



# **Cochrane Insurance Medicine – A new field within Cochrane**

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# Celebrating with related groups



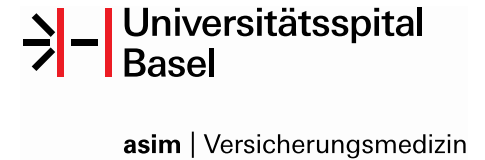
## Cochrane Insurance Medicine

to advance the practice of insurance medicine (Regina Kunz)

The importance of outcome measures - **Cochrane Work** (Jason Busse, Jos Verbeek)

Including insurance medicine related outcomes in reviews overseen by relevant Cochrane groups. **Cochrane Back** (Sandra Brouwer, Maurits van Tulder)

Reviewing guidelines on expectation of sickness absence duration: **Cochrane EPOC** (Wout de Boer; Bernard Burnand)



# **Cochrane Insurance Medicine to advance the practice of insurance medicine**

Prof. Regina Kunz

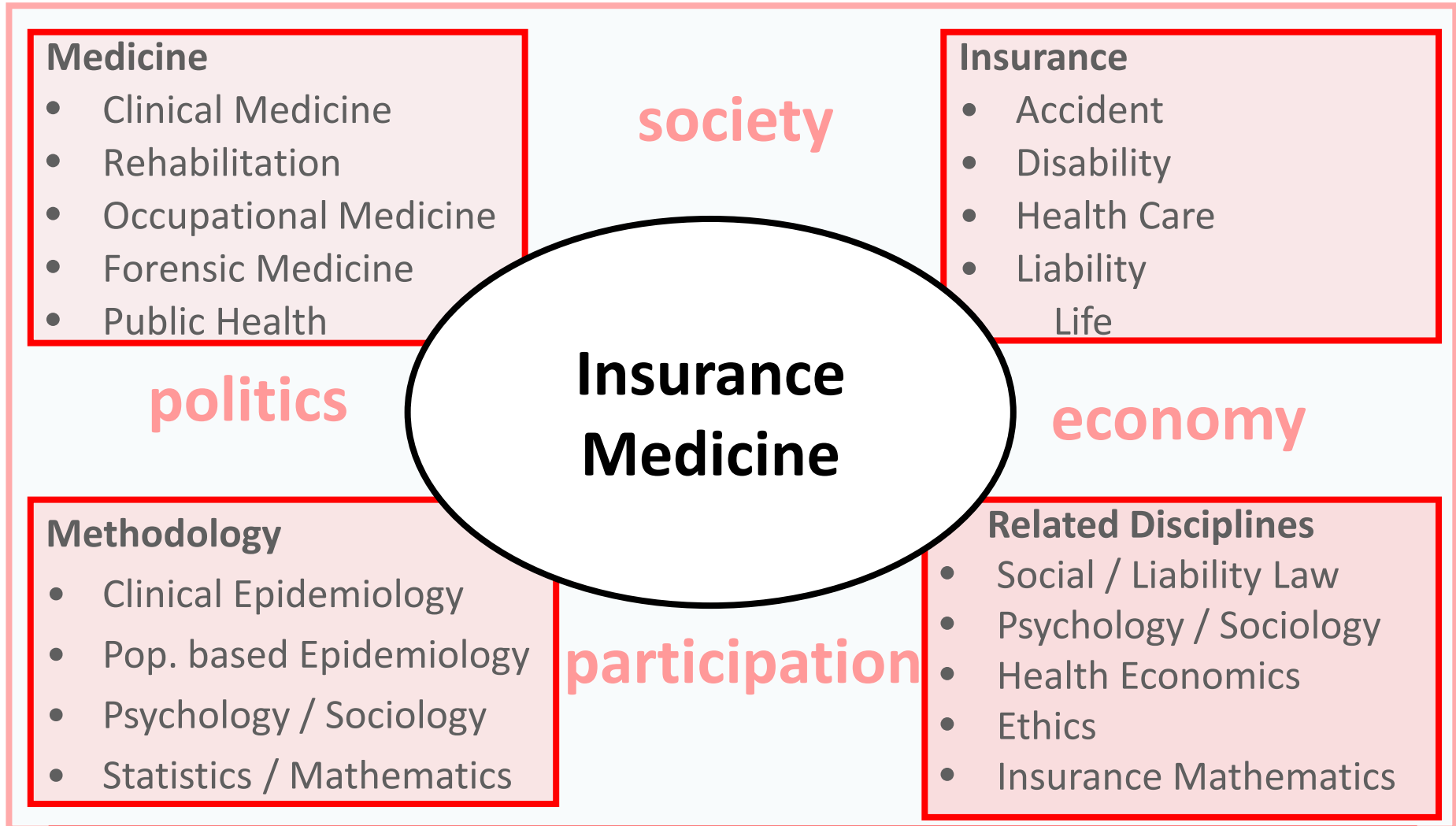
asim, Basel

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# Overview

- What is insurance medicine?
- Core tasks
- The use of research evidence in medical assessments
- Evidence based (insurance-) medicine and Cochrane
- Cochrane Insurance Medicine

# Interfaces of Insurance Medicine (selection)



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# Typical tasks of health care professionals working in the insurance context

1. **Assessing impairments and causality** (e.g. accident) in individuals
2. **Certifying sick leave**
3. **Evaluating** long-term disability for work and for social participation
4. **Promoting return to work**
5. **Assessing the health risks** of individuals applying for insurance coverage (e.g. life, work capacity, health care)
6. **Promoting the participation** of disabled persons in the society
7. **Monitoring** the use of **health care and social care**

Source: EUMASS

# Insurance-related medical activities - in clin epi terms

EUMASS terminology		Clinical Epidemiology - terminology
1.	Assessing the health risks of individuals applying for coverage (e.g. life, work capacity, health care)	<b>Screening</b> <b>Prognosis</b> about future events
2.	Assessing <b>impairments in health</b>  Assessing <b>causality</b> ( e.g. accident) in individuals	<b>Diagnosis:</b> applying one or several <i>tests</i> to determine a disease, its severity and consequences on function <b>Causality:</b> establishing a causal link between an event and impaired health
3.	<b>Certifying sick leave</b>	<b>Diagnosing</b> health conditions with 'work ability' as outcome <b>Monitoring</b> health status and functioning <b>Prognosis</b> on function and ability to work
4.	<b>Evaluating long-term disability</b> for work and for social participation	<b>Diagnosis</b> with 'ability to work' as outcome <b>Prognosis</b> about a person's health status to improve <b>Interventions</b> that improve health status
5.	<b>Promoting return to work</b>	<b>Interventions</b> that facilitate return to work <b>Diagnosis / prognosis</b> on people who will or will not benefit
6.	<b>Promoting participation</b> of disabled persons in the society	<b>Interventions</b> that facilitate participation

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# What should be in the toolbox of insurance medicine and what is often missing

Health care professionals need ...

... **scientific evidence** from **research in the insurance setting** to reliably answer questions from the practice

... **Instruments** and **techniques** for **reliable and valid assessments and evaluations** of insured individuals

... **studies about insured populations with long term follow-up**, in order to establish sound prognoses about the trajectory of claimants on work ability

... **validated criteria for making judgments** on diagnostic test and medical interventions



# Does insurance medicine need evidence?

## Uptodateness of evidence in insurance medicine

System	Page	Book/article	Year of publication
musculoskeletal	n=40	6/1	2001; '03; '04; '06; '08; '08 // 2006
heart	n=39	7/ 0	1996; 2003; '04; '04; '06; '06; '07
vessels	n=26	39 quotes <i>mixed</i>	<2000: <b>n=33</b> (back to 1968) ≥ <b>2000</b> : n=6: 2000; '02; '02; '03; '03; '04

lung			n=15;
liver			
gastrointes			
skin			
...			

**Conclusion**

- hardly any primary studies
  - literature outdated
- guidelines older than 15 years
- no reviews; no meta-analyses

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# Does Insurance Medicine need evidence?

## What kind of evidence?

- Case management performed by insurers (2010)

A case study by Boston Consulting

# Case management performed by insurers (2010)



Case Management und  
seine strategische Bedeutung  
für Versicherer

**Expert statements  
about the  
effectiveness:**

30% «success rate»

**Extrapolated  
potential for savings:**

120 Mio savings in  
benefits /year

# Our alternative draft

OPEN ACCESS Freely available online

PLOS ONE

## Return to Work Coordination Programmes for Work Disability: A Meta-Analysis of Randomised Controlled Trials

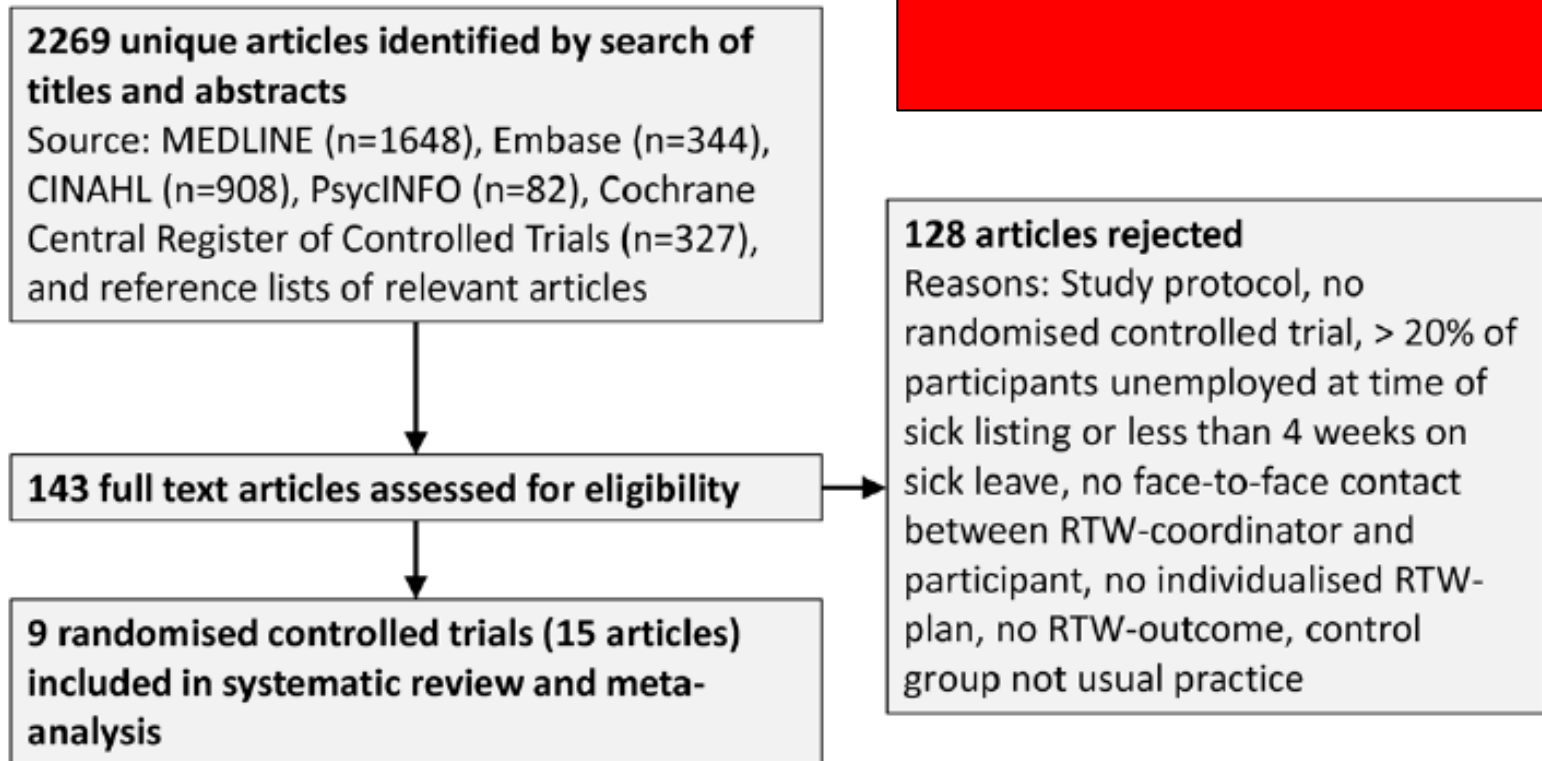
Stefan Schandelmaier<sup>1\*</sup>, Shanil Ebrahim<sup>2</sup>, Susan C. A. Burkhardt<sup>1</sup>, Wout E. L. de Boer<sup>1</sup>,  
Thomas Zumbo<sup>3</sup>, Gordon H. Guyatt<sup>2</sup>, Jason W. Busse<sup>2,4</sup>, Regina Kunz<sup>1</sup>

<sup>1</sup>Academy of Swiss Insurance Medicine, University Hospital Basel, Basel, Switzerland, <sup>2</sup>Department of Clinical Epidemiology and Biostatistics, McMaster University

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The **effectiveness of RTW coordination** compared to usual practice on **disability, RTW, function, quality of life** and **satisfaction** in employees receiving wage replacements benefits. A Systematic Review / Meta-Analysis of RCTs

**What kind of studies?**



# Methodological assessment

	Bültmann	Davey	Donceel	Feuerstein	Lambeek	Lindh	Purdon	Rossignol	V.d. Feltz-C.
Randomisation	+	+	+	+	+	-	+	+	+
Concealed allocation	+	+	+	-	+	-	+	+	+
Blinding insured individuals , case managers	-	-	-	-	-	-	-	-	-
Blinding outcome assessors	+	-	-	-	-	+	-	+	+
Missing outcome data [%]	5	0	0	40	7	?	28	0	18
Complete reporting	?	?	?	-	+	-	?	?	-

# Broad spectrum on interventions

Study	Intervention
Bültmann	1 multidisciplinary team, standardised assessment
Davey	1 physical therapist, semi structured process
Donceel	30 insurance physicians, new guideline, disability evaluation and coordination
Feuerstein	32 nurses, training in ergonomic assessment and problem solving
Lambeek	2 trained OPs, coordination + ergonomic intervention + cognitive behavioural therapy
Lindh	1 multidisciplinary reha-team, integration of family
Purdon	4 case management providers, many case managers
Rossignol	1 team GP + nurse, new guideline low back pain
V.d.Feltz-C.	12 teams OPs / psychiatrist

GP = general practitioner  
OP = occupational physician

# Success: proportion at work at the end of study

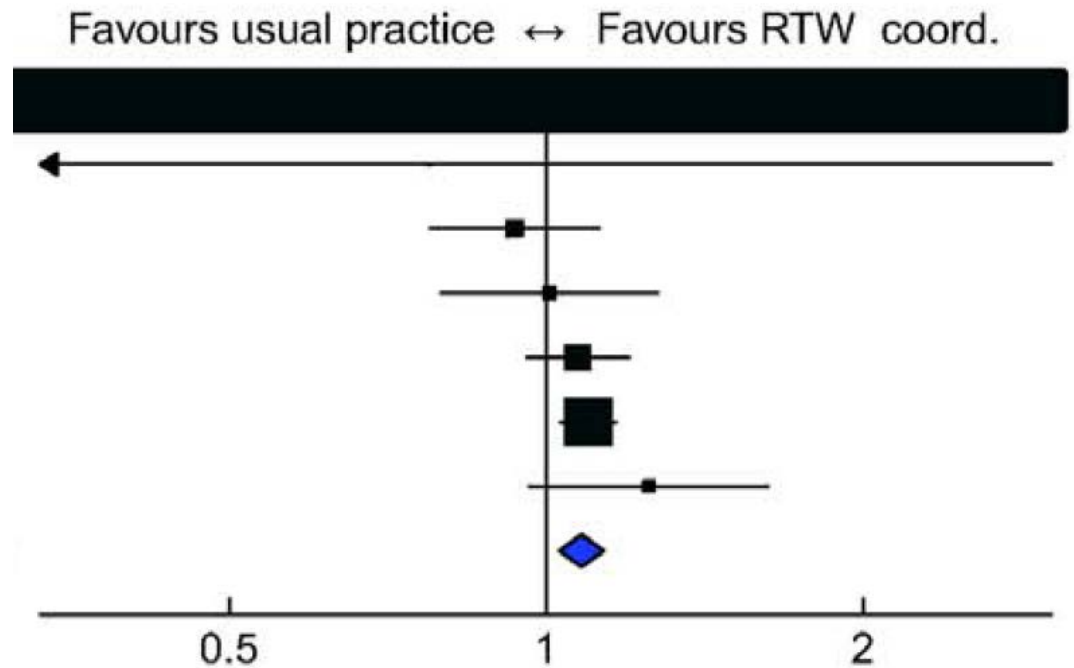
*Schandelmaier Plos One, 2013*

6 well done RCTs

2'417 patients, mostly musculoskeletal

**Case management improves RtW**

**by 8% compared to standard care**



**RR: 1.08**  
(CI: 1.03 – 1.13)



# Success: proportion ever returned to work

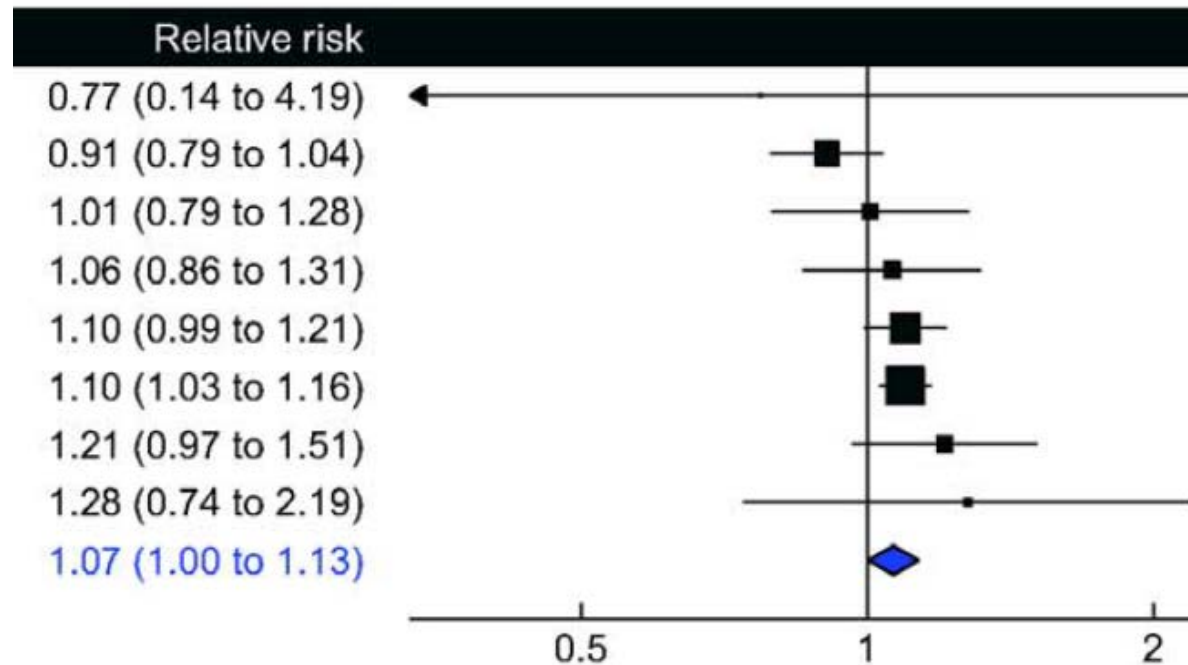
*Schandelmaier Plos One, 2013*

8 well done RCTs

2'645 patients, mostly  
musculoskeletal

**Case management  
improved RtW**

**by 7% compared to  
standard care**



**RR: 1.07**  
(CI: 1.00 – 1.13)

# Does Cochrane need insurance medicine?

## Prevalence of IM outcomes in Cochrane reviews

### Methodology

Cohort of CC priority reviews

**Population:** working age, affected by health conditions that often end in work disability

**Interventions,** that affect course or duration of disease

**Outcomes:** duration sick leave; short-longterm disability; RtW; endpoints of work incapacity

**Reference for validation of disease**

German, Swedish, French Guidance to work incapacity

### Result:

118/321 relevant **reviews**

**IM-related outcomes (narrow definition):**

proportion return to work; duration / frequency of sick leave; duration work incapacity...

**IM-related outcomes (broad definition):** time for

recovery; return to normal activities;

hospitalization; disability shift; disease related unemployment; cost

### IM-related outcomes in 118 reviews

- **narrow: 15%**
- **broad: 44%**



**Trusted evidence. Informed decisions, informed judgments. Improved health and social care**

## **Our Vision**

... is a world of improved health where decisions about health, health and social care are informed by high-quality, relevant and up-to-date synthesized research evidence.

## **Our Mission**

... is to promote evidence-informed decision-making in health and social care by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence.

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**Key Challenges in insurance medicine**

# Tasks of Cochrane Insurance Medicine: Overview

- 1. Contact with users in the insurance setting** (incl. insured individuals)
  - identify + tag Cochrane reviews related to insurance medicine
  - advocate and disseminate evidence-based insurance medicine
- 2. Development of various registries**
  - systematic reviews – Cochrane and others
  - intervention studies; prognostic studies
- 3. Education**
  - educate our stakeholders about Cochrane reviews and how to use them
  - educate review groups on insurance medicine with relevance to Cochrane

# Vision for Cochrane Insurance Medicine

**Sound basis** to perform the medical tasks in insurance medicine

Stakeholders have the **necessary knowledge and competences**

- better **basis to perform medical assessments and take decisions** in the practice of insurance medicine
- transparency **increases acceptance of decisions**

**The job is huge**

It needs an **international collaboration** with the necessary structures

**Cochrane**

**Cochrane Insurance Medicine**

## Browse by Topic

Browse the *Cochrane Database of Systematic Reviews*...

<b>A</b>	<b>G</b>	<b>P</b>
<a href="#">Allergy &amp; intolerance</a>	<a href="#">Gastroenterology</a>	<a href="#">Pain &amp; anaesthesia</a>
<b>B</b>	<a href="#">Genetic disorders</a>	<a href="#">Pregnancy &amp; childbirth</a>
<a href="#">Blood disorders</a>	<a href="#">Gynaecology</a>	<a href="#">Public health</a>
<b>C</b>	<b>H</b>	<b>R</b>
<a href="#">Cancer</a>	<a href="#">Health &amp; safety at work</a>	<a href="#">Rheumatology</a>
<a href="#">Child health</a>	<a href="#">Heart &amp; circulation</a>	<b>S</b>
<a href="#">Complementary &amp; alternative medicine</a>	<b>I</b>	<a href="#">Skin disorders</a>
<a href="#">Consumer &amp; communication strategies</a>	<a href="#">Infectious disease</a>	<b>T</b>
<b>D</b>	<a href="#">Insurance Medicine</a>	<a href="#">Tobacco, drugs &amp; alcohol</a>
<a href="#">Dentistry &amp; oral health</a>	<b>K</b>	<b>U</b>
<a href="#">Developmental, psychosocial &amp; learning problems</a>	<a href="#">Kidney disease</a>	<a href="#">Urology</a>
<a href="#">Diagnosis</a>	<b>L</b>	<b>W</b>
<b>E</b>	<a href="#">Lungs &amp; airways</a>	<a href="#">Wounds</a>
<a href="#">Ear, nose &amp; throat</a>	<b>M</b>	
<a href="#">Effective practice &amp; health systems</a>	<a href="#">Mental health</a>	
<a href="#">Endocrine &amp; metabolic</a>	<a href="#">Methodology</a>	
<a href="#">Eyes &amp; vision</a>	<b>N</b>	
	<a href="#">Neonatal care</a>	
	<a href="#">Neurology</a>	
	<b>O</b>	
	<a href="#">Orthopaedics &amp; trauma</a>	



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# Cochrane Insurance Medicine

Welcome to the website of Cochrane Insurance Medicine.

The field was established in 2015 to help decision-makers and professionals in a medical insurance context to make evidence-informed decisions. Insurance medicine makes health-related judgments on diagnosis, prognosis and effectiveness of interventions in the context of insurance coverage.

## Current news from Cochrane

- ♦ [Coming to Vienna? Join in the Project Transform activities](#)
- ♦ [Designing a successful questionnaire: webinars from Cochrane Training](#)
- ♦ [Cochrane widens its language scope to Catalan](#)
- ♦ [Establishment of the European satellite of the Cochrane Public Health Review Group](#)
- ♦ [Match funding to support Cochrane's 'Podcasts for Parents' project - 9 September](#)

[more](#)

# Cochrane Insurance Medicine

## The Initiators:

International network for an evidence-based insurance medicine,  
the ebIM Research Network:

**Switzerland:** Regina Kunz, Wout deBoer

**the Netherlands:** Sandra Brouwer; Jan Hoving; Jan Buitenhuis

**Sweden:** Kristina Alexanderson

**Canada:** Jason Busse; Gordon Guyatt





# Summary

- Core tasks of insurance medicine
- What do health care professionals performing insurance medicine miss out?
- Reliable evidence for important decisions
- Cochrane has a model for high quality information

**==> Cochrane Insurance Medicine**

**as a main pillar for an evidence-based insurance medicine**