

# The role of European physicians in the assessment of work disability: A comparative study

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## ABSTRACT

**Aims:** The aim of this study was to describe and compare the role and tasks of the physicians involved in the medical assessment which takes place at the transition from short-term to long-term work disability in the 14 European countries as well as the required knowledge, skills and competencies to carry out those tasks. **Methods:** We organized a multi-stage research model consisting of written information, an expert group meeting and data analysis (from 14 European countries), using both Donabedian's triad model and the CanMEDS framework. **Results:** Most of the resources and information the physician has available at the start of the assessment, concurs. Some of the resources are only in some countries specific for insurance medical assessments. The process steps are more or less comparable in the participating countries as is the output. Set against the CanMEDS framework the physician, while carrying out the long-term work disability assessment fulfils all the roles to a greater or

lesser extent. **Conclusion:** Most of the input and structure in this survey concur and although there are differences, so do process and output. Despite the difference in degree to which the CanMEDS roles are fulfilled, depending on the national legislation and operationalization of the assessment, we can conclude that physicians in all countries need to have all seven CanMEDS roles when carrying out the assessment of long-term work disability. Physicians require specific knowledge, skills and competencies, in addition to general medical knowledge, skills and competencies.

**Keywords:** Competencies, Disability assessment, European social security, Insurance medicine

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## INTRODUCTION

The social security systems in Europe have developed in a gradual process that began in late 19th century and continued into 20th century. Features of the various periods of time that the systems have been through are still present in each system leading to differences in the current systems. For, although the long-term objective of

the European Union is the convergence of social systems, the EU at present coordinates the national social security systems of the member states but does not harmonize them.

The common, European rules protect EU citizens' social security rights but they do not replace the national social systems with a European one. Each country of the European Union lays down the conditions under which social security benefits are granted, as well as the amount of such benefits and the period for which they are granted. However, when doing so, they must comply with EU law, in particular with Regulation (EC) No 883/2004 on the coordination of social security systems.

Even if we focus on the parts of social security systems that deal with illness and disability, there are still differences between the social security systems in Europe. This is also evident from European studies that have been carried out [1, 2]. They usually focus on the comparison of these social security systems as such. Entitlement to benefit as well as amount and duration are being compared, and then especially the differences between the systems are being emphasized.

Principles of harmonization do not apply to social security and the medical doctors who work in that field. Insurance medicine is only in a few countries a recognized medical specialty and hence there are only in some countries registered insurance physicians. Yet in all countries, medical doctors carry out the assessments in the context of the social security framework. In countries where there are no registered insurance physicians, these assessments are being carried out by doctors whose roles and training are determined by history and national legislation.

Nevertheless it emerges from work with the European Union of Medicine in Assurance and Social Security (EUMASS) that, with regard to the work of the medical doctors within these social security systems, there appear to be more similarities rather than differences. Yet little information is available about the actual tasks of the medical doctors when they carry out medical assessments within the framework of the social security systems and about the required knowledge, skills and competencies to carry out those tasks.

In this study, we therefore aimed to describe and compare the role, tasks and responsibilities of the physicians involved in the medical assessment which takes place at the transition from short-term to long-term work disability, as well as the required knowledge, skills and competencies.

We focus on this assessment as it occurs in all social security systems in the participating countries, though the moment at which it takes place may differ (from for example, six months in Belgium to two years in the Netherlands). Moreover, in all EUMASS member countries medical doctors are involved in the assessment of the transition from short-term to long-term work disability, whether it is carried out by a registered

insurance physician or, in those countries where this comparatively young medical specialty does not exist, by physicians with various medical backgrounds [3, 4].

We invited all EUMASS council representatives (one or two per member country and all medical doctors) to participate in this study, since they are considered to be national experts in the field of insurance medicine and they have a good insight into the assessment of long-term work disability and the required training and education in their country.

Although the legal context differs from country to country as well as the circumstances in which the assessments are being carried out (from an assessment on paper in the Nordic countries to a face-to-face assessment in the other countries), we hypothesized that the core of the tasks the physicians perform when assessing the transition from short-term to long-term work disability, show many similarities [3, 4]. We assumed that the same applies to the required knowledge, skills and competencies to carry out those tasks.

## MATERIALS AND METHODS

We organized a multi-stage research model consisting of written information, an expert group meeting, clustering of gathered information and verification by participants and data analysis [5–10]. We invited all 27 EUMASS council members from 16 member countries of which 21 experts from 12 countries participated in the expert meeting.

One month prior to the expert meeting, written information about the meeting was sent to all participants in preparation of the expert meeting and discussion. In addition to general information about the purpose and proceedings of the meeting, we sent information about the topic of the discussion and some key questions we would like to address during the meeting beforehand to participants in order for them to prepare themselves for the discussion. The information contained clarifying definitions of terms that would be used during the expert meeting. They explained what would be understood by “an insurance physician”, “a medical assessment” and “short versus long-term work disability”. We included four questions which formed the basis for the structure of the discussion at the expert meeting:

1. What is/are the task(s) of the insurance physician related to the assessment of long-term work disability?

Reckoning with the clarifying definition: “an insurance physician is the qualified doctor carrying out the work disability evaluation of long-term work disability. And long-term work disability being what in the national regulation is considered to be long-term disability”.

2. What is the (professional) position of the insurance physician?

3. What specific knowledge is needed to carry out the assessment?
4. What skills and competencies are needed to fulfil this role?

Participants could thus, if necessary, gather additional national information prior to the meeting and hence prepare themselves for the discussion.

The expert meeting started with a brief introduction about the purpose and proceedings of the meeting. We went over the clarifying definitions and ran through the questions which had been sent in advance, after which three groups were formed, consisting of seven persons, including a participating moderator, who also took notes at the group meeting. A form with the clarifying definitions of the topic and the four questions was distributed to all participants. They were given time to answer these questions in writing, before discussion, by means of systematic rounds of questions. All three groups used the same method in order to obtain complete and comparable responses by country. There were 21 participants from 12 countries (Belgium, Czech Republic, Finland, Germany, Ireland, Italy, the Netherlands, Norway, Romania, Slovenia, Slovakia and Sweden).

EUMASS council members of two more countries (France and the United Kingdom), although not present at the expert meeting, completed the same forms. Their answers were verbally checked by a researcher (AdW) after the expert meeting and found to be in accordance with the scope of the discussion. We, therefore, decided to include the answers from these countries thus having a data collection from 14 countries (Belgium, Czech Republic, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Romania, Slovenia, Slovakia, Sweden and the United Kingdom).

The collected data were initially grouped by country and sent to the participants of those countries for verification. They were asked to verify the tables and report any mistakes or deficiencies concerning the information from their country. Then those controlled data were classified by subject and sent again to all participants for verification.

The data were then analyzed according to Donabedian's quality framework and the CanMEDS physician competency framework.

Donabedian's quality framework, which is well known in health care quality research, is a model consisting of three related types of information that may be collected about quality of care in a given system [11, 12].

First, the input contains all tools and resources that are within reach for the physicians carrying out the medical assessment.

Second, the process or throughput area contains all activity that takes place while carrying out the assessment with a distinction between technical and interpersonal processes. It includes the interaction between the assessor and the client as well as all other actions needed to complete the assessment.

Third, the output is the product of the assessment and all the effects or results of the preliminary processes. (Figure 1).

Two researchers (AdW and PD) independently analyzed and inventoried the classified and controlled data and categorized them according to Donabedian's framework. Next they discussed their categorization and achieved consensus about the issues they had interpreted differently.

Subsequently the data were analyzed, by the same researchers independently, according to the CanMEDS framework that was first introduced in Canada to explore and define the required roles and abilities of physicians and has meanwhile become the international framework of core competencies for all medical specialists [13]. Competencies are important observable knowledge, skills and attitudes, organized thematically around some arbitrary divisions called physician roles. Where one role begins and another role ends is based on an educational rationale that facilitates the acquisition of abilities and there are overlaps. The framework has seven key physician roles to describe the abilities of the whole, complete physician: medical expert (central role), communicator, collaborator, manager, health advocate, scholar and professional.

All the issues were classified in a matrix with Donabedian's model (input-process-output) on the Y-axis and the CanMEDS Roles on the X-axis. Finally the results of the analyses were sent to participants, with the request to check the analyzed data, verify if their country was indicated correctly and send any comments.

## RESULTS

### Input

According to the classification, based on Donabedian's triad model, most of the input and structure in this survey concur.

The patient's claim initiates the assessment in the all countries whether forwarded as such to the physician directly or transformed into an assessment request by the (national) insurance agency.

Since the assessment takes place in the context of the national social security system, all physicians have the social and/or private legislation framework at their disposal. Some countries (Belgium, the Czech Republic, Finland, the Netherlands, Sweden and the United Kingdom) have in addition specific deontological and ethical rules for the (social) insurance practice, such as a code of conduct for the insurance physician and specific guidelines for data exchange and protection [14, 15].

The medical information which the physician has available at the time of the assessment varies from concise information regarding the claimant's complaint by the general practitioner (United Kingdom), to the whole medical record (Belgium).

In all countries guidelines regarding general medical procedures are available, but EBM-protocols focusing on the assessment of long-term work disability are only in use in a few countries (Ireland, the Netherlands, Romania and United Kingdom and in Sweden in case of an occupational disease causing the work disability) and the same accounts for baremas, which are in general impairment-based and used in Ireland, Romania, Slovakia and the United Kingdom [16].

In all countries the physicians have acquired knowledge and developed skills to carry out a general medical examination, but in a few countries (the Czech Republic, Finland, the Netherlands, Romania, Slovakia and the United Kingdom) a specific methodology for a capacity assessment is available [17, 18]. In some countries the assessors also have additional specific knowledge of the theory on human functioning, including ICF (International Classification of Functioning, Disability and Health), which enables them to report systematically about health aspects and actual functional capacity [19, 20].

In all countries except the United Kingdom, the assessment of long-term work disability is a work-focused health-related assessment in which the functional capacity is determined. In the United Kingdom, the physicians assess the claimant's general capacity, but this is not linked to work capacity.

## Throughput

Broadly speaking, the process or throughput is similar, but there are some differences as well. The assessor incorporates clinical medical knowledge in the social and/or private legislation framework, thus medico-legal reasoning. The purpose of which is not to diagnose or treat a medical condition, but to address the legal question whether the claimant is eligible for benefit. This involves in fact a series of technical steps, based on the ability of the assessor to designate the necessary findings which are essential for the assessment, the ability to interpret them and apply them when determining the (work) capacity. In nine countries (Belgium, the Czech Republic, Finland, Germany, the Netherlands, Norway, Romania, Sweden and Slovakia), not only the (work) capacity is determined, but also all possibilities for professional reintegration and return to work are explored in the context of the claim. In a few countries other issues, such as causality of accidents, occupational diseases, work injuries and/or safety at work are assessed at the same time as the long-term work disability assessment. Besides technical steps, physicians also perform interpersonal processes in all countries, when assessing long-term work disability. On a medical level it concerns the interaction, whether verbal or in writing, with the claimants general practitioner or treating clinicians if additional medical information is needed. These interpersonal processes mainly take place to gather evidence prior to issuing the final report.

In all countries, the assessment involves some sort of collaboration with other disciplines within the social security agencies or assessing companies, since no assessment was carried out solely by the physician.

In countries where the claimant is met face-to-face there is of course interaction between the assessor and the claimant. Four countries (Czech Republic, Finland, Norway and Sweden) assess the claim on paper. In some countries, the claimant is met in person, unless he is very severely ill or disabled. In those cases, the assessment is done on paper.

## Output

In the majority of the participating countries the output is a written advice about the remaining work ability and hence the benefit, given by the physician. This advice is sent to a decision-maker. In other countries, the assessor him/herself takes the decision about the benefit (Figure 2).

Besides an advice or decision about the remaining work ability physicians can in some countries (Belgium, Finland, Germany, the Netherlands, Romania, Slovenia, Slovakia and Sweden) initiate vocational rehabilitation and in Slovenia and Slovakia the assessment of long-term work disability includes an advice on safety at work. In some countries (Finland, Ireland, the Netherlands and United Kingdom) advice about entitlement to care and assistance with activities of daily living can be part of the scope of the long-term work disability assessment, usually, in the event of a long-term work disability assessment of a very severely ill or disabled claimant.

## CanMEDS

Set against the CanMEDS framework the physician, while carrying out the long-term work disability assessment fulfils all the roles to a greater or lesser extent.

In all countries physicians integrate as medical expert all of the CanMEDS roles, applying knowledge, skills, and professional attitudes in the provision of an advice or decision about the remaining work ability and hence the benefit.

In all countries, the physician facilitates as communicator all the dynamic exchanges, whether verbal or in writing, that occur before, during, and after the medical encounter. In those countries where the claimant is met in person, the physician also facilitates the doctor-claimant relationship.

The physician consults as collaborator with other physicians and healthcare professionals and contributes in all countries but the United Kingdom to some extent of teamwork.

In all countries the physician, as manager is an integral participant in a social security agency or private insurance company, advising or taking a decision about allocating resources when advising / deciding about



Figure 1: Donabedian’s quality framework; illustrates the relationship between three types of information that may be collected about quality of care in a given system.

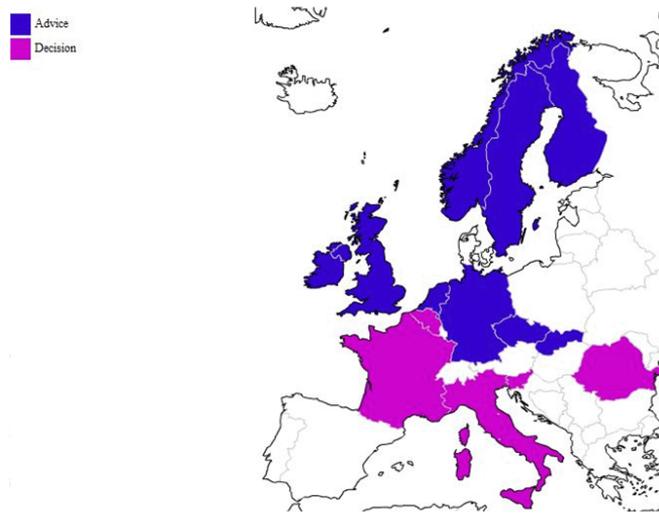


Figure 2: Output; geographical distribution of advice and decision about the remaining work ability and/or benefit.

remaining work ability and hence the amount of benefit.

As Health Advocate, a multilevel role, physicians use their expertise and influence to advance the health and well-being of individual claimants, communities and population levels. The assessors do so by identifying determinants of health, illness and accident consequences, but this role is not fully implemented in all countries.

In all countries the physician as Scholar critically evaluates the medical information and its sources and applies this appropriately to the advice or decision.

As professionals, physicians in all the participating countries are committed to the health and well-being of the claimants and society by exhibiting appropriate personal and professional behaviour according to specific deontological and ethical rules for the (social) insurance practice (Table 1).

## DISCUSSION

In this study, we wanted to describe and compare the role, tasks and responsibilities of the physicians involved in the medical assessment of long-term work disability in different European countries in order to test our hypothesis that the core of the tasks the physicians perform when assessing the transition from short to long-term work disability as well as the required knowledge, skills and competencies to carry out those tasks, show many similarities in spite of the different national social security systems.

Table 1: Analyses matrix of Donabedian’s quality framework and the CanMEDS Physician Competency Framework

		CanMEDS Medical Expert	CanMEDS Communicator	CanMEDS Collaborator	CanMEDS Manager	CanMEDS Health Advocate	CanMEDS Scholar	CanMEDS Professional
<b>COUNTRIES</b>	<b>INPUT</b>							
Be, Cz, De, Fi, Fr, Ie, It, Nl, No, Ro, Se, Si, Sk, Uk	Legislation framework	x				x		
Be, Cz, Fi, Nl, Se, Uk	Ethics and deontology of insurance medicine							x
Be, Cz, De, Fi, Fr, Ie, It, Nl, No, Ro, Se, Si, Sk, Uk	Medical information	x	x	x				
Be, Cz, De, Fi, Fr, Ie, It, Nl, No, Ro, Se, Si, Sk, Uk	General medical guidelines	x						x

Table 1: (Continued)

		CanMEDS Medical Expert	CanMEDS Communicator	CanMEDS Collaborator	CanMEDS Manager	CanMEDS Health Advocate	CanMEDS Scholar	CanMEDS Professional
Fi, Ie, Nl, Sk, Uk	Protocols and guidelines for claim assessment	x						
Ie, Ro, Sk, Uk	Barema rating of impairment	x						
Fi, Nl, No, Ro, Uk	Clinical assessment skills		x				x	x
Cz, Fi, Nl, Ro, Sk, Uk	Capacity assessment methodology	x				x		
Be, Fi, Nl, Ro, Se	Theory on human functioning (ICF) PROCESS	x				x		
Be, Cz, De, Fi, Fr, Ie, It, Nl, No, Ro, Se, Si, Sk, Uk	Medico-legal reasoning	x					x	x
Be, Cz, Fi, De, Nl, No, Ro, Se, Sk	Assess professional capacities / return to work	x				x		
De, Fi, It, Ro, Se, Sk	Assess causality of accidents / work injuries	x						
Si, Sk	Advice on safety at work		x			x		
Be, Cz, De, Fi, Fr, It, Nl, No, Ro, Se, Si, Sk, Uk	Function in a social security agency / company				x			
Cz, Fi, Fr, Ro, Se, Sk, Uk	Consult effectively with other practitioners			x				x
Be, Fi, Nl, Ro, Sk, Uk	Exchange information		x					x
Be, CZ, Nl, Ro, Sk, Uk	Elicit and convey information to clients OUTPUT		x					x
Be, Fr, It, Ro, Si	Decision about capacity/ entitlement to benefit	x	x		x			

Table 1: (Continued)

		CanMEDS Medical Expert	CanMEDS Communicator	CanMEDS Collaborator	CanMEDS Manager	CanMEDS Health Advocate	CanMEDS Scholar	CanMEDS Professional
Cz, Fi, De, Ir, Nl, No, Se, Sk, Uk	Advice about capacity/ entitlement to benefit	x	x		x			
Be, Fi, De, Nl, Ro, Se, Si, Sk	Initiative of (vocational) rehabilitation	x		x				
Fi, Ie, Nl, Uk	Other advice (care and assistance)	x	x					

## MAIN FINDINGS

### Donabedian

The analysis of the data showed that most of the resources and information the physician has available at the start of the assessment, concurs. This broadly includes the legislation, the theoretical and clinical background of the physician and work-related aspects. In all 14 participating countries, a claim initiates the assessment of long-term work disability, in which a medical doctor takes part, in most countries except the Nordic countries, by meeting the claimant face-to-face.

Physicians have in all countries the current laws and regulations at hand, which usually have been made operational by the (national) insurance agency. Although the decision latitude differs, the process steps are comparable in all countries but the United Kingdom. Insurance physicians incorporate the clinical medical knowledge in the social and/or private legislation framework while medico-legal reasoning when addressing the question whether a claimant has fulfilled the terms of the social security schemes. This is in line with previous findings from other studies [21–23]. In addition, physicians have in all countries medical knowledge and guidelines at their disposal. But with regard to the latter, we have encountered a difference, as in most countries this involved guidelines for general medical examinations. Only in some countries there were additional guidelines especially for the assessment of (work) capability. The countries where these specific guidelines do exist are, with the exception of Ireland, countries where a separate education program in insurance medicine is being offered or countries where insurance medicine is a medical specialty.

With respect to the output there is a similarity in the sense that in all countries the assessor issues an advice or decision, based on a series of both technical and interpersonal processes, about the remaining

(work) ability. The geographical distribution however, of countries in which an advice or a decision is provided is striking and appears to be linked to the historical development of the social security systems. European States do not all use a single social model, but welfare states in Europe do share several broad characteristics. It has been argued that there are different distinct social models in Europe such as the Nordic, British, Mediterranean and Continental because different European States focus on different aspects of the model.

With regard to additional advice we find a difference. In several countries, the advice or decision about the remaining (work) ability may include additional advice concerning vocational rehabilitation, safety at work and entitlement to assistance. This depends on the national laws and regulations.

### CanMEDS

Set against the CanMEDS framework, we observe that in all countries the physicians integrate all CanMEDS roles in the central role of medical expert, when medico-legal reasoning while assessing long-term work disability. The legal factor in this process distinguishes them from clinical, medical specialist and also requires additional knowledge.

In all countries, the physician performs the role of communicator when assessing long-term work disability, which, as in the curative sector, emphasizes the importance of communication abilities. But the assessments in insurance medicine often have drastic, consequences for the claimant, beyond the medical context. Financial impact, loss of work and failed expectations require additional, specific communication skills.

The physician consults as collaborator in all countries with other healthcare professionals and collaborates usually within a (national) insurance agency, but the extent to which the latter occurs depends on the procedures in the national social security systems.

The CanMEDS manager role describes the active engagement of all physicians as integral participants in decision-making in the operation of the social security system. Although this is indeed part of their everyday practice when advising or taking a decision regarding the (work) capacity and hence allocating resources, this Role seems to be the least recognized as such. According to the description of Health Advocate physicians use their expertise and influence to advance the health and well-being of individual claimants, communities, and populations. This role, not fully-implemented in all countries, showed the greatest variation in our study. In this Role the assessing and treating role seem to come together, whereas not all national social security systems provide for that.

In all countries, the physician as scholar critically evaluates the medical information and its sources and applies this appropriately to the advice or decision. However, this relates only in a few countries to specific insurance medical knowledge.

Physicians assessing long-term work disability have a unique societal role as professionals who are dedicated to the health and social security of others. Their work requires the mastery of a complex body of knowledge and skills of medicine, social security systems and specific deontological and ethical rules for the (social) insurance practice. Thus the insurance physicians distinguish themselves from the other medical specialists.

All in all this means that all CanMEDS roles are being fulfilled to a greater or lesser extent depending on the national legislation and operationalization of the assessment. It should be noted, however, that physicians who carry out assessments in the field of insurance medicine require specific knowledge, skills and competencies, in addition to general medical knowledge, skills and competencies. It mainly involves knowledge of current laws and regulations in social security and labor factors as well as communication skills for dealing with dissatisfied claimants.

Despite the difference in degree to which the roles are fulfilled we can conclude that physicians in all countries need to have all seven CanMEDS Roles when carrying out the assessment of long-term work disability. This confirms our assumption that there are similarities in the actual tasks a physician carries out when assessing long-term work disability throughout Europe. Moreover, it shows that these physicians need the knowledge, skills and competencies that all specialist physicians need to have, to be better doctors and for better patient outcomes. Mutatis mutandis this accounts also for better claimant rights in social security.

### **Strengths and weaknesses**

To our knowledge this is the first study that aims at identifying and qualifying the actual tasks of the insurance

physician and the required knowledge, skills and competencies to carry out those tasks, using, beside the Donabedian triad model also the CanMEDS framework, thus mapping the competencies at a European level, by analogy with the other medical specialties.

We have collected data through expert group meetings with experts from the EUMASS council, who are in a good position to provide information about how the assessment of long-term work disability and the required training and education are organized in their country but they are usually not employed in everyday practice. So they may have stricter standards than applicable in daily practice. As all participants were doctors, the data collection is solely from that perspective. Therefore, in follow-up study practitioners, policymakers and educators/tutors will be included.

### **CONCLUSION**

Most of the input and structure in this survey concur and although there are differences, so do process and output. Despite the difference in degree to which the CanMEDS Roles are fulfilled, depending on the national social security legislation and operationalization of the assessment, we can conclude that insurance physicians in all countries need to have all seven CanMEDS roles when carrying out the assessment of long-term work disability. Physicians require specific knowledge, skills and competencies, in addition to general medical knowledge, skills and competencies.

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### **Author Contributions**

Annette E. de Wind – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Peter Donceel<sup>†</sup> – Substantial contribution to conception and design, Acquisition of data, Analysis and interpretation of data, Revising it critically for important intellectual content

Patricia M. Dekkers-Sánchez – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

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**Guarantor**

The corresponding author is the guarantor of submission.

**Conflict of Interest**

Authors declare no conflict of interest.

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