LBP

- 68% of PTs used interventions with strong or mod evidence of effectiveness
- 90% used interventions with limited evidence of effectiveness
- 96% used interventions with absence of evidence of effectiveness

*Mikhail C et al. Phys Ther. 2005*

# Why there is the Know-Do Gap?

Evidence not focused on the end-users[1]:

- Epidemiologically and methodologically focused
- Missing details on interventions and settings

Lack of knowledge management skills and infrastructure[2]

- Macro-level: health care system and organization (finance and equipments)
- Meso-level: health care teams (standards of care)
- Micro-level: Individual health care professionals
  - Volume of, and access to research evidence
  - Time to read
  - Skills to appraise, understand and apply research evidence

*1. Glenton C et al. J Clin Epidemiol 2006. 2. Grimshaw JM et al. J Contin Educ Health Prof. 2002.*

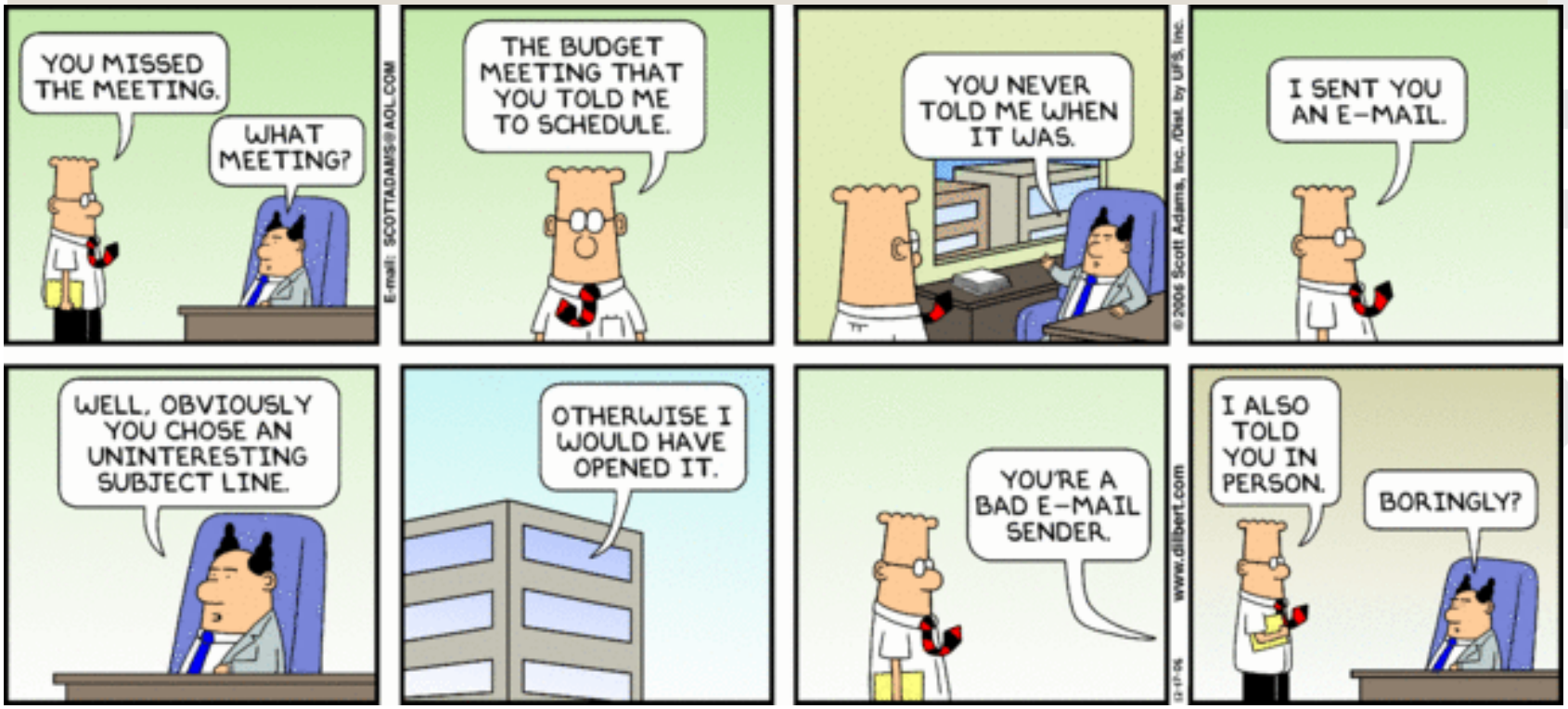
*Courtesy of Stefano Negrini*

# Judging the benefits and harms of medicines

Only trustworthy evidence will earn the public's trust

Joe Freer *editorial registrar, The BMJ*, Fiona Godlee *editor in chief, The BMJ*

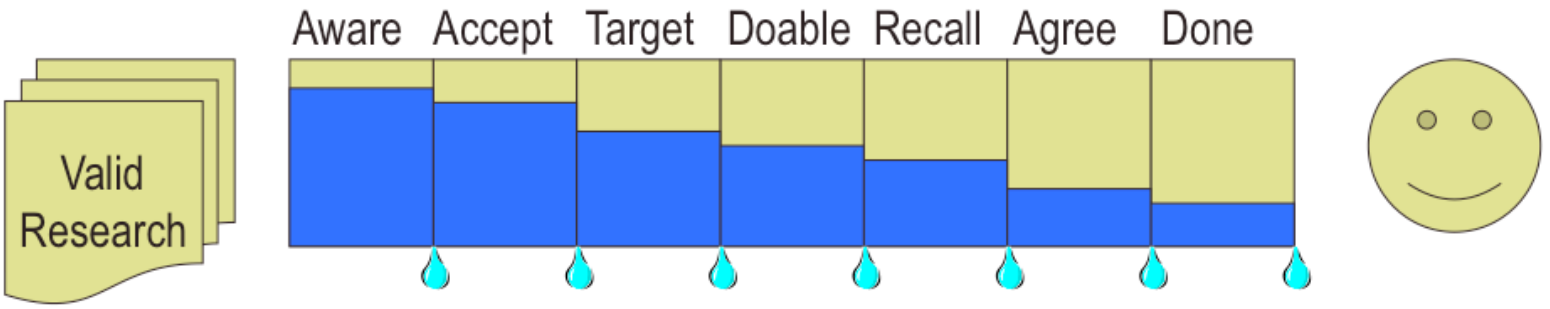
**Box 1: Academy of Medical Science's 12 recommendations**



# Leaks from research to practice

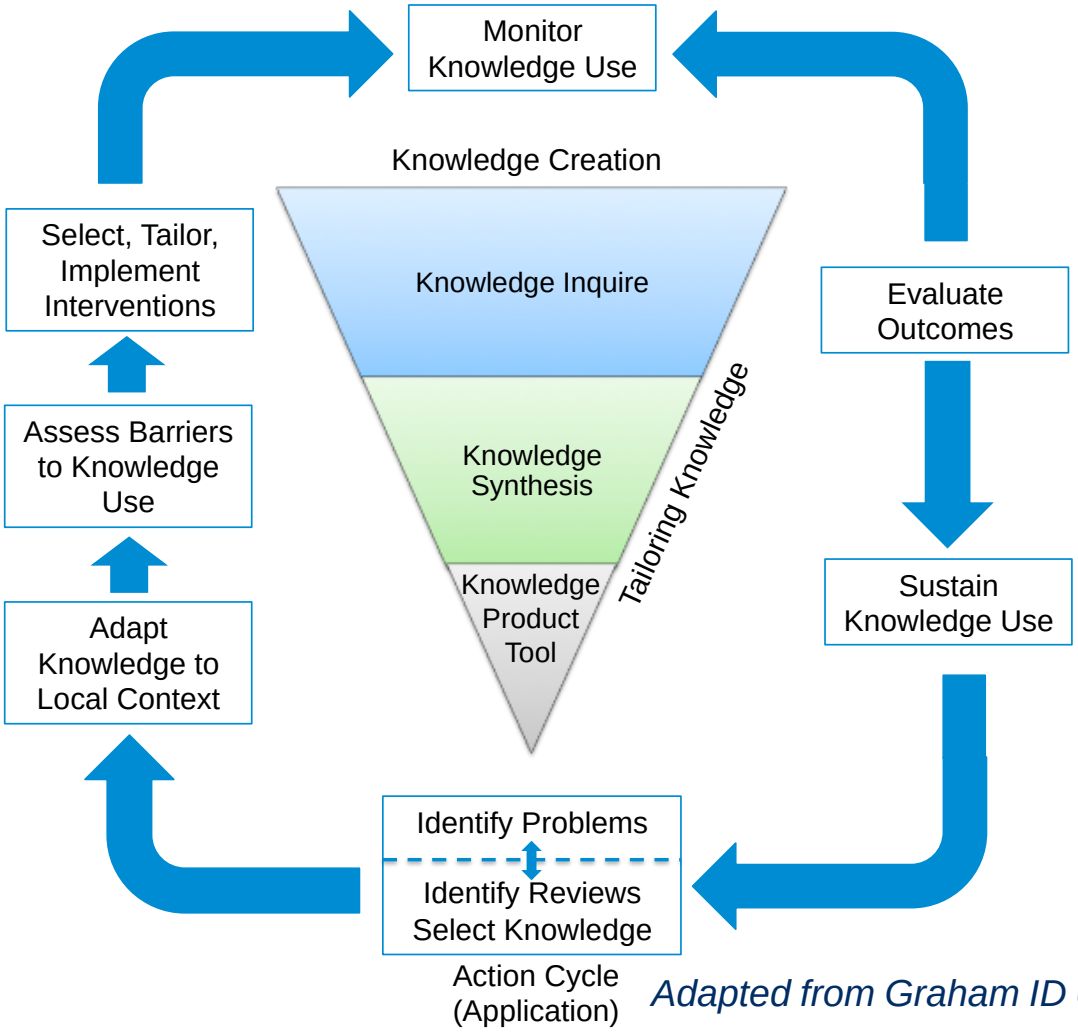
If 80% achieved at each stage then

0.8 x 0.8 x 0.8 x 0.8 x 0.8 x 0.8 x 0.8 = 0.21




*Adapted from Glasziou P*

# Knowledge to action process




*Adapted from Graham ID et al. J Contin Ed Health Prof. 2006.*

# Strategy to 2020

| | | |
|---|---|---|
| 1 | **Collaboration** | by fostering global co-operation, teamwork, and open and transparent communication and decision making. |
| 2 | **Building on the enthusiasm of individuals** | by involving, supporting and training people of different skills and backgrounds. |
| 3 | **Avoiding duplication of effort** | by good management, co-ordination and effective internal communications to maximize economy of effort. |
| 7 | **Promoting access** | by wide dissemination of our outputs, taking advantage of strategic alliances, and by promoting appropriate access models and delivery solutions to meet the needs of users worldwide. |
| 8 | **Ensuring quality** | by applying advances in methodology, developing systems for quality improvement, and being open and responsive to criticism. |
| 9 | **Continuity** | by ensuring that responsibility for reviews, editorial processes and key functions is maintained and renewed. |
| 10 | **Enabling wide participation** | in our work by reducing barriers to contributing and by encouraging diversity. |


The main aims of the Strategy to 2020 are:

1. Make it simpler, quicker and more efficient to produce Cochrane Reviews and other synthesized research evidence.
2. Increase the number of people worldwide accesing and using this evidence in their decision making.

# Knowledge Translation

"A dynamic and interactive process that includes the synthesis, dissemination, exchange, and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system." *Canadian Institutes of Health Research*[1]

Alternative terms[2] are:

- dissemination and implementation,
- implementation science,
- research use,
- knowledge transfer
- uptake/exchange


*1. Mc Kibbon KA et al. Impl Sci. 2010. 2. www.cihr-irsc.gc.ca/e/29418.html.*

*Courtesy of Stefano Negrini*

# Knowledge Translation

It is about ensuring that:

- stakeholders are aware of and use research evidence to inform their decision making
- research is informed by current available evidence and the experiences and information needs of stakeholders

What should be transferred?

To whom should research knowledge be transferred?

By whom should research knowledge be transferred?

How should research knowledge be transferred?

With what effect should research knowledge be transferred?

*Lavis JN et al. Milbank Q. 2003*

# Purpose of KT

KT is the vital ‘other half’ to Cochrane’s investment in producing systematic reviews.

We have to take responsibility for getting our knowledge used (there are currently Cochrane reviews published, that then ‘fall off a cliff’, never to be heard from again).

Only through a serious investment in KT can we achieve Cochrane’s vision of ‘*a world of improved health where decisions about health and health care are informed by high quality, relevant and up to date synthesized research evidence’*

# Audiences

## Consumers and the public

Those seeking health care, their families and carers, and the public

## Practitioners

of health care including clinicians and public health practitioners

## Policy-makers & healthcare managers

making decisions about health policy within all levels of management

## Researchers & Research Funders

who need information regarding important gaps in the evidence

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Editorial

CrossMark

# Evidence based medicine manifesto for better healthcare

## A response to systematic bias, wastage, error and fraud in research underpinning patient care

Carl Heneghan,[1] Kamal R Mahtani
Helen Macdonald,[2] Duncan Jarvie

thebmj

**Box 2 EBM manifesto for better health**

- Expand the role of patients, health professionals and policy makers in research.
- Increase the systematic use of existing evidence.
- Make research evidence relevant, replicable and accessible to end users.
- Reduce questionable research practices, bias and conflicts of interests.
- Ensure drug and device regulation is robust, transparent and independent.
- Produce better usable clinical guidelines.
- Support innovation, quality improvement and safety through the better use of real world data.
- Educate professionals, policy makers and the public in evidence-based healthcare to make an informed choice.
- Encourage the next generation of leaders in evidence-based medicine.

# Evidence informed policy making

Research evidence in management and policymaking are useful to:

- get problems on the agenda
- think about problems and solutions differently
- solve particular problems at hand
- justify a decision made for other reasons

SUPPORT tool is a series of 18 papers about how policy makers can better use research evidence to support their decision making


*https://health-policy-systems.biomedcentral.com/articles/supplements/volume-7-supplement-1*

# Cochrane & WHO

Cochrane has been in **official relations** with the World Health Organization (WHO) **since 2011**.

This collaboration includes:

To **appoint a representative** to participate in WHO's meetings, including **at the World Health Assembly**

To **provide input on the way research evidence is identified, synthesized, assessed and used** by WHO

To **provide reliable summaries of health information** which can be used to inform recommendations and policies

To promote **intersectoral collaboration** and high-quality research between our two organizations **to produce** the necessary **evidence to ensure policies** in all sectors contribute to improving health and health equity

# Cochrane and Wikipedia

Articles relating to medicine are viewed more than 180 million times per month on Wikipedia, yet less than 1 per cent of these have passed a formal peer review process.

This opens up a unique opportunity for Cochrane to work with Wikipedia medical editors to transform the quality and content of health evidence available online.

The partnership, formalized in 2014, supports the **inclusion of relevant evidence within all Wikipedia medical articles**, as well as processes to help ensure that medical information included in Wikipedia is of the highest quality and as accurate as possible.

**Trusted, evidence-based research can help people to make informed decisions about their own health care.**

# Wikipedia

- Wikipedia health pages receive over 4.8 billion views every year
- Cochrane Reviews data have to be extracted, summarised and referenced in the clear and simple way required by Wikipedia.

LETTER Open Access

# SEED: a tool for disseminating systematic review data into Wikipedia

Lena Schmidt[1], Johannes Friedel[1] and Clive E. Adams[2,3*]

**Abstract**

Wikipedia, the free-content online encyclopaedia, contains many heavily accessed pages relating to healthcare. Cochrane systematic reviews contain much high-grade evidence but dissemination into Wikipedia has been slow. New skills are needed to both translate and relocate data from Cochrane reviews to implant into Wikipedia pages. This letter introduces a programme to greatly simplify the process of disseminating the summary of findings of Cochrane reviews into Wikipedia pages.

**Keywords:** Wikipedia, Summary of findings, Automation, Systematic reviews, Reducing waste

# Standardised statements about effect

| | Important benefit/harm | Less important benefit/harm | No important benefit/harm |
|---|---|---|---|
| **High quality / certainty[1] evidence** | [*Intervention*] improves/reduces [*outcome*] (high quality / certainty evidence) | [*Intervention*] slightly improves/reduces [*outcome*] (high quality / certainty evidence) | [*Intervention*] makes little or no difference to [*outcome*] (high quality / certainty evidence) |
| **Moderate quality / certainty[1] evidence** | [*Intervention*] probably improves/reduces [*outcome*] (moderate quality / certainty evidence) | [*Intervention*] probably slightly improves/reduces / probably leads to slightly better/worse [*outcome*] (moderate quality / certainty evidence) | [*Intervention*] probably makes little or no difference to [*outcome*] (moderate quality / certainty evidence) |
| **Low quality / certainty[1] evidence** | [*Intervention*] may improve/reduce [*outcome*] (low quality / certainty evidence) | [*Intervention*] may slightly improve/reduce [*outcome*] (low quality / certainty evidence) | [*Intervention*] may make little or no difference to [*outcome*] (low quality / certainty evidence |
| **Very low quality / certainty[1] evidence** | We / The review authors are uncertain whether [*intervention*] improves/reduces [*outcome*] as the quality / certainty of the evidence has been assessed as very low | | |
| **No studies** | None of the studies looked at [*outcome*] | | |

*Cochrane Norway. How to write a plain language summary of a Cochrane intervention review*

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# Blogshots

Cochrane Deutschland | Cochrane Schweiz | Cochrane Österreich


Ein übersetzter Blogshot von Cochrane UK

Cochrane Russia

## Доказательства на каждый день
## Allied Health

Казанский федеральный университет

Упражнения с моторным (двигательным) контролем (MCE упражнения), вероятно, более эффективны, чем минимальные вмешательства, при хронической боли в пояснице. Не существуе клинически важных различий между MCE упражнениями и мануальной терапией и, вероятно, нет различий по сравнению с другими упражнениями. Эффективность MCE упражнений по сравнению с упражнениями в сочетании с электрофизическими средствами лечения пока не ясна

Übungen für die Bewegungskontrolle (ÜBK) sind als Behandlungsmaßnahme bei chronischen Kreuzschmerzen wahrscheinlich wirksamer als eine Minimalbehandlung. Es gibt keinen klinisch bedeutsamen Unterschied zwischen ÜBK und Manueller Therapie und wahrscheinlich keinen Unterschied zwischen ÜBK und anderen Übungen. Die Wirksamkeit von ÜBK verglichen mit Übungen in Kombination mit elektrotherapeutischen Maßnahmen ist unklar.

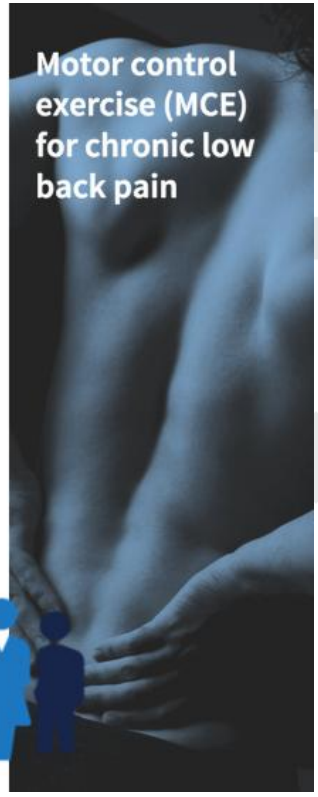
Cochrane Review; 29 Studien, 2431 Personen mit chronischen unspezifischen Kreuzschmerzen.

Cochrane UK

## Evidence for Everyday Allied Health

MCE is probably more effective than minimal intervention for chronic low back pain. There is no clinically important difference between MCE and manual therapy and probably no difference compared with other exercise. The effectiveness of MCE compared to exercise plus electrophysical agents is unclear

Cochrane review; 29 studies, 2431 people with chronic non-specific low back pain




uk.cochrane.org | @CochraneUK | #CochraneEvidence #EEAHP http://bit.ly/24QvLtO

# Work packages (WPs)

| *Strategy to 2020* Goal | KT Theme | Work Package Area |
|---|---|---|
| **Goal One: Producing Evidence** | **Prioritization and co-production** | Embed prioritization processes as an essential part of Cochrane review production |
| | | Increase the number of reviews co-produced with users to ensure that reviews are aligned with users' needs |
| **Goal Two: Accessible Evidence** | **Packaging, push and support to implementation** | Adapt review formats and production processes to ensure reviews are 'fit for purpose' and are complemented by appropriate review-derived products for dissemination and support to implementation |
| | | Improve and scale up existing products, and innovate new products, which package and present Cochrane Reviews to suit different stakeholder needs |
| | | Translate our reviews and products to support the uptake of evidence in non-English speaking countries |
| | **Facilitating pull** | Continuously evolve the Cochrane Library so it makes Cochrane reviews easy to find in appropriate formats and languages |
| | | Grow capacity in our users through development and delivery of training in using Cochrane evidence and (in relation to theme five) in understanding the concept and importance of evidence in decision-making |
| | | Scale up mechanisms for engaging with, and responding to key user groups and meeting their evidence needs |

| *Strategy to 2020* Goal | KT Theme | Work Package Area |
|---|---|---|
| **Goal Three: Advocating for Evidence** | **Exchange** | Further define and implement policies to formalise strategic partnerships at all levels of the organization |
| | | Establish forums and processes to exchange ideas with partners, learn about their evidence needs and support their decision making for issues of importance to them |
| | | Convene deliberative dialogues to contextualize global guidance to national or sub-national levels and to address emerging health-system challenges |
| | **Improving climate** | Develop a systematic and sustainable approach to contributing to efforts to improve the climate for use of research evidence in health and health care decisions |
| **Goal Four: Effective and Sustainable Organization** | **Sustainable KT Processes** | Agree and adapt or establish structures for the governance, leadership, oversight and implementation of Cochrane's KT Strategy |
| | | Build infrastructure and resources to enable KT |
| | | Strive for common language in Cochrane around KT |
| | | Build capacity for KT in Cochrane: learning, leadership and fundraising |
| | | Using evidence to inform our KT and continuously evaluate our KT Strategy |

# Committees

## Methodology

- Stengthen methodology in Rehabilitation

## Rehabilitation Reviews

- Reference database of Cochrane Reviews

## Publication

- Cochrane Corners in scientific journals
- Cochrane Rehabilitation e-book

## Communication

- Website, Newsletter, Social media

## Education

- Courses, Workshops and Congresses

# Cochrane Rehabilitation & KT

1. **Review Committee** selects and tags all Cochrane Reviews relevant for rehabilitation creating the background for the work of all other Committees;
2. **Communication and Publication Committees** spread Cochrane Reviews results through social media and scientific instruments respectively (theme 2 of the Cochrane KT Strategy);
3. **Education Committee** educates and trains rehabilitation professionals on evidence and review production (theme 3-5 of the Cochrane KT Strategy)
4. **Methodology Committee** works on methodology in evidence production and gathering in rehabilitation (themes 1 and 4 of the Cochrane KT Strategy)

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# Cochrane Rehabilitation

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# Cochrane Colloquium Edimburgh 2018

## A patients included health research conference

ISPRM 2018
12th International Society of Physical and Rehabilitation Medicine World Congress
Paris, France | July 8 - 12, 2018

Paris 2018

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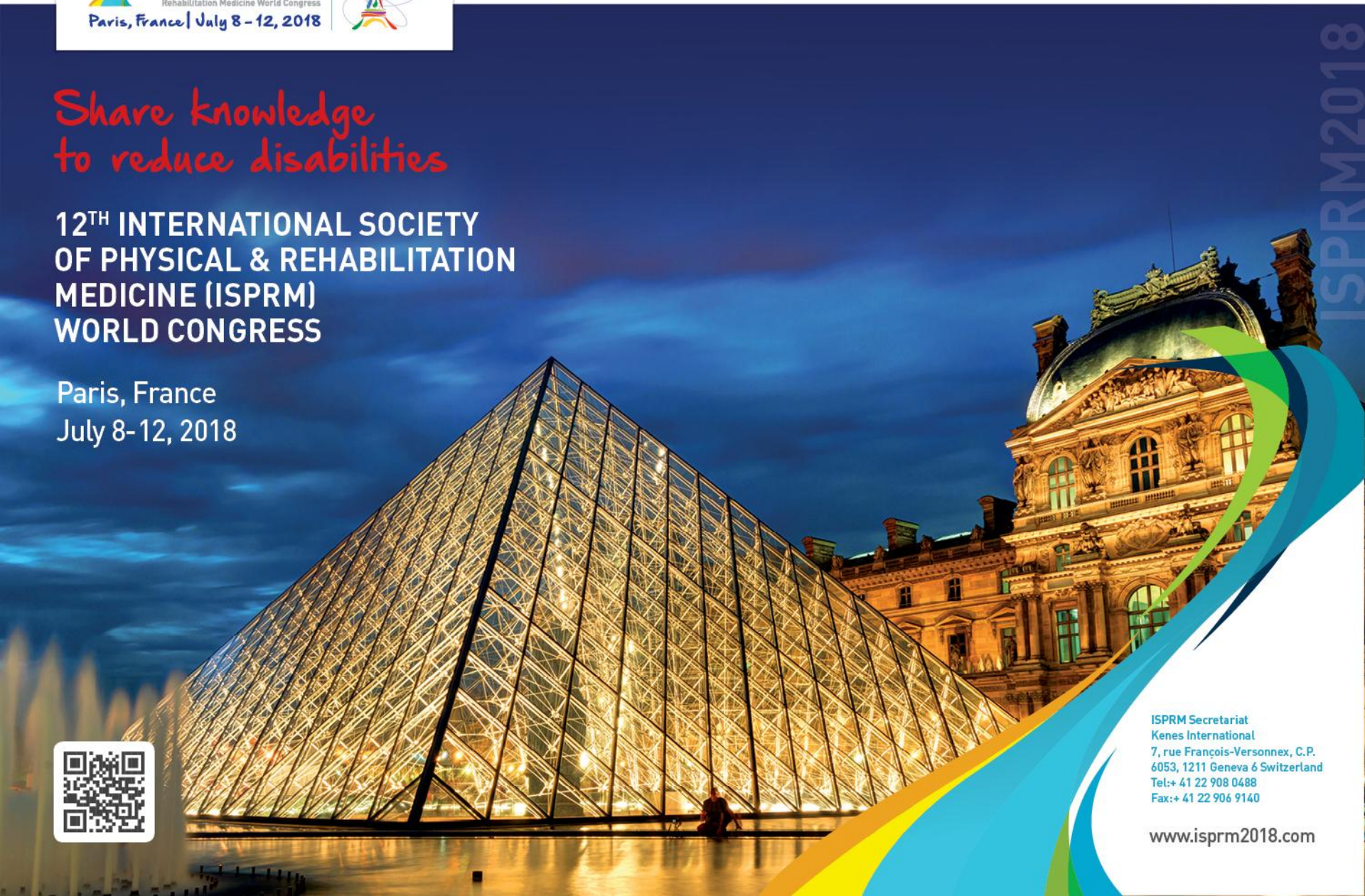
# Share knowledge to reduce disabilities

## 12TH INTERNATIONAL SOCIETY OF PHYSICAL & REHABILITATION MEDICINE (ISPRM) WORLD CONGRESS

Paris, France
July 8-12, 2018



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