What we do and why: the Knowledge Translation strategy

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Disclosure

ISICO (Italian Scientific Spine Institute): stock
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Medtronic: consultant
Janssen Pharmaceutical: advisory board
European Journal of Physical and Rehabilitation Medicine: congress expenses
The Know-Do Gap

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 under-prescribed\(^2\)
- Antibiotics are overprescribed in children with upper respiratory tract symptoms\(^3\)

Examples in health system policies:
- Evidence is not frequently used by WHO\(^5\)
- Out of 8 policymaking processes in Canada(4
  - Only 1 was fully based on research
  - Other 3 were partially based on research

Why there is the Know-Do Gap?

Evidence not focused on the end-users:\textsuperscript{1}
- Epidemiologically and methodologically focused
- Missing details on interventions and settings

Lack of knowledge management skills and infrastructure\textsuperscript{2}
- Individual health care professionals
  - Volume of, and access to research evidence
  - Time to read
  - Skills to appraise, understand and apply research evidence
- Health care teams (standards of care)
- Health care system and organization (finance and equipments)
- Patients (adherence and compliance)

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 Institute of Health Research

Dissemination and implementation, implementation science, research use, knowledge transfer and uptake/exchange

Knowledge to action framework
Knowledge creation

Knowledge inquiry
- Primary research studies

Knowledge synthesis
- Secondary research studies (systematic reviews)

Knowledge Tools/products
- Guidelines
- Algorithms
- Messages for end-users

The Action Cycle (application)

Identify problem; identify, review, select knowledge
Adapt knowledge to local context
Access barriers – facilitation to knowledge use
Select, tailor, implement interventions
Monitor knowledge use
Evaluate outcomes
Sustain knowledge use

Human behaviours to be considered

Repetitive behaviours

- They allow to free the brain for higher level thinking (diagnosis, prognosis)
- Nevertheless, they gradually drive to reduced quality
- Only regular checks allow to identify this loss of quality

Resistence to change

- Individuals
- Organizations
- Systems
Implementation of evidence

Micro-level: individuals
- Surrender to evidence
- Use facilitators (clinical charts)

Meso-level (organizations)
- EBM Continuous Quality Improvement groups
  - Human and financial resources
  - Specific thematic projects on a regular basis

Macro-level (Health Systems)
- National guidelines and flow-charts
- Data collection
- Rewarding system
Take home messages

Adapting to evidence is a real work that requires:

• Acceptance of the evidence
• Reorganization of one’s own work (individual or collective)
• Identification and overcoming of barriers
• Need of resources to make the change possible
• Sustainability in time
• And, most of all, willingness to change!
# Action cycle for Cochrane Rehabilitation

<table>
<thead>
<tr>
<th>Action cycle</th>
<th>Cochrane Rehabilitation action</th>
<th>Product</th>
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| **Identify problem**          | Check the actual Cochrane Evidence relevant to Rehabilitation  
Identify and help to solve the problems with evidence of the rehabilitation world | Director: prioritization of future Cochrane Reviews with Cochrane Reviews Groups  
Methodology Committee: surveys, discussion and position papers                                           |
| **Adapt knowledge to local context** | Comment Cochrane Reviews results for:  
• clinicians  
• students  
• politicians, to be informed from a rehabilitation perspective | Communication Committee: social media  
Pubblication Committee: Cochrane Corners in scientific journals, e-book                                      |
| **Access barriers – facilitation to knowledge use** | Identify and collect all relevant Cochrane Reviews  
Prepare brief clinical summaries  
Diffuse the reviews  
Develop skills and knowledge in end-users  
Promote Evidence Based Clinical Practice | Reviews Committee: identification of reviews  
Communication Committee: web-site collection  
Pubblication Committee: Cochrane Corners and e-book  
Education Committee: courses                                                                      |
| **Select, tailor, implement interventions** | Adapt Cochrane material for rehabilitation professionals  
Improve Cochrane methods to make them relevant to rehabilitation | All Committees as presented above                                                                      |
| **Monitor knowledge use**     | Check presence of Cochrane Reviews in Rehabilitation Guidelines and journals | Under development with Cochrane Central                                                                 |
| **Evaluate outcomes**         | Development of meaningful outcomes for the actions started                                                                                                           | Under development with Cochrane Central                                                                      |
| **Sustain knowledge use**     | Support Evidence Based Clinical Practice in Rehabilitation                                                                                                           | Education Committee: courses                                                                              |

Different 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
Effective and Sustainable KT

- Improve climate / building demand
- Prioritisation and co-production
- Exchange
- Packaging / push
- Facilitating pull

Cochrane Knowledge Translation Strategy
April 2017
Cochrane KT Strategy

Goal 1: Producing evidence
  Prioritization and co-production

Goal 2: Accessible evidence
  Packaging, push and support to implementation
  Facilitating pull

Goal 3: Advocating for evidence
  Exchange
  Improving climate

Goal 4: Effective & sustainable
  Sustainable KT processes
**Identify problem**

Cochrane Rehabilitation action
- Check the actual Cochrane Evidence relevant to Rehabilitation
- Identify and help to solve the problems with evidence of the rehabilitation world

**Product**
- Methodology Committee
  - surveys
  - discussion and position papers
Methodology Committee

A think tank to help solving problems of EBM in PRM

Already done:

• Two surveys on EBM problems in Rehabilitation

• One poster at the Global Evidence Summit

• First Cochrane Rehabilitation Corner paper in the European Journal of Physical and Rehabilitation Medicine (October 2017)

Yearly journal special issues and/or sections on methodology:

• First one in EJPRM after Catalyst 2-days Workshop before ISPRM Paris
Adapt knowledge to local context

Cochrane Rehabilitation action

– Comment Cochrane Reviews results for:
  • clinicians
  • students
  • politicians, to be informed from a rehabilitation perspective

Product

– Communication Committee
  • social media

– Pubbllication Committee
  • Cochrane Corners in scientific journals
  • e-book
Comunication Committee

Web-site: 4727 visits in 2017
Newsletter: 361 subscribers
Twitter: 715 followers
Facebook: 1292 likes
U-tube channel: 28 videos with 58 visualizations on average
4 blogshots (1 per week since January 2018)

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Cochrane Rehabilitation serves as a bridge between all the stakeholders in Rehabilitation and Cochrane.

The first year of Cochrane Rehabilitation

The Global Evidence Summit 2017

My experience as a PhD student at the Global Evidence Summit 2017

An African proverb says: “If you want to go fast, go alone; if you want to go far, go together”.

My name is Clara and last year I started my PhD in Brescia (Italy) on Evidence Based Medicine, dedicating most of my time to Cochrane Rehabilitation. This year I attended for the first time a Global Evidence Summit.

Happy Holidays from Cochrane Rehabilitation!

The Latest Cochrane Systematic Reviews relevant to Rehabilitation

Fitness training for cardiorespiratory conditioning after traumatic brain injury

Cardiorespiratory exercise programmes may improve cardiorespiratory fitness in people after traumatic brain injury. It is uncertain whether they improve depression, cognition or fatigue or whether there are any adverse effects.

Cochrane Review: 8 studies with 369 people with traumatic brain injury of any age or severity, comparing cardiorespiratory exercise prescribed alone or Legal care, a non-exercise intervention or no intervention.

Cochrane Review by Cochrane Injuries
Yoga for stroke rehabilitation

We are uncertain whether yoga improves quality of life, balance, gait, depression, anxiety and disability in stroke survivors. Whether or not yoga has any adverse effects is also uncertain.

Cochrane Review; two studies with 72 people comparing yoga vs waiting-list control in adults with stroke.

Cochrane Review by: Cochrane Stroke Group

rehabilitation.cochrane.org | @CochraneRehab | #CochraneEvidence http://bit.ly/2BR580B
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Cochrane Rehabilitation e-book – 1

“Live” e-book available for free in Internet to be constantly updated
Titles, abstracts and plain language summaries
In collaboration with and funded by the European Bodies (Society, Academy, Section and Board)
Importance to PRM:
• inform evidence based practice (relevant to all European PRM Bodies)
• educate postgraduate PRM trainees (relevant to UEMS-PRM Board)
• support political actions toward policymakers, patients’ associations and other stakeholders (relevant to UEMS-PRM Section and ESPRM)
• identify unmet needs of evidence synthesis and activate correct prioritization for future work of Cochrane (relevant to all European PRM Bodies)
Cochrane Rehabilitation e-book - 2

Ongoing effort (2 years to start)

• Definition of the **Summary** and the topics to browse the e-book

• Identification of all relevant **Cochrane reviews**

• Production of the summaries for different **target audiences**
  – PRM physicians and other rehabilitation professionals, with ESPRM
  – postgraduate PRM trainees and medical students, with UEMS Board
  – politicians, with UEMS Section
  – consumers, with Cochrane

• **Translation** into different languages

• **Publication**

• Continuous **updating**
Access barriers – facilitation to knowledge use

Cochrane Rehabilitation action
– Identify and collect all relevant Cochrane Reviews
– Prepare brief clinical summaries
– Diffuse the reviews
– Develop skills and knowledge in end-users
– Promote Evidence Based Clinical Practice
Access barriers – facilitation to knowledge use

Product

– Reviews Committee
  • identification of reviews
– Communication Committee
  • web-site collection
– Publication Committee
  • Cochrane Corners
  • e-book
– Education Committee
  • courses
Reviews Committee

Tagging rules document
Tagging database using “Knack” online software
All Cochrane Reviews since 2015 have been double-checked, with single check starting from 2012
Ongoing tagging process to tag all Cochrane database
Evidence

List of Cochrane reviews of rehabilitation interest.

Full list  By Subtopic  New - Updated

(Stage filter not available for Subtopic view)

By subtopic:

- Health Conditions (100)
  - Cardiac (3)
  - Gynaecology or Urology (1)
  - Mental Health (1)
  - Neurological (26)
  - Older Adults (>65 years) (16)
  - Oncology (3)
  - Orthopaedic or musculoskeletal (incl. pain conditions) (29)
  - Other (5)
  - Paediatrics (<18 years) (11)
Scientific contributions

1. 10/2016 Seoul Cochrane Colloquium: Presentation & Poster
2. 2/2017 Geneva WHO “Rehabilitation 2030: a call for action”: Participation as a rehabilitation stakeholder
3. 5/2017 Buenos Aires International Society of PRM: Keynote lecture
4. 9/2017 Cape Town Global Evidence Summit: 3 posters
5. 2/2018 Atlanta American Academy of Physiatry: DeLisa Lecture
6. 4/2018 Vilnius European Society of PRM: Lecture
Select, tailor, implement interventions

Cochrane Rehabilitation action
- Adapt Cochrane material for rehabilitation professionals
- Improve Cochrane methods to make them relevant to rehabilitation

Product
- All Committees as presented above
- Translations
- Representatives
Contributors

Cochrane Rehabilitation community
• 256 people from 54 countries

Specific tasks defined by Committees (calls)
• Review selection
• Surveys
• Translation of web-site and Newsletter
• Link with National Societies and Cochrane Centres
• Treasurer position
Partners

Partners
• 6 funding partners
• 3 partners in kind established
• 8 partners in kind to be established

Agreed big actions/tasks
• E-book
• National actions
• Methods
• Social media and communication
• Rehabilitation Professionals
Monitor knowledge use & Evaluate outcomes

Cochrane Rehabilitation action

– Check presence of Cochrane Reviews in Rehabilitation Guidelines and journals
– Development of meaningful outcomes for the actions started

Product

– Under development with Cochrane Central
Sustain knowledge use

Cochrane Rehabilitation action
  – Support Evidence Based Clinical Practice in Rehabilitation

Product
  – Education Committee
    • courses
Education Committee

Workshops
  – General introduction: what is Cochrane and Cochrane Rehabilitation
  – Cochrane Rehabilitation results
  – Other EBM material

Courses on EBM and Cochrane
Workshops & educational sessions

1. 3/2017 Frankfurt Reha-Kolloquium 2017
2. 5/2017 Buenos Aires International Society of PRM
3. 9/2017 Cape Town Global Evidence Summit
4. 11/2017 Malta Mediterranean Forum of PRM
5. 11/2017 Maastricht Baltic North Sea Forum of PRM
6. 2/2018 Atlanta American Academy Physiatry
7. 4/2018 Vilnius European Society of PRM
8. 7/2018 Paris International Society of PRM
Take home messages
Thank you

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