

EUMASS – UEMASS REPORT

The need for evidence-based knowledge in European insurance medicine Report to EUMASS Council 2016

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Insurance medicine is a field of expertise in need of further development of evidence-based knowledge and practice. The knowledge base is so far fragmented and we need to strengthen international cooperation and enhance standards for research and practice. The European Union of Medicine in Assurance and Social Security (EUMASS) therefore welcomes and supports the establishment of the Cochrane Insurance Medicine (CIM) as a field in Cochrane.

In this report, we mainly use the term evidence-based knowledge instead of evidence-based medicine. The latter concept, often defined as "the conscientious and judicious use of current best evidence from clinical care research in the management of individual patients" (1), does not fully cover the use of evidence-based knowledge in social security, since clinical care is not the main objective of the insurance institution. It is probably more fruitful to use evidence-based knowledge as an umbrella terms, of which evidence-based medicine forms one part. For physicians and other professionals in social security, evidence-based knowledge (in a wider sense) is needed also in relation to non-medical aspects of the work regarding for instance law, social work and cost analysis.

To get an idea of the present situation for evidence-based knowledge in insurance medicine, and to promote a stronger foundation for future collaboration with CIM, the EUMASS council decided to carry out a preliminary survey – an inventory - among the representatives of EUMASS. The aim was to give some indications of the present status of evidence-based knowledge in insurance medicine. Particular aims were to gain information on experiences of the most pressing needs for an improved evidence base and on examples of successful use of evidence-based knowledge in insurance.

Method

A survey was sent by email in March 2015 to all representatives of the EUMASS council from 19 countries. Responses were included up to September 2015. The survey contained two questions: "In what area of insurance medicine is evidence-based knowledge lacking most in your country? In other words — where do you miss evidence-based medicine most?" and "Do you have an example of successful use of evidence-based knowledge in insurance medicine in your country?" The answers were to be given as free text. We used a simple quantitative content analysis to extract the meaning of the texts. Both authors read independently all answers and agreed on the categorization.

Results

We received replies from 12 countries (Belgium, Czech Republic, Finland, Germany, Ireland, the Netherlands, Norway, Poland, Romania, Sweden, Switzerland, and the United Kingdom) (response rate: 63%). For three countries there were two respondents, representing different sectors of insurance medicine (Germany, the Netherlands, and Romania). In Sweden the questions had been passed on to the universities that replied to a large extent.

The answers could be categorized in three main areas:

- 1. Did they refer to private or social insurance?
- 2. Which common work domain for insurance physicians did they refer to? Based on a previous publication (2), the following domains were used:
 - Work disability evaluation
 - Sick-leave management and return to work
 - Impairment assessment and causality
 - Health care monitoring
 - Risks for acceptance for life insurance

- Evaluation of incapacity to participate in community/society
- 3. Which medical conditions did they refer to?

The lack of evidence-based knowledge

To the first question, "In what area of insurance medicine is evidence-based knowledge lacking most in your country?" 14 replies were given (see Appendix table 1 for details). Some replies were related to private or social insurance, some to work domains, and some to underlying pathologies.

Four countries mentioned explicitly that there is a lack of evidence-based knowledge in social insurance (Bel, Fin, Nor, Rom), and three stated the same about private insurance (Bel, Ire, Nor).

Of the work domains, lack of evidence-based knowledge was reported for two domains in particular. Six countries stressed the lack in disability evaluation for long-term absence from work (Bel, Ger, Pol, Rom, Swe, Swi), and three countries stressed the lack in sick-leave management (including certification) and promoting RTW (Rom, Swe, UK). Of other domains, risk assessment in life/disability insurance (Net) was reported, but for three domains, namely functioning assessment outside of work life, health care monitoring, and impairment assessment and causality, no respondent reported any lack of evidence-based knowledge. In addition to these domains, the importance of synthesizing knowledge from different scientific fields was reported.

Four countries mentioned that there is a lack of evidence-based knowledge for the evaluation of persons with mental health problems (Cze, Pol, Rom, Swe). From Sweden such lack was also reported for chronic fatigue and comorbidity.

A summary of findings is presented in table 1.

Table 1. Lack of evidence-based knowledge in insurance medicine domains. Europe 2015

Domain	Specific field
Work disability evaluation	Disability evaluation
	Assessment of partial disability (hours per week)
	Disability assessment of persons with mental
	disorders, CFS, and comorbid conditions
Sick-leave management and RTW	Guidelines for sick leave
	Sick-leave prevention
	Effects of interventions for RTW
	Disease-specific sick leave
	Outcomes and side effects of sick leave
Impairment assessment and causality	Not mentioned
Health care monitoring	Not mentioned
Risks for acceptance for life insurance	Risk assessment in life/disability insurance
Evaluation of incapacity to participate in community/society	Not mentioned

Three of the previously identified domains of insurance medicine were not mentioned in the answers on lack of evidence-based knowledge. No additional domains were identified in the responses.

It was pointed out (Ger) that there is a need to make a clear distinction between evidence-based medicine (a pursuit in health care for the benefit of the individual patient in treatment and outcomes) and evidence-based knowledge (in this context, a pursuit in insurance for the benefit for the individual persons, professionals, and society). "Evidence based medicine ... is concerned with health outcomes to individual patients and how to best further them in medicine. Its primary concern is not the impact of disease on society and economy".

The present use of evidence-based knowledge

To the second question, "Do you have an example of successful use of evidence-based knowledge in insurance medicine in your country?" we received 15 answers (see Appendix table 2 for details). Almost all answers were related to social insurance. From one country it was reported that private insurance used formal disease criteria (Rom).

The most frequent examples of evidence-based knowledge came from the domain of disability evaluation, where 9 countries reported having successful examples (Bel, Cze, Ger, Ire, Net, Nor, Pol, Swe, Swi). Within this group, there was a large variety of examples. Evidence-based knowledge was used as a solid base for guidelines (Cze, Ger, Ire, Net, Pol) or as reference when the insurance physician wrote reports on disability (Net, Swe, Swi). It was also used to design more effective disability-evaluation management by assisting the medical assessors and other case workers (Bel) and to provide more valid tools in disability assessment (Nor, Swe). Many of the given examples have already been implemented. In one country, previous studies for guidelines have been judged outdated and will be replaced by more relevant studies in social insurance (Rom).

In the fields of rehabilitation, work participation, and sick-leave management, several minor studies have been carried out with successful outcome (Nor). Some insurance physicians work with assessment of impairment related to cause, and here an example of success was given on the use of evidence-based knowledge for settling the legal rights to claims (Fin). In the domain of health care monitoring, evidence-based knowledge was used in the assessment of drug effectiveness (Ger).

A summary of the findings is presented in table 2.

Table 2. Successful use of evidence-based knowledge in insurance medicine. Europe 2015

Domain	Specific field
Work-disability evaluation	Disability evaluation guidelines/protocols based on EBK Scientifically tested tools for work-disability assessment Scientifically tested methods for disability evaluation EBK to support conclusions in disability reports «Case law»: examples built on EBK
Sick-leave management and RTW	Sick-leave certification guidelines Interventions for RTW that are proven effective
Impairment assessment and causality	Referral to proven causes in occupational diseases
Health care monitoring	Assessment of drug effectiveness
Risks for acceptance for life insurance	Disease-specific criteria
Evaluation of incapacity to participate in non-work life	Not mentioned

On the meta level, the newly accepted Cochrane field of insurance medicine (CIM) was stated to help synthesize evidence-based knowledge from many disciplines (Swi).

Discussion

In this limited survey to the national representatives in the EUMASS council, the insurance physicians report lack of evidence-based knowledge in both public and private insurance, in the work domains of disability evaluation for long-term absence from work and in sick-leave management and promotion of return to work, particularly in relation to mental health problems. Most examples of successful use of evidence-based knowledge came from social insurance, and were related to the same two work domains - disability evaluation and sick-leave management.

The rationale behind this survey was to provide CIM with some information from the practitioners within EUMASS, as bases for their future work and to promote a broader discussion among insurance physician on evidence-based knowledge. As illustrated by our first question in the survey, where we both asked about evidence-based knowledge and evidence-based medicine, the authors were not clear enough about concepts and how to phrase questions in a way that they could provide more specific information. Consequently, the answers variously responded to evidence-based knowledge and evidence-based medicine. We see this as indications of a need to increase the understanding of evidence-based knowledge and evidence-based medicine in insurance medicine.

Because of the limited number of informants, our inventory is neither representative nor exhaustive. It was also clear that the two survey questions could be interpreted in different ways, as shown by the large variation in type and content of answers.

Nevertheless, the inventory provides some ideas of the position of evidence-based knowledge in European insurance medicine today. In the responses to the first question, it was noticeable that no respondents suggested health care monitoring, functional assessment in the non-life domain, or causality assessments as domains where this knowledge is lacking. These domains are, however, work tasks for insurance physicians only in some European countries, and their absence might simply be a consequence of the small size of our survey. It should definitely not be taken as a sign that evidence-based knowledge is satisfactory in these domains.

On the other hand, it can be fairly safely concluded that domains that were mentioned many times, such as disability evaluation, interventions for return to work, and sick-leave management are common work tasks for many European insurance physicians and other professionals. They find little support in evidence-based knowledge in these domains. It seems also apparent that handling insurance matters related to mental disorders is most in need of evidence-based knowledge.

The importance of disability evaluation and sick-leave management is emphasized by the fact that most examples of successful use of evidence-based knowledge concerned these two domains. They apparently generate many single studies, systematic reviews, and guidelines. Nevertheless, both domains were also reported as those with the largest lack of evidence-based knowledge.

In the survey, guidelines and protocols were suggested as good examples where evidencebased knowledge was used. It was not clear, however, if the respondents differentiated between guidelines based on consensus, guidelines based on sound scientific evidence, and guidelines based on sound and relevant scientific evidence. It is quite common that insurance physicians have access to disease-specific guidelines. Such guidelines are often updated and based on new scientific evidence, but often restricted to clinical studies. In our view, the usefulness of guidelines would be higher if relevance also was a criterion. It would be better if they were based on studies that had specific outcomes related to RTW or work integration.

Acknowledgement

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References

- 1. Haynes, R.B., D.L. Sackett, J.M.A. Gray, D.F. Cook, and G.H. Guyatt. Transferring Evidence from Research into Practice: 1. The Role of Clinical Care Research Evidence in Clinical Decisions. ACJ Club. 1996;125: A14-6
- **2.** de Boer, W.E.L, C. Wiholm, S. Brage. Insurance medicine in Europe. Abstract book, EUMASS Congress 2014, p 76

Appendix table 1. In what area of insurance medicine is evidence-based knowledge lacking most in your country? In other words – where do you miss evidence-based medicine most?

Country	Comments
,	Evidence-based knowledge is lacking both in private and social insurance medicine.
	Areas of concern include the evaluation of body functions and structures, activity and
Bel	participation in society. The prevention of long-term disability is a key issue.
Cze	Psychiatry
Fin	Mostly evidence-based medicine is lacking in sector of social insurance
	From our current understanding, insurance medicine is comprised mostly of two
	distinct fields: 1. The inclusion of medical expertise in any type of insurance (in
	particular beyond health insurance) where expected future health changes may
	impact insurance policies regarding the likelihood of the occurrence of events
	triggering benefits and the extent of those benefits (e.g. risk of death depending on
	current health for life insurance). 2. Social health insurance insofar as it is not
	primarily concerned with prevention, detection and treatment of disease to the
	benefit of patients but rather regarding the consequence for society at large (or the health/health insurance system) e. g. most notably the capacity for education or work
	or "return to work"-issues regarding health. We are not commenting on the 1. area as
	it is not in the remit of health insurance, in particular not in the remit of social health
	insurance as in the statutory health insurance / GKV in Germany as the current health
	state and the prognosis of future health states is not in any way related to insurance
	policies insofar coverage and premiums are concerned – that's a cornerstone what the
	GKV is about. The 2. area is also specific and, in our understanding, distinct from the
	general question of evidence-based medicine. The latter is concerned with health
	outcomes to individual patients and how to best further them in medicine. Its primary
	concern is not the impact of disease on society and economy. If the Cochrane
	Collaboration intends to develop a particular field for insurance medicine, we
	recommend that this distinction is accounted for. While the impact of health and
	disease and the health systems on society or the insured population is a valid field of
	study – that, as other social policies, might benefit from evidence in the general sense
	of scientific knowledge - it should not be confused with evidence-based medicine in
	the above mentioned understanding, as tensions regarding potential conflicts between benefits and harms for individual patients (within and beyond the health
Ger (1)	domain) and society may be difficult to reconcile in these particular discourses.
GCI (1)	What is – as far as I know – discussed most intensively among colleagues from
	different branches of the German social insurance system is the lack of evidence on
Ger (2)	the hours per day etc. persons (especially with comorbidities) can work.
()	I am unfamiliar with the use or otherwise of evidence-based medicine in the private
Ire	insurance sector in Ireland.
	Because of the rectification of the European Council discrimination in insurance is in
	general no longer allowed, but only possible on good grounds. To keep private
	insurance affordable we need evidence regarding risk-management, especially in the
Net	field of acceptation (life and disability).
	EBK has in Norway generally been seen to be lacking within most fields of insurance
	medicine (insurance medicine interpreted as including the private and public sector).
	This is changing slowly, with now broadening national support for research and
Nor	increased application of EBK.
	In Poland – in my opinion and in opinion of my colleagues from ZUS – the most
Dal	discussed is the lack of evidence in evaluation of incapacity for work people with
Pol	mental disorders,

Rom (1)	We miss evidence based approach mostly in the state social insurance, in assessing functional capacity and work capacity, our system being currently based on a too medical approach, as well as in granting sick leave in different health problems.
Rom (2)	Romania- psychiatry
Swe	Effects of interventions for RTW after long term sick leave
	Measures for sick leave prevention
	Evaluation of interventions
	Follow up of work adaption
	Work environment
	Shift of work place
	(Common) mental disorders/CFS/comorbidities
	Gender differences
	Diagnose specific sick leave
	The effects of migration on sick leave
	Guidelines for sickness certification: CFS and stressrelated disorders
	Side effects of measures (need to be diagnose specific)
	Synthesis of wanted/unwanted outcomes in sick leave
	Persons with reduced functioning and their entry in working life
	Employers' perspective on what is needed to include persons with reduced
	functioning and effective methods to do it
	Patchy and non-systematic evidence-based knowledge. Needs to be synthesized. Also from different scientific fields
	In employment service
	We performed a survey with Swiss GPs about sick leave certification, but that is not an urgent theme at the moment. Another survey among Swiss stakeholders in disability evaluation showed an urgent need, however. Current evaluation for long term work disability is criticised for being unreliable and non-transparent. Evidence is needed
Swi	there!
	I think we lack knowledge of what interventions have been tried in all countries - research into whether an intervention has made a difference and returning to work is measured as an outcome. Most research focusses on patient outcomes such as pain scores, cure / improvement but not whether it made a difference to their welfare
UK	benefits or returning to work.

Appendix table 2. Do you have an example of successful use of evidence-based knowledge in insurance medicine in your country?

Country	Comments
Bel	The Alliance of Christian Sickness Funds, Belgium's largest social insurer successfully
=	implemented the evidence based impact of information and advice on patient's recovery.
	It was demonstrated that counseling by medical advisers during a disability evaluation of
	low back pain claimants has a beneficial impact on the return to work rate and recurrence
	of sick leave. In addition, early results show promise for the value-added effect of the joint
	disability management by medical adviser and in-work coach.
Cze	Yes, in the assessment of invalidity. The Decree of invalidity-assessment has many tables
	for all health states. For the assessment of the client's health state you have to have
	evidence. The evidence is basis for this assessment. The best experience we have for
	example in ophtalmology. They have explicit criteria for assessing.
Fin	In Finland we have successful example considering of occupational diseases in insurance
	medicine. When a disease is accepted as a <u>legal</u> occupational disease and claimant has
	right to compensation, the scientific task force has evaluated epidemiological and
	scientific studies
Ger (1)	We cannot at the present provide a definite example. We would however like to point out,
	that, regarding the above mentioned considerations, a successful approach would have to
	show that individual and social benefits are in accordance: Interventions that could be
	shown to be of benefit to society and individual patients at the same time should be
	considered most valuable. Supplement: The application of evidence shall be by health
	insurance consistent with the benefit assessment of drugs: http://www.gkv-
	spitzenverband.de/english/statutory_health_insurance/amnogevaluation_of_new_ph
	armaceutical/amnogevaluation_of_new_pharmaceutical_1.jsp
Ger (2)	A successful use of evidence-based knowledge in insurance medicine in Germany is the
	process of "Leitlinien" (guidelines) first and foremost in responsibility of the German
	statutory pension insurance. With a colleague (Katrin Breuninger) I work on them
	concerning aspects of social medicine as a member of a working group of DGSMP (the
	German scientific professional association on social medicine and prevention). Link to the
	"Leitlinien" in German: http://www.deutsche-
	rentenversicherung.de/Allgemein/de/Inhalt/3_Infos_fuer_Experten/01_sozialmedizin_for
	schung/01_sozialmedizin/03_begutachtung/leitlinien_index.html
	Link to the English version (not to the guidelines): http://www.deutsche-
	rentenversicherung.de/Allgemein/en/Navigation/06_service/service_index_node.html
Ire	In the public sector insurance (Government), all of our Guidelines and Protocols are
	evidence-based. We have decided to roll out the Guidelines nationwide.
Net(1)	Not really
Net (2)	1. Some Ips use systematic reviews to underpin reports.
	2. Systematic referral to scientific studies in case law examples.
	3. Disease specific guidelines for disability evaluation are to some extent evidence based
Nor	Norway has some examples of use of EBK in insurance medicine, but in most cases we
	have yet to confirm if this has truly been successful (for example in terms of improved
	outcome) after broader implementation nationally or regionally.
	1. A broad shift from "Train then Place" to "Place then train", more specifically Supported
	Employment and now ongoing government supported studies on IPS (Individual
	Placement Support)
	2. Benefits and risks of work participation, with a broadening acceptance of the positive
	effects on the individual's heath, societal inclusion and financial situation. EBK on work
	and health is increasingly applied in the joint effort of health care workers and Insurance

	medicine workers in their counselling of people on sick leave, perhaps especially within the fields of mental health (mild – moderate depression and social anxiety) EBK on benefits of being in work are also introduced into national guidelines for advice on sick leave with mental disorders as depression or low back pain 3. In relation to sick leave: Centres for job coping are effective, unnecessarily prolonged treatment (or wide use of surgery) may prolong sick leave, restrictions on fulltime sick leave and an active approach to partial sick leave are effective, and RCT on the use of insurance medicine doctors as support for GPs providing sickness certification. 4. Targeting rehabilitation/follow-up regimes according to known predictors of a positive RTW outcome (employment status, duration of sick leave, psychometric properties as fear avoidance behavior) 5. Use of ICF and related tools for assessment of work disability
Pol	Our success of using evidence-based knowledge in insurance medicine in Poland is our guideline for ZUS social insurance doctors "standards of medical evaluation in ZUS" 2nd edition. The link to the guideline: http://www.zus.pl/files/Standardy%20orzecznictwa%20lekarskiego%20ZUS_II_wydanie_2 013_rok.pdf
Rom (1)	At present, I think I can't give an example of the application of evidence-based knowledge in social insurance medicine; in former times studies have been made but today they are outdated.
Rom (2)	Romania: criteria for cardiac diseases, criteria for stroke, dementia, Alzheimer, diabetes
Swe	AFU/TMU/SLU contain some evidence based tests that give the ground for assessment of activity level. Psychologist, occupational therapists and physiotherapists use evidence based tests and methods.
Swi	 A good example is found in disability assessments where experts underpin their conclusions with evidence as found in the scientific literature. Some psychiatric reports I know of, go in this direction, although much improvement is possible. Our initiative for a Cochrane field that brings together the evidence needed for evidence based practice