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Insurance Medicine

Designing Knowledge Translation Strategies: Using online surveys to identify target audience characteristics and evidence needs

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Trusted evidence.
Informed decisions.
Better health.

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Poll 1

Who are you?

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Poll 2

About your knowledge translation work?

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Content

1 Introduction: who are we?

2 The problem: the need for more evidence-based insurance medicine

3 The tool: an on-line survey

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5 Conclusions: learnings and steps forward

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1. Cochrane Insurance Medicine - who are we?

- The field Cochrane Insurance Medicine (CIM) was created in 2015
- **Our mission:** to make Insurance Medicine (IM) more evidence-based
- **What we do:** design, implementation and diffusion of knowledge translation (KT) products and activities (e.g. advocacy for the production, compilation, diffusion and fostering the use of evidence)
- Member institutions:

UNI BASEL
University Hospital Basel
Department Clinical Research
EbIM Research & Education
Kenniscentrum Verzekeringsgeneeskunde
Dutch Academic Center for Insurance Medicine
McMaster University
Karolinska Institutet Anno 1810

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1. Cochrane Insurance Medicine - who are we?

What is Insurance Medicine?

- IM covers medical assessments and interventions for social and private insurance schemes, such as:

  - Disability pension for health-related incapacity to work
  - Return to work interventions
  - Morbidity caused by accidents
  - Sickness allowance
  - Life and health insurance

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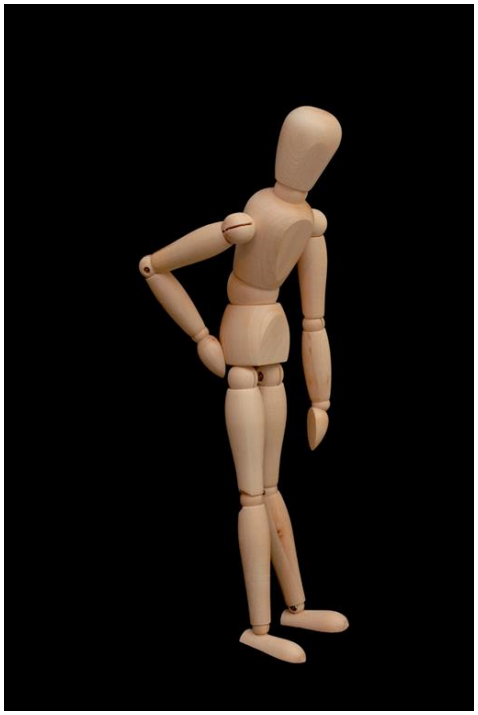

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2. The problem: the need for more evidence-based insurance medicine

Comic by: Bert Cornelius (1952-2018)
Published in: CIM Newsletter Issue 01 Oct 2015

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2. The problem: the need for more evidence-based insurance medicine

Area	Situation
Production and access to evidence	• Insurance medicine experts often lack sufficient evidence for making medical assessments • Scientific evidence relevant for IM is generally produced by multiple health areas and disciplines making it scattered and thus difficult to identify and access • No availability of international IM journals
Workforce	• The IM medical assessments are performed by a diverse range from health professionals (psychiatrists, orthopedists, rehabilitation specialists, occupational health physicians, managers, etc.) and with different levels of training in IM (with and without formal training in IM)

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2. The problem: the need for more evidence-based insurance medicine

Area	Situation
Social, security systems	• The IM practice and tasks are determined to a great extent by national regulations • The lack of evidence in IM has relevant implications in terms of reliability, fairness and equity of medical assessments, as well as, the efficient use of financial resources in social security systems

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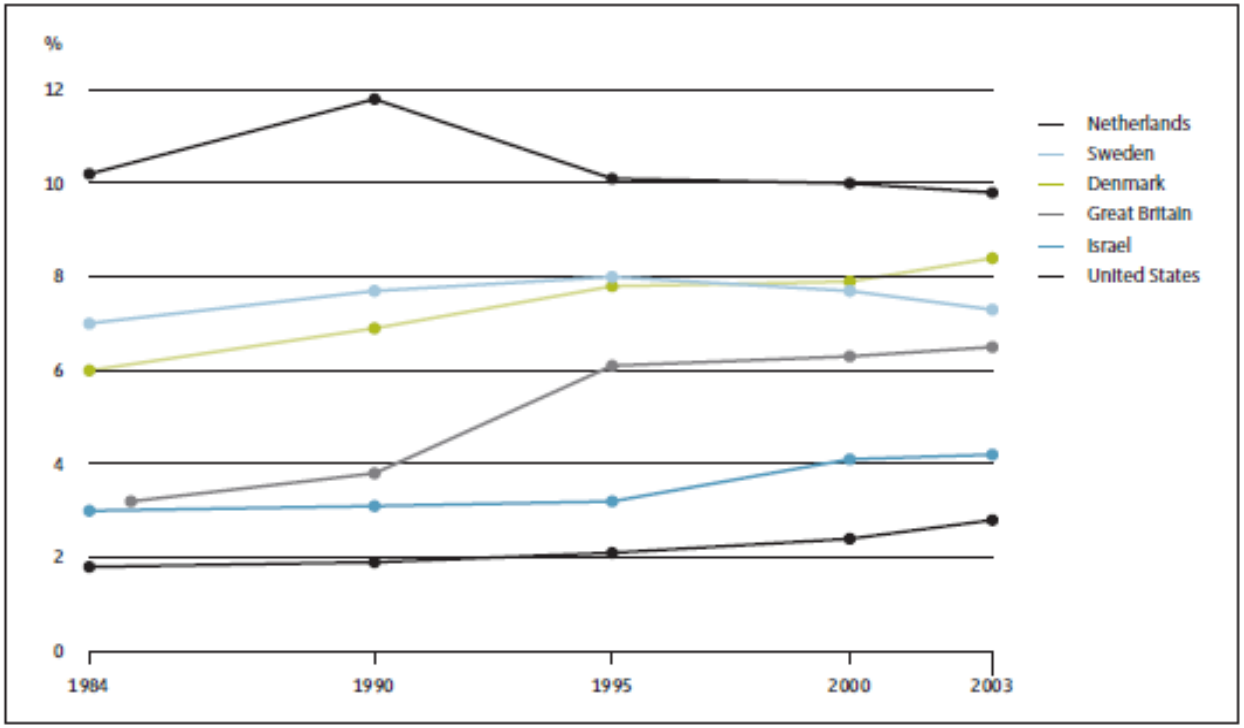
2. The problem: the need for more evidence-based insurance medicine

Working age population (%) receiving disability benefits in selected countries



Source: Kemp, Sundén, and Bakker Touritz (2006)

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OPEN ACCESS

Inter-rater agreement in evaluation of disability: systematic review of reproducibility studies

Jürgen Barth,[1,2] Wout E L de Boer,[1] Jason W Busse,[3,4,5] Jan L Hoving,[6,7] Sarah Kedzia,[1] Rachel Couban,[4] Katrin Fischer,[8] David Y von Allmen,[1] Jerry Spanjer,[9,10] Regina Kunz[1]

For numbered affiliations see end of article.

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Accepted: 21 December 2016

ABSTRACT

OBJECTIVES

To explore agreement among healthcare professionals assessing eligibility for work disability benefits.

DESIGN

Systematic review and narrative synthesis of reproducibility studies.

DATA SOURCES

Medline, Embase, and PsycINFO searched up to 16 March 2016, without language restrictions, and review of bibliographies of included studies.

ELIGIBILITY CRITERIA

Observational studies investigating reproducibility among healthcare professionals performing disability evaluations using a global rating of working capacity and reporting inter-rater reliability by a statistical measure or descriptively. Studies could be conducted in insurance settings, where decisions on ability to work include normative judgments based on legal considerations, or in research settings, where decisions on ability to work disregard normative considerations.

Teams of paired reviewers identified eligible studies, appraised their methodological quality and generalisability, and abstracted results with pretested forms. As heterogeneity of research designs and findings impeded a quantitative analysis, a descriptiv synthesis stratified by setting (insurance or research) was performed.

RESULTS

From 4562 references, 101 full text articles were reviewed. Of these, 16 studies conducted in an insurance setting and seven in a research setting, performed in 12 countries, met the inclusion criteria. Studies in the insurance setting were conducted witl medical experts assessing claimants who were actual disability claimants or played by actors, hypothetical cases, or short written scenarios. Conditions were mental (n=6, 38%), musculoskeletal (n=4, 25%), or mixed (n=6, 38%). Applicability of findings from studies conducted in an insurance setting to real life evaluations ranged from generalisable (n=7, 44%) and probably generalisable (n=3, 19%) to probably not generalisable (n=6, 37%). Median inter-rater reliability among experts was 0.45 (range intraclass correlation coefficient 0.86 to κ−0.10). Inter-rater reliability was poor in six studies (37%) and excellent in only two (13%). This contrasts with studies conducted in the research setting, where the median inter-rater reliability was 0.76

WHAT IS ALREADY KNOWN ON THIS TOPIC

Social and private disability insurers use medical experts to evaluate claimants with impaired health to determine eligibility for disability benefits

Anecdotal evidence suggests that experts often disagree in their judgment of capacity to work when assessing the same claimant

WHAT THIS STUDY ADDS

This systematic review of 23 reproducibility studies from 12 countries shows a lack of good quality data applicable to the real world of disability assessment

In most studies, medical experts reached only low to moderate reproducibility in their judgment of capacity to work

Studies reported higher reproducibility when experts used a standardised evaluation procedure

These findings are disconcerting and call for substantial investment in research to improve assessment of disability

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3. The tool: an on-line survey

Evidence and training needs in social security and insurance medicine. An international survey.

Regina Kunz[1], Adrian Verbel[1], Rebecca Weida[1], Jan L. Hoving[2,3], Susanne Weinbrenner[4], Emilie Frieberg[5], Wout de Boer[1], Frederieke Schaafsma[6]

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[2] Amsterdam University Medical Center, Location AMC, Coronel Institute of Occupational Health, APH Institute, The Netherlands
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[6] Amsterdam University Medical Center, Location VUmc, Department of Public and Occupational Health, APH Institute, The Netherlands

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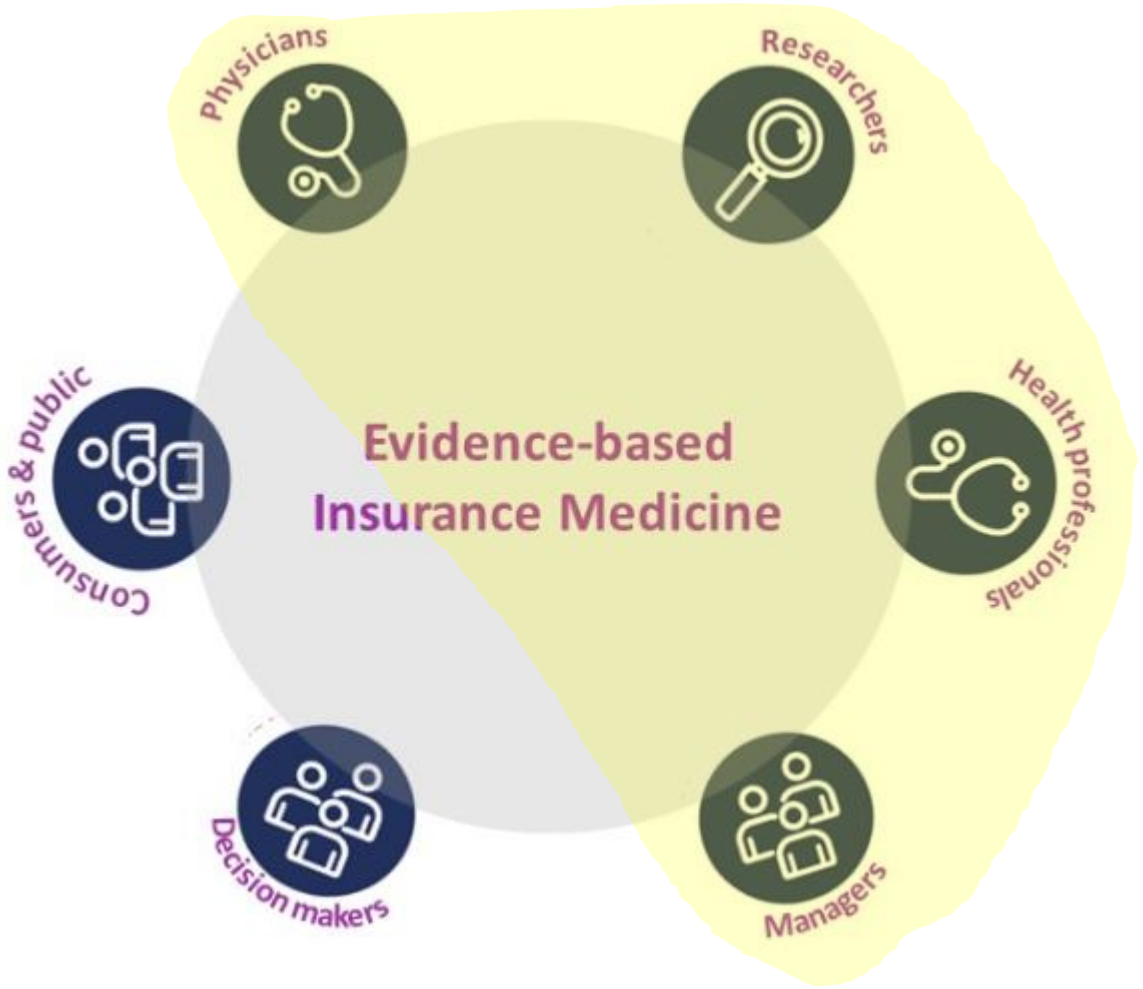
3. The tool: an on-line survey – Know your audience



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3. The tool: an on-line survey – Methods

- **Participants**: IM professionals (e.g. physicians, other health professionals, researchers and managers)
- On-line survey (e-mail)
- 26 items across five domains:
  - Characteristics of respondents (n=3)
  - Area of work and work experience (n=4)
  - Information and training needs (n=5)
  - Information seeking behaviour (n=4)
  - Attitudes towards, knowledge and skills in evidence-based medicine and Cochrane (n=10)
- Questions were open-ended, semi-open or closed using the Likert scale or with multiple or forced choices

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3. The tool: an on-line survey – Methods

- The questionnaire was piloted among a group of Dutch insurance physicians
- The questionnaire was finalised in English and translated into German, French and Spanish
- Completion of the survey: 10 to 15 minutes
- Data collection Feb to Oct 2016
- Reminders (one to three reminders)
- No use of incentives to increase participation
- Participation was anonymous

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3. The tool: an on-line survey – Methods

- **Sample:** convenience sampling of members from disability and accident national IM organizations *(Belgium, Finland, France, Germany, Netherlands, Spain, Sweden, and Switzerland)* and members from two international IM associations *(EUMASS and ICLAM)*

CHRISTELIJKE MUTUALITEIT

Kela

Deutsche Rentenversicherung

UWV

SOCEMESS

SÉCURITÉ SOCIALE
L'Assurance Maladie

SIM

ICLAM

International Committee for Insurance Medicine
founded in 1901

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3. The tool: an on-line survey – Results

- Individuals invited to participate = 5.611
- Respondents = 782 (from 39 countries)
- 93.6% of respondents worked in Europe
- Response rates ranged from 47% to 5% across countries (median response rate 29%)
- Mean age was 52 years and 53% were male
- 95.3% considered that evidence-based medicine can improve decision making in IM
- 73% needed to search for evidence on a daily (31%) or weekly (42%) basis
- 72% felt comfortable using English, 26% reported being uncomfortable.

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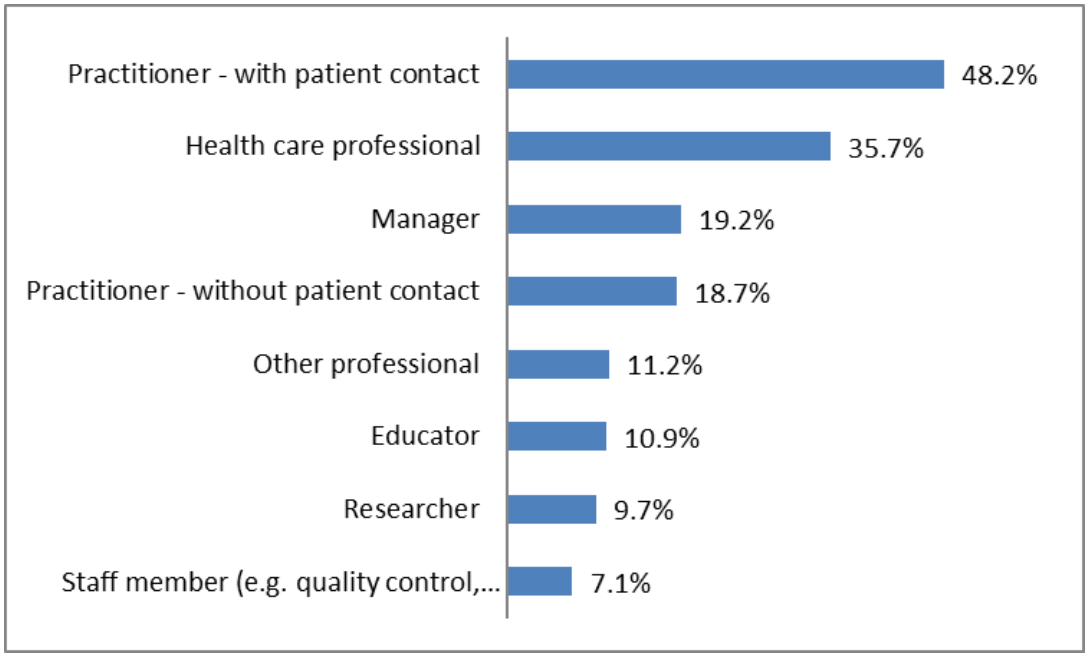
3. The tool: an on-line survey – Results

- What is your profession and function at work? (n=743)



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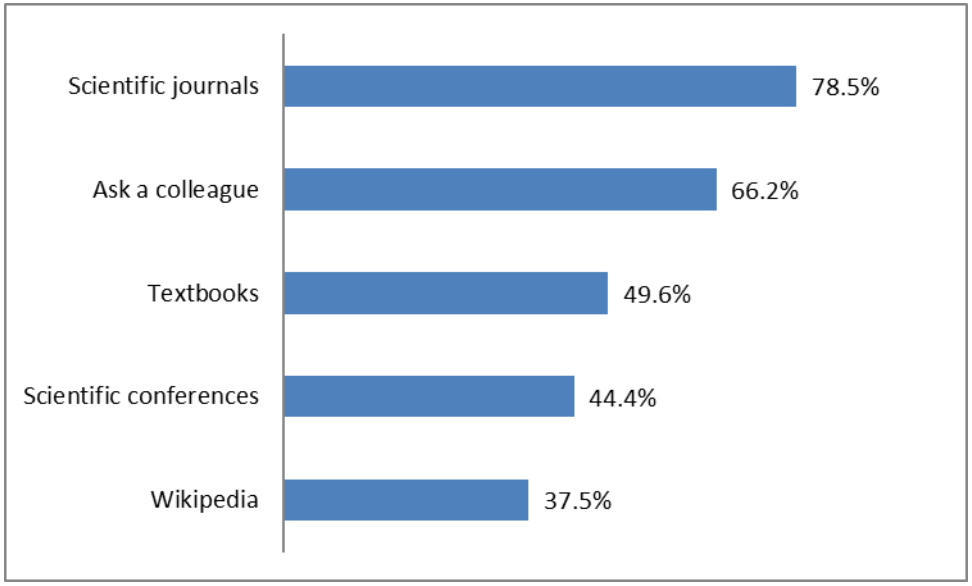
3. The tool: an on-line survey – Results

- Where do you find information if you encounter an information gap in your work in insurance medicine? (n=674)



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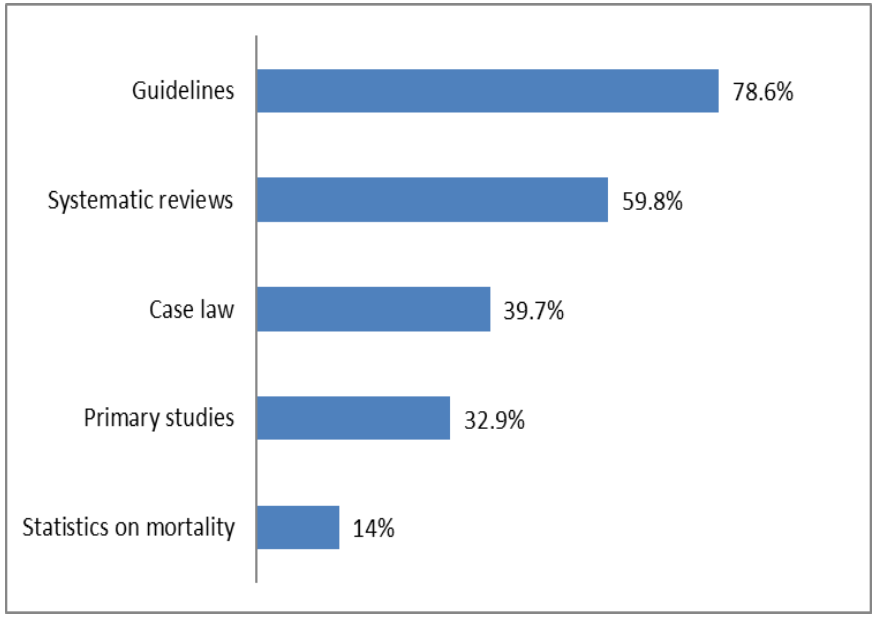
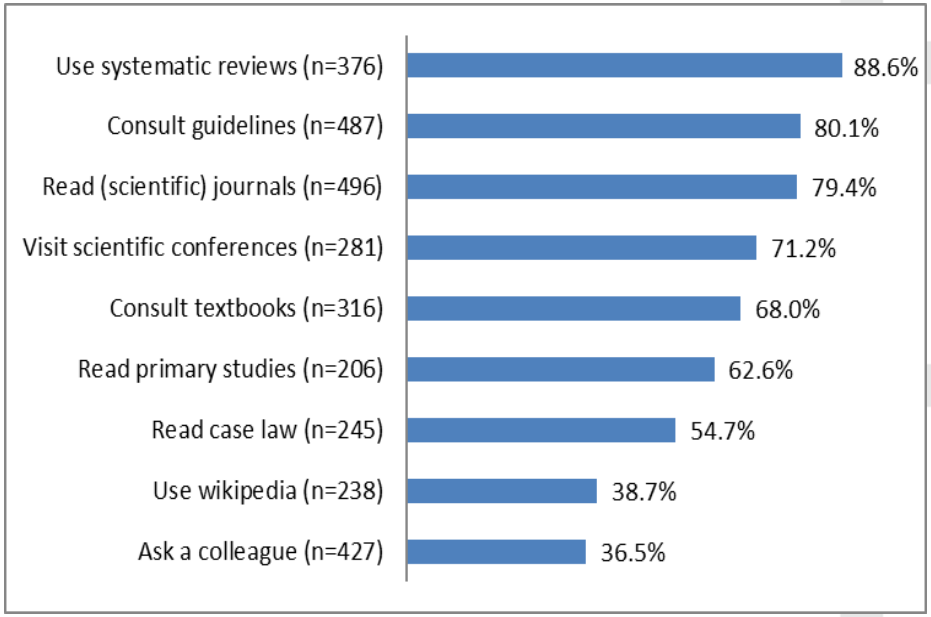
3. The tool: an on-line survey – Results

- What kind of evidence do you usually work with? (n=645)



- How certain are you to get evidence/information that is up to date



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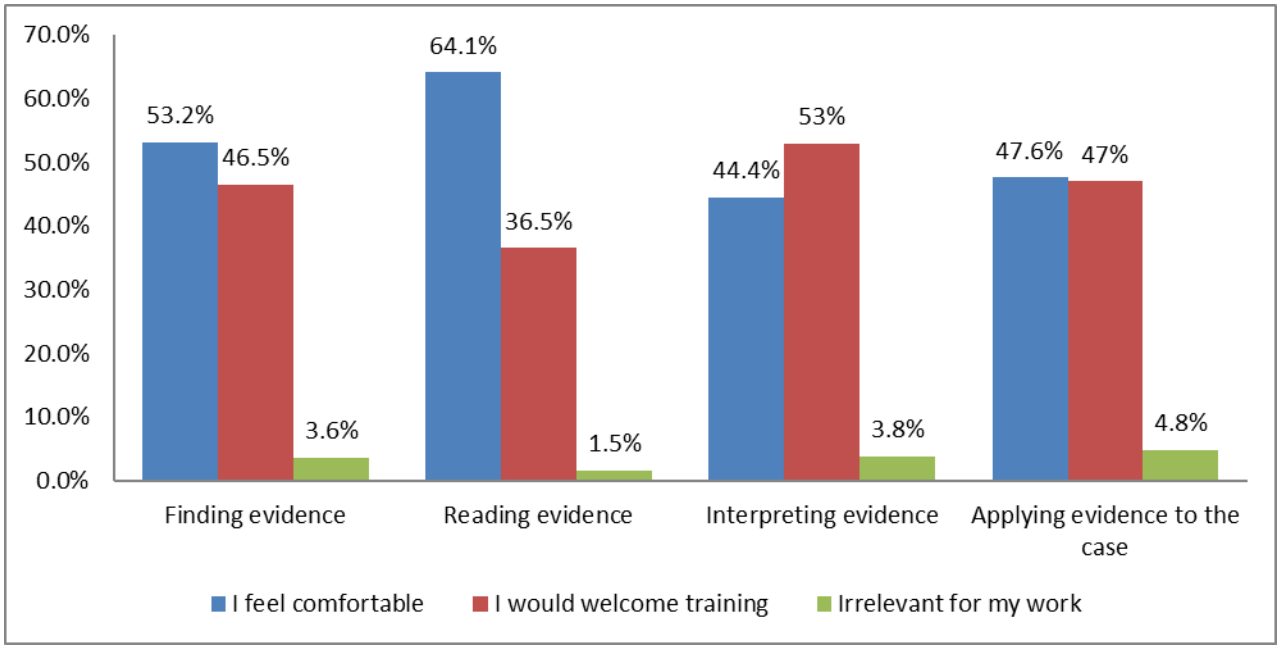
3. The tool: an on-line survey – Results

To what extent do you feel comfortable about your skills in finding, interpreting and applying evidence and to what extent would you welcome instruction/ training? (n=660)



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3. The tool: an on-line survey – Results

- List of potential medical fields for our evidence synthesis efforts (n=646)

Medical field	International	Finland	France	Germay	Netherlands	Spain	Sweden	Switzerland	EUMASS	ICLAM
Mental disorders	79%	95%	73%	87%	92%	76%	70%	72%	80%	75%
Musculo-skeletal	67%	81%	88%	23%	81%	88%	100%	47%	67%	78%
Occupational Health	65%	71%	73%	31%	90%	78%	80%	48%	74%	61%
Injury /Trauma	46%	62%	59%	26%	58%	59%	40%	27%	49%	62%
Cancer	42%	43%	42%	21%	73%	27%	40%	16%	41%	83%
Cardio-vascular	37%	48%	44%	18%	65%	24%	30%	10%	37%	78%

bis 19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80+%

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3. The tool: an on-line survey – Results

- List of potential topics for our evidence synthesis efforts (n=660)

IM topic	International	Finland	France	Germay	Netherlands	Spain	Sweden	Switzerland	EUMASS	ICLAM
Assessment of work capacity	64%	67%	75%	68%	60%	70%	88%	72%	68%	40%
Prognosis on return to work	51%	38%	58%	68%	39%	60%	56%	46%	58%	36%
Establish certain impairments	47%	67%	34%	68%	66%	40%	32%	56%	37%	30%
Return to work interventions	33%	57%	34%	28%	36%	40%	29%	29%	42%	17%
Prognosis of disease	32%	38%	17%	35%	51%	40%	24%	23%	24%	62%
Vocational rehabilitation	19%	38%	29%	45%	16%	40%	12%	18%	15%	3%
Assessment of health related risks	18%	19%	20%	10%	8%	0%	19%	9%	16%	66%
Medical treatment	17%	43%	19%	3%	20%	0%	12%	11%	18%	32%
Establishing certain diagnosis	4%	5%	5%	3%	4%	10%	7%	3%	4%	1%

bis 19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80+%

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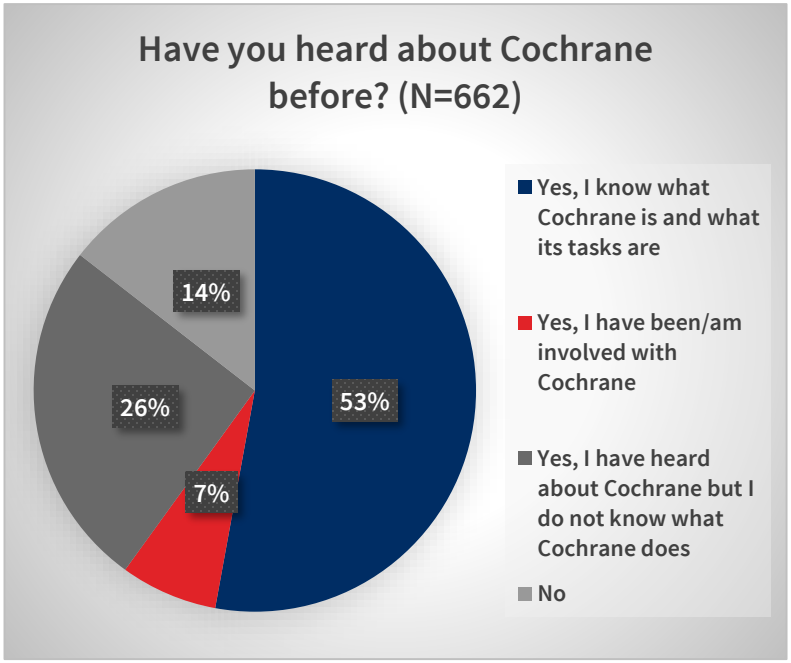
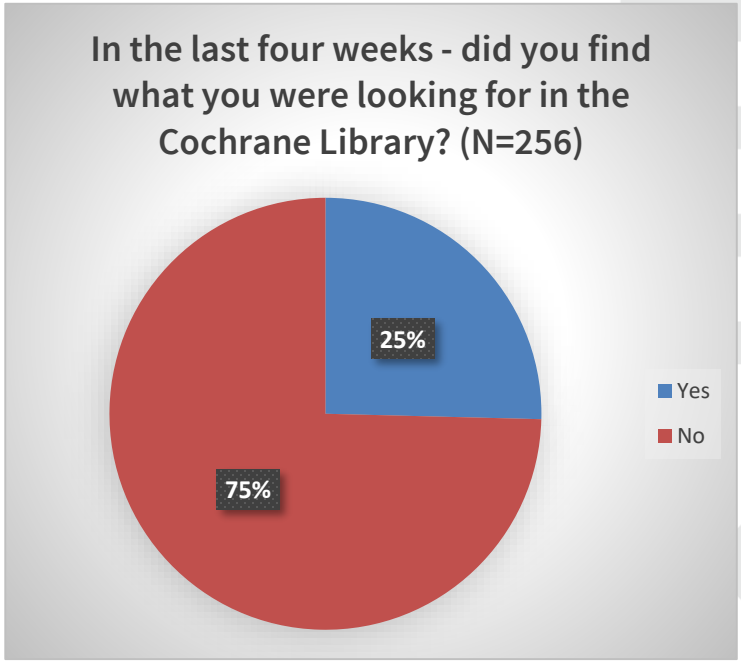
3. The tool: an on-line survey – Results

- Barriers for using Cochrane evidence





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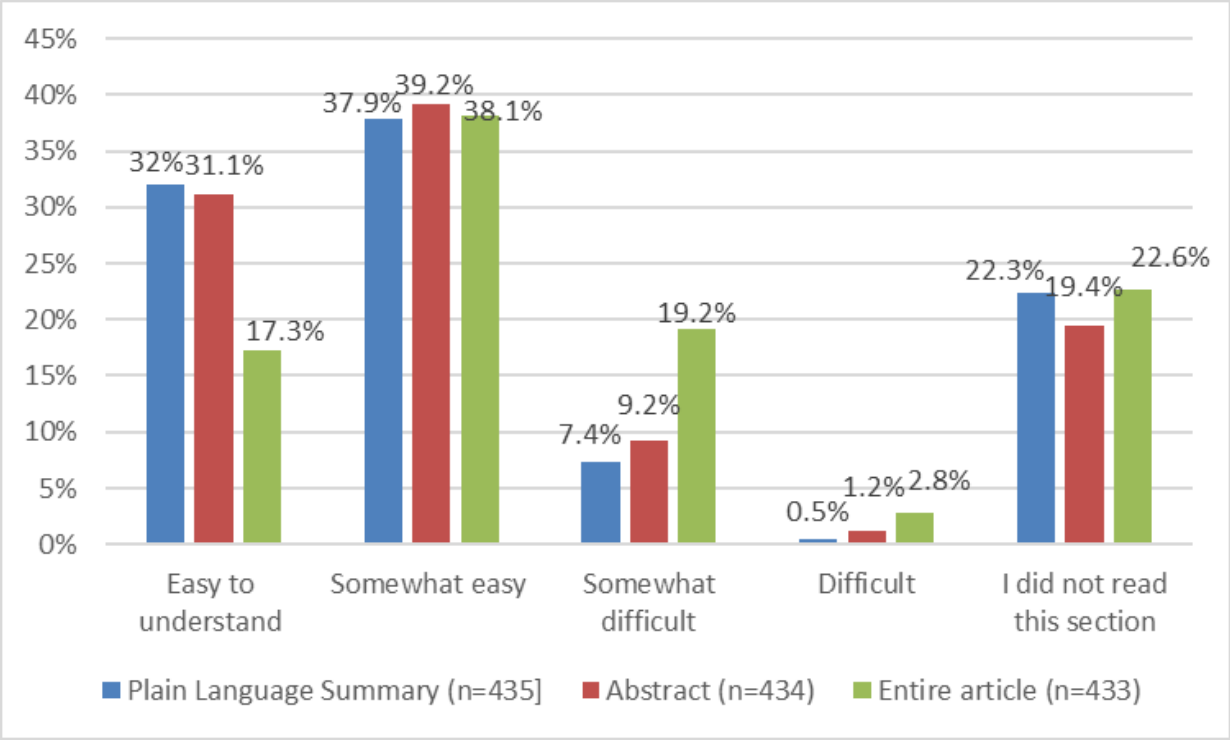
3. The tool: an on-line survey – Results

- What was your experience reading a Cochrane review?



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3. The tool: an on-line survey
Implications for knowledge translation

1. Average age of participants was 52 year-old → Implications on the use of social media?
2. IM evidence needs seem to be similar across European countries with some differences between social and private insurers → implications for advocacy
3. Main barriers identified for using and accessing Cochrane evidence were:

   - **Lack of awareness of Cochrane**
   - **Barriers to access/finding evidence in the Cochrane Library.** It might be related to: (i) limited evidence published; (ii) the searching process for evidence; (iii) evidence is published but cannot be accessed
   - **Language barriers using English** (26%)

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3. The tool: an on-line survey
Implications for knowledge translation

4. Future knowledge translation strategies to foster the use of evidence in IM should address:
   - The refinement and identification of priority research questions (PICO)
   - The need to advocate for the production of evidence relevant to IM
   - Promote and position CIM/Cochrane as a source of evidence in IM
   - Facilitating the access to IM evidence in the Cochrane Library → Tagging of SRs
   - Training of stakeholders in the use of evidence
   - Increasing the translation of evidence into different languages

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3. The tool: an on-line survey – Limitations

- Response bias
  - Participation from individuals using or favoring evidence-based medicine
  - Most participants were from Europe – to what degree does these results also apply to middle- and low-income countries?
- The results of the survey do not take into account the evidence and training needs of consumers or decision-makers
- Participation rates could have been higher (use of reminders, incentives?)

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4. The knowledge translation strategies – CIM Strategic Plan 2018 - 2023

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4. The knowledge translation strategies – CIM Strategic Plan 2018 - 2023

- Four goals:
  1. Network building
  2. Building demand/advocacy
  3. Production of knowledge translation outputs
  4. Strengthening CIM

- Goal →Strategies →Activities →Tasks →Indicators

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4. The knowledge translation strategies – CIM Strategic Plan 2018 - 2023

Problem	Strategies/activities
The need to advocate for the production of evidence relevant to IM	• Make the case for IM (publications and dissemination) • Networking plan (aligned with the objectives of CIM's Strategic Plan) • PICO questions refinement?
Lack of awareness of Cochrane	• Promotional stands in congresses and academic events • Create and implement CIM's social media strategy • Increasing the number of subscribers to CIM's newsletter
Barriers to access/finding evidence in the Cochrane Library	• Tagging of SRs → Topic IM in the Cochrane Library • CIM's social media & newsletter • Cochrane corners • Translation of evidence in multiple-languages
Training of stakeholders in the use of evidence	• Education and training of stakeholders

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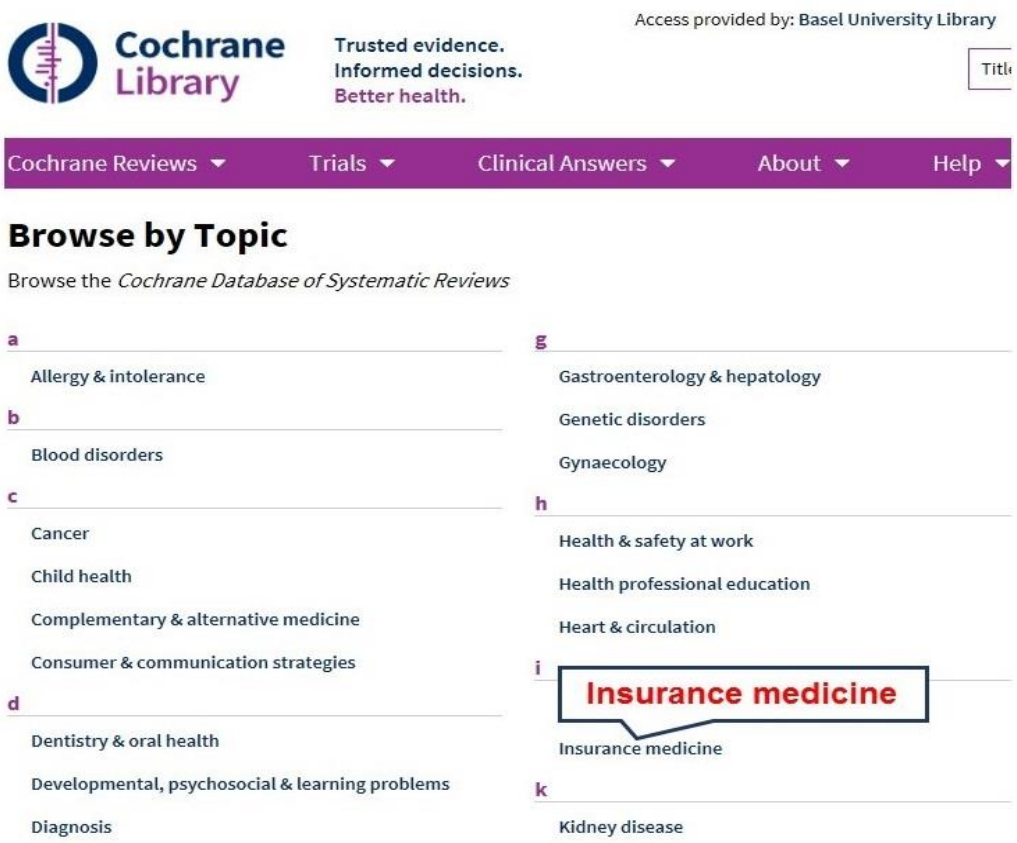
4. The knowledge translation strategies – Topic “Insurance Medicine” in the Cochrane Library



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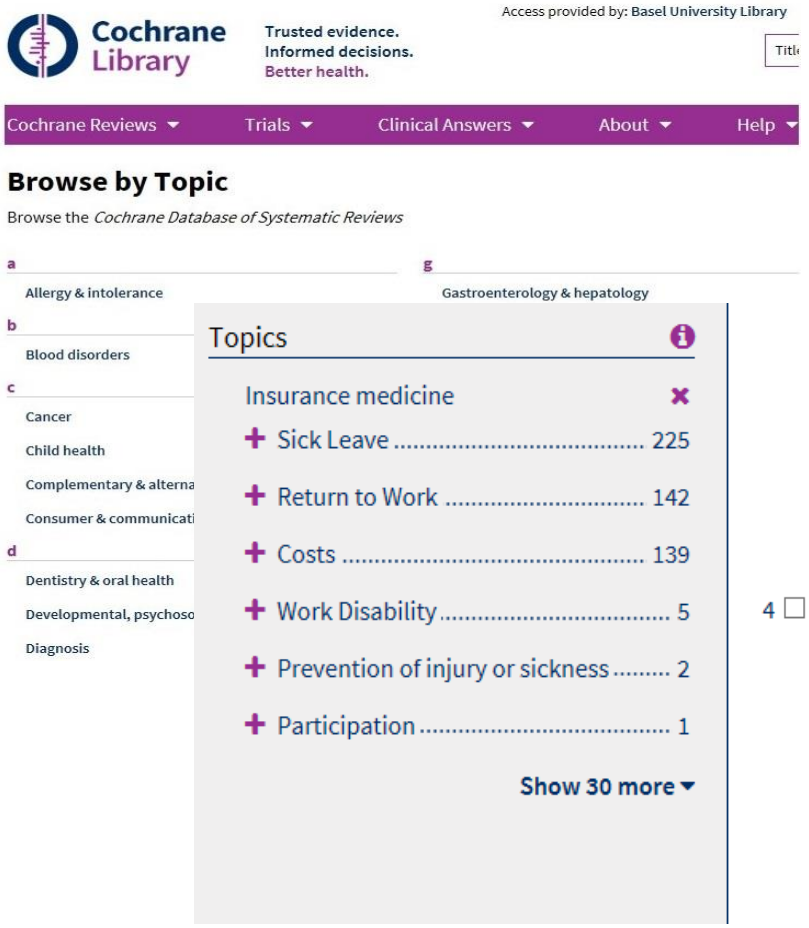
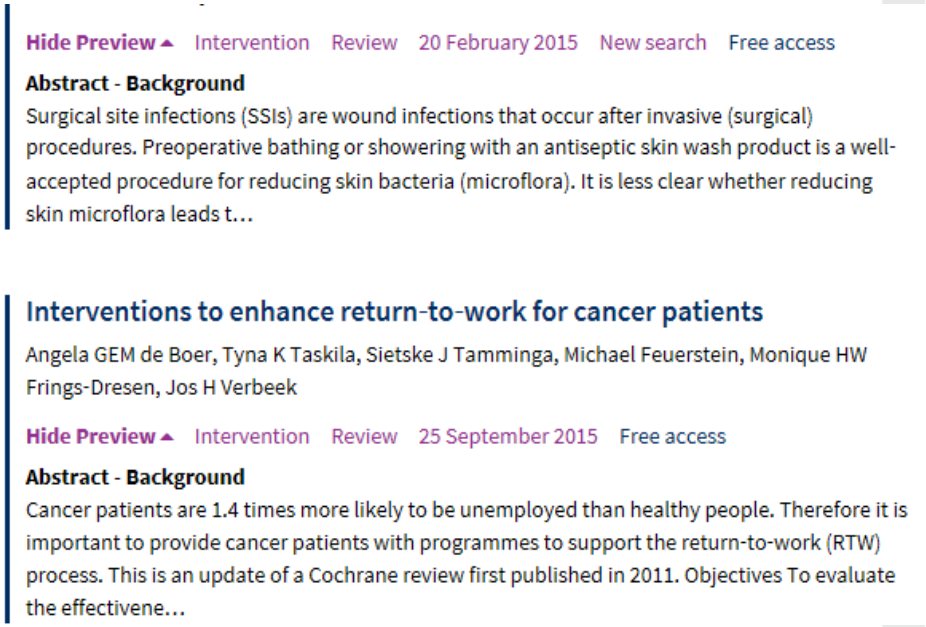
4. The knowledge translation strategies – Topic “Insurance Medicine” in the Cochrane Library





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4. The knowledge translation strategies – Topic “Insurance Medicine” in the Cochrane Library

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4. The knowledge translation strategies – Topic "Insurance Medicine" in the Cochrane Library

Results screening outcomes in systematic reviews (n=84)

	Primary outcome %	Secondary outcome %	Total
Main IM outcome	2 (2%)	10 (11%)	12
Surrogate IM outcome	11(12%)	69 (75%)	80
Total	13	79	92

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4. The knowledge translation strategies

Problem	Strategies/activities
The need to advocate for the production of evidence relevant to IM	• Make the case for IM (publications and dissemination) • Networking plan (aligned with the objectives of CIM's Strategic Plan) • PICO questions refinement? • Advocacy for the inclusion of IM outcomes in Cochrane SRs?
Lack of awareness of Cochrane	• Promotional stands in congresses and academic events • Create and implement of CIM social media strategy • Increasing the number of subscriber to CIM newsletter
Barriers to access/finding evidence in the Cochrane Library	• Tagging of SRs→Topic IM in the Cochrane Library • CIM's social media & newsletter • Cochrane corners • Translation of evidence in multiple-languages
Training of stakeholders in the use of evidence	• Education and training for stakeholders

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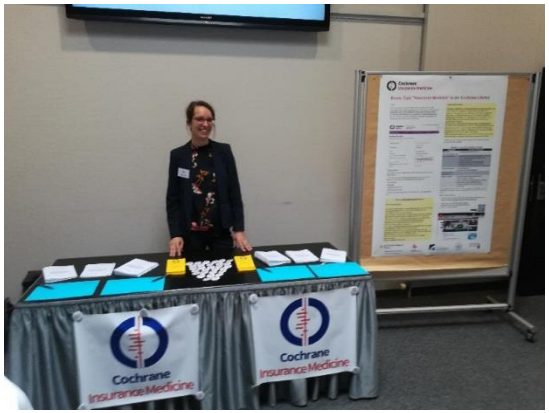
4. The knowledge translation strategies - Events



CIM members participated in the 15th Congress of the European Forum for Research in Rehabilitation

The 15th Congress of EFRR, held together with the 28th German Congress for Rehabilitation, took place from 15th to 17th April in Berlin, Germany. Topics related to insurance medicine focused on international legal, scientific and socio-political aspects of work disability, international return work (RTW) programs and screening instruments to predict future RTW. Members of CIM provided an overview on the Cochrane's strategy of Knowledge Translation and the development of a questionnaire to assess perceived fairness of claimants undergoing a disability evaluation. There was also a promotion table to inform congress participants about recent activities and future projects of CIM.

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Topic
Science and practice in the field of insurance medicine – present and future challenges in the European and Swiss context

Participants
Physicians, medical advisers, researchers and other professionals involved in the field of insurance medicine, social security issues, law issues and the return-to-work-process

Co-Organisers

www.eumass-2020.eu

Swiss Insurance Medicine
Interessengemeinschaft Versicherungsmedizin Schweiz
Communauté d'intérêts suisse de la médecine des assurances
Comunità d'interessi svizzera medicina assicurativa

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4. The knowledge translation strategies - Promotion

University Hospital Basel
Department Clinical Research
EbM Research & Education
Kenniscentrum Verzekeringsgeneeskunde
Dutch Academic Center for Insurance Medicine
McMaster University

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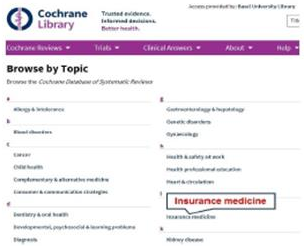
Neues Topic "Insurance Medicine" in der Cochrane Library

Ziel:

Das neue Topic 'Insurance Medicine' soll die Suche in der Cochrane Library nach systematischen Reviews und Protokollen erleichtern, die in ihrer Methodik versicherungsmedizinische Endpunkte einschliessen (z.B. berufliche Wiedereingliederung, Krankschreibung, Arbeitsunfähigkeit, Teilhabe, Prävention von Verletzung oder Krankheit und Kosten)



Zielgruppen

Das Topic 'Insurance Medicine' in der Cochrane Library wurde entwickelt für:

- Versicherungsmediziner/Sozialmediziner und Ärzte, die im Bereich der Sozial- und Privatversicherung tätig sind
- Forschende
- Manager
- Leitlinien-Entwickler
- Entscheidungsträger
- Weitere Berufsgruppen (z.B. Reha-Mediziner, Berufsexperten, etc.)

Ein- und Ausschlusskriterien

Einschlusskriterien

Population: Erwachsene im erwerbfähigem Alter (18 bis 65 Jahre) mit Gesundheitsproblemen, die zu einer temporären oder dauerhaften Arbeitsunfähigkeit führen
Interventionen: Massnahmen, die den Verlauf und/oder die Dauer der Erkrankung beeinflussen und damit die Arbeitsunfähigkeit verkürzen bzw. die berufliche Wiedereingliederung fördern (z.B. manuelle Therapie bei chronischen Rückenschmerzen; Massnahmen zur beruflichen Wiedereingliederung bei Krankschreibung wegen Depression).
Endpunkte: Versicherungsmedizinische Endpunkte oder Surrogate in der Methodik. Tabelle 1 fasst die relevanten versicherungsmedizinischen Endpunkte mit entsprechenden Beispielen zusammen. Der Endpunkt "Kosten" wurde nur dann als relevant betrachtet, wenn er in Verbindung mit versicherungsmedizinischen Endpunkten oder Surrogaten berichtet wurde.
Setting: regulärer Arbeitsmarkt

Ausschlusskriterien

Population: Menschen mit gesundheitlichen Einschränkungen, die eine Teilhabe am regulären Arbeitsmarkt verhindern (z.B. Autismus, Down-Syndrom), arbeitslose oder schwer erkrankte Personen (z.B. Nierenerkrankung im Endstadium, palliative Versorgung), Personen mit vorübergehenden Zuständen ohne direkten Einfluss auf die Arbeitsfähigkeit (z.B. Rhinitis oder postoperative Übelkeit)
Interventionen: systematische Reviews über Primärprävention oder Präventionsmassnahmen, wie z.B. Raucherentwöhnung und Adipositasprävention; Interventionen ohne direkten Einfluss auf Krankschreibung oder Arbeitsunfähigkeit (z.B. Prozessevaluation, organisatorische Veränderungen, partizipative Entscheidungsfindungsfindung in der Primärversorgung); Reviews über Diagnostik (Screening, Monitoring, diagnostische Güte).

Anmerkung: Berücksichtigt wurden Reviews, die sowohl Ein- als auch Ausschlusskriterien erfüllten.

Tabelle 1. Endpunkte und deren Surrogate

Endpunkt	Surrogat (Beispiele)
Berufliche Wiedereingliederung	• Verlust des Arbeitsplatzes
Krankschreibung	• Klinikaufenthalt (Aufenthaltsdauer, Anzahl der Krankenhauseinweisungen oder -wiederaufnahmen) • Institutionalisierung (Abhängigkeit) • Abwesenheitsdauer von der Arbeit, Ausfallzeiten, Krankheitstage, Krankengeld
Arbeitsunfähigkeit	• Arbeitsfähigkeit • Verlauf der Arbeitsfähigkeit
Unfallprävention oder Krankheit	
Andere: Kosten*	• Sozioökonomische Auswirkungen • Wirtschaftliche Folgen • Wirtschaftlichkeit, wirtschaftliche Analyse • Ausgaben im Gesundheitswesen, Inanspruchnahme von Gesundheitsleistungen

* Der Endpunkt "Kosten" wurde nur dann als relevant betrachtet, wenn er in Verbindung mit weiteren versicherungsmedizinischen Endpunkten berichtet wurde.

Mehr Information:

- Weitere Informationen zu den Ein- und Ausschlusskriterien auf unserer Webseite: https://insuremed.cochrane.org/
- Video-Tutorial zur Suche nach Literatur innerhalb des Topics 'Insurance Medicine' in der Cochrane Library.

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CIM social media

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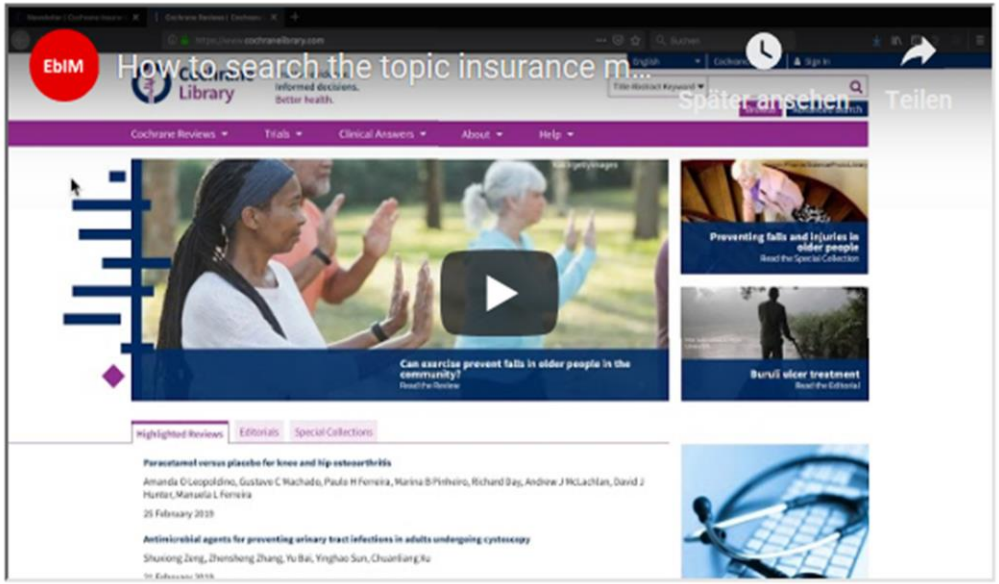

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4. The knowledge translation strategies - Impact

CIM Newsletters Subscribers 346 (Jun 2018) to 386 (May 2019)

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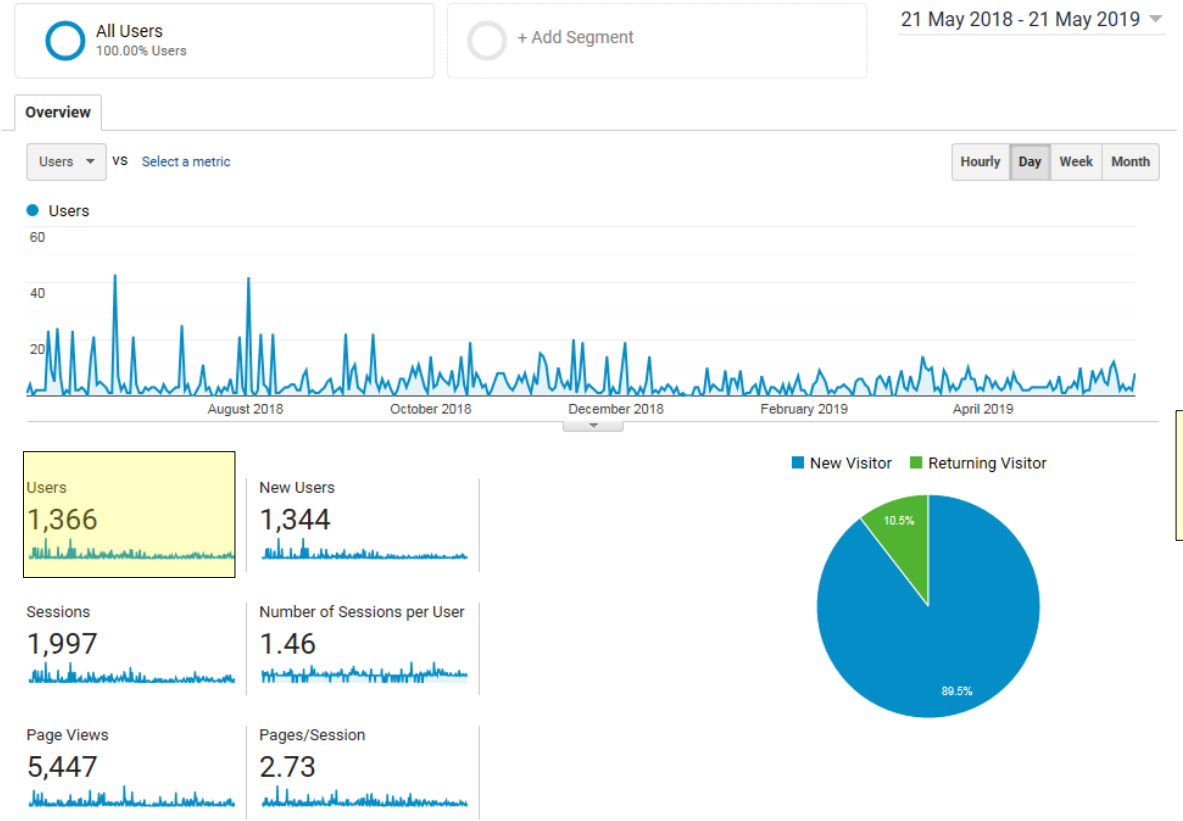
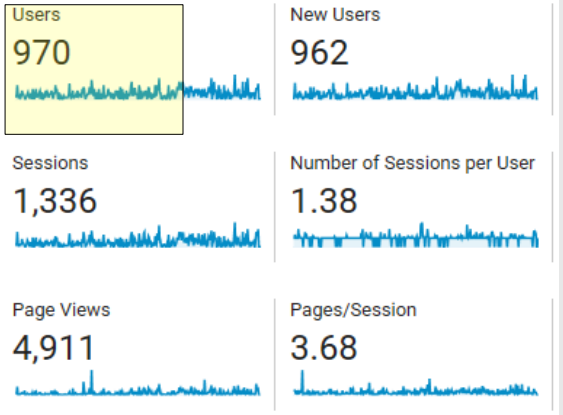
4. The knowledge translation strategies – Impact

CIM website visits - 29% more visits, 2018-2019

Google Analytics (21 May 2018– 21 May 2019)



Google Analytics (21 May 2017– 21 May 2018)



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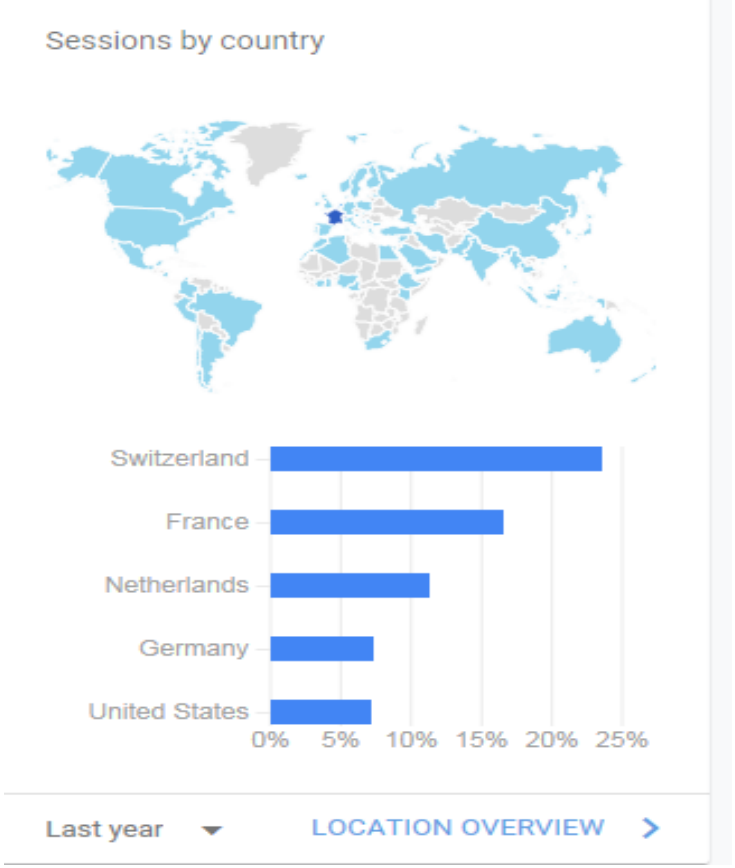
4. The knowledge translation strategies - CIM website visits



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5. Conclusions: learnings and steps forward

- A survey can be a suitable tool for identifying evidence needs and priorities of users and for designing and implementing KT strategies
- The identification of priority research questions (PICO) for developing SRs requires further refinements
- Medical associations and national institutions can be a practical way to reach some key stakeholders, particularly health professionals
- Other factors to consider when conducting similar surveys are: logistic implications, resources required, cost, translation of the survey and results into different languages and strategies to increase participation.

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5. Conclusions: learnings and steps forward

Steps forward:

- Survey assessing the profile of subscribers to the CIM newsletter, feedback on the content of newsletter and use of social media.
- Open new social media accounts and promotion of accounts
- Networking and advocacy plan
- PICO questions refinement?
- Advocacy for the inclusion of IM outcomes in Cochrane SRs?

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Thanks for your attention!