



# STRASBOURG EUMASS•CONGRESS 2023

## Insurance medicine 2.0 in a changing world

La médecine d'assurance 2.0  
dans un monde qui change

## ABSTRACT *BOOK*

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## WORDS OF PRESIDENTS

### Le 24<sup>e</sup> Congrès de l'UEMASS à Strasbourg fut une belle réussite !

Merci à tous les orateurs et présentateurs pour leur contribution. Merci à toutes et tous pour votre participation.

Ce fut pour tous les congressistes une joie et une fierté de se réunir et de débattre dans ce lieu symbolique de la démocratie européenne qu'est le Parlement européen, les 28 et 29 septembre 2023.

Les membres du Comité d'organisation du 24<sup>e</sup> Congrès médical scientifique de l'UEMASS adressent leurs plus vifs remerciements aux équipes du Parlement européen de Strasbourg pour leur accueil et leur disponibilité pendant tout le Congrès. Nos remerciements vont aussi au professeur Sabilia, doyen de la Faculté de médecine de l'Unistra, qui a hébergé le dernier jour du Congrès, le 30 septembre. Notre reconnaissance s'adresse également au docteur Feltz, maire-adjoint de la belle ville de Strasbourg qui nous a accueillis et ouverts les portes de sa ville pour le Congrès.

L'Union Européenne de Médecine d'Assurance et de Sécurité Sociale est constituée de 24 associations qui sont présentes dans 19 pays d'Europe. Le Congrès s'est tenu à nouveau en présentiel malgré les appréhensions liées à la pandémie. Il permit aux 600 participants d'accéder à 100 communications et à 50 posters affichés.

La réussite de notre Congrès est le fruit de l'engagement des membres :

- le Comité scientifique (Sci-Co) de l'UEMASS
- et le Comité d'organisation (CO) constitué des associations UFMASS (France) et ASMA (Belgique).

Les objectifs de l'UEMASS ont bien été atteints lors de ce 24<sup>e</sup> Congrès :

- permettre une plateforme d'échange d'expériences entre médecins-conseils
- faciliter la diffusion et le partage des connaissances scientifiques et des "bonnes pratiques" cliniques
- défendre des normes éthiques
- assurer une représentation aux niveaux européen et international.

Le prochain congrès de l'UEMASS, sera organisé en 2026, nous espérons vous y retrouver.

**Les co-Présidents du Comité d'Organisation**

**Docteur Nadine AGOSTI, présidente de l'UFMASS**

**Docteur Jean-Pierre Baron SCHENKELAARS, président de l'ASMA et de l'UEMASS**

**Docteur Corina OANCEA, ex-présidente du Comité scientifique de l'UEMASS**

**Docteur François LATIL, nouveau président du Comité scientifique de l'UEMASS.**

<https://www.eumass2023.eu/fr>

### The 24th EUMASS Congress in Strasbourg was a great success!

Thank you to all the speakers and presenters for their contributions. Thank you all for your participation. It was a joy and pride for all the delegates to meet and debate in this symbolic place of European democracy, the European Parliament, on September 28 and 29, 2023. The members of the Organising Committee of the 24th EUMASS Scientific Medical Congress would like to extend their warmest thanks to the staff of the European Parliament in Strasbourg for their hospitality and availability throughout the Congress. Our thanks also go to Professor Sabilia, Dean of the Unistra Faculty of Medicine, who hosted the last day of the Congress on 30 September.

Our gratitude also goes to Dr. Feltz, Deputy Mayor of the beautiful city of Strasbourg, who welcomed us and opened the doors of his city for the Congress.

The success of our Congress is the result of the commitment of the members:

- of the Scientific Committee (Sci-Co) of EUMASS,
- and the Organising Committee (OC) made up of the associations UFMASS (FR) and ASMA (BE).

The objectives of EUMASS were achieved during the 24th Congress:

- allow a platform for the exchange of experiences between medical advisors
- facilitate the dissemination and sharing of scientific knowledge and clinical "good practices"
- defend ethical standards
- ensure representation at European and international levels.

We look forward to seeing you in 2026 for the next EUMASS congress, hoping to see you there.

**The Co-Presidents of the Organising Committee**

**Dr. Nadine AGOSTI, President of UFMASS**

**Dr. Jean-Pierre Baron SCHENKELAARS, President of ASMA and EUMASS**

**Dr. Corina OANCEA, former President of the EUMASS Scientific Committee**

**Dr. François LATIL, new President of the EUMASS Scientific Committee**

<https://www.eumass2023.eu/en>

## Plenary Sessions – Keynote Speakers

**8:00 - 9:30 Registration – Coffee - poster corner**

**9:30 - 10:00 Conference Welcome - Opening address - Information**

### THURSDAY 28 SEPTEMBER 2023 **Keynote Speakers**

#### **INAUGURAL LECTURE – Dominique Martin Médecin-Conseil National CNAM**

**10:00- 10:45 - KAAT GOORTS** (Peter Donceel lecture)  
Screening for the risk on long term sickness absence  
Moderator : Kristina Alexanderson  
*Abstract p.21*

**10h:45- 11:30 – JAN HOVING**  
Implement of Cochrane Work in real-life practice of insurance medicine / Core Outcome Set (COS) for Work Participation  
Moderator : Annette de Wind  
*Abstract p.21*

**11:30-12:15- ALEX COLLIE**  
A systems view of work disability prevention: Some new insights on an old problem  
Moderator : Maurizio Trippolini  
*Abstract p.21*

#### **12:15 – 13:45 Lunch & poster corner**

**13:45 – 14:30 MIKA KIVIMÄKI**  
Does working beyond the statutory retirement age have an impact on health and functional capacity ?  
Moderator : Pia Svedberg  
*Abstract p.22*

### FRIDAY 29 SEPTEMBER 2023 **Keynote Speakers**

**9:45 – 10:00 Welcome - Information**

**10:00- 10:45 FREDERIEKE SCHAAFSMA**  
Better work focused care for workers with chronic conditions  
Moderator : Sylvia Vermeulen  
*Abstract p.20*

**10:45- 11:30 LENE AASDAHL**  
Effects of occupational rehabilitation on return to work  
Moderator : Karen Walseth-Hara  
*Abstract p.20*

**11:30 -12:15 JÛRGEN WINDELER**  
Efficiency of new drugs introduced in health care  
Moderator : Hans-Werner Pfeifer  
*Abstract p.19*

#### **12:15 - 13:45 Lunch**

**13:45- 14:30 REINHARD BUSSE**  
Health System Performance Assessment: how well do European countries perform ?  
Moderator : Hans-Werner Pfeifer  
*Abstract p.20*

# Scientific programme

**SATURDAY 30 SEPTEMBER 2023** Keynote Speakers

**8:30 - 9:00 Coffee**

**9:00- 9:40 JEAN SIBILIA**

The University in the global health crisis

Moderator : François Latil

*Abstract p.22*

**9:40- 10:20 ETIENNE MINVIELLE**

Monitoring patient in health care settings ; targeted therapies, empowerment.  
From standardisation to personalization : a new deal in patients' demands

Moderator : Corina Oancea

*Abstract p.19*

**10:20- 11:00 PETRA DOSENOVIĆ BONČA**

Using national-level administrative data of Health Insurance Institute of Slovenia to foster positive changes throughout the healthcare system

Moderator : Jana Mrak

*Abstract p.19*

**11:00- 11:30 Coffee Break**

**11:30- 12:10 AYDEN TAJAHMADY**

Consequences of Covid 19 impact on daily practice ; how long does it take to catch-up ?

Moderator : François Latil

*Abstract p.19*

**12:10- 12:50 PHILIPPE COUCKE**

Covid-19 : from crisis to opportunities

Moderator : Jean-Pierre Schenkelaars

*Abstract p.19*

**12:50- 13:00 CLOSING WORDS**

## Parallel Sessions & Workshops

THURSDAY 28 SEPTEMBER 2023 Parallel Sessions & Workshops

### SESSION Thursday 28 September 2023

#### WORKSHOP 2 Room R1.1 - 14:30 - 15:55

**Is there a higher prevalence of overweight and obesity in claimants undergoing an insurance medical evaluation ?**

Case-based discussion in continuing education for occupational physicians, insurance physicians, and labour experts: an explorative study.

Julia von Stedingk

Zwaan Elmi,  
Sylvia Van der Burg-Vermeulen

#### HEALTHCARE 1 Room S2.1 - 14:30 - 15:55

Moderator **Regina Kunz - CH**

Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after spine surgery

Is there a co-variation between finger dexterity speed and outcome in the Test of Memory Malingering (TOMM)?

Development of an eHealth intervention in insurance medicine using principles of intervention mapping

Systematic review of spinal cord stimulation (SCS) versus conventional medical treatment (CMM) in patients with chronic debilitating pain.

Hara Sozaburo

Julia von Stedingk

Elza Muller

Regina Kunz

#### WORK CAPACITY 1 Room S2.2 - 14:30 - 15:55 Moderator **Annina Ropponen - SE**

How we can benefit from different types of assessments !

Psycho-social determinants predicting disability benefit

Does low effort in a cognitive validity test covariate with lower maximal hand grip strength in claimants undergoing medical evaluation

Patient centeredness in psychiatric work disability evaluations and interrater agreement of work capacity estimates

Gerth Persson

Irène Bohn

Julia Von Stedingk

Timm Rosburg

#### RTW 1 Room S3.4 - 14:30 - 15:55

Moderator **Emilie Friberg - SE**

Job coaches and medical advisors as actors of adapted work ? The example of the Belgian IPS pilot project ('INAMI-ULB 2018')

Interventions in relation to sickness absence in healthcare - a systematic literature review

Development of an evidence-based vocational rehabilitation program and guidance to promote return to work of people with mild functional impairments

Natasia Hamarat

Emilie Friberg

Corina Oancea

### **RTW 3** Room S3.5 - 14:30 - 15:55

Moderator **Annette de Wind - NL**

**O-13-** Active engagement of managers in employee return to work : experiences of participating in a dialogue using Demand and Ability Protocol

**Therese Hellman**

**O-14-** Vocational rehabilitation a critical foundation for sustainable long term employment ? The perspective of workers with SCI or ABI, employers and professionals

**Monika E.Finger**

**O-15-** Risk factors and service needs for a sustainable work of people with an acquired brain injury : a qualitative multi-stakeholder analysis

**Katarzyna Karcz**

**O-16-** Experiences of employees and employers of communication with occupational health professionals during return to work in the Netherlands

**Kreuger Donny**

### **Sick leave 1** Room S4.1 - 14:30 - 15:55

Moderator **Amin Ridwanul - SE**

**O-17-** From the mass summons of insured persons on sick leave to the selection of cases handled by peer-to-peer exchanges.

**Nathalie Delmouly**

**O-18-** Period effects in the risk of work disability and unemployment among refugees in Sweden : a register-based cohort study

**Amin Ridwanul**

**O-19-** Sequence analysis of sickness absence and disability pension states among privately employed white-collar workers in Sweden ; a prospective cohort study

**Kristin Farrants**

**O-20-** Video consulting and remote certification in sick leave New federal directives concerning sick leave assessment and certification in Germany

**Elisabeth Panke Joan**

### **Sick leave 3** Room S4.2 - 14:30 - 15:55

Moderator **Pia Svedberg - SE**

**O-21-** A prediction model for the duration of sickness absence due to stroke - a population-based prospective cohort study from Sweden

**Katalin Gemes**

**O-22-** Young employees with previous mental health problems in the private sector : does part-time sickness absence help remaining on labor market ?

**Jurgita Narusyte**

**O-23-** Predictors of time until return to work and duration of sickness absence in sick-listed precarious workers with common mental disorders

**Yvonne Suijkerbuijk**

### Session francophone 1 Protection sociale réglementaire Room S1.4 - 14:40 - 15:55

Ouverture de la session :

Modératrice **Odile Blanchard**

**Nadine Agosti**

**F1 Le régime complémentaire de sécurité sociale d'Alsace-Lorraine.**

Du legs historique aux dynamiques locales

**Alexandre Feltz**

**F2 Le dossier médical et rapports**

**F2.1** Le choix des mots dans les rapports de prestation

**Magali Percot-Pedrono**

**F2.2** Rappel réglementaire

**Jérémie Buisson**

**F2.3** Une donnée sensible mais à prendre en compte : les abus dans l'enfance

**Etienne Noël**

**F2.4** Les inscriptions dangereuses dans les rapports médicaux

**Magali Percot-Pedrono**

**Isabelle Gabellon**

**F2.5** Débat

**Animateurs :**

**Magali Percot-Pedrono**

**Isabelle Gabellon**

**F3 Regards croisés sur les communications francophones**

**F3.1.1** Les transferts de tâches : comparaison des avis des médecins et des infirmières sur l'arrêt de travail

**Pascal Becker**

**F3.1.2** Les transferts de tâches : transfert de tâche des ALD aux infirmières

**Dominique Lecointre**

**F3.2.1** Les arrêts de travail – L'invalidité : intérêt des échanges confraternels sur le contrôle des arrêts de travail

**Nathalie Delmouly**

**F3.2.1** Les arrêts de travail – L'invalidité : les enseignements à tirer des avis donnés en invalidité sur personne pendant la période Covid

**Claire Gravet**

**F3.3** La décision médicale : l'arrivée de la CMRA a-t-elle changé la donne en matière de résultat pour l'assuré ?

**Dyane Heraney**

**F3.4** Le mauvais usage des médicaments : le mauvais usage du Fentanyl en Nouvelle Aquitaine

**Karine Lefebvre**

# Scientific programme

## SESSION 2 Thursday 28 September 2023

### Workshop 3 Room S1.5 - 16:40 - 18:00

Workshop ICF in assessment of disability for work

Corina Oancea, Wout de Boer

### Workshop 4 Room R1.1 - 16:40 - 18:00

Cochrane reviews in insurance and occupational medicine :  
from research to reality and vice versa

Maurizio Trippolini, Regina  
Kunz, Jan Hoving, Karen Hara,  
Emilie Friberg

### Healthcare 2 Room S2.1 - 16:40 - 18:00

Moderator *Jean-Pierre Bronckaers - BE*

**O-25-** Financial medical control in the role of monitoring the  
introduction of a new payment model for health services

Isabelle Querrioux

**O-26-** Regulation of the billings of dental surgeons via a  
gradated support program for control

Damien Tomaiuolo

**O-27-** Immunotherapy usage for treating asthma in Belgium

Catherine Colle

**O-28-** Inequalities in health influence of the gradient of  
exposure to precariousness on drug prescriptions of general  
practitioners in Vienne - France"

Omar Tarsissi

### Work capacity 2 Room S2.2 - 16:40 - 18:00

Moderator *Gert Lindenger - SE*

**O-29-** The design of an evidence-based working method for  
work disability prognosis evaluation

Sylvia Snoeck-Krygsman

**O-30-** Disease-modifying therapy and work ability among  
people with multiple sclerosis in Sweden

Teni Fitsum Sebsibe

**O-32-** Evaluation of common mental disorders in insurance  
medicine - a functional capacity approach

Nathalie Hargot

### RTW 2 Room S3.4 - 16:40 - 18:00

Moderator *Christina Dal Pozzo - IT*

**O-33-** Patients' needs regarding work-focused healthcare :  
a qualitative evidence synthesis

Marije Hagendijk

**O-35-** Perceived job quality among persons with spinal cord  
injury and its association with sociodemographic  
characteristics, health-related factors, and person-job  
match

Mayra Galvis Aparicio

**O-36-** Reasonable accommodation in the workplace in Italy :  
present status and perspectives

Cristina Dal Pozzo

## Scientific programme

**O-38-** Return to work after total hip arthroplasty

**O-40-** Large variability in recommendations for return to daily life activities including work and sport after knee arthroplasty in the Netherlands

**Nicky T Wouters**

**J. Anema**

### **Sick leave 2** Room S4.1 - 16:40 - 18:00

Moderator **Kristin Farrants - SE**

**O-41-** Sickness absence and disability pension before and after healthcare for post-traumatic stress disorder and workplace injuries : a prospective cohort study

**Kristin Farrants**

**O-42-** Occupational branch and labor market marginalization among young employees with attention deficit hyperactivity disorder - a population-based study

**Katalin Gemes**

**O-43-** Evaluation of RE-MODE : a tool for the identification of the return-to-work mode in sick-listed precarious workers with mental health issues

**Yvonne Suijkerbuijk**

### **Sick leave 4** Room S4.2 - 16:40 - 18:00

Moderator **Ari Kaukiainen - FI**

**O-45-** Impact of job characteristics on return-to-work interval following arthroscopic partial meniscectomy

**Jef Van Doninck**

**O-46-** Prior diagnosis-specific sickness absence and disability pension and future paid work ; a Swedish 6-year cohort study of all aged 65

**Aleksiina Martikainen**

**O-47-** Sickness absence and disability pension after a road traffic accident, a nationwide study comparing road traffic groups with matched references

**Linnea Kjeldgård**

**O-48-** Parental factors, offspring lifestyle factors and risk of long-term sick leave among offspring due to musculoskeletal disorder : the HUNT Study

**Karoline Moe**

### **Médecine basée sur les preuves, choix politique, et société civile : un équilibre instable et nécessaire.**

#### **Room S1.4 - 16:40 - 18:00**

Modératrice **Sophie Ruggieri- FR**

**F4** L'analyse critique des manuscrits ; à la recherche du contre-intuitif

**François Latil**

**F5** Les médecins évaluateurs de la capacité de travail face à la société civile ; comment dissiper les malentendus ?

**Isabelle Gabellon**

**F6** Aux sources de la performance : l'organisation

**Marie-Claude Cabanel**

**F7** Conclusions et pistes à suivre

**Corina Oancea**

**FRIDAY 29 SEPTEMBER 2023** Parallel Sessions & Workshops

## **SESSION 1** Friday 29 September 2023

### **Workshop 5** Room S3.4 - 14:30- 15:55

Electronic Exchange of Social Security Information (EESSI) -  
Exchange of medical information

**Annette de Wind, Edith Hesse,  
Mireille de Bruyn, Jean-Paul  
Dembieremond,  
Khadija Damiens**

### **Mini-symposium 1** Room R1.1 - 14:30 - 15:55

Impact of long-lasting effects of Covid-19 on social security.  
Expert opinion.

**Nina Wijnands, Birgit Donker-  
Cools, Corina Oancea, Jan  
Verbakel, Hanna Person**

### **Healthcare 3** Room S2.1 - 14:30 - 15:55

Moderator **Jean-Pierre Schenkelaars - BE**

**O-49-** Factors influencing a roadmap for sustainable  
implementation of vocational rehabilitation of people with  
mental disorders : a qualitative study

**Yvonne Noteboom**

**O-50-** The concept of positive health : applicable for  
insurance medicine evaluation ?

**Anja Lemlijn-Slenter**

**O-51-** Exploring the perspectives of insurance physicians on  
clients values in social insurance medicine

**Nina Zipfel**

**O-52-** Post-stroke ambulatory rehabilitation : a long way to  
quality

**Laurence Papinaud**

### **Demographic** Room S2.2 - 14:30 - 15:55

Moderator **Iman Alaie - SE**

**O-53-** Work adjustments among employed people with  
multiple sclerosis : a survey study

**Alejandra Machado**

**O-54-** Concurrent changes of residential regions and  
sustainable working life in Sweden

**Annina Ropponen**

**O-55-** Risk of labour market marginalisation among refugees by  
the host country of residence : a cohort study in Sweden and  
Norway

**Amin Ridwanul**

**O-56-** Health and morbidity among those in paid work after  
age 64 : a systematic review

**Kristin Farrants**

**O-57-** Health inequalities - Quantitative study of economic  
inequalities in health and health care utilisation in Belgium

**Clara Noirhomme**

## Scientific programme

### **RTW 5 Room S3.4 - 14:30 - 15:55**

Moderator **Lutgart Braeckman - BE**

**O-58-** A multicenter focus group analysis of experiences and perceptions of the lumbar spine rehabilitation program in Belgium

**O-59-** Work Participation after Multimodal Rehabilitation due to Neurological Diseases. Representative Analyses Using Routine Data of the German Pension Insurance.

**O-60-** Sustainable vocational integration: Examining the long-term success of specialized vocational rehabilitation services for persons with spinal cord injury

**O-61-** Return to work after psychosomatic rehabilitation. Representative findings based on

**Lutgart Braeckman**

**Marco Streibelt**

**Urban Schwegler**

**Marco Streibelt**

### **RTW 7 Room S3.5 - 14:30 - 15:55**

Moderator **Valérie Fabri - BE**

**O-62-** Exploring inability to work fulltime and paid employment among work disability benefit applicants : a longitudinal study

**O-64-** Work-related medical rehabilitation in patients with mental disorders : results of a randomized controlled trial at completion of inpatient rehabilitation

**O-65-** Back to work after bariatric surgery, a Belgian population study

**Tialda Hoekstra**

**Miriam Markus**

**Valérie Fabri**

### **Training / Changing profile Room S4.1 - 14:30 - 15:55**

Moderator **Hara Karen Walseth - NO**

**O-66-** Task transfer to social nurses in long term disability assessment

**O-67-** Best Practices Whiplash -effective treatments for WAD I-II.Recommandations for liability insurers

**O-68-** Experience of and solutions for practice in social insurance settings for medical students

**O-69-** A knowledge team in insurance medicine within psychiatric healthcare in Stockholm, Sweden

**Dominique Lecointre**

**Angelique Reitsma**

**Hara Karen Walseth**

**Emilie Friberg**

### **Sick leave 5 Room S4.2 - 14:30 - 15:55**

Moderator **Gunnel Hensing - SE**

**O-70-** A mixed-method approach to explore return to work among transgender and gender diverse people

**O-71-** Prior sickness absence and/or disability pension and income from work after age 65 and 70 in Sweden

**O-72-** Sociodemographic and morbidity characteristics of people receiving long-term sickness benefits

**O-73-** Occupational prestige and future sickness absence and disability pension in women and men. A Swedish nationwide prospective cohort study

**Joy Van de Caeter**

**Aleksiina Martikainen**

**Corina Oancea**

**Gunnel Hensing**

# Scientific programme

## SESSION 2 Friday 29 September 2023

### Mini-symposium 2 Room S1.5 - 16:40 - 18:00

Introducing in Fact : the individual functional activity composite tool

Chan Leighton, Julia Porcino,  
Bart Desmet, Elisabeth Marfec

### Workshop 6 Room R1.1 - 16:40 - 18:00

Value-based healthcare in Insurance Medicine : adding value by measuring client-relevant outcomes

Marije Hagendijk, Nina  
Zipfel, Jan Hoving, Sylvia Van  
Der Burg-Vermeulen

### Healthcare 4 Room S2.1 - 16:40 - 18:00

Moderator *Hans-Werner Pfeifer- DE*

**O-74-** Domestic violence and child abuse, insurance physicians what to do: ignoring or signaling the signals?

**O-75-** Influence of the characteristics of multidisciplinary nursing homes (MSPs) on colorectal cancer screenin

**O-76-** Regulation of dysfunctional practices of dental surgeons in Occitania via a gradated support program

**O-77-** Expectations towards involving social security services within a national care pathway

Janet Mook

Patrick Durmont

Emmanuelle Soustre

Maryam Haghshenas

### Healthcare 5 Room S2.2 - 16:40 - 18:00

Moderator *Jana Mrak - SL*

**O-78-** Two years after implementing an electronic prior authorization request service for bariatric surgery, have we observed an improvement ?

**O-79-** Overconsumption of healthcare services in patients undergoing surgery under general or regional anesthesia - new approach to monitor healthcare providers

**O-80-** An intersectoral health- and welfare intervention in Norwegian workplaces (Health in Work) - a potential for sick-leave reduction ?

**O-81-** Individual Placement and Support and a Participatory Workplace Intervention as support for people with a disability in the municipal setting

Eric Leutenegger

Jana Mrak

Christoffer Terjesen

Esmée Oude Geerdink

### RTW 6 Room S3.5 - 16:40 - 18:00

Moderator *Angelique de Rijk - NL*

**O-82-** Multi-professional team-based efficacy

**O-83-** Translating prognostic factors for long-term work disability among cancer survivors to recommendations for the guideline Cancer and Work

**O-84-** Return to work after cancer rehabilitation : representative analyses using routine data of the German Pension Insurance

**O-85-** Factors related to the return-to-work of head and neck cancer patients in Belgium : a multivariate Fine-Gray regression model analysis

Mikael Elf

Angelique de Rijk

David Fauser

Maxim Van den Broecke

## Scientific programme

### Changing legislation Room S3.5 - 16:40 - 18:00

Moderator **Nadine Agosti - FR**

**O-86-** Attention Deficit and Hyperactivity Disorder: a database bottleneck

**O-87-** Best Practices Whiplash -effective treatments for WAD I-II

**O-88-** Prospective Assessment of structural characteristics in hospitals. A new field of assessment in Germany.

**O-89-** Supporting dentists in the proper use of the dental nomenclature in the Centre-Val de Loire region

**O-90-** The impact of organisational and social work environment provisions on sickness absence due to mental disorder in Sweden

**Laurence Papinaud**

**Angelique Reitsma**

**Thomas Petzold**

**Marc Lafferayrie**

**Carin Nyman**

### COVID Room S4.1 - 16:40 - 18:00

Moderator **Jurgita Narusyte - SE**

**O-91-** Sick leave the first year after COVID 19 : a nationwide population study in Sweden.

**O-93-** COVID 19 and invalidity assessment without clinical examination : impact on insured people disputes

**O-94-** Recognition of COVID 19 as occupational diseases victims in the French social security system

**O-95-** Sickness absence among 299 484 blue-collar workers in the trade industry during the COVID 19 pandemic ; a Swedish prospective cohort study

**Hanna C. Persson**

**Claire Gravet**

**François Pialot**

**Kristin Farrants**

### Information technology Room S4.2 - 16:40 - 18:00

Moderator **François Latil - FR**

**O-96-** Does video-based assessment for determining the need for long-term care work ?

**O-97-** Can e-consultation improve access to care in deprived areas ?

**O-98-** Facilitators and barriers for the implementation of eHealth from a healthcare professional's perspective - results of a review of reviews

**O-99-** A comprehensive screening monitoring process for drug fraud

**Andrea Kimmel**

**François Latil**

**Elza Muller**

**Henri Roussel**

## Scientific programme

| TITLE POSTER                                                                                                                                | NB Order | PRESENTER                    | COUNTRY     |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------|-------------|
| Nurses may assist medical advisors in issuing a favourable or unfavourable recommendation regarding extension of sick leave                 | P-01     | <b>Pascal Becker</b>         | France      |
| Workplace stigma and managers' possibility to prevent sick-leave of employees with common mental disorders - a Swedish video vignette study | p-02     | <b>Sofie Schuller</b>        | Netherlands |
| Fate of long-term sick leave for Covid and impact on the French social healthcare system                                                    | P-03     | <b>Aurélien Auger</b>        | France      |
| Monitoring disease-generic symptoms to improve the return-to-work guidance and work disability assessment of long-term sick listed workers  | P-04     | <b>Alice Laganga</b>         | Netherlands |
| Social insurance medicine evaluation of long-term fatigue in breast cancer survivors and implications on disability and return to work      | P-06     | <b>Christophe Heylbroeck</b> | Belgium     |
| Concordance of opinions on work stoppages given by different actors                                                                         | P-08     | <b>Frederic Margaroli</b>    | France      |
| Absenteeism at Two Occupational Health Services in Belgium from 2014 to 2021                                                                | P-09     | <b>Ilse Moerland</b>         | Belgium     |
| Tests to assess function and activity                                                                                                       | P-10     | <b>Tove Eriksson</b>         | Sweden      |
| Generalization of fear of movement-related pain and avoidance behavior as predictors of work resumption after back surgery                  | P-11     | <b>Rini Masuy</b>            | Belgium     |
| Exploring drivers and consequences of disclosure and concealment of multiple sclerosis at the workplace                                     | P-13     | <b>Jessica Dervish</b>       | Sweden      |

## Scientific programme

| TITLE POSTER                                                                                                                                            | NB Order | PRESENTER                 | COUNTRY     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|-------------|
| Early communication between general practitioner, sick-listed patient, and employer - the Capacity Note project                                         | P-14     | <b>Gunnel Hensing</b>     | Sweden      |
| Context, mechanisms and outcomes of motivational interviewing in public health insurance : a qualitative study among long-term work-disabled.           | P-15     | <b>Isha Rymenans</b>      | Belgium     |
| Digital assisted or face-to-face outpatient rehabilitation : study protocol of a randomized non-inferiority trial                                       | P-16     | <b>Richard Albers</b>     | Germany     |
| How do occupation and job exposures change after vocational rehabilitation in Germany?                                                                  | P-17     | <b>Annika Sternberg</b>   | Germany     |
| A medical commission to replace a judge in a court : impact and relevance of changing legislation                                                       | P-18     | <b>Dyane Heranney</b>     | France      |
| Peer review procedure for case-related and global quality assurance of medical assessments for Swiss disability insurance (PRP-CH)                      | P-19     | <b>Markus Braun</b>       | Switzerland |
| Neuropsychological effort validity in the context of insurance medical team assessment in Sweden                                                        | P-20     | <b>Anna Holmqvist</b>     | Sweden      |
| Reliable digit span as a measure of neuropsychological effort validity in the frame of insurance medical team assessment in Sweden                      | P-21     | <b>Anna Holmqvist</b>     | Sweden      |
| Can evaluation of variations in sensory thresholds be used as a marker of validity performance ?                                                        | P-22     | <b>Thomas Lundeberg</b>   | Sweden      |
| Domestic violence - dare to ask.                                                                                                                        | P-23     | <b>Madeleine Jonsson</b>  | Sweden      |
| How frequent is comorbidity in claimants with long-term sickleave referred from the Swedish Social Insurance Agency for insurance medicine evaluation ? | P-24     | <b>Thomas Lundeberg</b>   | Sweden      |
| Association between chronic fatigue and hypermobile Ehlers-Danlos syndrome (hEDS): insurance perspectives and diagnostic challenges in Switzerland.     | P-25     | <b>Ioannis Kokkinakis</b> | Switzerland |

## Scientific programme

| TITLE POSTER                                                                                                                                                | NB Order | PRESENTER                       | COUNTRY     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------|-------------|
| Care pathway for patients with heart failure in the Nouvelle Aquitaine Area - France                                                                        | P-26     | <b>Laurence Tandy</b>           | France      |
| Adaptation and validation of the Work Disability Functional Assessment Battery (WD-FAB) to German (Germany).                                                | P-27     | <b>Susanne Weinbrenner</b>      | Germany     |
| Barriers and facilitators for interprofessional education in occupational healthcare : an integrative review.                                               | P-28     | <b>Elmi Zwaan</b>               | Netherlands |
| Effectiveness evaluation of a motivational counseling training program for health insurance practitioners                                                   | P-29     | <b>Isha Rymenans</b>            | Belgium     |
| Assessment of the care pathway for patients with heart failure in France before and during the Covid-19 pandemic.                                           | P-30     | <b>Philippe Tangre</b>          | France      |
| Long-term impact of children sexual abuse on prolonged disabilities and medical care consumption                                                            | P- 31    | <b>Salomé Battisti</b>          | Belgium     |
| Tobacco cessation: cooperation between general practitioners and Bouscat Hospital France                                                                    | P-32     | <b>Bruno Lescarret</b>          | France      |
| Misuse of Rapid Acting Fentanyl (RAF) or transmucosal Fentanyl in the Nouvelle Aquitaine region - France                                                    | P-33     | <b>Karine Lefebvre</b>          | France      |
| Evolution of anti-PCSK9 prescriptions (Alirocumab, Evolocumab), before and after the introduction of the "Request for Prior Agreement" by health insurance. | P-34     | <b>Betty Liegeois</b>           | France      |
| Recognition of prostate cancer as an occupational disease by the French health insurance system.                                                            | P-35     | <b>Luc Goupil</b>               | France      |
| Diabetes : incentive contract                                                                                                                               | P-36     | <b>Patricia Vidal</b>           | France      |
| Prescribing proton pump inhibitors (PPIs) : relevance by contract ?                                                                                         | P- 37    | <b>Henri Clavaud</b>            | France      |
| A qualitative study of immigrants' experiences of labour-market integration in Sweden - the role of the workplace                                           | P-38     | <b>Maria Brendler-Lindqvist</b> | Sweden      |

## Scientific programme

| TITLE POSTER                                                                                                                                  | NB Order | PRESENTER                      | COUNTRY     |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------|-------------|
| Differences in psychosocial workplace conditions between migrant and native middle-aged workers in Germany                                    | P-39     | <b>Hannes Banaschak</b>        | Germany     |
| Feasibility of the PROM QUALITOUCH activity index as an app in rehabilitation of patients with pulmonary disease                              | P-40     | <b>Vivian Arias</b>            | Switzerland |
| Antibiotics save lives, so let's save our antibiotics - Dentists take action in the Grand Est.                                                | P-41     | <b>Géraldine Roset</b>         | France      |
| Co-management of work stoppage, a participatory approach between the prescribing physician and the Health Insurance consulting physician      | P-42     | <b>Hélène Maillet</b>          | France      |
| Claimants' and professionals' actions and criteria on which work disability benefits can be granted : a comparison between European countries | P-43     | <b>Petter Djoeke</b>           | Netherlands |
| Need and access to medical services in Saxony. A retrospective secondary data analysis as an impetus for expert witness development.          | P-44     | <b>Thomas Petzold</b>          | Germany     |
| Tracking drug megaconsuming and/or nomadic french social security policyholders, using the «SUROCO» shared tool in the Rochelle county France | P-45     | <b>Marie-Christine Levraut</b> | France      |
| Impact of COVID-19 on young adults mental health in Grand Est area : analysis of French Health Insurance database                             | P-46     | <b>Claire Lagrange</b>         | France      |
| A policy and practices perspective study on work participation among people with partial work disabilities.                                   | P-47     | <b>Mara de Visser</b>          | Netherlands |
| Cognitive variables predict return to work after mild/moderate traumatic brain injury : a systematic review                                   | P-48     | <b>Silvana Scolari</b>         | Switzerland |
| Post exertional symptom exacerbation: a paradigm of post Covid 19 syndrome ?                                                                  | P-49     | <b>Silvana Scolari</b>         | Switzerland |

### SESSION ON COVID-19 MONITORING COVID CONSEQUENCES

1. DR AYDEN TAJAHMADY MD, CNAM DEPUTY DIRECTOR OF THE SURVEY SERVICE, FR

#### Consequences of Covid 19 impact on daily practice; how long does it take to catch-up?

If a lot of data exist about the consequences of the Covid-19 pandemic, few is available about the secondary and side effects on the other health issues. This is mapping of cases spread and hospital response, shifts in pathologies as a result of covid as a new risk factor, shortcomings in care and screening of cancer, consequences on deleted surgery, impact of long term survival of some long-term pathologies. The aim of the presentation is not only to have a clean bill of the pandemic, but to be at stake for any new pandemic.

2- PROF. PHILIPPE COUCKE, UNIVERSITY OF LIEGE, BE

#### Covid-19 from crisis to opportunities

Since several years, our health-care ecosystems all over the world are struggling with shortage of economical and human resources, while facing a never-ending increase in demand (essentially linked to the aging population, harboring multiple and complex diseases, but also to the definitely earlier advent of chronic diseases in the “millennials”), and a never-ending raising cost of technology. Both result in a foreseeable lack of sustainability in a very near future. Recently, the Covid-19 crisis has put a supplementary enormous pressure on our capacity to care. We should not waste the lessons we learned during this global health crisis!

If one wants to make health care data-driven, sustainable and efficient, there is no way out. We have to embrace rapidly and collectively a new ecosystem where “data are king” and shared (data philanthropy) in a secure environment. Artificial Intelligence will be used to optimize and individualize the care process, and abolish once and for all the secular and inefficient “one size fits all approach”. Make no mistake, robotization and automatization will become cornerstones in an ecosystem with limited human resources.

### MONITORING HEALTH CARE

3. PR ETIENNE MINVIELLE ; MD, PHD , FR INSTITUT DE CANCÉROLOGIE IGR-PARIS

#### Monitoring patient in health care settings; targeted therapies, empowerment.

*From standardisation to personalisation: a new deal in patients' demands*

With medical and technological advances, medicine is becoming more and more personalised. In addition, patients with chronic diseases express non-clinical needs and demands (e.g. the care of an isolated person is different from that supported by an entourage). This presentation will provide an overview of personalisation applications and their current challenges.

4. PETRA DOŠENOVIĆ BONČA, PHD, ASSOCIATE PROFESSOR UNIVERSITY OF LJUBLJANA, SLO

#### Efficiency of new drugs introduced in health care

In Europe, newly approved drugs undergo further evaluation in the context of their introduction into the health care systems. In almost all countries this evaluation is a prerequisite for reimbursement, often referred to as a «fourth hurdle». In contrast, in Germany beginning in 2010 a system of early benefit assessment of new drugs was established. It comprises the assessment of every new drug except certain orphan drugs with the question of an added benefit compared to the standard of care in Germany. The result of this assessment triggers price negotiations between statutory insurance fund and pharmaceutical company. There is no fourth hurdle.

Results of the assessments will be presented and related to international experience. Some outlook on the ongoing European harmonization process will be given.

5. PROFESSOR JÜRGEN WINDELER, DM, DIRECTOR OF THE INSTITUTE FOR QUALITY AND EFFICIENCY IN HEALTH CARE IN COLOGNE, DE

### **Using population-level administrative health care data to incentivize positive change in patient care across the provider network**

Studies based on administrative data are valuable for identifying patient characteristics and healthcare utilization patterns at the population level as well as across the provider network. As such they are both a valuable tool for evidence-informed reallocation decisions of public payers and a basis for meaningful feedback to health care providers based on comprehensive comparative appraisals of patient care. By analysing the quality of care and health outcomes in patients with atherosclerotic vascular disease in Slovenia we aim to demonstrate how routinely collected population-level administrative health care data can incentivise improvements in patient care across the provider network.»

## **QUALITY, EFFICIENCY AND ETHICS IN HEALTH CARE**

6. PROF. REINHARD BUSSE, DIRECTOR OF THE DEPARTMENT OF HEALTH CARE MANAGEMENT, TECHNISCHE UNIVERSITÄT BERLIN, GE

### **Health System Performance Assessment: how well do European countries perform ?**

Health System Performance Assessment (HSPA) is a cross-country or country-specific process of monitoring, evaluating, communicating and reviewing the achievement of high-level health system goals. It was first promoted through the World Health Report 2000. While several frameworks have been developed since then, they are similar in regard to their performance dimensions, namely “accessibility” and “quality” as intermediate goals as well as “contribution to population health”, “responsiveness/ person-centredness” and “efficiency” as final goals, with equity concerns running cross-sectional. The ability to measure the performance in these dimensions depends on the availability of indicators, which are valid and for which reliable data exist (preferably across countries). For example, the EU-SILC surveys provide data on “unmet need” for accessibility, OECD for certain quality indicators, Eurostat on “avoidable mortality” or Commonwealth Fund surveys on responsiveness. The presentation will briefly explain the background and concept and HSPA, and then provide longitudinal data on a range of European countries to explore how well their health systems perform.

7. PROF. FREDERIEKE SCHAAFSMA, NL OCCUPATIONAL MEDICINE, AMSTERDAM UMC

### **Better work focused care for workers with chronic conditions.**

The number of workers with chronic conditions are growing fast in the Western world. Most of these workers prefer to keep their job as long as possible and are hesitant to ask for assistance at an early stage. Besides the disease specific health problems, many also deal with fatigue and cognitive functioning problems. As the majority of modern working environments require high level information processing, even mild cognitive functioning problems increase the risk for sick leave and job loss. This limits effective occupational health advice and guidance in how to adjust the current work situation so that a healthy work life balance can be maintained.

Preventive care to reduce job loss in workers with chronic conditions needs better multidisciplinary collaboration between clinical and occupational health care with more personalized focus on job retention. There is also a need for better instruments to assess the cognitive load of job demands, with more sensitive and objective measurements for the assessment of cognitive fatigue. We should also evaluate what interventions and support systems can then be put in place to prevent workers with chronic conditions and with these type of complaints to go on sick leave.

8. LENE AASDAHL MD. PHD. RESEARCHER NO DEPARTMENT OF PUBLIC HEALTH AND NURSING, UNIVERSITY OF TECHNOLOGY AND SCIENCE (NTNU)

### Effects of occupational rehabilitation on return to work

In Norway there is long tradition for inpatient occupational rehabilitation for sick listed individuals. However, there has been little research done on evaluating the effect of this treatment on return to work. The Hysnes project, which started in 2010, was a large project with several randomized trials evaluating inpatient occupational rehabilitation. The project included an evaluation of different lengths of treatment, adding a workplace component, and adding follow-up after the program. Long term results (up to 7 years) from the different randomized trials on return to work will be presented, as well as the results of the economical evaluation.

### SICK LEAVE

9. KAAT GOORTS PHD KU LEUVEN, BE

### Sick leave, attrition and injury reduction; civilian and military paradigms

In many countries, the duration of sick leave will be determined based mainly on the diagnosis of the patient. However, research has previously shown that other factors, such as psychosocial factors, have an impact on the duration of the disability period as well. A more comprehensive, holistic approach of sick leave is necessary to understand the complex interactions between factors that influence the spectrum of choice of an employee to take sick leave. Paradigms seems to shift from purely biological to biopsychosocial, towards an ecological model. More insights are gathered using modern techniques.

In the military world, sick leave can lead to attrition from high-performance functions. Because of the scarce resources, and the high cost to train these employees, attention is shifting from curative measures towards the reduction of injuries and attrition using holistic approaches such as the total force fitness model.

In the current presentation, sick leave and attrition are put in a different light. How can military approaches be applied to civil structures, what can we learn from each other and how did paradigms shift over the years?

10. JAN HOVING ASSISTANT PROFESSOR AMSTERDAM UMC, NL

### Implement of Cochrane Work in real-life practice of insurance medicine / Core Outcome Set (COS) for Work Participation

Over the past decades, intervention research, investigating the evidence for occupational health interventions, has seen a dramatic increase in studies and publications. Although the number of intervention studies and systematic reviews on topics like the prevention of sick leave and return to work is growing, advancements in the measurement of work-related outcomes in these intervention studies are lagging behind. Cochrane Review authors therefore consistently recommend improvements in the definition and standardized use of these work-related outcomes.

Recognizing the need for international consensus on the measurement of work outcomes in intervention research, an international consortium of researchers, supported by Cochrane Work and Cochrane Insurance Medicine, started several studies within the research program 'COS-For-Work' ([www.cosforwork.org](http://www.cosforwork.org)).

The presentation will highlight several studies leading up to the development of a Core Outcome Set for Work, including practical examples showing some of the challenges of having stakeholders agree on something as vital as work outcomes. The presentation will also include the Core Outcome Set itself and its implications and implementation.

### WORK DISABILITY MANAGEMENT

11. PROF. ALEX COLLIE, PHD, AU HEAD OF INSURANCE WORK AND HEALTH GROUP AT MONASH UNIVERSITY

#### Work disability management

A systems view of work disability prevention: Some new insights on an old problem

For nearly 40 years we have viewed occupational rehabilitation and work disability prevention mainly through a biopsychosocial lens. For example, there is abundant evidence that the determinants of work disability include features of the injured/ill person, their workplace relationships and employment circumstances, the nature and quality of healthcare, and the design and administration of insurance and legislative systems. Similarly, effective work disability prevention programs address determinants across these multiple domains. More recently, evidence of the critical importance of work disability systems on worker outcomes has emerged. This presentation will summarise this evidence and how a systems view of work disability prevention can support advances in treatment and rehabilitation. Professor Collie will present work across four main areas that support the importance of system effects in work disability: (1) Comparative policy studies which provide evidence of variation in health service provision and work disability duration between systems with different policy features; (2) Naturalistic, population-based evaluations of system reform which demonstrate the dramatic impact that system changes can have on access to care and on worker outcomes; (3) Qualitative studies of worker, healthcare provider and case manager experiences of work disability prevention that identify system features as critically important to worker recovery and return to work; and (4) Computational models that enable visualisation and estimation of policy and practice impacts across and between work disability systems.

12. PROFESSOR MIKA KIVIMÄKI, FI UNIVERSITY COLLEGE LONDON (UCL) AND UNIVERSITY OF HELSINKI

#### Does working beyond the statutory retirement age have an impact on health and functional capacity ?

«In response to the rapid population ageing and worsening economic dependence ratio in European countries, governments are seeking ways to extend working careers and minimize early exit from labour force. Multiple lines of recent research have sought to address these challenges. In addition to studies on the work-health associations, artificial intelligence and data-driven approaches have been used to develop reliable, scalable and easy-to-use risk prediction algorithms for work disability. The aim is to construct risk scores which have a high detection rate combined with a low or moderate false positive rate as those could be used in occupational settings to inform targeting of preventive intervention. In addition to identifying employees at risk of work disability and factors that affect early exit, an emerging line of research seeks to increase understanding about factors that may motivate employees to continue working after they have reached retirement age and to evaluate the impact of extended work careers on health and functional capacity in old age.»

13. PROFESSOR JEAN SIBILIA, FR ,UNISTRA, MEDECINE FACULTY

#### The University in the global health crisis

Covid-19 pandemic has revealed a global health crisis. This crisis has demonstrated our collective inability to cope with a global viral pandemic. What will happen tomorrow when a world population of almost 8 billion people will be threatened by new microbial or climatic attacks ?

The university is under pressure to affirm its social responsibility which is to uphold values but also to train quality health professionals in sufficient numbers. We must therefore examine together the current issues. How to train and participate in an optimal organization of the health system while sustaining a strong capacity for research and innovation ?

How to ensure a role of stakeholders in university health community for the common good? How to take the assumed step towards a more predictive and preventive medicine? Therefore, it is necessary to challenge the place of each stakeholder because any health system needs effective evaluations and flexible regulations.

It is legitimate to strengthen the role of social security and its medical experts in our solidarity system. By the way, we must address the function and missions of these doctors in an original partnership with the university. This is a new model of cooperation that the impending emergency situation forces us to consider. We must contribute, with conviction, to a great momentum of renewal and solidarity, all together !

### Is there a higher prevalence of overweight and obesity in claimants undergoing an insurance medical evaluation?

HUGO J. (1), JONSSON M. (1), LUNDEBERG T. (1), VON STEDINGK J. (1)

(1) University Department of Rehabilitation Medicine Stockholm, Karolinska Institute, Danderyds Hospital, Stockholm, SWEDEN

#### Background

Body Mass Index (BMI) can provide an estimate of body fat in both females and male at any age. It can define if a person is underweight, normalweight, overweight or obese and is widely used as risk factor for several health issues and in determining public health. The Public Health Agency of Sweden (PHA) did a survey 2021 that showed that 52 percent of the population between 16-84 years stated an BMI that indicated overweight or obesity. The proportion had increased in every age group between 2006-2021. Obesity does not only increase morbidity and mortality but also an increased risk for sick leave from work. In a report from the Center for Epidemiology and Community Medicine in Stockholm 2013 results displayed that people with obesity to a greater extent than normal weighted got sick pay from the Swedish Social Insurance Agency (SSIA).

#### Objectives

To investigate if claimants undergoing an insurance medical evaluation have a higher prevalence of overweight and obesity compared to the Swedish population.

#### Methods

1145 claimants referred for an insurance medical evaluation at Danderyds Hospital, Sweden, on behalf of the SSIA were included in the study. All the participants were assessed by a medical doctor as well a physiotherapist. The BMI was calculated using the mass (weight) and height of the claimant (expressed as kg/m<sup>2</sup>). The BMI is a rule of thumb used by the WHO to broadly categorize as person as: underweight (under 18.5 kg/m<sup>2</sup>), normal (18.5 to 24.9), overweight (25 to 29.9) and obese (30 or more).

#### Results

Out of the 1126 claimants included (missing data = 19) in the analysis, 33 were categorized as underweight, 320 as normal, 419 as overweight and 354 as obese.

In total 69% of the 1126 claimants had overweight or obesity. This is significantly larger than the survey carried out by the PHA in 2021. As found in our data and also reported in the survey the prevalence and obesity varied between different groups and was more common in older claimants, among men and among claimants with lower education levels. Also, overweight and obesity was more common in claimants born outside Europe.

#### Conclusion

There is significantly higher prevalence of overweight and obesity in claimants undergoing an insurance medical evaluation suggesting that overweight directly or indirectly may influence the ability to return to work.

### Case-based discussion in continuing education for insurance physicians, occupational physicians, and labour experts: using it to improve collaboration

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#### Background

Interprofessional education (IPE) between insurance physicians (IPs), occupational physicians (OPs), and labour experts (LEs) is suggested as a method to improve communication and collaboration between these professionals (1) to contribute to a faster return to work process and better support for workers on long-term sick leave. One educational method that could fit IPE well, is case-based discussion (CBD) (2, 3). We explored current applications of CBD in continuing education for OPs, IPs, and LEs in the Netherlands. We will use the outcomes as input for the development of a program theory concerning interprofessional forms of CBD applicable in continuing education for IPs, OPs and LEs.

#### Objectives

During this workshop, participants will:

- Learn about current CBD practices for IPs, OPs and LEs in the Netherlands.
- Identify barriers in one's own practice for the development of an interprofessional CBD method.
- Explore possibilities to overcome the above-mentioned barriers.
- Formulate actions to shape interprofessional CBD in one's own practice.

#### Methods

##### Outline of the workshop

The workshop starts with a short introduction on interprofessional education (IPE) followed by a short overview of the study's results to inform participants on the current state of practice of CBD in the Netherlands. Next, participants are divided into subgroups to identify barriers that might hinder interprofessional CBD in their own practice. These barriers will be discussed in plenary and supplemented with the study's insights. Participants are then divided into subgroups again to think of possible solutions for the identified barriers. The workshop ends with a plenary discussion of the proposed solutions and study's insights will also be shared. Followed by a wrap up with opportunities and possible actions to shape interprofessional CBD in one's own practice.

#### Results

-

#### Conclusion

-

#### References

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### Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after spine surgery

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#### Background

The use of spinal cord stimulation for chronic pain after lumbar spine surgery is increasing, yet rigorous evidence of its efficacy is lacking.

#### Objectives

To investigate the efficacy of spinal cord burst stimulation, which involves the placement of an implantable pulse generator connected to electrodes with leads that travel into the epidural space posterior to the spinal cord dorsal columns, in patients with chronic radiculopathy after surgery for degenerative lumbar spine disorders.

#### Methods

This placebo-controlled, crossover, randomized clinical trial in 50 patients was conducted at St Olavs University Hospital in Norway, with study enrollment from September 5, 2018, through April 28, 2021.

Patients underwent two 3-month periods with spinal cord burst stimulation and two 3-month periods with placebo stimulation in a randomized order. Burst stimulation consisted of closely spaced, high-frequency electrical stimuli delivered to the spinal cord. The stimulus consisted of a 40-Hz burst mode of constant-current stimuli with 4 spikes per burst and an amplitude corresponding to 50% to 70% of the paresthesia perception threshold.

The primary outcome was difference in change from baseline in the self-reported Oswestry Disability Index (ODI; range, 0 points [no disability] to 100 points [maximum disability]; the minimal clinically important difference was 10 points) score between periods with burst stimulation and placebo stimulation. The secondary outcomes were leg and back pain, quality of life, physical activity levels, and adverse events.

#### Results

Among 50 patients who were randomized (mean age, 52.2 [SD, 9.9] years; 27 [54%] were women), 47 (94%) had at least 1 follow-up ODI score and 42 (84%) completed all stimulation randomization periods and ODI measurements. The mean ODI score at baseline was 44.7 points and the mean changes in ODI score were -10.6 points for the burst stimulation periods and -9.3 points for the placebo stimulation periods, resulting in a mean between-group difference of -1.3 points (95% CI, -3.9 to 1.3 points;  $P = .32$ ). None of the prespecified secondary outcomes showed a significant difference. Nine patients (18%) experienced adverse events, including 4 (8%) who required surgical revision of the implanted system.

#### Conclusion

Among patients with chronic radicular pain after lumbar spine surgery, spinal cord burst stimulation, compared with placebo stimulation, after placement of a spinal cord stimulator resulted in no significant difference in the change from baseline in self-reported back pain-related disability.

### Is there a co-variation between finger dexterity speed and outcome in the Test of Memory Malingering (TOMM)?

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#### Background

The prevalence of invalid effort has been estimated to be 20-40% in medico-legal contexts. One way to assess performance validity (PV) is the Test of Memory Malingering (TOMM) (Tombaugh, 1996; Martin, 2019). TOMM is a forced choice PV-test including two trials, with a cut off score for valid effort set at >45 out of 50 correct answers in the second trial.

However, performance validity or lack thereof may influence any test outcome during an insurance medicine evaluation suggesting that performance validity needs to be taken into consideration.

One test that may be influenced by degree of motivation or exaggerated difficulties is the Nine Hole Peg Test (NHPT) (Oxford Grice K et al., Am J Occup Ther. 2003,57(5):570-3). The NHPT is used to assess finger dexterity and is one of the tests included in the standardized physiotherapeutic assessment instrument in insurance medicine evaluations in Sweden. Dexterity can be defined as manipulation of small objects with the fingers, and it is considered essential for adequate performance of tasks in daily living and work. In the NHPT the finger dexterity is primarily measured by the time it takes to complete the task, i.e. the finger dexterity speed.

#### Objectives

The aim of this study was to investigate if there is any co-variation between the results of finger dexterity speed regarding claimants undergoing an insurance medicine evaluation passing or not passing the cut of score for a valid effort while performing TOMM.

#### Methods

All 370 claimants were referred for an insurance medicine evaluation on behalf of the Swedish Social Insurance Agency. The NHPT speed was examined in the claimants by a physiotherapist and TOMM was assessed by a neuropsychologist. The results of TOMM were categorized in two levels as a valid performance > 45 or non-valid performance 0-44 in the second trial. The results of the NHPT were categorized in two levels as a valid performance 14-25 secs for women and 15-26 secs for men and > 25 as non-valid performance.

#### Results

The TOOM score of each claimant was plotted against their NHPT speed. The result show little co-variation between the two tests.

#### Conclusion

There is no co-variation between finger dexterity speed and outcome in TOMM. This suggests that a performance validity test merely reflects performance validity related to what is being tested i.e. the results cannot be generalized.

### Development of an eHealth intervention in insurance medicine using principles of intervention mapping

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#### Background

Although eHealth interventions are used to deliver, and improve healthcare, they are still scarcely used in the field of insurance medicine. We therefore developed an eHealth intervention tool that could help insurance physicians (IP) enhance efficiency and effectiveness of the process of doing disability assessments. Additionally, the needs and input of people with a social disability benefit were taken in account. We defined eHealth according to the WHO definition.

#### Objectives

We aim to discuss the development of an eHealth intervention for structuring information of disability assessments and preparing both IP and people with a social disability benefit for it, using the intervention mapping protocol. We will present the process of development and discuss eHealth intervention in accordance with our most recent progress.

#### Methods

We used intervention mapping (a six step iterative protocol) to develop and evaluate this intervention. We first conducted a needs assessment by means of a survey amongst IP and semi structured interviews with experts to learn from the implementation of eHealth tools in adjacent medical fields. We used the Donabedian model to structure the process of disability assessments. By means of brainstorm sessions, we identified eHealth intervention directions within the process of disability assessments for further development. Subsequently, we formulated performance and change objectives and developed pilot studies for daily practice. Finally we aimed to implement and evaluate the usability and feasibility in the daily practice of insurance medicine.

#### Results

We identified 3 preliminary intervention directions that can be implemented alone or in combination in the field of insurance medicine.

1. Digital questionnaire collecting relevant information digitally prior to the disability assessment by the IP, e.g. information on medical and psychosocial situation, self-reported symptoms and work limitations, or daily activities.
2. Online information support for people with a disability benefit about aspects of the disability assessment to enhance their empowerment and to manage expectations.
3. Dashboard for the IP to more directly see all retrieved client information. This enables the IP to better prepare for the disability assessment.

#### Conclusion

Results of further development of a prototype are expected by the end of June 2023.

### Systematic review of spinal cord stimulation (SCS) versus conventional medical treatment (CMM) in patients with chronic debilitating pain.

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#### Background

Managing patients with debilitating chronic pain is challenging. Despite treatment with multiple drugs, pain control remains frequently inadequate, and invasive SCS is increasingly used as a last resort. To interpret RCTs comparing different SCS interventions, we must first understand the benefits of SCS versus CMM. These benefits are currently unclear.

#### Objectives

To investigate the effectiveness of SCC over CMM in patients with chronic debilitating pain. A systematic review.

#### Methods

Literature search in PubMed, Embase, Cochrane Central by 06/2022; randomized trials; Population: adults with chronic (mainly) neuropathic pain; Intervention: conventional or high frequency SCS; Comparison: CMM; Outcomes: nine core outcome domains for pain studies (IMMPACT, Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials, <http://www.immpact.org>); clinically meaningful follow-up (=12 months): I°: Overall pain; II° (n=8): functioning (including physical, mental, social, role, functioning), quality of life, sleep. The review applied Cochrane methodology, used GRADE guidance (<https://www.gradeworkinggroup.org/>) to assess trustworthiness ('certainty'), presents findings by outcome, and refers to «Minimal Important Difference» in clinical interpretation. We achieved comparability by converting all scales to a 0-100 point scale and reported results as mean difference (MD) and 95% confidence interval [95%CI]. Studies were screened, selected, included, and extracted by teams of two researchers based on predefined criteria.

#### Results

Of 4 RCTs with 422 patients, only one study (n=50 patients) reported our predefined outcomes (12 months). We therefore added 6-month results to include 1-3 RCTs per outcome. The trustworthiness of all outcomes was 'very low'. 12-month results: Overall pain was reduced by 17 points (MDpain, [33.75-0.25]; mental function favored SCS (MDmental +22.8 points [9.4;35.3], with no significant difference for overall and physical function. The other IMMPACT outcomes lacked results. 6-month results: Overall pain was reduced by 23.9 points (MD, [-32.4;-15.5]); overall, physical, social function, and sleep favored SCS (MDoverall -7.22 points, [-10.5;-3.97]; MDphysical +4.1 points, [+2.6;+5.7], MDsocial +15.8 points, [+5.9;+25.6], MDsleep +7.6 points, [+2.5;+12.7] with no significant difference for mental function, quality of life, patient satisfaction, and role functioning (working).

### How we can benefit from different types of assessments !

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#### Issue/problem

Worldwide, work capacity assessments (WCAs) are mostly accomplished on units serving the insurance agencies only. Performing WCAs in that way can be one-sided as a full-time job, in turn draining energy, narrowing thought, and possibly lowering quality of assessments.

#### Description of the problem

The issue described above also applies to Sweden. However, in Västra Götaland region, two assessment units also perform assessments on behalf of other stakeholders: primary care, and occupational health care – adding up to four different assessment types. We believe that work with different assessment types can provide added value in the way we think and elaborate regarding the complex factors involved in work capacity.

The first two of these assessment types are more or less enforced upon the individual, i.e. there is an economic incentive involved; the persons salary or payment from the SIA. The other two are voluntary and both are initiated by the primary care. The four assessment types are initiated and accomplished as follows:

AFU - Social insurance agency (SIA), partly team-based. Highly structured and standardized. Aims to give a broad activity-based status as a basis for further handling by SIA.

FHV – Occupational health care, fully team-based. Aims to provide a basis for the employer to better understand the employee's ability to match resources to demands.

VB - Primary care, fully team-based. Aims to provide a basis for further rehabilitation, better diagnosis, adaptation to current work etc.

IFU – Primary care, fully team-based. Aims to investigate intellectual disabilities to provide a basis for adaptation to work-life.

#### Results (effects /change)

The accomplishment of different types of assessments has several advantages:

To meet individuals in different situations and motivational contexts, increase the ability to understand the variety of influencing factors of work capacity.

As an assessor you become more conscious and focused on the specific aim and goal of the assessment.

You get the opportunity to make use of your clinical experience, e.g in suggesting further assessment, rehabilitation, diagnoses, and treatment.

The work as an assessor becomes more varied and enriches the work. A negative impact of doing several different assessments might be confusion of the different aims and roles.

#### Lessons

We believe that the variety we experience in the different assessment types can give synergetic effects to the way we accomplish our work and contribute to a more openminded thinking.

### Psycho-social determinants predicting disability benefit

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#### Background

There is an evidence in the literature now that psychological determinants (PSD), beyond the diagnosis, play a major role on the length of long-term sickness absence. However this has not been studied in claimants for disability pension. In France a pension can be obtained after a sick-leave period, or by direct request from the claimant. We studied the second pathway.

#### Objectives

The first outcome was to estimate if the PSD of the claimant were related with the medical decision, and the second was to build a predictive score of disability.

#### Methods

The 60 questions Belgian "Quick-test" needs a support to the claimant on sick-leave. We planned to develop an easier self-screening test. The questions were selected from the most predictive variables absence in the survey by K.Goorts [2020]. They were reduced to a 8 items questionnaire on job expectation, psychological distress, health perception, health expectation, autonomy, social support, work expectation, stressful live events. Each question is scored on a 6-point scale (0-5) and is individually entered in the model. We derived all the independent variables (8 items, demographic variables, long term disease, ICD-10 categories) and outcome variable (agreement of disability).

The questionnaire was completed by 259 claimants before their examination and 207 could be analyzed.

#### Results

The disability pension agreement was related positively with: age 50,5 years vs 48, ( $p=0,02$ ), having a long term disease: 59% vs 18% respectively, ( $p 10^{-3}$ ), ICD-10 categories ( $p 10^{-3}$ ), Psycho-social score: 27 vs 25 ( $p < 0.003$ ).

The multivariate analysis showed factors leading to disability agreement a long term disease (OR=3.54), ICD-10 Categories M, G, F, (OR=3.07) and the psycho-social score  $> 26/40$  (OR=2,15). No significant relation were found with gender, job, and level of education.

#### Conclusion

No single question from the psychological status could predict the outcome of the examination, only the sum of them through the score was predictive. Open questions about the PSD are routinely used by the social case manager in France screening for difficult social conditions, although not considered by the medical advisor. Our study could lead to evolve the practices of insurance physicians.

### Does low effort in a cognitive validity test covariate with lower maximal hand grip strength in claimants undergoing medical evaluation

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#### Background

When assessing the cognitive ability by insurance medical evaluation, specific validity tests can be used to detect malingering thru non valid effort. There is little knowledge weather the effort of the insured in the cognitive validity test is related to his or her performance in assessment of physical function.

#### Objectives

The aim of the study was to investigate differences in test results of hand grip strength and prevalence of pain in upper extremity regarding men and women participating in an insurance medical evaluation passing and not passing the cut off score for a valid effort while performing the Test of Memory Malingering (TOMM).

#### Methods

An observational study with cross- sectional study design where all participants were undergoing an insurance medical evaluation, extended with assessment by physiotherapist and psychologist. Data was collected consecutively using the Jamar® dynamometer for maximal hand grip strength and TOMM for performance validity in the cognitive assessment. Pain intensity was estimated using the BORG-CR10 scale. Nonparametric methods were used for analyzing as there was skewness in the data.

#### Results

98 participants were included in the study, of which 74 passed the cut off score for a valid effort performing TOMM, and 24 did not pass the cut off score. The median for maximal hand grip strength was significantly lower in the study group not passing the cut off score. The group not passing the cut off score also reported higher pain intensity in upper extremity than the compared study group. The pattern regarding performances in the three repeated measures of hand grip strength differed between the study groups.

#### Conclusion

Low effort in a cognitive validity test seems to covariate with lower maximal hand grip strength, a distinctive pattern of performance in repeated measures and higher pain intensity ratings in upper extremity, regarding men and women undergoing an insurance medical evaluation. Though the result indicates that there are differences in physical performance and pain intensity rating between participants related to a cognitive validity test, possible underlying causes to the result has not been analyzed enough to make a distinct conclusion. Further research is of importance to increase the knowledge of the area on performance validity in insurance medicine.

### Patient centeredness in psychiatric work disability evaluations and interrater agreement of work capacity estimates

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#### Background

In patient centred approaches, the relationship between clinician and patient is considered as partnership, characterized by trust and caring. The concept of patient centeredness has gained considerable importance in clinical medicine also because of favourable effects on patient outcomes, like adherence to therapy. In contrast, the concept is still given little consideration in the field of medical work disability evaluations and is evaluated differently.

#### Objectives

We analysed (a) to what extent interviews conducted in psychiatric work disability evaluations showed characteristics of patient centeredness and (b) whether higher levels of patient centeredness were associated with a better interrater agreement of work capacity (WC) estimates as favourable outcome.

#### Methods

The contents of 29 video-taped interviews in psychiatric work disability evaluations were categorized according to the Roter Interaction Analysis System (RIAS). Patient centeredness in these interviews was quantified by three different measures derived from the RIAS data: (I) the number of utterances reflecting empathy, (II) ratio between psychosocial and biomedical information gathering, (III) length of uninterrupted patient speech. The interviewing expert as well as three experts who watched the video-taped interview rated the claimant's WC.

#### Results

Psychosocial information requested by the expert and provided by the claimant was more than three times as common as biomedical information requested by the expert and information provided by the claimant. In contrast, utterances reflecting empathy were rare in the interviews, e.g. the expert did not address the claimant's emotions in 25 of 29 interviews. Unexpectedly, the three different measures of patient centeredness showed no intercorrelations. Moreover, none of these measures showed a significant association with WC interrater agreement.

#### Conclusion

The study revealed no evidence that the reproducibility of WC estimates was modulated by patient centeredness. The observed preponderance of psychosocial information retrieval over biomedical information retrieval might be explained by the context of psychiatric work disability evaluations that are expected to capture the claimant's limitations in psychosocial functioning. This preponderance alone is, therefore, no valid indicator for patient centeredness, opposed to clinical settings. In contrast to this preponderance, the psychiatric experts hardly showed empathy, which is a hallmark characteristic of patient centeredness. It is possible that the experts intentionally avoided empathy in order to maintain their role as neutral and objective experts. However, avoiding empathy is possibly associated with lower claimant satisfaction with the evaluation.

### Job coaches and medical advisors as actors of adapted work? The example of the Belgian IPS pilot project ('INAMI-ULB 2018')

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#### Background

The Individual Placement and Support (IPS) model, originally developed for people with severe mental illness, was created in the United States in the early 1990s. Inspired by the concept of «supported employment», it involves job coaches who follow a «Place-then-Train» methodology, as opposed to «Train-then-Place». Since 2016, the IPS became one of the pilot projects initiated by the Belgian National Institute for Health and Disability Insurance, currently being evaluated through a randomised controlled trial. This pilot project was implemented in collaboration with the mutual insurance companies, and required, among other elements, the participation of the medical advisors. Over the past ten years, the role of the latter has evolved, and they have become involved in reintegration pathways for people returning to work.

#### Objectives

It is in this context that we propose to contribute to the conference by examining how the actors of the Belgian social security system can support the work adaptations and adjustments required by the state of health of people experiencing mental illness. Focusing specifically on the notion of «adapted work», this analysis will provide some insights into the evolution of the IPS programme, but also a broader exploration of the transformation of the social security actors.

#### Methods

We will present, on the one hand, the legal implications of these matters and, on the other hand, the results of interviews and a focus group carried out with around fifteen key actors and stakeholders (medical advisors, mutual insurance companies, job coaches, clinical teams, regional employment services, etc.) to understand how they provide their intervention, taking the employment conditions, organisation of companies and public policies.

#### Results

The issue of «adapted work» in the IPS pilot project frequently arises in connection with the authorisation of the medical advisor. Some of the medical advisors actively support the insured people accompanied by the job coaches, and are paying close attention to their employment and working conditions. In the light of these processes, it is therefore very relevant to further understand about the intervention of the medical advisors, as well as that of the job coaches.

#### Conclusion

This understanding provides some keys to the further development of the IPS program. More overall, it also provides an important insight into broader concepts, such as «vocational rehabilitation», by further addressing the relationship between social security law and labour law.

### Interventions in relation to sickness absence in healthcare – a systematic literature review

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#### Background

Sickness absence is a common measure in health care. In cases of long-term sickness absence different types of treatments and interventions are often initiated to facilitate individuals' return work.

#### Objectives

The purpose of this project was to evaluate the positive and negative effects of different ways for healthcare to manage people who are, or are at risk of becoming, long-term sickness absent.

#### Methods

A systematic literature review was performed including studies of healthcare interventions in relation to sickness absence or return to work in healthcare in persons with common long-term sickness absence diagnoses. That is: common mental disorders; bipolar disorder; musculoskeletal: back, shoulder, and pain conditions; breast cancer; and post-infectious conditions (including post-covid). Interventions were categorized as being unimodal, multimodal, interventions that involved workplace contact or coordination with the workplace, and interventions targeting caregivers. Due to substantial heterogeneity, synthesis without meta-analysis was conducted. Effects of types of interventions on return to work were assessed at short term (up to 12 months) and longer term (longer than 12 months). The certainty of the evidence was assessed using the GRADE framework.

#### Results

The systematic literature review included 92 articles, based on 68 unique studies evaluating the effect of interventions on return to work in over 40,000 participants. The absolute majority of the studies had investigated interventions for people on sickness absence due to mental or musculoskeletal diagnoses. Most studies showed no statistically significant effects, but combined results suggest that unimodal interventions, multimodal interventions and interventions involving workplace contact or coordination with the workplace may have a positive effect on return to work in the short term (up to 12 months) for people on sickness absence due to mental or musculoskeletal diagnoses (low certainty). It was not possible to assess the size of the effect or to assess the effect on return to work of interventions targeting caregivers.

#### Conclusion

Low certainty evidence suggest that certain types of interventions could have effects important to patients and society. It was not possible to draw conclusions about specific interventions or about which components of the interventions that were effective. Future research can contribute to the knowledge by replicating studies that have shown positive results.

### Development of an evidence-based vocational rehabilitation program and guidance to promote return to work of people with mild functional impairments

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#### Background

Vocational rehabilitation is a well-defined action area for certain categories (long-term unemployed, disabled persons); incentives for both beneficiaries and employers are provided by law. Less is known and done for people with chronic conditions and impaired functional capacity, who are outside the categories recognized by law. Daily practice has shown that these people have lower chances of keeping or finding a job and are targets for discrimination but currently there are no clear legal provisions to support this category.

#### Objectives

To develop and widely validate a vocational rehabilitation program in order to support people with mild functional impairments to maintain or resume a professional activity.

#### Methods

One hundred and fifty six patients admitted to The National Institute for Medical Assessment and Work Capacity Rehabilitation Bucharest for work capacity evaluation were included in the survey. We expect to include more patients in the following months, which will make the results more reliable. An observational study was designed to describe their vocational skills and to integrate interests and abilities to work counselling using a person-centered approach. Socio-demographic data were collected and RIASEC test was applied. Data were statistically analyzed with appropriate tests using PSPP software.

#### Results

Gender ( $p=0.016$ ), marital status ( $p<0.001$ ), residence ( $p=0.003$ ) and level of education ( $p<0.001$ ) were correlated with longer working experience. Multi-skilled was a favorable feature for a shorter interruption of the activity ( $p<0.001$ ). Investigative profile was found in higher education ( $p=0.001$ ) while social profile was associated with lower level of education ( $p=0.003$ ) and unskilled jobs ( $p=0.027$ ). Men had a significantly higher percentage of realistic ( $p=0.001$ ) and investigative ( $p=0.004$ ) profile. Women had a significantly higher artistic profile ( $p=0.001$ ).

#### Conclusion

Various factors were associated with work participation. An occupational gender segregation was found and differences in vocational interest were identified for different levels of education and occupational groups. The development of a standardized approach targeting the population at risk of poor work participation will allow effective vocational rehabilitation to be achieved.

### Active engagement of managers in employee return to work: experiences of participating in a dialogue using Demand and Ability Protocol

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#### Background

In Sweden, musculoskeletal disorders are the second most common cause of sickness absence. It is known that workplace interventions are important for improving workability and for a successful RTW process. Furthermore, the collaboration and involvement of stakeholders, including the employer, are of importance for a successful and sustainable RTW. According to employees on sick-leave due to back pain, a lack of collaboration or understanding from the manager has been expressed as one of the greatest obstacles for a successful RTW process. One way to promote the employer's involvement in the RTW process is to include them in a three-party meeting, where the employee, the employer, and a third party have a dialogue together. The Demand and Ability Protocol is a structured three-party meeting that aims to assess workability, in relation to the demands at the workplace, to make adequate adjustments at the workplace, and to promote RTW.

#### Objectives

To describe how managers of employees on sick-leave, due to chronic pain conditions, experience participating in a three-party meeting using the Demand and Ability Protocol (DAP) in the return- to-work process.

#### Methods

This study is based on individual semi-structured interviews with 17 managers of employees with chronic pain. Interviews were conducted after participating in a three-party meeting including the employee, manager, and a representative from the rehabilitation team. The data were analyzed using thematic analysis with an inductive approach.

#### Results

Two main themes were identified – “to converse with a clear structure and setup” and “to be involved in the employee's rehabilitation.” The first theme describe experiences from the conversation, and the second theme reflected the managers' insights when being involved in the employee's rehabilitation. The themes comprise 11 sub-themes describing how the DAP conversation and the managers involvement in the rehabilitation may influence the manager, the manager-employee relationship, and the organization.

#### Conclusion

This study show, from a manager's perspective, how having a dialogue with a clear structure and an active involvement in the employee's rehabilitation may be beneficial for the manager- employee relationship. Insights from participating in the DAP may also be beneficial for the organization.

### Vocational rehabilitation a critical foundation for sustainable longterm employment? The perspective of workers with SCI or ABI, employers and professionals

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#### Background

Vocational rehabilitation (VR) provides services to individuals with a disability, such as spinal cord injury (SCI) or acquired brain injury (ABI), with the ultimate goal of entering, returning to, or retaining employment. Although the factors that promote return-to-work after injury are increasingly understood, the factors that contribute to sustainable long-term employment after return-to-work are poorly understood.

#### Objectives

To identify the factors of VR that workers with SCI or ABI, employers, and health and work professionals consider essential to sustainable long-term employment.

#### Methods

Focus groups with workers with SCI or ABI with long-term work experience, and individual interviews with employers and health and work-integration professionals. Data were synthesized using thematic analysis.

#### Results

Fifty-one workers with SCI or ABI in 14 focus groups and 20 employers and 23 professionals in individual interviews highlighted the significant impact of VR for employment over the long term. Key factors from the workers' perspective included becoming an expert on one's disability, understanding the impact of the health condition on daily life, learning to advocate for oneself, and developing a new work identity. Findings were supported by employers, who stressed the importance of injured workers learning to think about the impact of their disability on their work, developing strategies for dealing with the effects of disability, and identifying and articulating their own needs, abilities, and limitations to employers. They also emphasize the benefits of professional workplace support during VR to prepare employers and employees for sustainable employment.

Health and integration professionals, on the other hand, pointed to the importance of good cross-setting coordination of VR, involving the employer as early as possible. They recommended a patient-centered, individualized process and Supported Employment strategies, with an emphasis on empowerment and enabling self-management.

Overall, all three stakeholder groups agreed that the key factors for sustained employment are fundamentally very similar for workers with ABI and SCI. Whereas different physical, mental, and neuropsychological effects require individually tailored interventions.

#### Conclusion

Well-coordinated VR, involving the employer and the workplace whenever possible, with a strong focus on empowerment of the affected worker prepares a critical foundation for sustainable long-term work-activity for workers with SCI or ABI.

### **Risk factors and service needs for a sustainable work of people with an acquired brain injury: a qualitative multi-stakeholder analysis**

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#### **Background**

Along with the social and economic challenges posed by an aging society, creating work conditions that allow persons to stay healthy and able to work into old age has become a major task of Western societies. In particular, for persons with a disability, retaining employment over time after an initial return to work represents a major challenge as indicated by an increased number of premature dropouts from the labor market. Persons with acquired brain injury (ABI) make an exemplary case for this challenge because their impairments commonly affect the ability to perform cognitive, technical, and interpersonal work tasks that become increasingly relevant in the contemporary labor market. To optimally support affected persons, vocational integration practitioners need in-depth and conclusive knowledge of risk factors for premature labor market dropout as well as of the best possible strategies to ensure sustainable work.

#### **Objectives**

The aim of this study was to identify risk factors and service needs for sustainable work of people with ABI as perceived by affected persons, employers, and health professionals.

#### **Methods**

Secondary analysis of data from seven focus groups and three interviews with persons with ABI, 13 interviews with employers, and 13 interviews with vocational integration professionals. Data were synthesized using thematic analysis.

#### **Results**

There turned out to be two major themes of risk factors: (1) person-related factors (including the subthemes: post-ABI impairments; lack of understanding of post-ABI impairments; poor health management) and (2) environment-related factors (including the subthemes: challenges related to the service structure; insufficient knowledge and education of professionals; challenges at the workplace; difficulties in private life). While stakeholders noted the variety of the currently available services, they particularly pointed to the missing long-term monitoring and counselling services for persons with ABI following the initial return-to-work phase, reflecting a major challenge for sustainable work. An overarching gap related to the fragmentation of the service structure and the lack of case coordination along the working life.

#### **Conclusion**

Based on the perspective of multiple stakeholders, empowering the person, ensuring easy access to professional support, and providing a well-matched work environment does all address major risk factors and thus have the highest potential to facilitate sustainable work for people with ABI. This could be achieved by offering continuous coaching support and long-term monitoring and counselling after the initial return to work.

### Experiences of employees and employers of communication with occupational health professionals during return to work in the Netherlands

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#### Background

In the Netherlands, different occupational health professionals (OHP's) are involved in the return to work (RTW) guidance process for sick-listed employees. OHP's need to cooperate with each other, and with the employee and employer. There is already a wide body of research on cooperation between OHP's, employers and employees during the RTW 1-5. These studies emphasize that cooperation between the employees, employers and OHP's is important for a successful RTW process, especially for aligning RTW activities with the recovery process of the employee<sup>2, 4</sup>. Furthermore, researchers found that the use of (interdisciplinary) interventions during early stages of RTW, was associated with less sick absenteeism among employees<sup>5-7</sup>.

#### Objectives

The goal of this study was to explore how employers and employees experience communication with each other, and with OHP's during RTW.

#### Methods

A total of 18 semi-structured interviews were carried out, nine with employers and nine with employees who have had recent experience with the RTW process. Interviews were thematically analyzed for barriers and facilitators for RTW, with regards to communication with OHP's and other stakeholders in the RTW process. We used patient journey mapping to illustrate the results in a RTW journey.

#### Results

Based on an thematic analysis of the interviews, we identified seven themes: (1) maintaining a good relationship between employee and employer during RTW, (2) maintaining mutual contact early on in the RTW process, (3) structurally planning joint conversations and evaluation moments, (4, employee perspective) employees need to be well informed about the RTW process, (5, employee perspective) the need for psychological and emotional support during RTW, (6, employer perspective) putting the employee in control during RTW, and (7 employer perspective) the importance of good communication between all stakeholders. The patient journey derived from the data illustrates the experiences and needs in the RTW process from the perspectives of employees and employers.

#### Conclusion

According to employees and employers, making joint decisions about RTW activities with OHP's, contributes to a more satisfactory RTW process. Moreover, it was stressed that organizing fixed contact- and evaluation moments during the RTW process between employee and employer was beneficial for their relationship as well as for the RTW process. This research is part of a broader project, with the aim to develop an ICF based instrument

### From the mass summons of insured persons on work stoppage to the selection of cases handled by peer-to-peer exchanges.

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#### Issue/problem

The social security Medical Service (MS) of Hérault (Occitanie-France) experimented a new method of managing and monitoring work stoppages, through a coordinated approach with general practitioner (GP).

#### Description of the problem

The background was a reorganization of the MS so that each medical advisor (MA) was the referent identified with GP in a community.

Then, the MS describes the profiles of the GP by a distribution on criteria of :

- Volume of patients on sick-leave (all pathologies combined),
- Number of daily allowances prescribed.

The MA identifies relevant patient records to discuss with each GP. The main targeting criteria are the pathology and the duration of sick-leave.

After a presentation of the approach to the GP, confraternal exchanges (CE) between the GP and the MA are organized, face-to-face or by phone.

During the CE, the discussion of each case makes it possible to jointly decide on the follow-up to be given to the work stoppage. Three orientations are possible, from the interruption to the continuation of the work stoppage, through the summons of the insured by the MA.

When the sick-leave benefit is stopped, this is supported by the implementation of concerted steps to avoid any disruption of professional and/or financial career.

#### Results (effects /change)

A quantitative and qualitative evaluation was carried out 6 months from the start of the experiment: of the 913 patient cases followed, 23% were not prolonged by GP.

The number of sick-leave days prescribed, monitored by comparing two periods September November 2021 and September November 2022, decreased to 29.98%.

This evolution is multifactorial, in particular linked to :

- the educational impact of CE,
- better monitoring and targeting of patient cases.

A retrospective study of 1077 patient cases followed in 2022, specifies that following CE, at least 25.53% were not prolonged by GP (22.75% within 3 months following CE)

#### Lessons

This new concerted management of patients on sick-leave, based on a privileged bond of trust between the GP and the MA, allows an adjusted orientation of the sick-leave in progress. It is a source of mutual learning and impacts everyone's practices.

Further investigation like case control study should be implemented to optimize the process

### Period effects in the risk of work disability and unemployment among refugees in Sweden: a register-based cohort study

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#### Background

Several countries in Europe, among them Sweden, have seen dramatic societal changes due to global migration and growing numbers of refugees. Migrants, particularly refugees, have been shown to have different patterns of work disability and unemployment compared to the native population in the new host country. Considerable changes in the social insurance regulations regarding granting of sickness absence and disability pension were introduced in Sweden in 2003 and 2008, the latter implying stricter regulations. However, to date no scientific knowledge exists if changes in Swedish national social insurance policies over time differently influenced the risk for work disability and unemployment in refugees as compared to the Swedish-born host population.

#### Objectives

This study aimed to investigate 1) potential period effects in the association between refugee status and the risk of subsequent long-term work disability and unemployment and 2) explore any differences by country of birth, age and duration of residence.

#### Methods

Using national registers, three cohorts including all Swedish residents during 1999, 2004 and 2009 were followed for 4 years (cohort 2000, 2005 and 2010). Cox regression models were used to examine associations between refugee status and long-term unemployment (>180 days annually) and disability pension. The analyses were adjusted for socio-demographic factors, morbidity and labour market-related factors. Stratified analyses were run for age, country of birth and duration of residence.

#### Results

Across the cohorts, hazard ratios (HRs) were higher for long-term unemployment [2000: HR = 1.98; 95% confidence interval (CI): 1.96-2.01; 2005: HR = 2.30; 95% CI: 2.27-2.33; 2010: HR = 2.78; 95% CI: 2.75-2.81] for refugees compared to Swedish-born but not for disability pension. HRs for long-term unemployment were highest among refugees aged 25-34 and 35-44 years, from Somalia, Afghanistan and Iraq and refugees with a shorter duration of residence.

#### Conclusion

The considerable changes in the social insurance regulations in Sweden over time had a similar influence on the risk of disability pension in refugees and Swedish-born. On the other hand, the risk of long-term unemployment appears to have increased for refugees over time. Particularly some refugee subgroups experienced more difficulties. These findings highlight worsening disparities for refugees and have implication for person-based, culturally sensitive programs for improving integration of refugees in the labour market.

### Sequence analysis of sickness absence and disability pension states among privately employed white-collar workers in Sweden; a prospective cohort study

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#### Background

There is very little scientific knowledge about sickness absence and disability pension among privately employed white-collar workers.

#### Objectives

We aimed to gain knowledge about future patterns of sickness absence and disability pension over time in a cohort of the privately employed white-collar workers in Sweden.

#### Methods

A 7-year prospective cohort study, using microdata linked from nationwide registers was conducted. We analysed information for all the 1,283,516 privately employed white-collar workers in 2012 in Sweden, using sequence analysis to describe the future annual states of sickness absence (in spells >14 days) and disability pension, and multinomial logistic regression to analyse the odds of sociodemographic variables belonging to each observed cluster.

#### Results

We identified five clusters of future sickness absence and disability pension patterns during follow-up: (1) 'low or no sickness absence or disability pension' (88.7% of all), (2) 'sickness absence due to somatic diagnosis' (5.2%), (3) 'sickness absence due to mental diagnosis' (3.4%), (4) 'not eligible for sickness absence or disability pension' (due to death/emigration or old-age pension) (1.4%), and (5) 'disability pension' (1.2%). Men, highly educated, high-income earners, and those working in industry or the service sector were more likely to belong to the first and the fourth cluster. The second, third, and fifth clusters consisted mainly of women, low educated, low-income earners, those working in the education, care, nursing, and social services sectors.

#### Conclusion

In general, the absolute majority of the privately employed white-collar workers had sequences without sickness absence or disability pension during the 7-year follow-up. The risk of belonging to a cluster characterised by having been sickness absent varied by sex, educational level, income level, job sector, and other sociodemographic factors.

### Video consulting and remote certification in sick leave - New federal directives concerning sick leave assessment and certification in Germany

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#### Issue/problem

Sick leave assessment up to 2020 was considered to be a hands-on examination taken care by the primary care doctor or the specialist. Before this time, sick leave certification was never thought of as being a remote conversation between doctors and patients. But in the following years during the pandemic, Covid-19 patients had to be isolated from other patients visiting their health care specialists because of the risk of contagion. Therefore, the need arose to find alternatives to the patient's visit at the doctor's office.

#### Description of the problem

Not every doctor's office has facilities for video consultation and therefore a first change of the sick leave directive was released through a special regulation. Until the end of March 2023, sick leave in patients with Covid-19 could also be certified after a thorough telephone interview by the doctor. The medical doctors have to be careful while diagnosing with remote devices in order not to overlook severe medical conditions. When in doubt, the patient has to be diagnosed by direct examination in the practice.

#### Results (effects /change)

The Federal Joint Committee released a new directive that allows doctors to assess sick leave and prescribe medication remotely by video consultation.

#### Lessons

The experience during the pandemic shows that there are advantages to keeping patients with respiratory infections from spreading diseases to other patients consulting the doctor's office and to health care workers. The contagion rate in the population caused by different types of viruses that affect the upper airways can be decreased further by avoiding unnecessary visits to the doctor's office in the first one or two weeks of infection. Because of the positive experience with remote sick leave certification, permanent regulations for video consultation are also being implemented in other fields of health care.

### A prediction model for the duration of sickness absence due to stroke – a population-based prospective cohort study from Sweden

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#### Background

Almost 20% of all strokes that affect the working-age population leads to sickness absence (SA) longer than 180 days.

#### Objectives

To help physicians identify patients with a high risk for long-term SA (>180 days) due to stroke, we developed a prediction model for prognosticating the duration of SA in a population-based cohort study.

#### Methods

All 3,841 SA spells that were due to a stroke diagnosis and lasted more than 14 days begun in the 2.5-year period 2010.01.01 through 2012.06.30, were identified from a nationwide administrative register of the Swedish Social Insurance Agency. Information on possible predictors was obtained by individual linkage to other nationwide administrative registers, regarding socioeconomics, healthcare, and prescribed medication. Piecewise-constant hazard regression was used for predicting the duration of the SA spell in the training dataset, containing 70% of the SA spells. Based on previous studies, 14 possible predictors were identified and from them, nine predictors were selected based on the log-likelihood loss and feasibility issues to the final model. This model was validated and evaluated in the validation dataset (30% of the SA spells).

#### Results

The median SA spell duration was 232 days (interquartile range: 76-915 days). The following predictors were selected in the final model: SA days in the previous 365 days, employment- and family situation, country of birth, part- or full-time SA, partial disability pension when the SA spell begun, sex, age, and geographical region. The overall c-statistics of the prediction was 0.54 (95% confidence intervals (CI): 0.53-0.56). The c-statistics were 0.50 (95% CI: 0.46-0.63) to predict SA >90 days, 0.54 (95% CI: 0.51-0.57) for SA >180 days, and 0.57 (95% CI: 0.53-0.61) for SA >365 days. The discriminatory ability of the model to predict SA  $\geq$ 1000 days or disability pension was moderate, with the c-statistic 0.64 (95% CI: 0.59-0.68).

#### Conclusion

The final model is implementable in clinical settings to predict the duration of SA due to stroke and it can moderately discriminate shorter SA spells from long-term SA or disability pension. Future development of the model will include clinical information regarding the type and seriousness of the stroke to increase discriminative capacity.

### Young employees with previous mental health problems in the private sector: does part-time sickness absence help remaining on labor market?

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#### Background

Mental health problems are frequently characterized by long-term continuity and impact on reduced work capacity including sickness absence (SA) and disability pension (DP). SA and DP, in turn, are known to have several unfavorable outcomes, one of the ultimate being exclusion from the labor market. Whether being on part-time SA or DP, instead of full-time, may promote remaining on the labor market has been little studied so far. Notably knowledge is lacking for young adults working in different occupational sectors and groups.

#### Objectives

To investigate whether part-time SA/DP, as compared to full-time SA/DP, plays a role for future SA or DP among young blue-collar and white-collar employees in the private sector that have experienced mental health problems previously.

#### Methods

This prospective cohort study included 7 177 twin individuals born in Sweden in 1959-1986 and employed in the private sector. Depending on the birth year, the twins were invited to participate in two different health-screening surveys in 2005, when study participants were aged 19-20 or 20-30, respectively. All study participants were followed regarding SA and DP (part-time and full-time) during 2006-2018 through linkage of the survey data with several Swedish nationwide registries. Presence of mental health problems in 2005 including depression, anxiety, or attention-deficit hyperactivity disorder was evaluated by the survey and prescribed medications data. Logistic regression analyses were applied to calculate Odds Ratios (OR) with 95% Confidence Intervals (CI).

#### Results

Results showed that 59% of all study participants were employed in blue-collar occupations. Blue-collar employees experienced higher levels of mental health problems at baseline (12%) and part-time SA (31%) or DP (0.5%) during 2006-2016, as compared to white-collar employees (10%, 22%, and 0.2%, respectively). Blue-collar employees with, as compared to without, previous mental health problems had an increased risk for SA during 2017-2018 (OR 2.04, 95% CI 1.96-2.81). The association decreased slightly when part-time SA/DP was considered (OR 1.78, 95% CI 1.45-2.18). The associations were not statistically significant for white-collar employees.

#### Conclusion

Among young adults with previous mental health problems and employed in the private sector, part-time SA/DP seems to reduce the risk for future SA. The effect was present among blue-collar but not among white-collar employees.

### Predictors of time until return to work and duration of sickness absence in sick-listed precarious workers with common mental disorders

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#### Background

Common mental disorders (CMD) are highly prevalent among precarious workers, often leading to long-term sickness absence, work disability and unemployment. For precarious workers, such as temporary workers, return to work (RTW) is more challenging, because they often do not have a job to return to and their access to RTW-support is limited.

#### Objectives

This study aimed to identify predictors of a longer time until RTW and prolonged duration of sickness absence in sick-listed precarious workers with CMD.

#### Methods

We conducted secondary uni- and multivariable Cox regression analyses using data from two Dutch randomized controlled trials (RCT) and one cohort study among sick-listed precarious workers with CMD (N = 681). Age, gender, baseline employment status, study allocation, severity of psychological symptoms and RTW self-efficacy were evaluated for their predictive value on time until sustainable ( $\geq 28$  days) RTW and duration of sickness absence during 12-month follow-up. In this study, time until sustainable RTW and duration of sickness absence are distinct dependent variables, because they are not mutually exclusive.

#### Results

During 12 month follow-up only 26% of the participants had a sustainable RTW. The median time until sustainable RTW was 185 days (IQR 94-262 days). About 64% of the participants without sustainable RTW were still sick-listed after 12 months. Age above 50 years (HR 0.57, 95% CI 0.39-0.82), severe psychological symptoms (HR 0.64, 95% CI 0.43-0.93), unemployment (HR 0.19 95% CI 0.11-0.33) and loss of employment contract during sickness absence (HR 0.25, 95% CI 0.14-0.47) were predictive of a longer time until RTW. Male gender (HR 0.77, 95% CI 0.62-0.97), severe psychological symptoms (HR 0.64, 95% CI 0.46-0.87), unemployment (HR 0.47, 95% CI 0.27-0.84) and loss of employment contract (HR 0.48, 95% CI 0.26-0.90) predicted a prolonged duration of sickness absence.

#### Conclusion

Unemployment at the moment of sick-listing, loss of employment contract during sickness absence and severe psychological symptoms were predictive of both a longer time until sustainable RTW and a prolonged duration of sickness absence. This knowledge can assist social insurance professionals in the early recognition of precarious workers at risk of long-term sickness absence and unemployment. Then, they can arrange targeted RTW-support.

### Workshop ICF in assessment of disability for work

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#### Background

Despite many articles about ICF and assessment of disability for work, the precise place of ICF in the assessments remains undetermined. Attempts have been made to identify items from the ICF classification that seem relevant for assessment of disability for work. This resulted in several different core sets for different purposes. A rather different approach is to study how the medical decision making fits to the image that the ICF concept presents of disability. Assessments for disability for work all address impairments and they all result in decisions about disability but how is the connection between the two established? Among countries, this appears to be done in different manners. In an international survey we used the ICF framework to identify how ICF elements are implied in the medical decision making in disability assessment in The Netherlands, in Romania and in other countries.

#### Objectives

To share a conceptual approach of ICF in disability assessment in different countries. Participants will gain a better understanding of their own medical decision making and of the medical decision making elsewhere.

#### Outline of the workshop

After sharing the model of medical decisionmaking and clarifying it, we invite participants (in small groups) to reflect on the practices in their respective countries and to propose that in the group. By exchanging these reflections we expect to reach a lively discussion.

#### Structure

1. Presentation of ICF in disability assessment in The Netherlands, illustrated with a cardiovascular condition. (5 min)
2. Discussion of that approach. (10 min)
3. Presentation of how in Romania ICF was used to restructure the assessments, illustrated using the same condition. (5 min)
4. Discussion of that approach. (10 min)
5. Invitation to participants in subgroups to use the conceptual approach to determine which ICF elements are already considered in their medical decision making. (45 min)
6. Conclusion about the value of this approach to better understand the medical decision making in social insurance medicine. (15 min)

Moderator of the workshop and presenter of the Romanian experiences: Dr C Oancea; presenter of the Dutch part: Dr W de Boer.

#### Abstract

There will be two presentations, basically similar but from two different countries: The Netherlands and Romania. Introduction: the framework of the ICF classification can be used to clarify the medical decision making in assessment for disability for work. Method: The components of the medical decision making are analysed as items of the ICF. Results: The medical decision making can contain explicitly and implicitly the items of ICF. Discussion: ICF appears to be a useful tool for analysing the medical decision making.

### Cochrane reviews in insurance and occupational medicine: from research to reality and vice versa

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#### Background

Cochrane's mission aims to make healthcare decisions get better. By conducting systematic reviews Cochrane contributed to transform the way decisions on health are made. However, practitioners and other stakeholders face challenges to identify, appraise and apply the results from systematic reviews. In addition, in a rapidly changing world, questions need rapid unbiased answers while generating evidence thoroughly is time consuming.

#### Objectives

Participants will:

learn about how to retrieve updated information from Cochrane reviews

learn about the strengths and limitations of Cochrane reviews

recognize examples of Cochrane reviews that did impact

identifying gaps in knowledge in the field of Insurance Medicine and Occupational Medicine that could be answered by Cochrane reviews

discuss how to improve the utility of Cochrane reviews for the use in practice and policy making

#### Outline of the workshop

This workshop is offered by members of Cochrane Insurance Medicine. Two thirds of the workshop will be interactive by working in small groups and summarizing the results in plenary discussions.

The target audience are all congress delegates striving for better integrating evidence into practice in insurance and occupational medicine. All participants are invited to think and discuss beyond the commonly used approaches by using 2 sequential words 'Yes, and ...' (instead of Yes, but..).

#### Structure

Introduction, structure of the workshop (5 Min)

Input presentation (15 Min)

Small groups discussions (30 Min)

Plenary discussion (30 Min)

Conclusions (10 Min)

#### Abstract

The short input presentation will give a brief overview of Cochrane reviews in the field of Insurance and Occupational Medicine. Participants will learn about where and how to retrieve updated information from Cochrane reviews. The strengths the strengths and limitations of Cochrane reviews will be described. The potential impact on practice and policy making will be discussed based on examples of Cochrane and other reviews

### Financial medical control in the role of monitoring the introduction of a new payment model for health services

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#### Issue/problem

Slovenia, like other economically developed countries, is faced with the aging of its population and the increase of costs in the healthcare system. The development of new payment models for health services is necessary to optimize the performance of the system.

The analysis of the performed controls by the Health Insurance Institute of Slovenia (HIIS or ZZZS: Zavod za Zdravstveno Zavarovanje Slovenije) in a field where a new payment model applies is one of the bases for monitoring and planning the necessary changes to the new model.

#### Description of the problem

Financial-medical controls (hereinafter: FM controls), whose primary purpose is to verify the compliance with the contractual obligations of health service providers who collaborate with the Institute of Health Insurance of Slovenia (hereinafter: ZZZS), are also an important part of the process of monitoring new payment models after their introduction. After defining what a payment model for health services is, we will briefly explain the context for establishing new payment models - international and Slovenian (Strategic Development Program of ZZZS 2020-2025). In the following, we will describe the way the control department cooperates with the department responsible for the development of new payment models within ZZZS. Then we will look at examples of new payment models: in the field of dermatology and in the field of molecular genetic diagnostics.

#### Results (effects /change)

Since 2015, 12 new payment models have been introduced. The goals of the Strategic Development Program of the Health Insurance Institute of Slovenia for the period from 2020 to 2025 were achieved. Monitoring the implementation of these new payment models through FM controls does play a key role in evaluating their efficiency, their shortcomings, and the actual improvements they facilitated.

#### Lessons

FM controls are an important element for the success of the introduction of a new payment model for health services.

The abstract presents one of the Slovenian methods for monitoring health care providing (performing FM controls) and explains its role in contributing to the upgrade of the healthcare system. The main goals of the control procedures are to ensure fair and unified practices over the Slovenian territory and to achieve the best possible satisfaction of health service providers and benefits for the patient or the healthcare system in general.

### Regulation of the billings of dental surgeons via a graduated support program for control

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#### Issue/problem

this program by alerting dental surgeons early on the anomalies observed, seeks to avoid their perpetuation or even their accentuation and establishes regulatory monitoring for the entire population of dental surgeons.

#### Description of the problem

an analysis of the Health Insurance reimbursement data was performed in 2021, after defining 4 indicators based on frequently dental procedures, to verify compliance with the legislation:

association of a consultation and another dental procedure (Indicator 1 ; I1) ;

more than 2 dental scalings in 6 months (indicator 2 ; I2) ;

multiple tooth extractions ( Indicator 3 ; I3) ;

combination of excision of bone lesion and tooth extraction (Indicator 4 ; I4).

Depending on the volume of anomalies observed for each indicator, a graduated action is envisaged ranging from the reminder letter to the regulations to alert interviews conducted both by the chief doctor of the local level of the Medical Service and the director of the Primary health insurance fund or even a triggering of a professional activity control.

An impact analysis will be implemented one year after this action in order to verify the correction of dysfunctional practices and to assess the financial damage avoided.

#### Results (effects /change)

in 2021, these 4 indicators represent 23 967 anomalies : 40% of them related to I1 ; 33,8% to I2 ; 25,2% to I3 ; 1% to I4. They will give rise, after information, to the recovery of €550,000 of undue payment, mainly in connection with an abusive practice.

For example for I1, 968 out of 3993 practitioners practicing in Occitania have at least 1 anomaly; 820 have less than 10 anomalies; 5 have more than 200 anomalies.

#### Lessons

This support program for dental surgeons aims to reduce the number of regulatory invoicing anomalies, based on early detection and information. More support for new ones installed as well as the study of new indicators are considered.

### Immunotherapy usage for treating asthma in Belgium

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#### Background

Between 2015 and 2019 in Belgium, the expenses linked to immunotherapy were multiplied by a factor three. Several studies conducted by Inami showed that about sixty percent of patients receiving such treatment for asthma do not meet the guidelines defined by the Belgian healthcare system. The repayment is only available in case of severe asthma and after reinforced corticoid treatment.

#### Objectives

This work aimed at quantifying the percentage of asthmatic patients treated by immunotherapy that suffer from severe asthma and received reinforced corticoid treatment.

#### Methods

We analyzed the invoicing data from years 2018-2019 to identify patients treated by immunotherapy for asthma. We then identified which patients received corticoids during the year before such treatment and what amount was delivered.

#### Results

We found that 38 percent of patients treated by immunotherapy for asthma in 2018 and 2019 did not receive suitable corticoid treatment or did not present uncontrolled asthma. They were thus not eligible for the repayment.

#### Conclusion

We conclude that those two criteria, out of six defined by the Belgian healthcare system, are sufficient to identify almost forty percent of patients having obtained the repayment of an immunotherapy treatment without being eligible.

## Inequalities in health influence of the gradient of exposure to precariousness on drug prescriptions of general practitioners in Vienne-France

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### Issue/problem

To determine whether the prevalence of exposure to precariousness among general practitioners modifies their prescriptions of reimbursed drugs

### Description of the problem

Patients in precarious situations are known to be heavier consumers of health care, particularly medication, because of the interaction between precariousness and poor health. One of the health policies in France is to try to compensate inequalities inherent to precariousness through reimbursement and financial coverage of health care fees. It would be logical to observe a greater consumption of medication of precarious populations, compared to other patients. However, a preliminary study has reported that treatments targeting diseases with a higher prevalence in the precarious population are under-prescribed by general practitioners for these patients

### Results (effects /change)

Comparison of reimbursement amounts for 20 different molecules prescribed to precarious and non-precarious patients, by two groups of general practitioners in the Vienne region, with different prevalence of patients benefiting from the Complémentaire Santé Solidaire (C2S -complementary reimbursement assistance for precarious populations), from 2019 to 2021. The primary assessment criterion was a difference of 5% threshold in the amount of reimbursement between the populations as well as the groups of general practitioners

### Lessons

Results : The study confirms the existence of a population effect on prescriptions, with higher reimbursements for all treatments in destitute population. It also demonstrates the effect of the prevalence gradient of precariousness on the prescriptions of general practitioners, concerning the precarious population, with a decrease in reimbursed costs for 18 of the molecules when exposure to precariousness is high. This effect was not significantly found in less deprived population.

Conclusion : Exposure to precariousness clearly influences the prescriptions of general practitioners. This may mean that the most exposed physicians develop techniques and coping mechanisms specific to the precarious population, favouring health education, contrary to the less exposed practitioners who may over-prescribe. Another hypothesis is that the precarious population, which is more complicated to manage, generates an overload of work, exhaustion and an alteration of empathy for the most exposed physicians, which has a negative influence on the management of their patients.

### The design of an evidence-based working method for work disability prognosis evaluation

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#### Background

Insurance physicians (IPs) experience evidence-based work disability prognosis evaluation (WDPE) as a challenging task. The WDPE content (i.e. future abilities in work) is considered difficult, within a context of various stakeholders with substantial and conflicting demands. In earlier studies 1 2, relevant aspects for WDPE and IPs' perceived implementation barriers (e.g. limited time) and solutions (e.g. training, automation) were identified.

#### Objectives

The aim of this study 3 is to design an intervention supporting physicians in evidence-based WDPE.

#### Methods

The 6 step Intervention Mapping 4 framework was used, supplied with elements of the Behavior Change Wheel 5. In Step 1, needs such as prognostic evidence and assets were analyzed to construct a logic model of the problem. Determinants were selected from the Theoretical Domains Framework 6 7 and in Step 2, change objectives were formulated. In Step 3, features and demands for the intervention were identified, assisting in the conceptualization of an intervention plan. Steps 4 to 6 comprise tests and trials regarding product design, implementation, evaluation of effects on WDPE quality and usage of the intervention in practice.

#### Results

Four important actors were IPs, disability claimants, the organization (IPs' employer as well as claimants' benefit supplier) and the IPs' professional community. Problem determinants included IPs' limited EBM knowledge and skills and the organization's goal of assessing the requested amount of benefit claims. These problem determinants led for example to selecting the intervention functions 5 «Education» and «Environmental Restructuring» respectively. By offering a training, the IPs' knowledge and skills might improve. A supportive software tool will restructure the IPs' working environment, potentially allowing either a higher quality (leading to less reassessments) or the same quality in less time.

The identification of such characteristics and demands led to the conceptualization of the intervention "Prognosable". It consists of a stepwise working method for evidence-based WDPE. The working method is supported by a software tool and taught to IPs in a training. A prototype of the software tool was developed, allowing product demos for further refinement.

#### Conclusion

IM was applied to design the intervention "Prognosable". It consists of a stepwise working method, software tool and training to assist IPs in performing evidence-based WDPE 3.

### Disease-modifying therapy and work ability among people with multiple sclerosis in Sweden

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#### Background

Work ability has been assessed in the general population and different disease groups using the work ability index; a widely used measure in clinical as well as research contexts. However, there is limited research in the context of multiple sclerosis in general and in relation to people with multiple sclerosis (PwMS) on different disease-modifying therapies.

#### Objectives

The aim of the study was to assess the association between disease-modifying therapy use and work ability among PwMS and the role of other socio-demographic, clinical and self-reported health variables.

#### Methods

A web-based cross-sectional survey was conducted among PwMS in Sweden in 2021 with 4103 individuals with complete data on work ability and related variables included in the final analysis. Work ability was assessed using the work ability score (WAS) component of the work ability index. Disease-modifying therapy was categorized into: high-efficacy, non-high-efficacy and no disease-modifying therapies (no treatment or other medications). Self-reported health was measured using the three-level version of the commonly used health-related quality of life instrument: EQ-5D. Univariable analyses and multivariable linear regression models were used to assess the association between disease-modifying therapy and work ability.

#### Results

The mean age of the PwMS was 40.3 years and 71.1% were women. Among the PwMS, 67.8% and 28.4% were on high-efficacy and non-high-efficacy disease-modifying therapies respectively within the last two years. PwMS reported a mean and median WAS of 6.9 and 8.0 (0: cannot work at all to 10: work ability at its best) respectively, and a little over half of the participants reported good (WAS=8-9; 37.0%) or excellent (WAS=10; 16.3%) WAS. In the unadjusted model, PwMS on non-high-efficacy disease-modifying therapies reported significantly higher WAS than those on high-efficacy and no disease-modifying therapies. However, after controlling for demographic, clinical and self-reported health variables, only the difference between non-high-efficacy and high-efficacy DMT categories remained. Although most of the sociodemographic and clinical variables had significant associations with WAS, variables such as type of occupation, expanded disability status scale score, fatigue and EQ-5D index explained larger proportions of the variation in WAS.

#### Conclusion

PwMS on non-high-efficacy DMTs reported higher work ability than those on high-efficacy DMTs, although the effect size was small, once other sociodemographic and clinical variables were considered. Occupation, level of disability, fatigue and EQ-5D index were among the important factors associated with work ability.

### Evaluation of common mental disorders in insurance medicine – a functional capacity approach

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#### Issue/problem

The first cause of work disability in Belgium is mental health disorders. Among these, most concern depression or burn-out. The NIHDI carries out regular statistical analyses that show a steady increase of these disorders among people with disability benefits (+46% between 2016 and 2021).

#### Description of the problem

The recognition of work incapacity and the provision of benefits and adequate support towards a return to work for people who are unable to work due to common mental disorders (depression, anxiety, burn-out, post-traumatic stress disorder, etc.) is therefore a major challenge.

However, these are particularly complex to evaluate because of the nature of the disorders: subjectivity of the symptoms and fragility of the people concerned.

Furthermore, experts as well as practitioners point out hurdles for physicians in social insurance to access evidence-based sources of knowledge.

Results (effects /change)

In order to address this issue, the R&D Disability Benefits Department went through the literature and met various stakeholders to help develop a research project to improve the quality of medical evaluation.

The research focusses on functional capacity assessment. Although still underdeveloped in the case of psychological disorders, practices and knowledge exist, notably in Switzerland and Canada.

The purpose is to bring our practice of medical evaluation into dialogue with the state of the art in the literature and international practices. To this end, scientific support is called upon to select the most relevant tool(s) in our context.

Tools may include checklists, semi-structured interview guides, self-report questionnaires. First, an inventory of available tools will be made. The most promising ones will then be analyzed in depth with a view of selecting the most appropriate. The conditions of effective use of the selected tools for insurance medicine purposes will also be identified. The tools will preferably present a transdiagnostic approach. A list of functional incapacities to be assessed will also be drawn up.

The results of the research will be available in 2025.

#### Lessons

Lessons will be learned about the use in insurance medicine of existing tools of functional capacity assessment in case of mental health disorders. The presentation of this study is also intended to stimulate international exchange on this topic.

### Patients' needs regarding work-focused healthcare: a qualitative evidence synthesis

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#### Background

An increasing number of individuals are experiencing problems with work participation due to chronic medical conditions. As a result, healthcare that focuses on work targeting the individual's needs has been identified as an important facilitator for improved participation in work. Therefore, it is important to know what patients consider important in work-focused healthcare.

#### Objectives

To identify, appraise, and synthesize qualitative research evidence exploring patients' needs regarding work-focused healthcare.

#### Methods

Four databases (MEDLINE, Embase, PsychInfo and Web of Science) were systematically searched. Studies were independently screened in pairs for the following inclusion criteria: qualitative data collection method, and patients' perspectives regarding work-focused healthcare when experiencing work-related problems due to chronic medical conditions. Data extraction and synthesis was executed by means of an inductive thematic analysis approach. The quality of the included studies was assessed using the CASP Qualitative Study checklist. Confidence in the review findings was assessed through the Confidence in the Evidence from Reviews of Qualitative research (CERQual) approach.

#### Results

Over 80 studies were included. Needs regarding four main themes were identified: 1) Substantive guidance, which comprises the specific content of work-focused healthcare, including sub-themes as psychological support and vocational rehabilitation; 2) Clear and continuous process, which comprises clarification and optimization of the work-focused healthcare process, including sub-themes as early access to support and continuity in support; 3) Supportive attitude and behavior, which comprises a positive and supportive attitude and behavior from professionals towards the patient, including sub-themes as a trustful relationship and equal partnership; and 4) Tailored approach, which comprises the delivery of tailored care to the individuals' needs, including sub-themes as flexibility and attention for the personal situation. In total, 17 subthemes were identified within these four main themes. In the CERQual assessment, most of the identified needs (53%) were assessed as high confidence, a few identified needs (41%) as moderate confidence, and only one identified need (6%) as low confidence.

#### Conclusion

The overview of the identified needs provide the work-focused healthcare system, and involved professionals, with insights for new strategies to realize work-focused healthcare that is centered around the patient.

### Perceived job quality among persons with spinal cord injury and its association with sociodemographic characteristics, health-related factors, and person-job match

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#### Background

Despite being a key indicator of sustainable work, job quality has been scarcely studied among persons with spinal cord injuries (PwSCI), and there is a lack of evidence on factors which may facilitate or hinder it in this specific population.

#### Objectives

The aims of this study were thus to a) describe the perceived job quality of working PwSCI in Switzerland using three indicators: job satisfaction, job performance, and work stress; and b) identifying whether and how different person-job match dimensions (i.e., interest congruence, demands-abilities fit, needs-supplies fit, and effort-reward imbalance) as well as sociodemographic and health-related factors (e.g., age, sex, SCI-related characteristics, pain problems, and depressive symptoms) are associated with perceived job quality.

#### Methods

Descriptive as well as multiple regression analyses were performed using cross-sectional data from 549 working-age PwSCI who participated in the 2017 community survey of the Swiss Spinal Cord Injury Cohort study and reported being engaged paid work.

#### Results

The findings of the multiple regression analyses showed that higher interest congruence, better needs-supplies fit and lower effort-reward imbalance as well as female sex were associated with higher job satisfaction, while higher effort-reward imbalance, poorer demands-abilities fit (underqualification), and – surprisingly – better needs-supplies fit were associated with higher work stress. Moreover, underqualification, worse needs-supplies fit as well as pain, depressive symptoms, and language region were associated with lower job performance.

#### Conclusion

The findings of this study suggest that integrating individuals in jobs that match their abilities, interests and needs, and which adequately reward their efforts may contribute to better job quality among PwSCI. Beyond that, common secondary health conditions and comorbidities such as pain and depressive symptoms should receive particular attention in interventions that aim to promote job quality and ultimately sustainable work in the SCI population.

### Reasonable accommodation in the workplace in Italy: present status and perspectives

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#### Issue/problem

To enforce the legislation on equal treatment, the Italian Government with the Stability Law 2015 (N. 190/2014) assigned the National Institute for Insurance against Accidents at Work (INAIL - <https://www.inail.it/>) competence in the field of work integration for people with disabilities according to Council Directive 2000/78/EC and UN Convention on the Rights of Persons with Disabilities (2006).

#### Description of the problem

Two schemes have been created to promote work integration of INAIL's insurees via reasonable accommodation of the workplace. The first supports return to work in the same company and the second supports employment in a new company. In both cases the objective is achieved by means of personalised projects.

Each project is set up with the cooperation of the employee, the employer and INAIL's Multidisciplinary Team (composed of an administrative officer, a medical doctor and a social worker). The functional capacity assessment of the worker is ICF based.

Operational difficulties and different cultural backgrounds among the stakeholders were observed in the first three years of practice. As a result, it was necessary to simplify the policy by giving the employer a more pro-active role.

#### Results (effects /change)

The changes of the policy increased the number of applications for projects of work integration as reported in INAIL's statistics (232 projects as of September 2022).

#### Lessons

Learning from the experience helped to improve the regulation on reasonable accommodation. However, it is equally important to invest in educational programs in the field of work integration to promote the culture of equal treatment. These aspects are particularly relevant in the new perspectives of reasonable accommodation as foreseen in the Framework Law on Disability N. 227/2021 included in the PNRR (National Recovery and Resilience Plan -<https://www.mef.gov.it/>)



### Return to work after total hip arthroplasty

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#### Background

Worldwide, enhance numbers of patients receive total hip arthroplasty (THA), primarily due to arthrosis. In addition, the number of patients of working age is rising, partially due to decreasing age at surgery. As a result, a wider and diverse range of outcome goals including daily participation and return to work (RTW) are gaining interest. As for the Netherlands, implementing the gatekeeper improvement act requires a minimum of two years sick-leave payment by the employer, which makes early RTW of primary importance for society. Thus far, studies on RTW have only focused on the first year after surgery.

#### Objectives

In this study, the aim is to gain insight into factors influencing RTW 2-years after receiving a THA.

#### Methods

In this single-center retrospective cohort study, performed at Zuyderland Medical center, (Sittard-Geleen, the Netherlands) all primary THA patients aged under 65 (n=398), operated between January 2016 and February 2018, received a questionnaire including qualitative and quantitative questions addressing RTW and factors influencing this process. Descriptive statistics were used to analyze.

#### Results

In total, 182 patients responded (response rate 46%), of which 145 patients (mean age 58.6 ± 5.6 years; female: n=74, 51%) completed the questionnaire. Within 12-weeks after surgery, 52% (n=75) returned to work, and 14% (n=20) within 104 weeks. In 19 patients (13%), working- hours or activities were adjusted.

For patients (n=82) who contacted their occupational physician (OP), 85% (n=70) returned to work within an average of 8-weeks. The average patient expectation for RTW was 13-weeks. Patients without contacting their OP (n=63), 43% RTW (n=27) within an average of 7-weeks, which matched their expectations of an average 8-weeks for RTW. In both groups, the remaining patients were either pre-retired, suffering from comorbidity or were unemployed prior to surgery.

Contributing factors to early RTW were personal and social support, including contact with colleagues and working atmosphere. Physically demanding work conditions resulted in delayed/inhibited RTW according to patients.

#### Conclusion

Overall, the majority of patients RTW within 12-weeks after surgery, and all remained at work 2-years after surgery. Contact with an OP could enhance RTW, possibly by adjusting patient expectations management after THA. Further research needs to focus on nationwide RTW and contributing factors for early RTW.

### Large variability in recommendations for return to daily life activities including work and sport after knee arthroplasty in the Netherlands

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#### Background

The prevalence of patients with severe knee osteoarthritis is rising rapidly. For people with end-stage knee osteoarthritis, knee arthroplasty (KA) has shown to improve knee functioning and quality of life. Setting realistic expectations is not only of importance to secure patient satisfaction after KA, but also to facilitate uniform prognosis predictions by physicians and other health experts. Therefore, uniform recommendations concerning the return to daily life activities including work and sport are essential. Fulfilment of these patient expectations probably contributes to more satisfaction and enhanced recovery during KA rehabilitation and better guidance and care by physicians and other health experts. However, scientific evidence for such recommendations is limited, and recommendations are often only based on expert opinions of healthcare professionals.

#### Objectives

We aimed to summarize the current recommendations regarding return to daily life activities, including work and sport, provided by Dutch hospitals and clinics to patients after KA.

#### Methods

Recommendations of 43 Dutch hospitals and clinics that perform KA's were identified, representing the advice that is provided to 70% of the total Dutch KA patients annually. Recommendations were retrieved using their websites (n = 8), brochures (n = 40) and content from mobile phone applications (n = 9). Two researchers independently summarized the recommendations regarding return to daily life activities, including work and sports.

#### Results

In total, recommendations for 24 activities were identified and summarized. On average, hospitals and clinics provided recommendations for 9 (range 0–15) activities. Recommendations regarding return to daily life activities including work and sport varied greatly between Dutch hospitals and clinics. For example, recommendations for return to work were mentioned by 18 out of the 43 hospitals and clinics and varied from 2 weeks to 4 months. In total, 38 hospitals and clinics mentioned a recommendation for resuming cycling, varying from 3 weeks to 3 months. Regarding return to light sports activities, 24 hospitals and clinics provided a recommendation, varying from 6 to 8 weeks after surgery.

#### Conclusion

Recommendations of Dutch hospitals and clinics for return to daily life activities including work and sport after KA are often missing and vary considerably. Since the number of KA patients is growing, in particular among those in the working age, these findings stress the need for more uniform evidence-based recommendations to improve prognosis predictions, shared decision making and perioperative care.

### Sickness absence and disability pension before and after healthcare for post-traumatic stress disorder and workplace injuries: a prospective cohort study

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#### Background

Despite the relatively high rates of post-traumatic stress disorders (PTSD) and workplace injuries in the trade and retail industry, knowledge about sickness absence (SA) and disability pension (DP) among those affected is lacking.

#### Objectives

To gain knowledge on diagnosis-specific SA/DP before and after receiving healthcare due to PTSD or workplace injuries among white-collar workers in the trade and retail industry.

#### Methods

A 5-year prospective cohort study of all 192 077 white-collar workers in the trade and retail industry in 2012 in Sweden, using microdata linked from several nationwide registers. We identified those in the cohort who in 2012-2016 had any specialised in- or outpatient healthcare due to PTSD or workplace injuries, respectively, using ICD-10 diagnoses, and calculated the proportions (%) with any SA/DP and the mean number of diagnosis-specific SA/DP net days during the 365 days preceding the first such healthcare visit, as well as during the following 365 days.

#### Results

Of the 216 people who had healthcare due to PTSD, 80% of women and 65% of men had at least one incident spell of SA/DP in the year after the healthcare visit date. Stress-related and other mental diagnoses were the most common SA/DP diagnoses, both before and after the healthcare visit. Women had on average 120 SA/DP days before the visit and 160 days after, while men had 115 days before and 175 days after. Of the 1114 people who had healthcare due to workplace injuries, 64% of women and 54% of men had at least one incident spell of SA/DP in the year after the healthcare visit date. Before this date, mental diagnoses were the most frequent SA/DP diagnoses, whereas, fractures and other injuries were most common after that date. Women had on average 15 SA/DP days in the year before the visit and 30 days after, whereas men had on average 9 days before and 21 days after

#### Conclusion

Very few had specialised healthcare due to PTSD or workplace injuries, but among those who did, the majority had a new spell of SA/DP in the following year. Those with PTSD had a very high number of mean days SA/DP both before and after the healthcare visit, whereas the mean number of days was lower for those with workplace injuries, however, their percentual increase was larger.

### Occupational branch and labor market marginalization among young employees with attention deficit hyperactivity disorder - a population-based study

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#### Background

Background: Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder commonly diagnosed during childhood, but since the 2000s it is more widely recognized in adults. Symptoms of ADHD can negatively influence educational achievement and workability in young adults leading to more sickness absences and a higher risk of disability pension and unemployment. Occupational factors might differ among individuals with ADHD and can affect their labor market trajectories. As occupational factors often differ by occupational branches, there might be differences in the labor market trajectories of workers with ADHD.

#### Objectives

Objective: We investigated the pattern of labor market marginalization (LMM), conceptualized as days of unemployment, sickness absence, and disability pension across selected occupational branches (manufacturing, construction, trade, finance, health, social care, and education) among young employees with or without ADHD and examined whether sociodemographic and health-related factors explain these associations.

#### Methods

Methods: All Swedish residents aged 19-29 years and employed between 01-01-2005 and 31-12-2011 were eligible for inclusion. Individuals with a first ADHD diagnosis (n=6,030) were matched with ten controls and followed for five years. Zero-inflated negative binomial regression was used to model the odds ratio of no LMM days and incidence of LMM days of individuals with and without ADHD with adjustment for sociodemographic and health-related factors, stratified by occupational branches.

#### Results

Results: 20% of those with ADHD and 59% of those without had no days of LMM during the follow-up. Among those who had >0 LMM days the median of LMM days with and without ADHD was 312 and 98 days. A diagnosis of ADHD was associated with higher odds and incidence of LMM days (range of ORs: 5.3-6.7, range of IRRs: 2.7-3.1) with slight differences across occupational branches. Adjustments for sociodemographic and health-related factors explained most of the differences (range of ORs: 2.7-2.9 and range of IRRs: 1.4-1.7), and relative differences by occupational branches diminished.

#### Conclusion

Conclusion: Young, employed adults with ADHD had higher odds of having LMM days and a higher incidence of LMM days than those without ADHD, but there were no substantial relative differences between the occupational branches, even after adjusting for sociodemographic and health-related factors.

### Evaluation of RE-MODE: a tool for the identification of the return-to-work mode in sick-listed precarious workers with mental health issues

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#### Background

Mental health issues are highly prevalent among sick-listed precarious workers and often lead to long-term work disability. Return to work (RTW) is challenging for these workers, because they often do not have a job to return to and their access to occupational health care is limited. Perceptions and attitudes about RTW are important determinants of RTW in precarious workers with mental health issues. These RTW-perceptions and attitudes can be classified into three modes in a process regarding RTW: a passive, an ambivalent and an active RTW-mode. We developed a tool (RE-MODE) for the professional assessment of the RTW-mode in sick-listed precarious workers with mental health issues.

#### Objectives

This study aims to evaluate the level of agreement between social insurance professionals regarding the RTW-mode and need for RTW-support in sick-listed precarious workers with mental health issues by using the RE-MODE tool. Secondly, we evaluate the usability, usefulness, inter-item consistency and content validity of RE-MODE.

#### Methods

In phase I we qualitatively assessed the usability and usefulness of RE-MODE. Ten social insurance professionals used RE-MODE after three consultations with a precarious worker with mental health issues. Afterwards we conducted semi-structured interviews and a thematic analysis. Phase II includes a vignette study with six videos of consultations between insurance physicians and precarious workers with mental health issues. At least 50 social insurance professionals will watch the video's, use RE-MODE and fill in a questionnaire. We will calculate the inter-observer agreement, the inter-item consistency, the contribution of each item, the content validity index, and the SUS-scale and usefulness scores.

#### Results

Phase I shows that RE-MODE is easy to use and could be valuable for the screening of precarious workers in need for targeted RTW-support. Additionally, the participants mentioned RE-MODE could be used for inter-professional communication regarding readiness for RTW-support. However, some comments showed the need for further improvement of RE-MODE, generally regarding the scoring system and the content of some items. The results of phase II are expected in Q2 of 2023.

#### Conclusion

The RE-MODE tool assists social insurance professionals in the assessment of the RTW-mode and arrangement of RTW-support. Based on the qualitative analysis RE-MODE needs some improvements. The results of the quantitative analyses are expected in Q2 of 2023.

### Impact of job characteristics on return-to-work interval following arthroscopic partial meniscectomy

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#### Background

Meniscus lesions are a highly frequent problem in orthopaedic patients with knee pain. They can be degenerative or traumatic. Different treatment options evolved over time with arthroscopic partial meniscectomy (APM) as gold standard for many years. Literature reports often studied return to sport after APM as meniscal tears mostly occur in young, active patients but it is also vitally important to understand time to recover and resume work in this patient population. This knowledge may be relevant in determining duration of sick leave and in setting realistic expectations for patients. Previous studies on predictors of return to work (RTW) after knee arthroscopy are scarce. Only few studies so far investigated the relationship between telework and RTW in general. To the best of our knowledge, no Belgian study has yet investigated whether job characteristics are related to time to return to work after APM.

#### Objectives

The main aim of this paper was to analyze whether job related features are associated with time interval for return to work after arthroscopic partial meniscectomy. We hypothesized that (temporary) telework would be associated with early return to previous work, independent of socio-demographic and medical variables. A second objective was to compare sick leave data with international (French) guidelines.

#### Methods

A retrospective study was carried out in a sample of 63 patients in working age who underwent an APM between July 2018 and July 2020. The following preoperative characteristics were assessed: age at surgery, meniscal side, sex, physical job demands (white versus blue collar worker), telework and work status (salaried versus self-employed). A linear regression analysis was used to study the association between job characteristics and RTW interval adjusted for socio-demographic and medical (meniscal side) factors.

#### Results

Telework was most strongly associated with interval for RTW ( $p < 0,001$ , adjusted R Square: 20,8). The results suggested that telework supports early RTW independently of sociodemographic and medical factors.

#### Conclusion

This study supported the need for a tailormade approach in the prescription of sick leave.

### Prior diagnosis-specific sickness absence and disability pension and future paid work; a Swedish 6-year cohort study of all aged 65

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#### Background

As more and more people extend their working lives, more knowledge is needed on factors that inhibit the extension of working life.

#### Objectives

The aim was to explore how sickness absence (SA) and/or disability pension (DP) due to mental and/or somatic diagnoses when aged 60-64 were associated with being in paid work when aged 66-71.

#### Methods

A 6-year prospective population-based cohort study of all 98,551 people (48% women) in Sweden who turned 65 years in 2010 (baseline) and had been in paid work at some point when aged 60-64. Linked microdata from Swedish nationwide registers were used for information on SA (in spells >14 days) and/or DP in 2005-2009 (exposures), and income from work in 2011-2016 (outcome). Logistic regression was used to calculate odds ratios (OR) with 95% confidence intervals (CI) for associations between exposures and outcome. Analyses were sex-stratified and controlled for sociodemographic factors.

#### Results

After age 65, 42.7% of women and 53.3% of men had income from work. Most women (56.0%) and men (66.3%) had no SA or DP when aged 60-64. Approximately 52% of those with no SA or DP, 43% of those with prior SA, and 24% of those with prior full- or part-time DP had income from work after age 65. Those with SA due to mental diagnoses had lower OR of being in paid work after 65 (women 0.76; 95% CI: 0.69-0.84; men 0.74; 0.65-0.84) than those with no SA. The corresponding associations were weaker for SA due to somatic diagnoses (women 0.87; 0.84-0.91; men 0.92; 0.89-0.96). Having had SA due to both mental and somatic diagnoses was associated with lower OR for men (0.77; 0.65-0.91) but not women (0.98; 0.88-1.09). Full- or part-time DP meant low ORs of being in paid work after age 65 regardless of diagnosis group and sex (women mental DP 0.39; 0.34-0.45; women somatic DP 0.38; 0.35-0.41; men mental DP 0.36; 0.29-0.43; men somatic DP 0.35; 0.32-0.38).

#### Conclusion

Prior DP was associated with not being in paid work after age 65 regardless of diagnosis group. SA, in turn, showed a stronger association with not being in paid work for mental diagnoses compared to somatic diagnoses. More knowledge is needed on factors that hinder older workers with different mental and somatic disorders to extend their working lives.

### Sickness absence and disability pension after a road traffic accident, a nationwide study comparing road traffic groups with matched references

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#### Background

Knowledge regarding long-term consequences in terms of sickness absence (SA) and disability pension (DP) following a road traffic accident is lacking, especially when comparing to the general population.

#### Objectives

The aim was to study SA and DP after a road traffic accident, for different road traffic groups compared with matched references.

#### Methods

A nationwide register-based study including all working individuals aged 20-59 years and living in Sweden who in 2015 had in- or specialized outpatient healthcare after a new traffic-related injury (n=20 177) and population-based matched references (matched on: sex, age, level of education, country of birth, living in cities) without any traffic-related injury during 2014-2015 (n=100 885). Diagnosis-specific (injury and other diagnoses) SA and DP net days were assessed during 1 year before and 4 years following the accident date. Mean SA and DP net days/year for each road traffic group and mean differences of (excess) SA and DP net days/year compared with their matched references were calculated.

#### Results

A third off the traffic-related accident were bicyclists, 31% car occupants, 16% pedestrian (including fall accidents), and 19% were other and unspecified accidents. Pedestrians and other road users were the groups with the highest mean number of SA days during the first years following the accident (51 and 49 days/year respectively). The matched references had approximately ten SA days/year throughout the study period. The excess SA days/year was elevated for all road user groups the whole study period. Four years after the accident the pedestrians and car occupants had ten excess days/year and bicyclists had three days/year. The excess DP was low, although it increased every year for pedestrians and for car occupants; for bicyclists no excess DP was seen. Excess SA due to injury diagnoses was 20-40 days/year during the first year following the accident. Excess SA due to diagnoses other than injuries were about eight days/year during the whole study period for pedestrians and car occupants and about zero for the bicyclists.

#### Conclusion

Higher levels of SA due to injury diagnoses was seen among all road traffic groups the first year after the accident compared to their references. Pedestrians and car occupants had more excess SA due to other diagnoses and excess DP four years after the accident than bicyclists and other road users.

### Parental factors, offspring lifestyle factors and risk of long-term sick leave among offspring due to musculoskeletal disorder: The HUNT Study

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#### Background

Too many young people leave the workforce early due to musculoskeletal disorders. It is therefore important to identify vulnerable groups and modifiable risk factors that can be targets for preventive efforts. It is not clear if chronic pain, disability benefits and education in parents influence the risk of sick leave in their adult offspring. Moreover, examining the joint effect of parental factors and modifiable lifestyle factors among offspring on the risk of long-term sick leave could help identify sub-groups in the population that may benefit from lifestyle interventions.

#### Objectives

To examine the effect of parental chronic pain, disability benefits and education on the risk of long-term sick leave in offspring due to musculoskeletal disorders, and explore if sleep problems and physical activity among offspring modify these associations.

#### Methods

Prospective cohort study using data from the Norwegian HUNT Study linked to national registry data on medical benefits and educational attainment. Overall, 18,440 adolescents and young adults  $\leq 30$  years participating in either Young-HUNT1 (1995-97), HUNT2 (1995-97), Young-HUNT3 (2006-08) or HUNT3 (2006-08) survey were included and linked to data on either one or both parents. We used Cox regression to estimate hazard ratios (HRs) with 95% confidence interval (95% CI) for long-term ( $\geq 31$  days) sick leave due to musculoskeletal disorders according to parental chronic pain, parental disability benefits, and parental education. The joint effect of parental factors and offspring lifestyle factors was estimated as the relative excess risk due to interaction from Cox regression.

#### Results

Chronic pain (HR 1.36, 95% CI 1.27-1.46), disability benefits (HR 1.38, 95% CI 1.31-1.45) and low educational attainment (HR 1.72, 95% CI 1.62-1.84) in parents increased the risk of long-term sick leave due to musculoskeletal disorder in the offspring. In the joint effect analysis, neither sleep problems nor physical activity among offspring modified the association between parental factors and risk of offspring long-term sick leave due to musculoskeletal disorders.

#### Conclusion

Chronic pain, disability benefit and low education in parents were associated with an increased risk of long-term sick leave due to a musculoskeletal disorder in their offspring, but these associations were not modified by offspring sleep problems or physical activity. These results suggest that interventions on a system level are important to prevent long-term sick leave in young adults.

### Electronic Exchange of Social Security Information (EESSI) - Exchange of medical information

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#### Background

The right to free movement is a fundamental pillar of the European Union (EU). Thus, EU citizens have the right to travel, move, take up work or look for a job within the EU.

The EU provides common rules to protect social security rights of citizens when moving within Europe.

To apply these rules, national institutions have to exchange informations which was being mostly done on paper.

As part of the modernization of social security coordination, the basic regulation (EC) No 883/2004 (Title V – Article 78) and its implementing regulation (EC) No 987/2009. (Title V – Article 95) have introduced the obligation of electronic exchange between social security institutions. Thus, any article requiring exchanges between the social security institutions has been modeled and formalized by standardized electronic procedures.

Since July 3rd 2017, 32 countries (EU Member States, United Kingdom, Iceland, Liechtenstein, Norway and Switzerland) are moving towards electronic exchange of information concerning social security benefits for people moving from one country to another. To this end, the social security institutions are deploying the Electronic Exchange of Social Security Information (EESSI).

EESSI is an IT system which connect Member States' institutions in charge of social security for electronic data exchanges. It was developed and it is being maintained by the European Commission pursuant to Regulation (EC) No 883/2004 and its Implementing Regulation (EC) No 987/2009, as last amended by Commission Regulation (EU) No 1372/2013 of 19 December 2013.

EESSI covers all the areas governed by the Regulations on social security coordination, namely:

- sickness, maternity and equivalent paternity benefits;
- old-age pensions, pre-retirement and invalidity benefits;
- survivors' benefits and death grants;
- unemployment benefits;
- family benefits;
- benefits in respect of accidents at work and occupational diseases

The purpose of EESSI is to streamline the flow of information between the authorities responsible for social security and to speed up the implementation of citizens' social security rights. The aim is that the 200 paper forms which were used for communication between administrations should be replaced by the exchange of electronic forms called SED (Structured Electronic Document). There are 305 SEDs which fit into 99 different scenarios called BUCs (Business Use Case) and 2 medical reports as supporting documents which can be attached when required to a given SED.

The IT-based exchanges in EESSI is supposed to notably :

- facilitate and speed up the decision making for the calculation and payment of social security benefits;
- allow a more efficient verification of data;
- provide a more flexible and user-friendly interface between different systems; and
- provide a collection of statistical data on European exchanges.

## Abstracts of speakers in parallel sessions

An ad hoc group Medical Report was mandated by the Administrative Commission for the Coordination of Social Security Systems in order to create new medical reports based on the new regulations. 2 new reports were delivered to Member States :

1. Basic Medical Report to be used in EESSI instead of the former E106
2. Detailed Medical Report instead of the former E213

Many EESSI BUCs require the exchange of medical information such :

- Scheduled treatment - Authorisation to receive treatment in a member state other than the Competent Member State and the Member State of Residence
- Accident at work and occupational disease (AWOD) - Notification of medical certificate for AWOD benefits or
- Request for Authorisation of Transport to the Place of Residence or to a Hospital
- Pension claims (invalidity, old age)
- Family benefits

However, since EESSI went in production, the institutions are facing difficulties with the exchange of medical data via EESSI and especially the completion of medical reports.

### Objectives

1. Provide the participant an overview of EESSI System and inform about the changes brought regarding the electronic exchange of medical information
2. Discuss challenges of exchanging medical data through EESSI
3. Allow a dynamic exchange about problems faced and the specificities of each country's information needs to assess work capacity or other

Outline of the workshop

Knowing that Member States' legislations differ and consequently their respective information needs, we will try to understand why the standardized medical reports aren't correctly filled in and why EESSI didn't improve yet the former paper exchange. Ultimately, the workshops aims to improve providing the required data for each member state in order to process benefits claims effectively and efficiently.

### Structure

5 min: Introduction, Agenda of the Workshop (Edith Hesse).

15 Min: Presentation of the exchange of medical data in EESSI (Khadija Damiens)

30 Min: Providing and managing medical data in EESSI with associated issues, examples from some countries (FR, BE, ...) (Annette de Wind)

40 min: Plenary discussion, conclusions and next steps. (Annette de Wind)

### Abstract

After the introduction, an overview of EESSI will be presented with focus on the electronic exchange of medical information.

In the second phase of the workshop some countries will present how they manage this new mode of exchange on a daily basis, the main difficulties they encounter and the irritants in the current situation.

The discussions will highlight whether standardized medical reports actually meet the needs of the medical departments of social security institutions as well as the reasons why their realization is imperfect. At the end of the workshop, solutions for improvement will be outlined.

### Impact of long-lasting effects of Covid-19 on social security. Expert opinion.

PERSSON H. (2), DONKER-COOLS B. (3), OANCEA C. (1), VERBAKEL J. (4)

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#### Background

Long-lasting effects of Covid-19 represent a current global public health concern with multiple consequences from the number of people affected and severity to the impact on healthcare, social security and the labor market. We aim to discuss these concerns from a European perspective.

#### Organizing group(s)

EUMASS Scientific Committee

#### Objectives

- To gain knowledge on the impact of long-lasting effects of Covid-19 on social insurance physician's work
- To gain theoretical knowledge and practical experience in the assessment of patients with long-lasting effects of Covid-19

#### Structure

5 min: Introduction, Agenda of the Workshop (Moderator: Birgit Donker-Cools)

15 min: Sick-leave in Sweden during the pandemic (Hanna C Persson, Emma Westerlind, Tamar Abzhandadze, Annie Palstam, Katharina Sibrant Sunnerhagen)

15 min: Disability assessments for employees with long COVID (Birgit Donker-Cools)

15 Min: Impact of long-lasting effects of Covid-19 on social security. Expert opinion (Corina Oancea, Karen Hara, Pia Svedberg, Francois Latil, Ari Kaukiainen, Sylvia van der Burg-Vermeulen)

15 min: A guideline on the follow-up and rehabilitation of patients with persistent complaints after Covid-19 (Jan Verbakel)

20 Min: Plenary discussion (Birgit Donker-Cools)

5 Min: Conclusions and next steps (Birgit Donker-Cools)

#### Abstract

The symposium reports data regarding the management of long-lasting effects of Covid-19 across Europe based on studies on the impact of long-lasting effects of Covid-19 from different perspectives: the current state of European social security and particular features in several European countries, e.g. sick leave in Sweden or work disability assessments in the Netherlands.

Abstract 1: National data on sick-leave in Sweden during the first wave of the pandemic will be presented. Of nearly 12000 people, over 13% were on sick leave for post Covid, however, less than 3% were on sick leave after one year. Factors that predicted longer sick-leave will be presented, as well as remaining symptoms reported in a survey 18 months post sick-leave. The study is a part of the Life in the time of Covid study in Gothenburg, GOT-LOCO.

## Abstracts of speakers in parallel sessions

Abstract 2: A substantial number of employees experience persistent symptoms after a SARS-CoV-2 infection, referred to as long COVID. These symptoms, for example shortness of breath, muscle pain, fatigue or cognitive problems, restrict daily activities and negatively affect work participation. After two years of sick leave insurance physicians (IP) s in the Netherlands assess the functional abilities of employees with long COVID. These assessments are challenging, mainly due to a lack of evidence regarding this new condition. The aims of this study are to analyse IPs' assessments of an employee with long COVID in more detail and to explore IPs' experiences regarding these assessments. The results of a survey study will be presented, based on a written multifaceted realistic case description of an employee with long COVID.

Abstract 3: A questionnaire was sent to several EUMASS countries representatives. Some socio-demographic data about the respondents were also collected. Information was gathered on: the existing guidelines for referring patients with long-lasting effects of Covid-19 to rehabilitation, the involvement of the medical advisors in this activity and how their activity is influenced and the eligible socio-medical benefits for claimants.

A presentation from Belgium on the follow-up and rehabilitation of patients with persistent complaints after Covid-19 will broaden the perspective on this topic.

Abstract 4: Lingering symptoms after acute COVID-19 present a major challenge to ambulatory care services. Trying to find a solution to this conundrum, researchers from KU Leuven, Belgium, have been working to develop evidence-based guidelines to help health professionals treat patients, while trialling a Care Pathway designed around the patient and the individual symptoms they are presenting with. Physical training, olfactory training and multidisciplinary treatment can be effective rehabilitation therapies for patients with persisting symptoms after COVID-19. Other tried and tested recommendations also included in the guidelines are those that can help patients help themselves in their own recovery, including self-management of symptoms using breathing and energy conservation techniques. These findings can guide ambulatory care practitioners to treat these patients and should be incorporated in clinical practice guidelines worldwide.

### Factors influencing a roadmap for sustainable implementation of vocational rehabilitation of people with mental disorders: a qualitative study

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#### Background

People with mental health problems have lower work participation compared to people without mental disorders. To increase work participation among this group vocational rehabilitation interventions are often offered. Collaboration between the mental health care and social (security) sector is needed to let professionals perform optimal in favour of these interventions. Yet, regulatory and financial barriers are often hindering the sustainable application of these interventions. To overcome these barriers, an experiment was initiated: a roadmap for sustainable funding based on a shared savings strategy, was implemented in four regions.

#### Objectives

The aim of this qualitative study was to gain understanding of the use of the roadmap and which factors were important in this process.

#### Methods

The roadmap consisted of five steps based upon insights from shared savings strategies and implementation science knowledge, and was initiated by a national steering board. The roadmap aims to make sustainable funding agreements (based on shared savings) on the implementation of a vocational rehabilitation intervention. In four regions, stakeholders from the mental health care and social (security) services sector followed the roadmap, guided by a project leader. We conducted interviews (n=16) with participants and project leaders of the experiment and collected and analysed field notes and documents to evaluate this roadmap process. A thematic analysis was used to analyse the data.

#### Results

Regions perceived an improved stakeholder collaboration on vocational rehabilitation after they were guided by the roadmap. Three regions made (or intended to make) agreements on collaboration and funding, yet not based on shared savings. Moreover, going through the roadmap took more time than anticipated. Stakeholder collaboration depended on factors like (personal and organizational) interests and collaboration conditions and values. Moreover, (financial) legislation and politics were regarded as barriers, personal motives were mentioned as a facilitator in this process.

#### Conclusion

This study showed that the roadmap for sustainable funding supported stakeholders from mental health care and social security sector to collaborate on vocational rehabilitation. Participants acknowledged the function of financial insights and the need for financial resources for the application of vocational rehabilitation interventions but financial incentives were not shown on an individual level.

### The concept of positive health: applicable for insurance medicine evaluation?

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#### Background

The concept of Positive Health (PH), with its dialogue tool and special training, provides a broader, more realistic view of health compared to the World Health Organisation's definition of health. PH aligns with the patient-centred approach and shared-decision making in Dutch healthcare. A training module was developed for healthcare workers. However, in the Dutch social security system, Social Insurance Physicians (SIPs) have a role as gatekeepers to disability pension and need to assess the disability claims of their clients. Thus far, it has not been studied to what extent the concept of PH is applicable for SIPs.

#### Objectives

This study aimed to explore the applicability of the PH concept for SIPs' daily practice and its relevance to their work field.

#### Methods

In this qualitative study, 12 SIPs working at the Dutch Social Insurance Agency were asked to participate in this study after completing a PH training (not designed explicitly for SIP, containing an eLearning and two workshops). After written informed consent, a semi-structured interview with topics addressing the value of PH for their profession was conducted. Interviews were transcribed ad verbatim and analysed thematically.

#### Results

In total, nine SIPs participated in this study, with a heterogeneous presentation of age (mean 43.3 years), gender (female 55%), and working experience (mean 6-10 years). Their main task was disability claim assessment.

All participants covered the topics of physical, psychological, social functioning, and participation as part of their assessment; quality of life and meaningfulness were less well covered.

The main concern of implementing the concept of PH in daily SIP practice was the mismatch between the patient perspective/patient-centred approach and the assessors' role of the SIP. The SIPs stated that PH would be more suitable for professionals with an opportunity to mentor their clients long-term, and with a focus on return-to-work guidance.

#### Conclusion

The PH dimensions were generally applied within the SIP daily practice. However, the PH concept was not regarded useful as a part of a disability claim assessment because of the conflict between the assessor's role of the SIP and the patient's perspective view/shared-decision making approach of the PH concept. The development of specific training materials regarding the PH concept for the SIPs work field might be useful, for example, addressing return-to-work guidance.

### Exploring the perspectives of insurance physicians on clients values in social insurance medicine

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#### Background

Value-based healthcare delivery focuses on improving the healthcare outcomes which are most important to the clients relative to the total care costs. The delivery of value-based healthcare may improve clients' outcomes and reduce inefficiencies in the healthcare system. However, the understanding of what adds value for clients during work disability assessment is lacking.

#### Objectives

The objectives was to explore the 1) facilitators to add value for clients , 2) barriers to add value for clients' and 3) opportunities to add value during the work disability assessment for clients on long-term sick leave as perceived from the perspective of IP's.

#### Methods

For this exploratory qualitative study, n=7 semi-structured interviews were conducted with IP's in the Netherlands. Thematic coding was performed for all interviews.

#### Results

A large variety of facilitators (n=22), barriers (n=17) and opportunities (n=11) were identified and inductively subdivided into four main themes: 1) coherent process, including all time related aspects, 2) interdisciplinary collaboration, including all aspects related to the collaboration between the IP and other professionals, 3) client-centred interaction, including all aspects related to the supportive interplay between the client and IP, and 4) information provision on all aspects during the work disability assessment process towards the client.

#### Conclusion

The overview of identified facilitators, barriers and opportunities to add value for clients from the perspective of the IP may stimulate to remove inefficiencies in current work disability assessment practice and to better match the client needs.

### Post-stroke ambulatory rehabilitation: a long way to quality

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#### Issue/problem

Stroke is the leading cause of acquired disability in adults and the third cause of death in France. Post-stroke management requires long-term follow-up and high-quality primary care to prevent recurrences and complications and preserve the patient's quality of life. A recent analysis by the French Institute for Research and Information in Health Economics highlighted low use of outpatient care after a primary stroke. The objective of our experiment was to improve an outpatient rehabilitation care pathway, as part of quality of care improvement programs.

#### Description of the problem

The Occitania region is an appropriate field to carry out this experiment because of its miscellaneous setting in densities of population, of health care professionals (HCP), elderly people and deprived areas.

Out of 11,106 patients hospitalized for a first stroke, only 57% have a home care pathway after discharge:

- 32% go back to hospital within 6 months.
- Only 55% of the patients meet a General Practitioner (GP) within 10 days after discharge, 10% of patients do not meet a GP within the 3 months following discharge.
- 26.5% are referred to a neurologist, geriatrician or rehabilitation doctor within 3 months (excluding multi-professional consultation) and 52% have contact with a cardiologist within 3 months.
- Moreover, 30% of patients receive nursing care within 7 days, and 44% a physiotherapy follow-up within 3 months.
- Finally, we observe that only 29% of patients have a coordinated follow-up including GP, nurse and physiotherapist within 3 months after discharge.
- The post-hospitalization support service PRADO-stroke implemented by the health fund service is underused: only 8% of potentially eligible patients are referred.

#### Results (effects /change)

In order to improve patient care, we rely on those tools:

- 1) Feedback to each hospital and health professionals on their own results and regular monitoring of territorial results from databases.  
Promotion of the use of Prado as a home network, as a link between outpatients and community HCP
- 2) Support for the ongoing structuring of primary care (territorial health professional community), to encourage them get involved in stroke follow-up

#### Lessons

A large population of post-stroke patients is exposed to a gap in ambulatory care, and the existing tools are underused. To improve the quality of life of patients, a tighter and coordinated follow-up of the post-stroke care pathway is at stake.

### Work adjustments among employed people with multiple sclerosis: a survey study

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#### Background

People with multiple sclerosis (PwMS) experience physical or cognitive limitations as the disease progresses. How PwMS accommodate their limitations at their workplace might be strongly associated with the level of physical demand (low vs high) or responsibility that their occupation requires (office, manual or manager, respectively).

#### Objectives

To explore if employed PwMS have work adjustments across different types of occupations in association with other sociodemographic and clinical factors.

#### Methods

A web-based survey was completed in 2021 by working-aged (19-51 years) residents in Sweden diagnosed with multiple sclerosis (MS). Participants responded to open and closed questions on work-related topics and other dimensions of life. Descriptive analyses were conducted to compare sociodemographic and clinical variables across occupations. Prediction of having any adjustment at work was determined by means of multinomial logistic regression.

#### Results

The majority of the 3313 employed PwMS were women (72%) and had normal functionality (24.2%) or mild disease severity (44.7%). Despite having a relatively “healthy” sample, differences across occupations ( $p < 0.05$ ) in having work adjustments were observed. Compared to the other occupations, office workers reported more invisible symptoms (e.g., fatigue), more adjustments at work and considered adapted schedules as the most important type of work adjustment. Contrary, managers reported having no limiting symptoms to a higher extent and consequently, disclosed to their employer to a lesser extent, reported having fewer work adjustments and reported having opportunities to modify their work more often than office and manual workers. When taking sociodemographic, clinical and survey response variables into account, manual workers had a higher likelihood to respond needing more support at work compared to office workers. Further, a higher likelihood to have work adjustments was associated with a progressive type of MS, higher MS severity and invisible symptoms. Contrary, PwMS were less likely to have any work adjustments when at younger ages, having normal functionality, reporting no symptoms, and not having disclosed their diagnosis.

#### Conclusion

The physical demands and responsibility of the occupation performed by PwMS play an important role in work adjustments. Support at work was highly associated with the clinical profile of MS severity, its progression and invisible limiting symptoms. Nonetheless, office workers still requested work adjustments more frequently than managers, and manual workers acknowledged the need for more work adjustments to a greater extent than office workers.

### Concurrent changes of residential regions and sustainable working life in Sweden

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#### Background

The EU Sustainable Development Strategy calls for longer working lives i.e., sustainable working life. Although geographical differences of sickness absence (SA) and disability pension (DP) are known, such knowledge is lacking for sustainable working life (i.e., not having work life interruptions due to SA/DP or unemployment).

#### Objectives

To investigate concurrent changes of residential regions and sustainable working life during 22-years follow-up among twins from the Swedish Twin Registry born 1925-1990.

#### Methods

National register data on SA/DP from the Swedish Social Insurance Agency, and unemployment and employment data from Statistics Sweden for years 1994-2016 were included. The final sample includes 80 398 twin individuals with mean age 42 years (50% women). Residential regions were classified into three groups according to Swedish municipalities for the degree of urbanization (cities; towns and suburbs; rural areas). Degree of sustainable working life was estimated through main labor market status in each year of follow-up using information on employment (i.e., in paid work), whereas SA/DP were defined as > 180 days with SA/DP benefits; unemployment > 180 days with unemployment benefits; and old-age pension (> half of yearly income from old-age pension). Emigration and death were assessed for censoring during follow-up. Group-based multi-trajectory analysis were used to identify trajectories of regions and sustainable working life.

#### Results

A six-group solution for trajectories was the best based on the goodness of fit statistics. The largest trajectory group (34.9%) had stable sustainable working life and lived in towns and suburbs the entire period. Second largest group (23.3%) were those with stable sustainable working life while living in cities; the other groups were those with increasing likelihood of having a sustainable working life and who were living in cities (12.7%) and those who had no sustainable working life and who lived in rural areas (12.1%). About 11% of the individuals had decreasing likelihood of having a sustainable working life while living in towns and suburbs, and 6% had slightly decreasing sustainable working life while living in cities.

#### Conclusion

Sustainable working life was prevalent both among those living in cities or among those living in towns and suburbs. A minority were those who lacked or had decreasing sustainable working life albeit their residential regions were different. Hence, residential regions seem to play a minor role for sustainable working life.

### Risk of labour market marginalisation among refugees by the host country of residence: A cohort study in Sweden and Norway

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#### Background

To date, no international comparison exists regarding the risk of labour market marginalisation (LMM) among refugees from the same country of birth residing in different host countries. Additionally, the influence of duration of residence on these associations is also understudied.

#### Objectives

To investigate the risk of subsequent LMM (long-term unemployment/LTU, long-term sickness absence/LTSA, disability pension/DP) among refugees from specific countries of birth who resettled in Sweden and Norway compared to their Swedish-born and Norwegian-born counterparts, respectively. A further aim was to examine the role of duration of residence in the host country on the risk of LMM among refugees and to what extent such associations differ across host countries.

#### Methods

Nationwide registers in Sweden and Norway were used to follow refugee and host population cohorts during 2010-2016. The risk of LTU (>180 days annually), LTSA (>90 net days) and DP were estimated using Cox regression yielding multivariate-adjusted hazard ratios (aHRs) with 95% confidence intervals (CIs), adjusting for sex, age, educational level and civil status. Additionally, the analyses were stratified for refugees' country of birth and duration of residence.

#### Results

Refugees in Sweden had a comparatively higher risk of LTU and DP [aHR (95%CI): 3.44 (3.38-3.50) and 2.45 (2.35-2.56), respectively] than refugees in Norway [aHR (95%CI): 2.77 (2.71-2.83) and 1.56 (1.50-1.63), respectively]. However, the risk of these outcomes and LTSA varied little when comparing a specific refugee group by their country of birth who resettled in different host countries. Moreover, there was a strong modifying role of duration of residence regarding the risk of LTU; the shorter the duration of residency, the higher the risk of LTU among refugees in both host countries.

#### Conclusion

The novel findings in this study showed that – despite some overall intercountry differences in LTU and DP - refugee groups from the same country of birth resettling in Sweden and Norway generally had very comparable risk estimates of LMM measures. These findings hint towards the importance of inherent factors such as socioeconomic status and health conditions rather than structural factors in the host country for the risk of LMM among refugees. Furthermore, a shorter duration of residence had a strong negative influence on the risk of LMM among refugees in Sweden and Norway, which warrants more efficient labour market integration policies for newly-arrived refugees.

## **Health and morbidity among those in paid work after age 64: a systematic review**

FARRANTS K. (1), ALEXANDERSON K. (1), DERVISH J. (1)

### **Background**

Despite the increase of labour market participation at older ages, very little is known about health and morbidity among those who remain in paid work after age 64.

#### Objectives

The aim was to systematically review the scientific knowledge on health and morbidity among people aged above 64 years who are in paid work.

### **Methods**

A systematic literature review of studies published in English in peer-reviewed scientific journals in 2014-2020. We identified 18,972 unique publications, of which 66 studies were deemed relevant by at least two independent researchers. Data extraction and quality judgements were conducted by at least two independent researchers according to pre-specified templates.

### **Results**

There was a great heterogeneity in the included studies regarding study design, included populations (both size and type), exposures, outcomes, covariates, measures, and analytical methods. Few were assessed as having high quality. Most studies (95%) were from OECD countries and results concerned men to a greater extent than women. Forty-two of the 66 studies had results indicating that being in paid work >64 was associated with good health and less morbidity. Six studies presented at least one result showing the opposite; those in paid work had worse health than those not, while 21 studies presented at least one result showing that there were no health/morbidity differences between those in paid work and those who were not. Only three studies included sickness absence as either an exposure or outcome variable, and two others included information on self-assessed work ability.

### **Conclusion**

Many studies had results indicating that those who were in paid work >64 had better health/less morbidity than those who were not, however, the results varied greatly. There are surprisingly few studies about health/morbidity among people in paid work after age 64, and those published are very heterogeneous: it is thus not possible to draw conclusions regarding scientific evidence based on the currently existing studies. Furthermore, work capacity was a consideration in only a small minority of the existing studies. More and better studies are needed as well as greater clarity regarding study designs, populations, measures, analytical methods, and definitions of central concepts such as work, health, and morbidity.

### Health inequalities – Quantitative study of economic inequalities in health and health care utilisation in Belgium

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#### Background

The study department of CM-MC (Christelijke Mutualiteit – Mutualité Chrétienne, largest health insurance fund in Belgium) has produced numerous indicators over the past, showing the extent of health inequalities in Belgium. The method is original because it is based on routinely collected administrative and health care billing data rather than on self-reported information.

#### Objectives

With this study, we use a more refined methodology to attest once again and measure the extent of health inequalities in Belgium, using the CM-MC databases.

#### Methods

We compared two types of information: various health indicators, constructed on the basis of administrative information and health care consumption data (collected routinely) and a proxy of the level of income determined using median tax incomes, per tax declaration, per geographical area (a geographical division of the territory smaller than the commune) where the CM-MC members reside. A scale of ten classes of income was built to measure the differences in health.

#### Results

The findings are unequivocal: people living in the most disadvantaged geographical areas have a considerably worse health status and a higher risk of excess mortality. Compared to those living in the richest neighbourhoods, those living in the poorest neighbourhoods have a 51% higher risk of suffering from diabetes and an 84% higher risk of dying within a year. In addition to health status indicators, we also measured inequalities in utilisation of preventive health care and of other health care services (primary ambulatory care, hospital care, mental healthcare). In all these areas, we identified the existence of an economic gradient of healthcare utilisation, unfavourable to the populations living in poor neighbourhoods, which is more pronounced when services are more costly for the patients.

#### Conclusion

These gaps in health are potentially avoidable through strong policies to reduce economic inequalities, which should be a challenge for everyone. Given the multiple factors that can influence health, it is essential to act jointly in other policy areas such as income, employment, housing, living conditions, etc., i.e. a «Health in All Policies» strategy. In the field of healthcare, we stress the importance of applying the principle of proportionate universalism to ensure sufficient access according to the healthcare needs by adopting universal measures, which apply to the whole population, with the possibility of adapting their intensity and content according to individual needs.

### A multicenter focus group analysis of experiences and perceptions of the lumbar spine rehabilitation program in Belgium

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#### Background

Low back pain (LBP) is a common condition that causes significant work absenteeism and disability. To prevent chronicity of LBP and stimulate return to work (RTW), early implementation of a lumbar spine rehabilitation (LSR) program and an ergonomic workplace intervention may be beneficial. In Belgium, the Federal agency for occupational risks (FEDRIS) reimburses since 2007 and under certain conditions such LSR program for specific categories of workers incapacitated from work due to LBP.

#### Objectives

This study explores the experiences and perspectives of patients and healthcare professionals (HCPs) with the multidisciplinary LSR program for the secondary prevention of LBP covered by FEDRIS.

#### Methods

A multicenter qualitative study using a demographic questionnaire and semi-structured focus group interviews was conducted. Data was collected during five focus groups including 35 participants (n patients = 15; n HCPs = 20) and analyzed by two independent researchers using coding reliability and reflexive thematic analysis.

#### Results

After using open, axial and selective coding, three major themes emerged: 1) Outcomes and content : the patients/workers received the program well and their ability to RTW was enhanced. Factors such as support from the employer and personal factors influenced the likelihood of a sustainable RTW. The majority of participants found 36 sessions during six months too few and suggested extending the program to include more follow-up sessions or annual booster sessions. The multidisciplinary approach, with a focus on addressing both physical and psychological aspects of LBP, as well as providing ergonomic analysis and workplace advice was experienced as valuable. Following the program in a group setting was considered to have a positive impact on patient motivation. 2) The administrative burden of the program was deemed reasonable, but suggestions were made to further digitize and improve communication and follow-up. 3) The program is perceived as positive but underutilized. To optimize the effectiveness of the program, participants suggest reconsidering the eligibility criteria, enhancing the general visibility of the program, and addressing the lack of uniformity across rehabilitation centers.

#### Conclusion

This study provides insights into the experiences of patients/workers and HCPs in the multidisciplinary LSR program covered by the Belgian Federal agency for occupational risks. Positive aspects of the program were highlighted as well as potential areas for improvement in order to prevent LBP and enhance RTW.

### **Work Participation after Multimodal Rehabilitation due to Neurological Diseases. Representative Analyses Using Routine Data of the German Pension Insurance.**

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#### **Background**

Return to work (RTW) for persons with neurological diseases and a rehabilitation on behalf of the German Pension Insurance (GPI) is very difficult. Up to now, there is only low sufficient evidence regarding the rate or predictors of RTW in this group.

#### **Objectives**

It is therefore important to determine (a) what risks exist prior to rehabilitation, (b) how well persons were able to participate in working life after rehabilitation, and (c) what conditions determine the work participation.

#### **Methods**

The study is conducted on the basis of the GPI's database of rehabilitation statistics including all persons with rehabilitation in 2016 due to a neurological disease. The analyses were carried out for the entire group and also for the main diseases, cerebrovascular diseases (CD) and multiple sclerosis (MS). Work participation was operationalized via a monthly status variable until 24 months after rehabilitation and as a rate of employed persons at the 12 and 24 months follow up and in the 3 months before, respectively. Multiple logistic regression models with stepwise inclusion were calculated separately for the rates after 12 and 24 months.

#### **Results**

A total of 42,230 persons were included (CD: n = 18,368, 44 %; MS: n = 6,343, 15 %). Patients with neurological diseases were 50 years old on average, 43 % were female. We found that approximately 15 % of patients reported no absenteeism, whereas 17 % stated an absence leave of six months or more in the year prior to rehabilitation. Mental and cardiovascular comorbidity was documented in 31 and 44 % of the cases respectively. Nearly 48 % of patients with CD returned to work two years after rehabilitation. For MS patients, the percentage was slightly higher at 54 %. The amount of sick leave of the rehabilitated individual, their gross/net income prior to rehabilitation as well their work capacity prior to admission were the three strongest influencing factors on their return to the labour market.

#### **Conclusion**

About half of all persons with neurological diseases return to sustainable work after medical rehabilitation in Germany. The amount of sick leave and the income before rehabilitation are determining factors as to whether the person will return to work. The analysis provides representative data on occupational reintegration after medical rehabilitation due to a neurological disease for the first time.

### Sustainable vocational integration: Examining the long-term success of specialized vocational rehabilitation services for persons with spinal cord injury

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#### Background

Ensuring a sustainable labor market participation is the ultimate goal of vocational integration (VI) services. The Institute of Vocational Guidance (ParaWork) at the Swiss Paraplegic Centre provides specialized VI services along a continuum of care (inpatient and outpatient VI services, job coaching) with the aim of integrate persons with spinal cord injury (SCI) sustainably into the labor market. While such a comprehensive approach appears promising for a sustainable VI, to date there is hardly any evidence of the long-term success of such services.

#### Objectives

The present study aimed to evaluate the long-term outcomes of specialized services for persons with SCI including long-term indicators of work quality.

#### Methods

A retrospective survey with 107 clients who received VI services at ParaWork between 2012 and 2018 was conducted, collecting information about their labor market participation and potential predictors thereof at the end of the VI services as well as in 2019. We descriptively analyzed the participants' work status at the end of and at survey, stratified for selected socio-demographic and SCI-related characteristics. In addition, we analyzed long-term indicators of work quality (e.g., person-job match, job satisfaction, job stress, job performance) and conducted a multivariate regression analysis on these outcomes.

#### Results

Preliminary results show that 85 (79.4%) participants returned to work after the VI measures. Seventy-five (70.1%) were still involved in paid work at time of the survey (average time since discharge from VI services was 12 months). With regard to work quality indicators, participants who were still employed at follow-up reported an average job satisfaction of 4.3 (1=not satisfied at all, 5=completely satisfied). Overall, 55% of the participants perceived a good person-job match between their physical abilities and the corresponding job demands, while for psychological and cognitive abilities and corresponding job demands 61% reported a good fit.

#### Conclusion

The rather high employment rate both at discharge and at follow-up as well as the high perceived job quality suggest that specialized vocational integration services for SCI are not only promising for returning clients back to work but also for stabilizing their work situation.

### Return to work after psychosomatic rehabilitation. Representative findings based on routine data of the German Pension Insurance.

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#### Background

Return to work (RTW) in persons with mental disorders is often difficult. International studies have reported RTW rates from 44% to more than 90% over periods of three months to five years. RTW seems to be complicated by older age and severe disease trajectories with long periods of incapacity and comorbidities.

#### Objectives

The contribution aims at answering the following questions:

1. What are the RTW rates of patients with mental disorders after rehabilitation in a German psychosomatic rehab unit?
2. Which socio-demographic, occupational and health-related factors may be used to predict RTW?

#### Methods

A representative data base of the German Pension Insurance was used. We included all patients who had received a medical rehabilitation in a psychosomatic rehab unit in 2017 and a primary diagnosis from chapter F ("Mental and behavioral disorders"; excluding F10-F19) of the ICD-10. As an indicator of RTW, we used "stable employment" 12 or 24 months after the end of rehabilitation, defined as employment subject to social insurance contributions in the 12th or 24th month of the observation period and in the preceding 3 months, respectively. Factors influencing stable employment were determined in logistic regression analyses.

#### Results

The sample comprises N = 122,623 rehabilitants. The most frequent diagnoses were recurrent depressive disorders (RD; F33, 35%) and depressive episodes (DE; F32, 23%), followed by reactions to severe stress and adjustment disorders (BR; F43, 15%), anxiety disorders (AS; F40 / F41, 8%), and somatoform disorders (SO; F45, 7%).

24 months after rehabilitation, about 58% of the patients had achieved stable employment. In the logistic models, model quality for the prediction of "stable employment 24 months after rehabilitation" is in the moderate range in the overall group as well as in the diagnosis groups (R<sup>2</sup> according to Nagelkerke: 0.29 to 0.36, area under the curve: 0.78 to 0.81). The strongest predictors in all groups were periods of incapacity to work in the 12 months before rehabilitation, amount of pay before rehabilitation, and age.

#### Conclusion

Regardless of the specific diagnosis, sociodemographic factors (except age) do not contribute to predicting stable employment while employment-related and health-related information each have high prognostic value. The article provides representative findings on rates of RTW and socio-medical risks of psychosomatic rehabilitation patients, which can be used for the interpretation of future studies.

### Exploring inability to work fulltime and paid employment among work disability benefit applicants: a longitudinal study

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#### Background

The ability to work fulltime is recognized as an important topic of work disability assessments in many European countries. Applicants for a work disability benefit who cannot sustain fulltime working activities, are assessed with an inability to work fulltime. Little is known about the impact of inability to work fulltime on work participation after the disability benefit assessment.

#### Objectives

The aim of our study is to explore the association between inability to work fulltime and having paid employment one year after the disability assessment.

#### Methods

This longitudinal register based cohort study included all work disability applicants assessed with residual work capacity who were granted a partial disability benefit in the Netherlands in 2016. Data were derived from the Dutch Social Security Institute: the Institute for Employee Benefits Schemes (UWV) and were linked to register data on paid employment at the time of assessment (baseline) to one year after the assessment.

Multivariable logistic regression analyses were conducted to study the association of inability to work fulltime and having paid employment one year later, separately for applicants who (partly) work and not work at baseline, and additionally, stratified to ICD10 disease groups.

#### Results

Of the total study sample (n=8300), the majority (68.1%) did not work at baseline. Of the applicants working at baseline, 55.7% were assessed with inability to work fulltime versus 39.8% of the applicants not working at baseline (p<.001). For applicants working at baseline, inability to work fulltime was significantly associated with having paid employment one year later, when adjusted for sociodemographic variables (OR 1.32, 95%CI 1.07;1.62). However, after adjusting for disease-related variables, the association was not significant anymore (OR 1.20, 95%CI 0.97;1.49). For applicants not working at baseline, being assessed with inability to work fulltime was not associated with having paid employment one year later (OR 0.95, 95%CI 0.80;1.14). Within the ICD10 disease groups, inability to work fulltime was only significantly associated with having paid employment one year later for applicants working at baseline and having a musculoskeletal disease (OR 2.19, 95%CI 1.20;4.00).

#### Conclusion

This study shows that the association between inability to work and work participation one year after the assessment is limited. Only for applicants working at baseline and diagnosed with a musculoskeletal disease, inability to work fulltime was positively associated with having paid employment one year later.

### Work-related medical rehabilitation in patients with mental disorders: results of a randomized controlled trial at completion of inpatient rehabilitation

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#### Background

In Germany various rehabilitation services have been developed in order to promote a sustainable return-to-work. Work-related medical rehabilitation is one of these programs that addresses people at high risk of not returning to work. The efficacy of these programs in patients with mental disorders was tested in smaller randomized controlled trials with very specific intervention approaches. To date, there is no clear evidence of the effectiveness of work-related medical rehabilitation implemented in real-care practice.

#### Objectives

In our multicenter randomized controlled trial, we examine whether patients benefit more from work-related medical rehabilitation (WMR) than from conventional medical rehabilitation (CMR).

#### Methods

Participants were randomly assigned to WMR or CMR in a one-to-one ratio in five rehabilitation departments in Germany. Patients with a mental disorder aged 18 to 60 years and at high risk of not returning to work, determined by at least 27 points on a validated risk score (SIMBO-C), were included. Questionnaires were used to assess demographic and psychometric variables at baseline and at the end of rehabilitation. Analyses were conducted using random-effects models. Additional stratified analyses were performed with subgroups based on duration of sick leave in the year before rehabilitation (> 26 weeks vs. ≤ 26 weeks) and perceived implementation of WMR (strong contrast vs. low contrast between WMR and CMR).

#### Results

1,483 rehabilitation patients were included (mean age: 53.5 years; SD = 9.4; 59% women). Both treatment groups improved in health and quality of life after rehabilitation with mostly moderate standardized effect sizes. Effect sizes were larger in WMR, but differences between treatment groups were mostly not significant. Significant effects in favor of WMR, however, were found in subgroup analyses. Patients with sick leave of more than 26 weeks before rehabilitation and patients in departments where WMR implementation was perceived more clearly (significant contrast between WMR and CMR in work-related services, work-related focus, and achievement of work-related rehabilitation goals) significantly improved on almost all outcomes in WMR compared with CMR.

#### Conclusion

Patients with long-term sick leave before rehabilitation and patients from departments with a noticeable contrast between WMR and CMR achieved better outcomes in WMR compared with CMR. Our pragmatic randomized controlled trial indicates that reaching the right patients and high treatment fidelity are important conditions of the effectiveness of WMR.

### Back to work after bariatric surgery, a Belgian population study

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#### Background

Aside of an impact on health, obesity is also associated with higher social and economic costs such as impaired workplace productivity, increased work absenteeism, and higher rates of unemployment. Bariatric surgery promises long-term weight loss results and improvement in obesity-associated comorbidities and mental health. Research suggests that employment rates improve following bariatric surgery.

#### Objectives

Aim of this study was to assess the effect of bariatric surgery on employment status in a large nationwide database, using Belgian national health insurance data of all bariatric patients.

#### Methods

This is a retrospective analysis of all patients that underwent bariatric surgery in Belgium between 2014-2015 registered in the IMA-AIM database (IMA-AIM Inter mutualistisch Agentschap – Agence Inter mutualiste). Information about employment status was retrieved from their health insurance file. The work status of these patients was examined yearly; four years before and three years after surgery. Demographic data consisting of gender, age, employment status, and health care status (e.g. chronic illness) was collected. Increased employment after surgery was defined first as a reduction in days of unemployment and incapacity and second as resumption of work among the unemployed.

#### Results

16,276 patients were included. The number of working people (without intermittent illness, loss of employment or sick leave) rose from 49.7% before bariatric surgery to 61.2% 3 years after bariatric surgery i.e. an increase of 11.5 % between pre- and post-surgery. The largest improvement of incapacity or unemployment was found in individuals who were absent from work for a period of more than 9 months, namely a reduction from 13.4% towards 7.2%. In the population of unemployed patients, 20.9% became employed after bariatric surgery.

#### Conclusion

In this study, we found an increased employment rate, and decreased work incapacity and unemployment after bariatric surgery. Better knowledge of the professional history of these patients would make it possible to make proposals to better support them and increase their participation in the labor market.

### Task transfert to social nurses in long term disease assesment

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#### Issue/problem

In a context of medical advisors shortage, a multidisciplinary approach has been implemented introducing Social Medical Nurse (SMN) and Case Managers. The medical service of Bourgogne-Franche-Comté carried out a survey to measure the difference between SMN and social insurance physicians (SIP) advices in the field of a socio-medical allowance which is time-consuming at the level of 20% of the workforce schedule.

The question was: how far can we go from a simple task support, as collecting informations, to a complete task shifting of the medical decision to the nurse?

#### Description of the problem

#### Methods

In France, the claimants with a long term disease (LTD), "affection de longue durée", are health care costs exempted. This benefit is obtained:

- from the diagnosis design, in a list of 30 diseases ( LTD 30).
- If another pathology is serious, and/or has a heavy cost, and/or disability consequences, so called LTD 31. The other claimants support a significant co-pay.

A prospective single blind study was implemented on a 3 months period in 3 departments involving 2 SMN et 8 SIPs. The SMN gave an advice on the LTD claim from a guidelines and the healthcare record. Second, the SIP stated on the same case without seeing the nurse's advice. The time required for each pathway was monitored.

#### Results (effects /change)

The SMN gave 173 favourable advises (72.4%), and the SIP 188 (78,6%), of the 239 request for LTD 30. The difference was 18 cases denied by the SMN, accepted by the SIP and, reversely, 3 cases accepted by the SMN and denied by the SIP.

The request for LTD 31 received 69 ( 48,6%) favourable advise from the SMN and 74 ( 52,1%) from the SIP. The inter-rater reliability is 93,8% in the LTD30 group and 96,5% in the LTD31 respectively.

#### Lessons

The SMN watched the guideline and debated the file more closely than the physicians. Without amending any legislation, the involvement of the SMN decrease by a factor of two the time needed to process. On a technical level, a complete delegation from the SIP to the SMN is acceptable for both claimants and health fund.

### Best Practices Whiplash -effective treatments for WAD I-II Recommendations for liability insurers

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#### Background

In the Netherlands, an estimated 35% of all personal injury claims consist of whiplash associated disorder type I-II (WAD I-II). Insurers still seek the best approach to such non-objectifiable complaints; outlining effective medical treatments may facilitate this. However, the last overview dates from June 2015.

#### Objectives

Aim of this study was to provide an update of recommended treatments for WAD I-II to assist insurance companies handling such cases while concurrently promoting the recovery of claimants.

#### Methods

1. Literature search, consisting of:

- a. scoping review of current professional guidelines for assessment and treatment of WAD since 2015,
- b. systematic review of the current medical scientific literature on treatment of WAD, published in Pubmed and Web of Science from Jan. 1, 2015 through Dec. 31, 2021.
- c. analysis of scientific literature relevant to personal injury claim handling such as insurance medical, psychological and legal publications.

#### Results

The scoping review of professional guidelines in The Netherlands performed over 2015-2021, yielded one modified guideline (physiotherapeutical) and one re-ratified unaltered guideline (neurological, the most authoritative guideline on this matter in The Netherlands). Our systematic review resulted in 16 admissible articles; 13 SRs and 3 Clinical Practice Guidelines. Strength of evidence of included SRs was assessed using AMSTAR2 quality assessment. The overview of relevant publications from (insurance) medicine, psychological and legal science provided additional insight in how to approach claimants with WAD I-II to prevent unintended anti-therapeutic effects of compensation schemes such as perceived injustice.

Recommended still is an activating, reassuring approach, encouraging the WAD I-II patient to 'act as usual'. Passive interventions are largely discouraged, save for pain medication (NSAIDs) en manipulation of the thoracic spine.

New insights since 2015: electroacupuncture is currently discouraged, providing structured information is recommended as is psychological treatment by physiotherapists added to physiotherapy. Use of opioids for pain is discouraged, neck collars are definitively obsolete. Specific guidance for acute and chronic WAD has been established, effective exercises and -therapies have been identified in more detail.

#### Conclusion

Our SR revealed new insights on medical care for WAD I-II since 2015, while an activating approach remains the standard. Current understandings from medical, psychological and legal science are synthesized here into Best Practice Whiplash Recommendations, aimed towards a recovery-oriented approach by insurance companies of WAD I-II claims.

### Experience of and solutions for practice in social insurance settings for medical students

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#### Background

Statutory National Curriculum Regulations for Norwegian education of physicians were introduced in 2021. They include learning objectives in social insurance medicine and state that all medical students should be offered practical training in the social insurance setting. However, the current situation including collaboration between the four medical universities with an uptake of 731 students each year and the Norwegian Labour and Welfare Service (NAV) has not been known.

#### Objectives

The aim was to map and describe the current status of using the Norwegian Labour and Welfare Service (NAV) as an arena for the practical training of medical students, and stakeholders' views on needs for establishing or maintaining such practices.

#### Methods

A qualitative evaluation with input from educators in insurance medicine at all universities, medical students, practicing physicians in NAV and members of the program group advising the development of the curriculum regulations was performed. Oral and written feedback from individual, group or plenary discussions were collected from February 22 to January 23.

#### Results

Two of the four universities offered all medical students structured practical training in the social security setting in collaboration with NAV. The other two were in the process of establishing such practice. All stakeholders expressed the need for cross-sectoral collaboration to assist the development and maintenance of NAV as a practice arena. The following needs were identified: 1) A formal arena for collaboration and sharing among practitioners and educators in social insurance medicine, 2) common teaching material allowing for regional adjustment and 3) training of supervisors in NAV participating in the practical training of medical students. To achieve this, it was suggested to establish a national network of educators and professionals in insurance medicine that would share responsibility for developing educational material and run accredited courses for NAV supervisors involved in the training of medical students.

#### Conclusion

In Norway, there is ongoing practical training of medical students within the social insurance service in collaboration with Norwegian Labour and Welfare Service (NAV). However, the findings indicate an unmet need for cross-sectoral collaboration involving both universities and NAV to ensure nationwide and stable implementation of the new National Curriculum Regulations for Norwegian Health and Welfare Education. A detailed action plan is proposed and suggested coordinated through a national collaborative program for research and education in Work and health.

### A knowledge team in insurance medicine within psychiatric healthcare in Stockholm, Sweden

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#### Issue/problem

Many experience the work with sick-leave certification and management as complex and problematic, in general, as well as when working within psychiatric healthcare. As a response to the need of further knowledge within this area, a knowledge team in insurance medicine within psychiatric healthcare in Region Stockholm was formed. Similar knowledge teams also exist for primary healthcare and specialized (besides psychiatry) healthcare within Region Stockholm.

#### Description of the problem

The objectives of the knowledge team include: Contribute to increased competence concerning insurance medicine among all healthcare personnel involved in sick-leave certification or rehabilitation. Contribute to increased coordination and collaboration between different involved actors during the sick-leave or rehabilitation process.

#### Results (effects /change)

The team was formed in 2019 and regularly offers insurance medicine related educational activities, workshops, and network opportunities to different occupational groups within healthcare. In addition, customized sessions for individual clinics including input on local routines and policies is also offered. During 2022, 8 educational courses/seminars (with a total of 194 attendees), 5 network meetings for rehabilitation- / return to work coordinators, and 4 customized clinic visits were conducted. The year contained two special themes. 1) The actual sick-leave certification: the assessment of the need for sick leave and how to formulate the assessment in a certificate. This educational activity was offered to physicians with a specialty in psychiatry as a full day activity. Lectures and discussions were combined with a filmed case and practical exercises. 2) Team-work: new guidelines highlight the importance of having a team at each clinic with responsibility for the work concerning insurance medicine. This team include the responsible line manager, a physician with special responsibility for insurance medicine and a rehabilitation- / return to work coordinator. A workshop for these teams was offered, where lectures was combined with time for formulating, improving, or discussing local routines.

#### Lessons

The knowledge team in insurance medicine within psychiatric healthcare enable continuous education in insurance medicine for different occupational groups working within psychiatric healthcare in Region Stockholm.

### A mixed-method approach to explore return to work among transgender and gender diverse people

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#### Background

Return to work (RTW) benefits the individual, the organization and society but research on work resumption of transgender and gender diverse (TGD) people is lacking.

#### Objectives

The objective is to examine RTW outcomes and experiences in TGD people to better understand their needs and provide tailored support. This study is part of a larger project to develop a tool for the preventive and insurance services.

#### Methods

In this convergent mixed-methods study, we descriptively analyzed questionnaires of 125 TGD people, who had been working prior to transitioning, for personal-, work characteristics, levels of support by different stakeholders and health literacy (HL). Based on informed grounded theory, in-depth interviews were held of twenty TGD people to explore perceived facilitators and barriers to RTW.

#### Results

109 participants reported an average of 38 sick-days after gender-affirming care. The majority (90.2%) resumed their job at the same employer. 90% of TGD people received some form of support at work during their transition. They reported being supported the most by their coworkers (71.9%), supervisor (69.0%) and confidant at work (66.1%). Only one third felt supported by their occupational physician.

TGD people's health literacy (55.1% sufficient level) was lower than the Belgian general population. HL score was significantly correlated with support from the occupational physician, the internal prevention advisor and support from HR.

Four major themes emerged from the qualitative data analysis: (1) the need and access to information; (2) having multidisciplinary allies; (3) the influence of the occupational position; (4) the precarious balance between work, life and gender-affirming care.

Participants with a low health literacy level encountered barriers to RTW by grappling: (1) to find and/or apply information; (2) find and/or navigate (occupational) health and insurance services.

#### Conclusion

This is the first study to investigate actual return to work of TGD people. Our findings highlighted RTW among TGD people as a complex process influenced by individual-, alongside work-related factors, factors in the healthcare system and social insurance. Improving RTW requires a high need for centralized information and improving (occupational) health- and social insurance literacy while engaging relevant stakeholders, such as (prevention) services with health professionals and employers, in making tailored RTW plans.

### Prior sickness absence and/or disability pension and income from work after age 65 and 70 in Sweden

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#### Background

Since retirement ages are increasing in many European countries, more knowledge is needed on factors associated with extending working life – is, e.g., sickness absence (SA) and/or disability pension (DP) any of them?

#### Objectives

Our aim was to explore if prior SA and/or DP due to mental and/or somatic diagnoses were associated with income from work after age 65 and after age 70, respectively.

#### Methods

This 4-year prospective population-based cohort study included all who in 2014 were aged 65-69 (cohort A; n=201,263) and ≥70 (cohort B; n=93,751), respectively, and fulfilled the following inclusion criteria: lived in Sweden during 2010-2015, had at least some income from paid work in 2014 (baseline), and were at risk for SA and/or DP during the exposure interval (2010-2014). Microdata from Swedish nationwide registers were used for information on exposures, i.e., prior SA (in spells >14 days) and/or DP due to mental and/or somatic diagnoses, overall and stratified by number of SA/DP net days (2010-2014), and on the outcome, i.e., future years with income from work (2015-2018). Cox proportional hazard regression was used to calculate hazard ratios (HR) with 95% confidence intervals (CI) for associations between exposures and outcome, censored for death and emigration, adjusted for sociodemographic and work-related factors, and stratified by sex.

#### Results

A majority had no SA or DP during the exposure interval, both among cohort A (66.3% women, 75.8% men) and cohort B (96.8% women, 97% men). Many had income from work at some point during follow-up, both among cohort A (77.8% women, 81.6% men) and cohort B (81.9% women, 83.4% men). Approximately 41% had income from work throughout the follow-up regardless of age and sex. Prior somatic SA/DP was associated with a marginally but significantly higher HR for earlier exit from paid work among cohort A (women 1.05; 95%CI: 1.03-1.07; men 1.10; 1.07-1.12), with higher number of SA/DP net days showing somewhat higher HRs, however, this was not seen among cohort B. The corresponding association for mental SA/DP was significant only for women in cohort A (1.05; 1.02-1.09).

#### Conclusion

Prior somatic SA/DP was slightly but significantly associated with earlier exit from paid work among those aged 65–69 at baseline but not among those aged ≥70 at baseline. Prior mental SA/DP was associated with earlier exit only for women aged 65-69 at baseline.

### Sociodemographic and morbidity characteristics of people receiving long-term sickness benefits

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#### Background

Certifying long-term sickness absence and coordinating complex rehabilitation programs are essential activities of social insurance physicians. These doctors have a role in preventing the decreased work capacity of employees that may lead to early leaving the labour market and the transition of these employees to other social insurance benefits, such as a work disability pension.

#### Objectives

The aim of this study was to analyse the possible risk factors for long-term sickness absence (over 6 months) and to identify the population groups with low potential for work capacity rehabilitation.

#### Methods

A cross-sectional study was carried out assessing 3889 demands for long-term sickness benefits during one year. The information was collected from the National Institute for Medical Assessment and Work Capacity Rehabilitation Bucharest registers and the EXPMED application. The data were statistically analyzed using PSPP software.

#### Results

People predisposed to using a longer period of sick leave were those with traumatic or musculoskeletal pathology  $COR=10.29$  (95%CI=7.78-12.80;  $p<0.001$ ) and who came from poor socioeconomic regions  $COR=2.48$  (95%CI=2.05-2.90;  $p<0.001$ ). The highest rehabilitation percentage was achieved in cases of traumatic injuries (73.17%), followed by musculoskeletal diseases (70.06%). We noticed lower recovery in cases of nervous system diseases (50.56%) and cardiovascular diseases (44.23%). In the group that summed up the other pathologies, the recovery percentage was 58.37%. People who regained their work capacity were significantly younger (mean age  $47.87 \text{ y} \pm 8.93$ ) than those who turned to other forms of social benefits, such as a disability pension or an old-age pension (mean age  $53.16 \text{ y} \pm 8.43$ ).

#### Conclusion

Most of the subjects (72%) regained their work capacity and did not need a disability pension. Several sociodemographic and morbidity characteristics of people receiving long-term sickness benefits were identified. The population at risk should be closely monitored and need tailored intervention measures. This findings can support both healthcare professionals and social insurance physicians when patients are enrolled in rehabilitation programs.

### Occupational prestige and future sickness absence and disability pension in women and men. A Swedish nationwide prospective cohort study

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#### Background

There is limited knowledge on whether occupational prestige, i.e., the symbolic evaluation and social positioning of occupations, is associated with sickness absence (SA) or disability pension (DP).

#### Objectives

The aim was to investigate associations between occupational prestige and future risk of sickness absence and disability pension among women and men

#### Methods

A four-year prospective cohort study (2010-2013) including the working population in Sweden aged 25-59 in 2010 (N=2,605,227; 47% women), using linked micro-data from three nationwide high-quality registers. The Standard International Occupational Prestige Scale (SIOPS) was used to measure occupational prestige at baseline. SIOPS-values were categorized as 'very low', 'low', 'medium', 'high', 'very high' prestige. Odds ratios (OR) with 95% confidence intervals (CI), both crude and adjusted for several sociodemographic factors [GH1] (sex, age, sex, education, birth country, family situation, etc), were calculated for three outcomes: having at least one SA spell (>14 gross days), >90 SA net days, or DP, respectively, during follow-up (2011-2013).

#### Results

Mean number of SA days in 2010 varied by occupational prestige group as follows; 'very high': 3.0; 'high': 3.6; 'medium': 4.6; 'low': 5.0; and 'very low': 6.5, respectively. In all five groups, mean days were somewhat higher among women. Compared to those in occupations with 'very high' prestige, all other groups ('high', 'medium', 'low', 'very low', respectively) had higher adjusted ORs for all three types of outcomes. This was true also when stratified by sex, with one exception; there was not a significant difference between the women in 'very high' and 'high' occupations regarding OR for >90 SA days. The occupational prestige group with the highest ORs for at least one SA spell was the group with 'very low' occupational prestige (adjusted OR among all: 2.44; (95% CI 2.39-2.48), among women 1.76; (1.68-1.76), among men 2.48; (2.41-2.55)). Their corresponding ORs for >90 SA days were: 2.27; (2.20-2.34) for all, 1.63; (1.57-1.70) for women, and 2.37; (2.25-2.50) for men. The ORs for DP were 2.91; (2.72-3.10) for all, 1.80; (1.66-1.96) for women, and 3.56; (3.19-3.97) for men.

#### Conclusion

Working in occupations with lower occupational prestige was generally associated with higher risks of future SA as well as DP than for those in occupations with higher prestige. The ORs tended to be higher among men, suggesting stronger association between occupational prestige and risk for future SA/DP for men than for women.

### Introducing inFACT: the individual functional activity composite tool

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#### Background

A comprehensive depiction of an individual's functional abilities and the means to relate these abilities to job demands are key components for sick leave or work disability evaluation. In this symposium, we propose a novel system, inFACT (individual functional activity composite tool), which brings together different measurements of functional abilities that can be linked to work requirements in order to identify potential job fit. Using the framework of the World Health Organization's International Classification of Functioning, Disability and Health (ICF), inFACT leverages cutting edge methods in artificial intelligence (natural language processing) and test theory (item response theory) to provide different measurement perspectives and together offer a more complete picture of an individual. This tool allows users to visualize and explore data in multiple ways. This symposium offers an opportunity to introduce inFACT to an audience of relevant stakeholders, as well as solicit input on potential applications and further development.

#### Organizing group(s)

Rehabilitation Medicine Department, National Institutes of Health

#### Objectives

This mini symposium aims to introduce a novel system for measuring functional abilities at the level of the whole person that can aid in sick leave or work disability evaluation. You will learn about natural language processing, a field of artificial intelligence, that can be used to identify and extract key information from large bodies of text, and an approach for linking measures of function to work demands to be able to make job recommendations based on an individual's current functional abilities. You will have the opportunity to discuss potential applications, directions, and improvements to such a system.

#### Structure

Duration of the Symposium: 90 Minutes

- 15 min: Introduction and Agenda (Moderator: Leighton Chan)
- 15 min: Presentation 1 - Introduction to inFACT: overview and potential applications (Julia Porcino)
- 15 min: Presentation 2 - Using NLP to identify language on functional abilities (Bart Desmet)
- 15 min: Presentation 3 - Linking WD-FAB and work demands (Elizabeth Marfeo)
- 30 min: Consequences and next steps – a facilitated discussion (Moderator: Leighton Chan)

### Abstract

In the first presentation, we will introduce inFACT – the individual functional activity composite tool – and its potential applications. inFACT displays information on function from two main data sources, an individual’s medical records and the Work Disability Functional Assessment Battery (WD-FAB). It visualizes and aligns these measures of function with work demands to serve as a support tool in disability adjudication or vocational rehabilitation settings. We provide an overview of the different ways data are organized and displayed in inFACT and current perspectives on the uses and benefits of such as tool.

Information on whole-person function in electronic health records is often sparse, located in free text, and not searchable, making it hard to find and use for research and work disability adjudication. Natural Language Processing can help retrieve and categorize such information from clinical free text. In the second presentation, we present our approach, methods, results, and observations in applying NLP to automatically extract information relevant to the ICF Activity component.

The third presentation will focus on an innovative measurement approach used to link patient-level measures with a US federal job evaluation tool, the Occupational Information Network (O\*NET®). We will describe methods and findings from a pilot study used to empirically link the WD-FAB and O\*NET® job data. Results from this work show promise for increasing the feasibility and efficiency in systemically linking multidimensional factors including work-related physical function and mental health with job demands. This work helps improve methods available for evaluating the fit between person-centered measures and job demands in the context of large, national disability evaluation programs.

### Value-based healthcare in Insurance Medicine: Adding value by measuring client-relevant outcomes

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#### Background

The value-based healthcare concept, which strives for optimal client value per unit of healthcare costs, is proposed as a remedy for the ever increasing costs and existing inefficiency in healthcare systems. To create value it is important to measure outcomes which are most important to clients. However, key challenges to create value for clients within the Insurance Medicine practice are the limited measurement of client preferences and client-relevant work-focused outcomes, and the absence of a standard set of outcome measures most important for clients experiencing problems in work participation. Within the Value@WORK research project we are currently working on the identification of a minimal set of outcome measures most important for clients experiencing problems in work participation due to cardiovascular diseases. The workshop aims to create awareness of the importance of measuring client-relevant outcomes in Insurance Medicine, and discuss the generalizability and usability of the proposed minimal set of client-relevant work-focused outcomes within the field of occupational healthcare.

#### Objectives

1. To inform the participants about the added-value of measuring client-relevant work-focused outcomes in the practice of Insurance Medicine.
2. Discuss the generalizability and usability of a proposed minimal set of client-relevant work-focused outcomes for clients living with cardiovascular diseases from a Dutch context to different contexts of Insurance medicine and Occupational healthcare.

#### Outline of the workshop

After a short introduction on the topic and definitions, we will start the interactive workshop with an assignment on mapping the work-focused outcome measures used in the current practices of the participants and ask the participants to reflect on the degree of client-relevantness using these outcomes. Then we will introduce the minimal set of client-relevant work-focused outcomes proposed for clients living with cardiovascular diseases developed by the Value@WORK research group in a Dutch context. Then the participants will receive an interactive assignment discussing the generalizability and usability of this proposed set for their own practice. The workshop will be concluded with a plenary discussion about the results of this assignment.

#### Structure

- 5 min: Opening and introduction on the topic (by the moderator).
- 15 min: Assignment to map work-focused outcome measures in the current practices of the participants and reflect on the client-relevantness of these outcomes (by all participants in subgroups).
- 15 min: Introduction on the use of client-relevant outcomes, highlight its importance and show the minimal set of work-focused client-relevant outcomes developed by the Value@WORK research team (by one of the speakers of the research group).
- 30 min: Interactive assignment on the generalizability and usability of the proposed set for the practice of the participant (by all participants in subgroups).
- 20 min: Plenary discussion on the results from the interactive assignment (guided by the moderator).
- 5 min: Closing workshop (by the moderator).

### **Abstract**

This workshop aims to create awareness of the importance of measuring client-relevant outcomes in Insurance Medicine. Therefore, the moderator will start the workshop with a short introductory presentation to explain the value-based healthcare concept and why identifying and measuring client-relevant outcomes within Insurance Medicine is so important.

After the assignment letting the participants reflect on the current use of client-relevant outcomes within their practice, a member of the Value@WORK research project will present the minimal set of work-focused client-relevant outcomes developed for clients living with cardiovascular diseases. Then, the participants are asked to discuss the generalizability and usability of the proposed set for their practices.

During the closing, the moderator will give an short reflection based on all results and discussions during the workshop.

### Domestic violence and child abuse, insurance physicians what to do: ignoring or signaling the signals?

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#### Background

Domestic violence and child abuse is a worldwide problem that has lasting negative effects on physical and mental health of children and adults with substantial social costs.

In order to prevent and stop (imminent) domestic violence and child abuse, it is important to identify and discuss this at an early stage. In the Netherlands, the Compulsory Domestic Violence and Child Abuse Reporting Code Act came into force in 2013, which is mandatory for all registered doctors, including insurance physicians.

#### Objectives

To inventory whether insurance physicians deal with suspicions of domestic violence and child abuse. It is also assessed whether they are aware of the legal obligation to act that they have under the law.

#### Methods

A qualitative exploratory study by focus group interviews was conducted whether signals of domestic violence and child abuse are recognized by insurance physicians at the Social Security Agency (UWV) and whether these give rise to a suspicion of (imminent) domestic violence and child abuse. Moreover was investigated whether the reporting code is being applied.

After transcription of sound recordings, data were analysed by qualitative software (MAXQDA). Coding in several rounds was performed till consensus was achieved.

#### Results

Signals appear to be largely recognised. However, the reporting code is hardly used.

The incidence of the problem seems to be underestimated and physicians seems to be insufficiently familiar with procedures surrounding the reporting code and backgrounds of domestic violence and child abuse. The physicians also seems to be insufficiently aware of the legal obligation to act.

#### Conclusion

Although signals appear to be largely recognized by insurance physicians, they are not sufficiently aware of the legal obligation to act, and the reporting code is hardly used.

Three recommendations for improvement are made: increase awareness at UWV of the existence and consequences of the law, develop the legally required own reporting code within UWV and finally make an implementation plan that makes it clear which financial and human resources will be needed.

### **Influence of the characteristics of multidisciplinary nursing homes (MSPs) on colorectal cancer screening**

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#### **Issue/problem**

Introduction: Colorectal cancer (CCR) is the second leading cause of cancer in men and the third in women in France. There is a screening organized from 50 to 74 years by Hemocult tests. The participation rate in the department of Hérault (France) remains insufficient (25.8 in 2018/2019) calling into question the public health objective set. The objective of the study is to understand how the characteristics of MSPs could influence the screening rate of the CCR. These structures promote the coordination of care through multidisciplinary and develop public health missions. A comparison shows a variation in their efficiency on screening (from 25.5% to 39.4%).

#### **Description of the problem**

Method: Qualitative research based on Peirce's pragmatic semio method centered on the lived experience of the actors. Collection of data carried out by focus group with Seven MSPs concerning 28 General Practitioners (MG). Semi-directive interview. After saturation of the data, a verbatim analysis brings out significant categories to understand what influences the phenomenon studied.

#### **Results (effects /change)**

MGs adhere to organized screening but their individual strategies depend on multiple factors: internal organization of work, heterogeneity of practices. Faced with patients with a negative social representation of the CCR test, all verbalize the need for dedicated time and additional help.

In MSPs with a screening rate of more than 35% in continuous growth, doctors consider that the collective strategies developed influence the observed result:

- Medical support provided by the medical assistant or advanced practice nurse (IPA): dedicated prevention time,
- Ease of access to tests under the guise of training of the various staff of the structure (secretariats, azalea nurses, ..)

On an MSP, engagement in local territorial campaigns using partner patients results in a CCR screening rate of 39.4%.

The 2 MSPs, without IPAs or medical assistants working in disadvantaged areas have lower rates (25.5% /27%) than MGs link to populations in social vulnerability. They believe that mass campaigns are unsuitable for their territories and advocate the intervention of health mediators.

All share the need not to offer a single mode of access to the test.

### Regulation of dysfunctional practices of dental surgeons in Occitania via a graduated support program

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#### Issue/problem

this program by early warning dental surgeons of deviations from best practice recommendations seeks to avoid their perpetuation and establishes regulatory monitoring based on targeted indicators.

#### Description of the problem

A survey is initiated with dental surgeons of Occitania in order to assess compliance with good practices specific to their profession. 5 indicators related to good dental practices were defined because of their frequency and/or their dangerousness:

Immediate prescription of second-line antibiotics (indicator 1; I1) ;

Production of fixed dental prosthesis device without X-rays (indicator 2; I2) ;

Endodontic treatments without X-rays (indicator 3; I3) ;

Direct pulp capping without X-rays (indicator 4; I4) ;

Prescription of nonsteroidal anti-inflammatory drugs after sixth month of pregnancy (indicator 5; I5).

Only for pulp capping, a threshold of 200 procedures per year has been defined. Beyond 200, a fraudulent practice is considered, requiring another treatment.

An analysis of the Health Insurance reimbursement data was performed in 2021 on these 5 indicators.

Depending on the volume and/or the dangerousness of the anomalies observed, a graduated action is planned in order to explain the discrepancies encountered and to encourage practitioners to modify their practice as soon as possible : from reminder letter ; brotherly exchanges ; to alert interviews conducted jointly by Medical Service and Primary health Insurance Fund.

An impact analysis will be carried out one year after this action.

#### Results (effects /change)

In 2021, 701 231 anomalies were detected, mainly due to fault and non-compliance with medical and dental recommendations. They are distributed as follows: I1 represents 15,5 % of anomalies ; I2, 44,7% ; I3, 38,1% ; I4 1,6% ; I5, 0,002%.

#### Lessons

The early detection and information of dental surgeons aim to improve professional practices for the benefit of users. Conventional negotiations with the profession will open. Indicators on public health objectives could be introduced, thus promoting good professional practices.

### Expectations towards involving social security services within a national care pathway

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#### Background

In Norway, a national care pathway for patients with long-lasting and complex pain conditions is in the process of being introduced. Having collaborative consultations with relevant actors is one requirement. As the targeted patient group has high levels of disability and sick leave, they require follow-up from social security services. Therefore, social security services are planned to be included in collaborative video consultations in an innovation project in Central Norway.

#### Objectives

To investigate the expectations of stakeholders of having social security services participate in collaborative video consultations within the national care pathway for patients with long-lasting and complex pain conditions.

#### Methods

A qualitative study using written material from a workshop with 53 participants including patients, health care providers, social security services employees and other stakeholders was conducted. Group discussions about expected benefits and challenges from involving social security services within the care pathway were carried out. The results of the discussions were collected on paper and electronically. The data was analyzed by a group of researchers.

#### Results

Among the topics raised by the participants, was that they expected having collaborative consultations including both health care and social security services could ensure better help for the patients by building common understanding from different sectors. They also wrote about opening venues for competence development and providing holistic services, and more opportunities for work participation for patients. On the other hand, there were participants who believed that including social security services could result in power imbalance leading to patients becoming overwhelmed and affect the duty of confidentiality within the meetings. Moreover, participants believed that conflict could be both raised and alleviated during these meetings. Some also assumed that collaborations would be practically demanding to coordinate.

#### Conclusion

Stakeholders expected that involving social security services in care pathways as an innovative solution could result in better services for individuals. However, they also expected issues that could challenge the collaboration.

### Two years after implementing an electronic prior authorization request service for bariatric surgery, have we observed an improvement ?

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#### Background

Bariatric surgery (BS) is the most effective treatment for obesity. Correct preoperative evaluation including psychiatric assessment and anticipation of a close follow-up is essential to predict the likelihood of success.

#### Objectives

Accordingly, since 2020, French Health Insurance has implemented a mandatory electronic prior authorization request service (EPA) for all BS candidates in order to valid, based on Health Authorities guidelines, their eligibility.

#### Methods

A retrospective study has been conducted in Grand Est, France among obese patients for whom the surgeon sent a BS electronic prior authorization request in 2021. For each patient, the surgeon must fill-in a questionnaire regarding patient's characteristics, medical history and planned care in order to justify the anticipated BS.

Using these anonymized data, the aim of our study was to describe the BS population and to assess the relevance and efficiency of this new service. We were also able to determine its impact on the management of these patients.

#### Results

In 2021, 3744 obese patients (mean age of  $43 \pm 13$  years old [18-86], 74 % female) were registered in the EPA service for BS by 94 surgeons. The max body mass index (BMI) before surgery was  $44 \pm 6$  % and 78% of the patients had comorbidity. The requested BS procedure was sleeve gastrectomy for 47% (N=1754), gastric bypass for 40% (N=1511) and gastric ring for 13% (N=479).

Following the EPA filling, 2630 patients (70.2%) matched the selection criteria and were directly approved for the requested BS. 1114 patients (28.2%) were assessed by a medical advisor resulting in 894 secondary approvals (23.9%) and 220 rejections (5.9%).

Secondary approvals were mostly obtained following additional data such as missing psychiatric advice or multidisciplinary consultation review. Main medical reasons for rejection were insufficient BMI or lack of follow-up. Less than 1% of patients were requested to be seen in person.

#### Conclusion

As BS gains acceptance as the leading option for weight-loss, a closer regulation of the patients' selection seems ineluctable. Our 2021 study confirmed the relevance of the implemented EPA service as almost 30% of the patients required additional medical data or clarification before approval and still more than 200 patients (6%) were rejected for medical reasons such as lack of follow-up. It is likely to have an educational impact on surgeons as it underlines the BS eligibility criteria.

### Overconsumption of healthcare services in patients undergoing surgery under general or regional anesthesia – new approach to monitor healthcare providers

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#### Issue/problem

Slovenia, like other EU countries, is faced with long healthcare waiting times, a specialist appointment including. This can have negative effect on access to care and health outcomes for patients. Several demand-side and supply-side factors affect waiting times. Policies acting on demand side are among others aiming at reducing inappropriate referrals and services. New approach to monitor healthcare providers in combination with auditing has been used by the National Health insurance Institute of Slovenia (hereinafter: HIIS) to identify certain inappropriate services (overconsumption).

#### Description of the problem

European Healthcare Fraud & Corruption network has established Waste typology matrix as lexicon of infringements by healthcare providers where services knowingly taken and billed without indication are considered overconsumption, thus waste.

In view of possible waste, case of patients undergoing surgery under general or regional anesthesia (hereinafter: surgery) has been considered. These patients from certain age on or with additional specified diseases are according to guidelines referred by GPs either to radiologists or pulmonologists with x-ray to have routine chest x-ray. The pulmonologist can also provide examination and certain functional tests of the lungs (hereinafter: the services) if needed. When the services are performed without special request of GP or indication, they are considered overconsumption.

Monitoring the services of pulmonologists with x-ray for patients referred from GPs due to undergoing surgery in 2022 was done by the HIIS. Analytical system with tracking of patients through the healthcare system has been used. After defining the premises, results of the analysis will be shown and findings of subsequent financial medical audits.

#### Results (effects /change)

According to monitoring results for 2022 four pulmonologists with x-ray, outliers in number of the services provided for patients undergoing surgery, have been audited by the HIIS. Overconsumption of the services has been confirmed, billing rejected and contractual penalties imposed.

#### Lessons

Data analysis based on tracking patients through healthcare system is helpful in establishing new ways of monitoring healthcare providers. Cross-linking of billed services in different medical specialties for patients in combination with auditing can identify overconsumption of certain services. Overconsumption of services across different medical specialties is a new field of interest in insurance medicine in Slovenia.

### **An intersectoral health- and welfare intervention in Norwegian workplaces (Health in Work) - a potential for sick-leave reduction?**

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#### **Background**

Musculoskeletal- and mental health disorders are dominating causes for sick leave worldwide, accounting for more than 50% of all sick leave in Norway alone. For employees, employers and the public welfare system it is relevant to seek cost-effective interventions reducing sick leave. Attempts to prevent these health complaints have so far been ambiguous. It therefore seems legitimate to target the ability to cope with these complaints, rather than avoiding them.

#### **Objectives**

To evaluate the workplace intervention Health in Work (HIW), an intersectoral collaboration between the specialist health care service and the Norwegian Labour and Welfare Administration (NAV) that aims at improving the individual- and organizational coping ability towards these common health complaints.

#### **Methods**

We carried out a pragmatic cluster randomized controlled trial in Northern Norway including 97 workplaces in a multicentre trial with 1:1 allocation. One arm, representing business-as-usual, offered solely monodisciplinary inclusive work measure interventions. The other arm, the new multidisciplinary HIW intervention, including information and coping strategies of musculoskeletal-, pain-, and mental symptoms related to work. A questionnaire on perceptions and attitudes towards backpain and common mental health complaints, work adaption and quality of life was administered before and after the 12 months intervention period. Difference-in-difference analyses were applied according to intention-to-treat.

#### **Results**

Difference-in-difference analyses showed a significant change regarding the role of injuries related to backpain ( $p=0.01$ ) and imaging diagnostics ( $p=0.03$ ). This in accordance with the intervention message. Contrarily, for physical activity a small change was observed in favour of the control group ( $p=0.01$ ). No significant change in assessment of workability with anxiety- or depression symptoms, health-related quality of life, subjective health complaints or job satisfaction was detected.

#### **Conclusion**

We found some significant changes between the groups in line with information addressed in the first HIW modules. However, no changes were found regarding common mental health complaints that was addressed in the last module shortly before the second questionnaire. These preliminary composite results are inconclusive of any effect of the intervention so far. Follow-up studies and further research are required to conclude on any effect on e.g. individual- and organisational coping of common health complaints and sick leave, and should reflect costs of the interventions.

### Individual Placement and Support and a Participatory Workplace Intervention as support for people with a disability in the municipal setting.

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#### Background

Work can be beneficial for physical and mental health, but a large gap in labor market participation exists between people with (occupational) disabilities and people without disabilities. Therefore, it is important to increase labor market participation of people with an occupational disability. We examined whether two interventions, that are effective in other contexts and for different target populations, can be carried out in a municipal setting to support people with an occupational disability to work (re)integration.

#### Objectives

This study examined the effectiveness of a Participatory Work Intervention (PWI), Individual Placement and Support (IPS) and a combination of both (PWI + IPS) on time until sustainable employment (i.e. more than 4 weeks consecutively) of people with an occupational disability, who receive coaching in the municipal setting. Additionally, a process evaluation of the two interventions was performed.

#### Methods

A randomized controlled 2x2 factorial trial was performed. Follow-up was 1 year and 118 clients participated. Professionals who support people with an occupational disability were trained in the intervention(s) they were assigned to. Cox regression analyses were performed for the primary outcome. Effects were considered significant when  $p < 0.05$ . For the process evaluation, recruitment, reach and dosage were described using the framework of Linnan and Steckler. Additionally, focus groups and interviews with professionals and clients were performed to examine satisfaction, and barriers and facilitators for execution of the interventions.

#### Results

Preliminary results show that the main barriers for PWI were having a lack of time, uncertainty about the right timing of the conversation at the workplace, and a focus on clients' obstacles instead of opportunities. Facilitators were the intensity of coaching and structured way of working. For IPS the main barriers were the lacking integration with health care services, uncertainty about the motivation of clients, and tension between being a job coach and representing a benefits agency. The main facilitator was that job coaches had great confidence in the effectiveness of IPS. Results of the effect evaluation and additional results of the process evaluation will be available in February 2023 and will thus be presented at the conference.

#### Conclusion

The results of this study will contribute to increasing sustainable employment for people with an occupational disability and thereby help closing the gap in labor market participation between people with and without disabilities.

### Multi-professional team-based efficacy

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#### Issue/problem

Due to changes in how work capacity assessments (WCAs) develop we can expect more complex data to handle. We suggest an adjustment in methods to meet the greater complexity.

#### Description of the problem

A multi-professional approach to WCAs has become more common and there is a shift in focus from assessment to define eligibility for disability benefits to assessment aiming at reintegration and return to work. Moreover, while there still is a prevalence of medical factors a trend towards a more holistic perspective weighing in other factors is recognizable [1].

#### Results (effects /change)

The WCA function in Västra Götalandsregionen, Sweden, has for years worked in multi-professional team-based settings. Compared to a “one doctor’s job” we have regularly experienced that our WCAs has been accomplished with higher quality and a better understanding of the complex factors involved in the individual’s abilities and disabilities. Additionally, we have acknowledged a more satisfying work with greater opportunity to learn from each other. Two concepts of relevance in this synergetic process are teamwork quality [2] and knowledge integration capacity [3], shown to co-vary with team effectiveness and team accomplishment. Some key factors are [2]:

- frequent, direct, and informal communication
- coordination of the individual contributions
- balance and optimization of these contributions
- mutual support among team members
- mutual effort among team members
- trust in and knowledge of each other

A clear assignment, a structure enabling teamwork and a supportive organisation are also vital [3].

#### Lessons

Leaning on our experience of multi-professional assessment in a teamwork setting and with support of available research, we suggest this work method as a means to handle the increasingly more complex WCAs. A multi-professional approach and a well-developed teamwork will contribute to quality and effectiveness of the assessments and a better understanding of the complex factors involved in each case.

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### Translating prognostic factors for long-term work disability among cancer survivors to recommendations for the guideline Cancer and Work

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#### Background

A systematic review revealed that younger cancer survivors (CS), low educated/income CS, CS with more severe cancer and CS with a history of high absence have a higher risk for long-term work disability. For the Cancer and Work guideline, this evidence on prognostic factors needs to be translated to recommendations. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) method includes an 'Evidence-to-decision framework' with 10 items to be considered. These items are: priority of the problem; test accuracy; benefits and harms; certainty of the evidence; outcome importance; balancing desirable and undesirable effects; resource use; equity; acceptability and feasibility.

#### Objectives

The aim was to translate evidence on prognostic factors for long-term work disability of CS into recommendations for Occupational Physicians (OPs), Social Insurance Physicians (SIPs) and Vocational Experts (VEs) in the context of the multidisciplinary guideline Cancer and Work in the Netherlands.

#### Methods

A multidisciplinary guideline projectgroup (n= 12) had two meetings of two hours and a written round to discuss the translation from evidence to decisions on the guideline recommendations.

#### Results

Most of the discussions were on priority and feasibility. The project group decided that the prognostic risk factors were indicators of vulnerability and should be regarded in their coherence. The recommendation for OPs was: consider documenting diagnosis, treatment, health-related and work-related information. The recommendations for SIPs were: consider when assessing eligibility to disability pension to include the prognostic factors and consider, in their coherence, if they imply a larger individual risk for not working; consider to describe the information about the factors that increase the risk for not working as 'belonging to a risk group' when communicating with other professionals outside the medical domain, as it is not allowed to share medical information with them.

#### Conclusion

The guideline projectgroup decided that the prognostic risk factors should be regarded in their coherence, as they are indicators of socio-economic vulnerability. New research should include changeable risk factors for return to work in CS, such as behaviour or working conditions.

### Return to work after cancer rehabilitation: Representative analyses using routine data of the German Pension Insurance

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#### Background

Cancer diseases are associated with multiple physical, psychosocial, and occupational burdens that jeopardize work participation and must be specifically addressed with rehabilitative interventions. Representative return-to-work rates after cancer rehabilitation are not yet known.

#### Objectives

The analysis addressed for persons who have undergone cancer rehabilitation on behalf of the German Pension Insurance (GPI) following questions: (a) What socio-medical risks exist prior to rehabilitation, (b) how well persons were able to return to work after rehabilitation, and (c) what conditions determine the work participation?

#### Methods

We used the rehabilitation statistics database of the German Pension Insurance and included patients with completed medical rehabilitation due to cancer in 2017. The analyses were carried out for the entire group as well as differentiated according to different tumor sites (breast, prostate, colon and lung). Work participation was operationalized both via a monthly state up to 24 months after rehabilitation discharge and as a rate of all persons who were employed 12 or 24 months and the 3 preceding months (stable work participation). For the analysis of the influencing factors on stable work participation, multiple logistic regression models with stepwise inclusion were calculated separately for the rates after 12 and 24 months.

#### Results

A total of 63,587 data sets were included in the analysis (breast cancer: n = 20,545, 32%; prostate: n = 6,434, 10%; colon: n = 4,727, 7%; lung: n = 2,866, 5%). The average age in the groups ranged from 53 (breast) to 58 (prostate) years, and the proportion of women was 62%. Of the rehabilitation participants 55% (lung), 49% (colon), 46% (breast), and 13% (prostate) had sickness absences of six or more months in the year before rehabilitation. Two years after rehabilitation, return-to-work rates were 66% (breast), 54% (prostate), 50% (colon), and 24% (lung). The strongest factors influencing on stable work participation were time of sick leave, wage before rehabilitation, tumor site and age.

#### Conclusion

Two years after participation in cancer rehabilitation, 5 to 6 out of 10 persons returned to stable work participation. Relevant influencing factors were the time of sick leave, wage prior cancer rehabilitation, type of tumor and age. The results support the further development of cancer rehabilitation to include work-related aspects and accompanying support for rehabilitation patients, especially in the first year after completion of rehabilitation.

### Factors related to the return-to-work of head and neck cancer patients in Belgium: a multivariate Fine-Gray regression model analysis.

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#### Background

The understanding of the factors that underlie the return to work (RTW) of head and neck cancer (HNC) patients is of high importance to better support patients but also to inform policy-makers who aim to tackle societal and health-related inequities and burdens of work inactivity.

#### Objectives

The current study aims to identify key factors that are associated with the probability of RTW in HNC patients.

#### Methods

We used data from the EMPCAN database linking data from the Belgian Cancer Registry and the Cross Road Bank for Social Security. People diagnosed with HNC between 2007 and 2011 and aged 16-60 at diagnosis were selected (n = 398). Fine-Gray regression models were applied to examine the effect of clinical, socio-demographical and work-related factors on the RTW. Subdistribution ratio's (SHRs) over a 7 years and 9 months follow-up were examined in the presence of two competing events: death and retirement.

#### Results

The overall RTW at the end of follow-up is 21.61% and reaches a plateau after approximately 3 years, while 31.66% of patients died and 6.53% retired (40.20% were censored). Age-adjusted analyses attenuated the significant univariate RTW probability increasing effects of stages III and IV and of chemoradiation. Multivariate analyses show that the probability of RTW decreases when age increases. Patients living with another adult without children were less likely to RTW compared to patients who live alone (SHR 2.12, 95% CI 1.14 – 3.97) and to patients who live with another adult and children (SHR 2.19, 95% CI 1.06 – 4.52). In stratified multivariate analyses by age, this result remains significant only among those older than 50.

#### Conclusion

The cumulative incidence of RTW in HNC patients is affected by age and household composition but not by treatment modalities or stage, especially in those older than 50. Policies or interventions that address the RTW of HNC patients should be tailored considering the socio-demographic profile of the patients. In future research, this model should be applied to larger cancer patient groups, such as breast or colorectal cancers.

### Attention Deficit and Hyperactivity Disorder: a database bottleneck

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#### Issue/problem

As stated in the Updated European Consensus Statement on diagnosis and treatment of adult ADHD, the impairments associated with ADHD have a significant impact on professional, social and economic integration throughout life. The frequency of the disorder is 5% in child and 3% in adult. ADHD is underestimated, leading the French drug agency to extend drug coverage. The Methylphenidate license was extended for adult in January 2022. The medical service of the Occitanie health fund was missioned to monitor the topic.

#### Description of the problem

The mission proved to be particularly tough because the ICD-10 code for ADHD, F90, was missing in our database.

- One claimant out of 1968 mental disability pension was a TDHA
- 7 adult cases out of 14242 applied for mental long-term-disease benefit

#### Results (effects /change)

The best way to approach the cases turned out to be the drug intake of methylphenidate. From the 4082 adult patients with drug uptake, only 15% were referred in the long-term mental diseases database, and 2% recorded as F90. All other ICD-10 codes were unrelated to the methylphenidate licence (F31, F60, F84).

We could then monitor the 2022 prevalence of cases in Occitanie and the rapid increase trend since the legal boost: + 38% adult consumers.

We found that 25% of GPs have not referred patients to adequate centers for diagnosis assessment according to guidelines. The low prevalence (0.3%) and the very unequal repartition of the treated cases showed a low coverage.

#### Lessons

The origins of underscoring are problems:

1°) From the Healthcare system: lost in translation

In Europe ICD codes are used by insurance agencies whereas DSM is used by mental health care professionals. Translating a pediatric case to a mental adult service is painstaking. These child's mental health departments are usually under-resourced.

2°) From the case:

The consequences of an un-treated adult ADHD case are: a low scholar level, underachievement at work, and relationship difficulties. As a result the patient cannot keep a job long enough to be enlisted in social contribution making him eligible to sick-leave, disability payments and database recording.

3°) It appears that a majority of ADHD patients is registered with inappropriate codes.

Monitoring from databases reflects neither the reality of practices nor the cost-of-disease. Implementing better tracing is needed to screen and assess ADHD patients.

### Best Practices Whiplash –effective treatments for WAD I-II Recommendations for liability insurers

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#### Background

In the Netherlands, an estimated 35% of all personal injury claims consist of whiplash associated disorder type I-II (WAD I-II). Insurers still seek the best approach to such non-objectifiable complaints; outlining effective medical treatments may facilitate this. However, the last overview dates from June 2015.

#### Objectives

Aim of this study was to provide an update of recommended treatments for WAD I-II to assist insurance companies handling such cases while concurrently promoting the recovery of claimants.

#### Methods

##### 1.Literature search, consisting of:

- scoping review of current professional guidelines for assessment and treatment of WAD since 2015,
- systematic review of the current medical scientific literature on treatment of WAD, published in Pubmed and Web of Science from Jan. 1, 2015 through Dec. 31, 2021.
- analysis of scientific literature relevant to personal injury claim handling such as insurance medical, psychological and legal publications.

#### Results

The scoping review of professional guidelines in The Netherlands performed over 2015-2021, yielded one modified guideline (physiotherapeutical) and one re-ratified unaltered guideline (neurological, the most authoritative guideline on this matter in The Netherlands). Our systematic review resulted in 16 admissible articles; 13 SRs and 3 Clinical Practice Guidelines. Strength of evidence of included SRs was assessed using AMSTAR2 quality assessment. The overview of relevant publications from (insurance) medicine, psychological and legal science provided additional insight in how to approach claimants with WAD I-II to prevent unintended anti-therapeutic effects of compensation schemes such as perceived injustice.

Recommended still is an activating, reassuring approach, encouraging the WAD I-II patient to ‘act as usual’. Passive interventions are largely discouraged, save for pain medication (NSAIDs) en manipulation of the thoracic spine.

New insights since 2015: electroacupuncture is currently discouraged, providing structured information is recommended as is psychological treatment by physiotherapists added to physiotherapy. Use of opioids for pain is discouraged, neck collars are definitively obsolete. Specific guidance for acute and chronic WAD has been established, effective exercises and - therapies have been identified in more detail.

#### Conclusion

Our SR revealed new insights on medical care for WAD I-II since 2015, while an activating approach remains the standard. Current understandings from medical, psychological and legal science are synthesized here into Best Practice Whiplash Recommendations, aimed towards a recovery-oriented approach by insurance companies of WAD I-II claims.

### **Prospective Assessment of structural characteristics in hospitals. A new field of assessment in Germany.**

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#### **Background**

In Germany, the MDK-Reformgesetz has opened up a new field of assessment for medical services. In the inpatient care sector, a retrospective analysis of treated patients has been carried out up to 2020. Since 2021, structural characteristics will also be examined prospectively to determine whether hospitals authorized to invoice the corresponding operation and procedure classification codes (OPS). The examination for proof is based on nationwide uniform evaluation standards.

#### **Objectives**

The aims of this study are to present the implemented contents of the law, to present the results of the assessment, and to present an accompanying survey to hospitals about the scope of implementation

#### **Methods**

A retrospective secondary data analysis of saxon hospitals for the years 2021 and 2022 was carried out. All requests for appraisal of structural characteristics were included in the study. The descriptive analysis of the data comprises the OPS codes of the applications, the fulfilment or not fulfilment of structural characteristics, and the concrete (socio-)medical causes of non-fulfilment. In parallel, a survey was conducted using a full standardized questionnaire that was sent to all hospitals in Saxony. The survey was performed in 2021 and 2022. The results were analyzed descriptively for each question.

#### **Results**

The assessment of structural characteristics for the invoicing of OPS codes is carried out via a specially programmed software solution. This software solution supports the expert witness in processing the assignment. 1,358 requests were assessed by the Medical Service of Saxony during the observation period. 5% of the requests did not meet the (socio-)medical requests of the guideline for the appraisal of structural characteristics and were therefore assessed as not fulfilled. 72% of hospitals reported that they understood the content of the appraisal statement.

#### **Conclusion**

With the survey it was determined that the saxon hospitals are very satisfied with the implementation and the execution of the appraisal. The prospective assessment of the medical services allows an influence in the inpatient care situation. In this approach, health care can be improved and a possible underuse or misuse of health care for the insured can be avoided.

### Supporting dentists in the proper use of the dental nomenclature in the Centre-Val de Loire region

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#### Background

In France, the billing procedures for private dentists changed in 2014 with the introduction of the Medical classification for Clinical Procedure for dentistry. Some of the billing rules remain unknown to practitioners. This leads to billing errors, causing financial loss for the Health Insurance Fund and a risk of litigation for the practitioner. The project was presented to representatives of the dental profession. Can the detection of atypical billing and early support change behaviour?

#### Objectives

The aim of this work is to ensure the correct application of the regulations in order to prevent billing errors as part of the national strategy to combat abuse, fault and fraud.

#### Outline of the workshop

Twelve procedures with a high potential for unusual billing were targeted based on previous observations made during dental activity routine analyses. A detection threshold was set for each procedure and a study of the 2020 reimbursement databases was used to target dentists whose billings exceeded these thresholds. In December 2021, each practitioner identified among the 936 installed in the region received a letter reminding them of the rules of billing, including a technical note with the regulatory and/or scientific reference for each procedure. An analysis of billings for these procedures was then conducted over the first five months of 2022 in order to assess changes in behaviour.

#### Structure

141 dentists were identified (15%). The procedures most frequently involved were: direct pulp capping, removal of cemented or implanted dental material, periodontal abscesses and the combination of CBCT (Cone Beam Computerized Tomography) and panoramic radiograph. At the end of May 2022, we no longer observed any unusual billing for 135 practitioners (96%). The avoided expenditure for the Health Insurance was 78364 euros for the first 5 months of the year.

#### Abstract

Early detection of unusual billing, coupled with a simple support action, made it possible to change the behaviour of the targeted dentists. Given the results, no recovery of undue payments or litigation was necessary. This efficient action has been renewed in 2022 based on the 2021 activity. It includes 3 new procedures and targets 103 private dentists and 17 dental care centres. The evaluation will be carried out at the end of May 2023.

### The significance of organisational and social work environment provisions on sickness absence due to mental diagnoses in Sweden

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#### Background

Sickness absence due to mental diagnoses has increased in Sweden in the last decade and is now making up the largest proportion of sickness absence among people of the working age. To promote a good work environment and prevent risks of ill health due to organisational and social conditions at work, a provision with binding regulations on organisational and social environment was launched by the Swedish Work Environment Authority in 2016.

#### Objectives

The aim of this study was to compare sickness absence due to mental diagnoses in the working population in Sweden before and after the implementation of organisational and social work environment provisions.

#### Methods

A register-based study including all gainfully employed in Sweden in 2014 (N=3.6 million) and in 2018 (N=3.9 million) was used for analyses of sickness absence before and after the implementation of the provision. Sickness absence was measured as new sickness absence ( $\geq 14$  days) and long-term sickness absence ( $\geq 90$  days) in a mental diagnosis. Associations were calculated using binary logistic regression yielding odds ratios (OR) with 95% confidence intervals (CI).

#### Results

There was a higher probability of sickness absence with a mental diagnosis among gainfully employed in all institutional work sectors and in several industries in 2018 compared to 2014. In relation to sectors, the largest difference between the two years was found for new sickness absence among employees in the private sector (OR 1.19, CI; 1.17-1.20) and in the governmental sector (OR 1.15, CI; 1.12-1.18). In relation to industries, the largest differences between the two years were found for new sickness absence in the construction industry (OR 1.26, CI; 1.19-1.32) and retail (OR 1.23, CI; 1.20-1.26). A sub-analysis of employees in education and health care showed higher probabilities for long-term sickness absence for employees in education within the governmental sector (OR 1.22, CI; 1.10-1.36) and for health care employees within the municipal sector, (OR 1.33, CI; 1.11-1.61) in 2018 compared to 2014.

#### Conclusion

There was a higher probability of sickness absence with mental diagnoses two years after the implementation of the organisational and social work environment provision. Implementation of new provisions at local workplaces takes time and research using longer follow-up is warranted.

### Sick leave the first year after COVID-19: a nationwide population study in Sweden.

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#### Background

The impact of COVID-19 and how an acute infection is related to sick leave followed the infection is not yet fully understood.

#### Objectives

The aim of this study was to investigate patterns of sick leave duration during the first year after the first wave of COVID-19, to identify factors that explain the duration of sick leave, and to investigate sex related differences.

#### Methods

This nationwide population study involved 11 902 individuals who received sickness benefits due to COVID-19 during the first wave of the pandemic. Data from three Swedish registries were analyzed for sick leave commencing between 1 March and 31 August 2020, with a follow-up of 12 months. Sick leave due to COVID-19 was counted as the number of days with sickness benefits and was required to include at least one registered COVID-19 diagnosis.

#### Results

The median duration of sick leave due to COVID-19 infection was 35 days, 347 (2.9%) individuals continued their sick leave during the whole follow-up period of 12 months. During one year, the cumulative incidence of sick leave was slightly higher in male individuals (3.5%), compared to female individuals (2.7%). Older age, being single with no children, diagnosed with SARS-CoV-2 infection U07.2, medium income level, history of sick leave, and no need of inpatient care were significantly associated with higher duration of sick leave due to COVID-19 infection in the total population as well as in the subgroups of sex.

#### Conclusion

The results of this nationwide registry-based study indicate a long duration of sick leave due to COVID-19 for a substantial amount of people in this 12 months follow-up. Sociodemographic characteristics, sick leave prior infection as well as need of inpatient care due to infection are associated with sick leave duration. These results indicate the complex nature of sick leave due to COVID-19 as well as the need of long-term follow-up, partly for identifying the people who can return to work, but also people who might benefit from targeted vocational rehabilitation.

### COVID19 and invalidity assessment without clinical examination : impact on insured people disputes

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#### Issue/problem

The Covid19 crisis has induced a major change in our way to deal with the insured people requests, due to sanitary restrictions. Consequently, it has proved essential to be able to assess invalidity without clinical examination, maintaining at the same time the quality of the opinions provided.

#### Description of the problem

In France, if the insured people disagree with the initial invalidity assessment, the cases are sent to a medical commission which can either disconfirm or confirm the first assessment.

We thus have studied the impact of the clinical examination on both insured people dispute rates and disconfirm rates by the medical commission, following an initial invalidity assessment.

We conducted a study comparing the outcomes between initial assessments with clinical examination and initial assessments without clinical examination. In order to assess the invalidity without clinical examination, the insurance physician can read the medical report, contact the general practitioner and call the insured people.

The study focusses on the cases of French insured people of 2 French territories (Haut-Rhin and Meurthe-et-Moselle) who have requested an invalidity pension, with an initial assessment in 2021. The list of the corresponding opinions (initial assessment, disputes and final decision) comes from the medical database of the French social care institution (Hippocrate) and from a monitoring table specifically dedicated to the medical commission.

#### Results (effects /change)

In 2021, 891 opinions were provided, concerning 884 insured people; 4 requests were not valid and 15 were refused by the administration before being sent to the insurance physician.

Among 872 opinions following an assessment by the insurance physician, 537 opinions were provided with clinical examination. Among those, there were 46 disputes (dispute rate of 8.6%), of which 23,9% were then disconfirmed (11 invalidations). Among the 335 opinions provided without clinical examination, there were 25 disputes (dispute rate of 7.5%), of which 24% were then disconfirmed (6 invalidations). The results of the chi-square test (SAS 9.4) are : p-value=0,4627 for the disputes rates, and p-value=0,9198 for the disconfirm rates.

#### Lessons

This analysis shows encouraging data concerning the invalidity assessment quality without clinical examination: there is no significant difference in disputes rates or rejected rates. This would make it possible to consider extending the number and type of opinions given without clinical examination.

## Recognition of COVID-19 as occupational diseases victims in the French social security system

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### Background

The document describes the special system that was introduced by National Health Insurance in France for the compensation of COVID-19 as an occupational disease

### Organizing group(s)

Occupational disease recognition steering group

### Objectives

The French scheme for the recognition of COVID-19 as an occupational disease

### Structure

the intervention times of Drs PIALOT and GOUPIL will be adapted according to the speaking time of the other authors

### Description

The French scheme for the recognition of COVID-19 as an occupational disease has been implemented since the publication of decree n°2020-1131 of September 14, 2020.

Location was dedicated to table 100

Table n°100 relating to COVID-19 constitutes a framework of presumption and allows salaried caregivers or salaried personnel who have worked in healthcare (or medico-social) structures, suffering from a severe respiratory form (with recourse to oxygen therapy) to be automatically and systematically recognized as an occupational disease. Victims of other serious or chronic forms of the disease and/or whose professional activities are unrelated to care may also have their situation studied by a national recognition committee responsible, on a case-by-case basis, for establishing the link between the work and the pathology.

This system has been exceptionally extended to self-employed caregivers. The expenses related to the coverage of these occupational diseases will be reimbursed by the occupational branch of the health insurance, by the French State.

It should be noted that the claims filed as work-related accidents were refused, due to the impossibility of demonstrating the link between the condition and an accidental event. However, they were redirected to an occupational disease investigation.

For claims under the complementary system, i.e. «outside the table» or for non-health professions, a single national recognition committee has been set up. It relies on a panel of physicians from the French hospital civil service: University Professors - Hospital Practitioners (PU-PH) in occupational pathologies, resuscitators and infectiologists. This system takes into account the problem of persistent manifestations also called long COVID-19.

### Results (Status as of May 13, 2022)

At the beginning of January 2022, 5641 files were checked-in and completed with the primary health insurance funds and in CGSS (general social security funds).

These admissible files concern 80% of caregivers.

Among these 5,641 files, 2,183 have been recognized as occupational diseases (1,573 under the table and 610 following referral to the committee).

The main filter for the recognition is ultimately the absence of severity criterion provided-for in the table (3075 files not admissible because of the non-respect of this criterion). However, people who do not meet this admissibility condition receive a letter inviting them to submit a new file for the event of persistent symptoms, thus encouraging the subsequent recognition of so-called «long COVID» cases.

The number of cases of death remains limited and their treatment is prioritized and accompanied.

There are 131 requests for death situations. These files are subject to specific support before and after the procedure and almost all are now complete (128). 75 have already been granted under the table and 51 have been transmitted to the Regional Committee for the Recognition of Occupational Diseases (CRRMP), which has issued 49 favorable opinions.

We are currently observing a clear slowdown in the number of claims.

### Sickness absence among 299 484 blue-collar workers in the trade industry during the Covid-19 pandemic; a Swedish prospective cohort study

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#### Background

Many blue-collar workers in the trade and retail industries have jobs that make it hard to avoid contacts with other people, and may have increased their risk for sickness absence (SA) during the Covid-19 pandemic.

#### Objectives

To investigate SA rates and sociodemographic and occupational differences in risk of SA during the first year of the Covid-19 pandemic.

#### Methods

A prospective cohort study of all blue-collar workers in Sweden in the trade and retail industry aged 18-67 in 2018 (n=299 484), followed 5 years (2016-2020) using linked microdata from nationwide registers. Descriptive statistics of rate of workers having had at least one SA-spell >14 days were calculated, and logistic regression was used to calculate odds ratios (OR) and 95% confidence intervals (CI) of having SA due to Covid-19 or related diagnoses (some infectious, respiratory, and symptom-based diagnoses) in 2020. As neither the ICD-10 code for Covid-19 was generally used nor widespread testing was possible in the first months of the pandemic, we, as many others, also used some related diagnoses for SA due to Covid-19.

#### Results

SA rates among blue-collar workers in the trade and retail industry increased from fluctuating between 7.6%-8.2% in 2016-2019 to 10.0% in 2020. In 2020, 0.05% of the cohort had at least one SA spell SA due to Covid-19 and 2.2% had SA due to Covid-19 or related diagnoses. Factors associated with having SA due to Covid-19 or related diagnoses were higher age (OR age 55-64: 3.41, CI 3.04-3.82 compared to 18-25) and only elementary education (OR 1.50, CI 1.37-1.64 compared to university/college). Warehouse and terminal staff (reference category) was the occupational group with the highest risk of SA/DP due to Covid-19 or related diagnoses. Cashiers had the second highest risk, with CIs that overlapped 1 (OR 0.91, CI 0.77-1.06). All other occupational groups had significantly lower ORs (0.48-0.78).

#### Conclusion

The SA rates increased slightly during the first year of the Covid-19 pandemic. Within the trade and retail industry, the warehouse and terminal staff was the occupational group with the highest risk of SA due to Covid-19 or related diagnoses.

### Does video-based assessment for determining the need for long-term care work?

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#### Issue/problem

The consequences of demographic change in Germany will hardly hit any other sector as hard as long-term care (LTC). One of the strategies currently being discussed in LTC to cope with demographic developments is greater use of modern information and communication technologies. The digitalization push linked to the COVID-19 pandemic has highlighted in particular the potential of video-based procedures, for example, to ensure location-independent care and advice.

#### Description of the problem

Based on their experiences from the COVID-19 pandemic, the Medical Services examined the potentials and limitations of a video-based assessment for determining the need for LTC within the framework of an explorative study. For this purpose, a systematic literature review was conducted to explore essential principles for a video-based assessment of LTC need. This theoretical inventory was supplemented by the perspective of experts from the assessment and consulting practice, data protection, IT and organizational management of the Medical Services. In addition a first coordinated practicability test of the video-based assessment of LTC need has taken place in seven Medical Services.

#### Results (effects /change)

On the basis of the results available so far, it can be stated that the assessment procedure for determining the need for LTC can in principle also be implemented video-based. According to the experts surveyed in the study, this works regardless of the applicant's underlying health problems, including people with cognitive and mental impairments. The technical and data protection requirements for the practical implementation of a video-based assessment are basically met. Nevertheless, the study has highlighted a number of further questions that need to be answered before transferring video-based assessment of LTC need into practice. What needs to be investigated, for example, is whether the results of a video-based assessment correspond to the results of the personal assessment on site.

#### Lessons

The COVID 19 pandemic has given an extreme boost to the development of video-based healthcare services, the scope of application has expanded, and both healthcare providers and patients have been able to gain extensive experience with such digital formats. For implementation in practice, a careful review of the quality of a video-based assessment of LTC need according to German Social Code (SGB XI) is necessary, especially in comparison to personal LTC assessment in the applicant's home environment. The study has provided a basis for this important next step.

### Can e-consultation improve access to care in deprived areas?

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#### Issue/problem

E-consultation (EC) has been implemented in medical practice during the lockdown covid-period.

A report from the French academy of medicine suggests that EC can improve medical coverage but recommends to assess the outcome of the process by an independent administrative authority. The Health Fund (CNAM) made it with a focus on: can we reduce social inequalities in health providers access through EC?

#### Description of the problem

A Survey in Saint-Denis city, east of Paris, with a shortage of doctor and a deprived population was carried out from October 2022 to March 2023. We questioned 200 claimants called at the medical service for sick-leave assessment on their EC practice. This area was relevant because it is in an urban area, eliminating the limitation of network access in remote areas. However a language barrier had to be assumed with 177 languages widespread in the community. Our information was completed by other sources: Interviews of members of the board, general practitioner (GP), Health agencies, EC platforms, polling institutes.

#### Results (effects /change)

Some results are in favour of EC improving access to deprived areas:

1. For the interprofessional association of EC enterprises, 25% of EC users have no attending GP compared to 10% for the general population. 2- More EC users, 25%, live in a deprived area, compared to 17% of the general population.

Other results play against an improvement of health care access: 1- In our survey mentioned above, 85% of the claimants never joined an EC, 12% once or twice, 3% regularly. The opinion of the users on the process was unfavourable in 60%, 25% mixed, and 15% favourable vs 78% in population of the later.

2. the typical profile of the teleconsultant is a 30-year-old city dweller, from a high socio-professional background.  
- 30% of the French population live in deprived area but only 18% of EC-users live in those areas. 4-Only 10% of GP in Saint-Denis practice EC vs 54% (national data), according to a community survey

#### Lessons

The results do not support the conclusion that EC improve health coverage in deprived area. The unfavorable opinion of the claimants, comes from a lack of e-access, of seeing the doctor, and from the language barrier. EC access could however be consolidated through a training assistance.

### Facilitators and barriers for the implementation of eHealth from a healthcare professional's perspective – results of a review of reviews

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#### Background

EHealth is increasingly used to provide and improve healthcare. Long-term and sustainable implementation of eHealth intervention in healthcare practice does, however, often fail.

We sought to create an overview of facilitators and barriers for the implementation of eHealth interventions in healthcare as a guideline for a future implementation strategy for the field of insurance medicine.

We discuss the preliminary results of our systematic review of reviews.

#### Objectives

We aimed to provide an overview of facilitators and barriers for the implementation of eHealth interventions as seen from a healthcare professional's (HCP's) perspective by means of an systematic review of reviews.

#### Methods

A search was conducted in PubMed. Inclusion criteria were qualitative systematic reviews in peer-reviewed journals, published between 01-01-2014 and 01-11-2021, reporting on facilitators and barriers for the implementation of eHealth technologies. We collected data about the facilitators and barriers reported from a healthcare professional perspective only and categorized them at 4 levels ( the individual, organizational, technical and policy level) based on the MIDI (a validated instrument for determinants of innovations).

#### Results

We identified sixteen reviews that met the inclusion criteria.

Specific facilitators and barriers for the different types of eHealth in all 4 levels were found. Additionally, group transcending general factors existed. Facilitators often resembled the opposite of barriers. General barriers on the individual level consisted of increased workload and lack of computer literacy. Lack of training and funding were barriers on the organizational level. Security issues and poor network connectivity on the technical level. And lack of guidelines and legislation on the policy level.

#### Conclusion

This systematic review of reviews resulted in an overview of facilitators and barriers , for the implementation of eHealth, from a HCP perceptive.

The general facilitators and barriers we found in this study, could aid in the development of implementation strategies directed on the implementation of eHealth technologies

### A comprehensive screening monitoring process for drug fraud

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#### Issue/problem

In France, monitoring of drugs diverted from their therapeutic use for recreational or fraudulent purposes is based on alerts issued by health professionals of the Drug Dependence Assessment and Information Regional Centers. Current methods to monitor fraud are only focused on pre-identified drugs. Detection of novel drugs and identification of fraudsters could greatly be improved by querying the database of drugs reimbursed by the health fund.

#### Description of the problem

Our novel method consists in selecting an adult population insured in the Occitanie region and picking up prescriptions from more than four different pharmacies, over a one-year period. Then, the Anatomical Therapeutic Chemical (ATC) classification system from the World Health Organization is used to pool delivered drugs. For each therapeutic class, a box plot is drawn to illustrate the distribution of insured persons relative to the number of boxes. Thresholds for the number of boxes are automatically determined for each class from the boxplots (i.e., third quartile plus 3 times the interquartile range). Finally, an inquiry is carried out on the outliers identifying a part as fraudsters. This process can lead to prosecution.

#### Results (effects /change)

The latest study, carried out from October 2021 to November 2022, investigated 718 drug classes. 395 were excluded as they included less than 30 individuals per class. Over the 323 remaining drug categories, corresponding to a total of 60'698 persons, 222 classes had outliers, representing 1'603 potential fraudsters. Considering these possible drug misuses, the maximal potential prejudice (mpp) amounted to 721'587 €. As expected, molecules commonly tracked and frequently involved in prescription frauds such as narcotics, benzodiazepines and tranquilizers were identified (388 persons, 109'843€ mpp), as well as less commonly monitored drugs as paracetamol (438 persons, 103'93€ mpp), medication for obstructive pulmonary diseases (63 persons, 33'965€ mpp), antiepileptics (42 persons, 65'571€ mpp), migraine medication (34 persons, 24'724€ mpp), antidiabetics (24 persons, 32'777 € mpp) and antibiotics (24 persons, 7'301€ mpp). Our method enabled fraud detection of an unusually controlled drug, the atropin eye drops from Eastern Europe. Misuse of pregabalin was also caught by our detection method, and has now been included in the national monitoring program.

#### Lessons

The method presented herein is a simple and readily applicable tool to detect both old and new molecules linked to illegal activities. Deploying this tool nationwide will help improving detection techniques of diverted drugs.

### **Nurses may assist medical advisors in issuing a favourable or unfavourable recommendation regarding extension of sick leave**

BECKER P. (1), BLANCHARD O. (1)

(1) CNAM, Strasbourg, FRANCE

#### **Issue/problem**

The Health Insurance Medical Service manages the payment of health benefits during sick leave. Due to a shortage of medical staff over the last ten years, medical service nurses (ISM) have been recruited to assist Medical Advisors (MC) in decision-making since 2017. Their function is to collect medical information through face-to-face or remote interviews and give either a favourable or unfavourable recommendation on the extension of the sick leave, while the Medical Advisor takes the final decision. This study compares the ISM's recommendations to the MC's decisions, in order to assess the level of coherence.

#### **Description of the problem**

547 patients were contacted between 01/09/2021 and 28/02/2022. A randomly selected sample of 200 cases out of 231 were analysed, according to the ISM's recommendation and the MC's issued decision.

#### **Results (effects /change)**

Out of the 200 cases selected, information for 139 were collected by phone and 61 through face-to-face meetings. The ISMs recommended 180 favourable and 20 unfavourable decisions for the extension of sick leave. 3 recommendations were conflicting: an unfavourable ISM recommendation followed by 1 favourable MC decision concerning two patients off work for several months due to anxiety syndrome, and 1 favourable ISM recommendation followed by an unfavourable decision by the MC on a patient with a preexisting malignant kidney tumour, on a 1-month leave due to an ophthalmological pathology.

#### **Lessons**

The Health Insurance staff have adapted adequately to the pandemic through the use of tele-medicine. The congruence between ISM recommendations and MC decisions is high. It can therefore be said that the medico-administrative elements collected by the ISMs and the MCs are similar. However, the number of recommendations in favour of extending sick leave raises questions about the anamnestic data. For example, anxiety syndrome can be difficult to assess.

This study shows a relatively high degree of concordance between the nurses' recommendations and the final decisions of the MCs, with a slight discrepancy in unfavourable decisions. It thus validates the current strategy of recruiting nurses to compensate for the lack of MCs. However, it is worth questioning why there is such a low number of patients who return to work before the end of their prescribed sick leave.

### Workplace stigma and managers' possibility to prevent sick-leave of employees with common mental disorders – a Swedish video vignette study

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#### Background

Common Mental Disorders (CMDs) affect many workers in Europe and are a common cause of sick-leave. It is well-known that CMDs carry stigma and it has been argued that stigma needs to be included in sick-leave research. Earlier research has investigated managers' personal stigma toward CMDs. However, there is a lack of understanding of contextual stigma at work, and its importance for workplace prevention of sick-leave.

#### Objectives

This study investigates personal stigma and three layers of contextual stigma (employee, collegial, organizational) and its association with the managers' possibility to take different types of actions to prevent sick-leave.

#### Methods

2,769 Swedish managers working in the private sector filled in a survey. Layers of stigma were measured with the 'managerial stigma towards depression scale' and supplemented with four additional items capturing contextual stigma. The managers' possibility to prevent sick-leave regarding 20 possible preventive actions was assessed using a video vignette design. Principal component analysis revealed three types of actions: 'actions to adapt tasks and setting', 'actions to involve experts', and 'social support actions'. A score reflecting the 'degree of possibility for action' was calculated for each type of action. Multiple linear regression analyses were done with the layers of stigma as independent variables for each of the three types of actions.

#### Results

Personal stigma was significantly associated with the degree of possibility for all types of actions, suggesting more personal stigma connecting to lower possibility to take any type of action. Patterns of association with the contextual stigma variables varied. For 'actions to adapt tasks and setting' both more collegial and organizational stigma contributed to lower degree of possibility to take these actions. For 'actions to involve experts' only more collegial stigma contributed to lower degree of possibility for these actions. For 'social support actions' more of any contextual stigma contributed to lower degree of possibility for these actions.

#### Conclusion

Both personal and contextual stigma were associated with less possibilities for managers to prevent sick-leave in relation to the vignette case. This calls for greater awareness for mental health stigma in workplaces and how stigma might hamper sick-leave prevention. Occupational and other healthcare actors need to act to counteract stigma and to support managers and their employees, to prevent sick-leave of workers with CMDs.

### **Fate of long-term sick leave for Covid and impact on the French social healthcare system**

AUGER A. (1), BLANCHARD O. (2)

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#### **Issue/problem**

Persistent forms of Covid, «long Covid», is a complex and confusing subject with very heterogeneous repercussions for the patient and multiple collateral effects. The aim of this study is to observe the evolution of long-term sick leave monitored by Health Insurance and to analyse the outcome in terms of insurance payments.

#### **Description of the problem**

The present study is based on a descriptive analysis of data extracted from the French Health Insurance databases. Firstly, we identified patients on long-term sick leave for Covid-related reasons who were monitored by the Medical Service of the Grand-Est region during the year 2020. Secondly, we followed-up on the evolution of these work stoppages until the summer of 2022.

#### **Results (effects /change)**

229 insured persons on sick leave due to Covid were monitored by the Medical Service of the Grand-Est region during the year 2020. 53.28% of the insured persons were women, 49.78% belonged to the 50 to 59 age group, and 46.72% were beneficiaries of the Haut-Rhin area. 89.52% of the work stoppages monitored were medically justified.

66 insured persons claimed a benefit during their work stoppages: 11 invalidity pensions, 9 recognized work-related illnesses and 6 long-term conditions were granted. The work stoppages of 10 insured persons were extended.

#### **Lessons**

Although the vast majority of insured persons have seen their work stoppages for sick leave come to an end (71.1%), the persistent forms of Covid have social and economic consequences for our society.

### **Monitoring disease-generic symptoms to improve the return-to-work guidance and work disability assessment of long-term sick listed workers.**

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#### **Background**

Not only disease-specific symptoms (i.e. symptoms specifically related to a disease) influence the course of sick-leave and work disability, but disease-generic symptoms also may have a major impact on returning to work.

Disease-generic symptoms are symptoms that are not specific for one disease; such as pain, mood and concentration problems and fatigue. In occupational medicine, monitoring disease-generic symptoms may be useful to assess work limitations and determine if interventions are needed. In insurance medicine, longitudinal and structural data on disease-generic symptoms are useful for assessing work limitations to determine work disability benefits. However, up to date, evidence is lacking about which disease-generic symptoms should be monitored and how often.

#### **Objectives**

##### **To identify:**

- 1, Which disease-generic symptoms should be monitored over time to facilitate the assessment of work limitations by occupational and insurance physicians.
2. How to structurally monitor these disease-generic symptoms, i.e. which type of measurements and at which time points during two years of sick leave.

##### **Methods**

Five focus groups will be conducted with occupational physicians (n=2), insurance physicians (n=2) and experts / policy makers (n=1). The focus groups will be organized in January 2023, and will be audio-recorded and transcribed verbatim. Themes will be explored by means of open and thematic coding during the summer of 2023. The results will be available to present during the EUMASS conference.

#### **Results**

The results will give us insight into: (1) which disease-generic symptoms should be structurally monitored during sick-leave, as they are considered to be imported for return to work and/or the assessment of work disability benefit; (2) how and at which moments during sick-leave the disease-generic symptoms should be measured; (3) which conditions apply for developing and implementing the instruments to monitor disease-generic symptoms structurally.

#### **Conclusion**

The information obtained will be used to compose an instrument to collect data on disease-generic symptoms that is useful for both occupational and insurance physicians in their assessment of work limitations.

### **Social insurance medicine evaluation of long-term fatigue in breast cancer survivors and implications on disability and return to work.**

HEYLBROECK C. (1), VAN VAERENBERG K. (1), DE SMET F. (2)

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#### **Background**

Breast cancer is the most prevalent cancer in women worldwide . This also applies to Belgium. About 67% of women with breast cancer resumed work within 2 years of diagnosis. About 26% were still incapacitated for work after those 2 years. Fatigue is the most common complaint in breast cancer survivors and leads to long-term incapacity for work.

#### **Objectives**

Social insurance medicine evaluation of long-term fatigue in breast cancer survivors and implications on disability and return to work.

##### Methods

Literature study, 'Evidence-Based Medicine' method. Inclusion criteria: women, 18-65 years, in remission. Exclusion criteria: men, stage IV breast cancer, not in remission.

#### **Results**

Cancer-related fatigue is the most commonly reported symptom in breast cancer patients in remission or Breast Cancer Survivors. In about 20% this gives a severe multifactorial cancer-related fatigue. There are several determinants. The objectified values of fatigue in breast cancer survivors 1-5 years post-diagnosis as in the healthy reference population despite persistent subjective complaints of fatigue .Beyond 5 years decreased functioning and increase in symptoms are observed in breast cancer survivors relative to the healthy reference population despite reporting a similar overall quality of life as in the healthy reference population. When measuring cancer-related fatigue, despite the statistically significant differences in some age groups compared to the healthy control group, the clinical relevance is small. Return To Work gives a positive evolution of cancer-related fatigue complaints. Causes and perpetuating factors should be considered when evaluating cancer-related fatigue as well as complicating factors in differential diagnosis.

#### **Conclusion**

Cancer-related fatigue is a subjective sensation and multidimensional. There are several determinants. We distinguish between 'mild' multidimensional fatigue and 'severe' multidimensional fatigue in breast cancer survivors. The more severe the cancer-related fatigue, the greater the influence on the quality of life, the functioning, the work capacity and the duration of the work disability. When evaluating cancer-related fatigue, it is important to identify the causes and perpetuating factors. Also consider the complicating factors in differentiating between different causes of fatigue. In the context of the assessment of incapacity for work it is objectively difficult to justify long-term incapacity for work due to long-term fatigue in breast cancer survivors on the basis of current Belgian disease legislation, with exception of severe multifactorial cancer-related fatigue.

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### Concordance of opinions on work stoppages given by different actors

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#### Background

The deficit in doctors also affecting Health Insurance consulting doctors (MC) leads the Medical Service (SM) to reorganize itself to maintain a quality service offer to insured persons.

#### Objectives

The emergence of new professions, medical service nurses (ISM) and health insurance service advisors (CSAM), makes it possible to focus the MC's mission on its expertise by gathering for him upstream the elements necessary for the medical decision.

Monitoring work stoppages being an essential mission of the SM, this theme is retained to set up work between the different actors in order to reserve the MC's opinion to end-of-compensation situations.

Until now, the overall follow-up of these files was carried out by the MC.

#### Methods

A framework is developed to support the interviews (telephone or face-to-face) carried out by CSAMs or ISMs with insured persons off work.

Targeting on indicators of pathology and/or duration of work stoppage allows orientation to the CSAM or ISM.

The first step in the process is to ensure a concordance between the opinions of the different actors.

This unique framework completed during the interview includes all the essential elements (identical to those sought by MCs outside the clinical examination) for a precise vision of the situation on the part of the MC associated with a proposal for a decision from the CSAM or the ISM:

- Continuation of justified work stoppage
- End of the foreseeable work stoppage followed by a return to work or compensation for another reason (disability, consolidation, retirement by incapacity)

Reading the plot, the MC makes his decision. This is then compared to the proposal made by its employees.

#### Results

A one-month test phase to assess the feasibility of using this frame and measure the concordance of the opinions demonstrated the validation of the decision by the MC (nine of ten cases, the vision gap of the MC rather towards a refusal after convocation)

#### Conclusion

The quality of the frame with precise items ensures the objectivity of the answers.

The use of this framework with a proposal for a decision by all ISM and CSAM will reduce the number of insured persons seen or contacted by the MC and thus reposition it on other missions where its expertise is mandatory and cannot be delegated.

### Absenteeism at Two Occupational Health Services in Belgium from 2014 to 2021

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#### Background

Medical certification is often needed for absences of longer than one workday. The literature remains unclear as to whether this changes absenteeism. Earlier research found that the merging of two firms can augment or diminish short-term absenteeism.

#### Objectives

This study was conducted to examine whether prolonging self-certification or merging increases short-term absenteeism.

#### Methods

Data from January 2014 to December 2021 were retrospectively collected from HR absenteeism files at two occupational health services in Belgium. Sickness periods of longer than 4 weeks were excluded. Company 1 started a merger in 2014, and company 2 prolonged of the self-certification period in 2018.

#### Results

The total full-time equivalents (FTEs) of company 1 increased by 6%, while company 2 had an increase of 28%. At company 1, there was a decline in absenteeism, while company 2 had an increase. The ARIMA (1, 0, 1) model provided a statistically significant local moving average (company 1: 0.123; company 2: 0.086) but no statistically significant parameters for the intervention (company 1: 0.007,  $p = 0.672$ ; company 2: 0.000,  $p = 0.970$ ).

#### Conclusion

Prolonging the self-certification period by up to 5 days without medical certification or merging was not found to increase short-term absenteeism.

### Tests to assess function and activity

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#### Issue/problem

As a support to doctors who prescribe sick leave, the assessment teams in Västra Götaland offer team-based assessments of function and activity capacity based on standardised tests, in an attempt to clarify. Occupational therapist, physiotherapist and psychologist perform tests to measure cognitive and physical ability as well as mental and physical endurance during three separate visits.

#### Description of the problem

In Sweden, doctors are required to describe the function and activity limitations that prevent the patient from working. Entitlement to sickness benefit is then assessed by an insurance administrator at Försäkringskassan, who does not have a medical background and who normally does not meet the person in question. The challenge is therefore to describe the patient's limitations and abilities as tangibly and clearly as possible.

#### Results (effects /change)

During the visit to the occupational therapist, the patient performs work-like tasks such as assembling a bookshelf, completing an order on a computer, picking and packing a stock order and sorting letters. In the meantime, the patient's ability to receive instructions, both oral and written, how the patient approaches the task and the actual performance are observed.

In the case of the physiotherapist and psychologist, the testing situation is more obvious. At the physiotherapist's, the patient is asked to walk for five minutes in a corridor, carry bags, climb stairs, walk fast, walk in a figure of eight. Hand strength is measured, as well as finger dexterity by means of a nine-hole peg test. Lifting ability is assessed when the patient lifts boxes with weight inside. Endurance is graded.

The psychologist performs a clinical assessment, to identify psychological factors and symptoms that may influence functionality and activity. A cognitive screening is also accomplished, often using RBANS as a bases, and eventually adding other needed tests. Various self-assessment scales might be used to measure executive ability, depression, and anxiety among others.

The patient also visits a doctor before the whole team meets to collate the results. The doctor performs a basic physical examination, reviews any medication, previous examinations, treatments, and status.

#### Lessons

By using standardised tests and actually seeing the patient perform activities, we believe that the assessment of the capacity to work is more accurate and less subjective. The test result provides us with an opportunity to describe the function and activity capacity of the patient tangibly.

### Generalization of fear of movement-related pain and avoidance behavior as predictors of work resumption after back surgery

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#### Background

Previous studies indicated that about 20% of the individuals undergoing back surgery are unable to return to work three months to one year after surgery. However, the specific factors that can explain individual differences in post-operative pain and resumption of work are largely unknown.

#### Objectives

The aim of this prospective, longitudinal study is to identify modifiable, psychological predictors of work resumption after back surgery.

#### Methods

Therefore, 300 individuals with radicular pain undergoing a lumbar decompression are followed until one year post surgery. Prior to surgery, participants will perform a computer task to assess (generalization of) fear of movement-related pain and avoidance behavior. Before and immediately after surgery, they will also complete questionnaires to assess fear of movement-related pain, avoidance behavior, optimism, expectancies towards recovery and work resumption, and the duration and severity of the pain. Six weeks, three months, six months, and twelve months after surgery, they will again complete questionnaires to assess (sustainable) work resumption, pain severity, disability, and quality of life.

#### Results

The results cannot be reported as the study is still ongoing. The primary hypothesis, however, is that (generalization of) fear of movement-related pain and avoidance behavior will negatively affect sustainable work resumption after back surgery. Second, we hypothesize that (generalization of) fear of movement-related pain and avoidance behavior, negative expectancies towards recovery and work resumption, longer pain duration, and more severe pain before the surgery will negatively affect work resumption, pain severity, disability, and quality of life after back surgery. In contrast, optimism and positive expectancies towards recovery and work resumption are expected to predict more favorable work resumption, better quality of life, and lower levels of pain severity and disability after back surgery.

#### Conclusion

With the results of this research, we hope to contribute to the development of strategies for early identification of risk factors and appropriate guidance and interventions before and after back surgery.

### Exploring drivers and consequences of disclosure and concealment of multiple sclerosis at the workplace

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#### Background

People with multiple sclerosis (PwMS) face both health and social challenges of living with a chronic and potentially disabling condition. One particular challenge is work. To disclose or conceal the MS diagnosis at work can be a difficult decision and may critically affect individuals' work situation, career opportunities, disease management and, ultimately, their health. PwMS often face a dilemma when assessing if the possible benefits of disclosing the diagnosis outweigh the possible risks; especially early in the disease course, when symptoms are usually milder, or in periods of low disease activity. However, concealing MS in the long-term may cause health implications over time as well as prevent opportunities for social support and work adjustments.

#### Objectives

To explore what drives PwMS to disclose or conceal the MS diagnosis at the workplace, particularly to their bosses and co-workers, as well as experienced consequences afterwards.

#### Methods

A web-based survey of PwMS was conducted in 2021 with linked individual-level sociodemographic and clinical data from nationwide Swedish registers. All individuals aged 20-50 listed in the Swedish MS registry were invited (n=8458), with 52% responding. This study included participants with open-ended responses to questions on disclosure and/or concealment of MS in a workplace setting in the survey (n=3810). These responses were analyzed using inductive content analysis.

#### Results

The majority (85%) of the participants had disclosed their MS diagnosis at work. Most of those who disclosed were aged 40-49 (51.1%) or 30-39 (32.6%) and had low levels of disability (Expanded Disability Status Scale score: 0-2.5). Drivers were related to: enabling continued work participation, securing financial protection and career opportunities, preventing stigma, seeking social support and understanding, being considerate of others, protecting self-image, preserving or reconstructing identity, wanting to reach disease acceptance, being guided by moral values/personal beliefs, and maintaining personal well-being. Consequences were related to: work adjustments, working conditions, career aspects, dissemination of MS knowledge, MS-related stigma, workplace (mis)treatment, social support, emotional reactions of others to the diagnosis, disease acceptance, personal development, façade upkeep, emotional stressors, and integrity issues.

#### Conclusion

Although it was common to disclose MS at the workplace, it was often reported as problematic and cautiously navigated, as both disclosure and concealment yielded favorable and unfavorable outcomes. It is important to continue investigating and identifying factors that enable a safer psychosocial work environment for PwMS to disclose.

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#### Background

People with multiple sclerosis (PwMS) face both health and social challenges of living with a chronic and potentially disabling condition. One particular challenge is work. To disclose or conceal the MS diagnosis at work can be a difficult decision and may critically affect individuals' work situation, career opportunities, disease management and, ultimately, their health. PwMS often face a dilemma when assessing if the possible benefits of disclosing the diagnosis outweigh the possible risks; especially early in the disease course, when symptoms are usually milder, or in periods of low disease activity. However, concealing MS in the long-term may cause health implications over time as well as prevent opportunities for social support and work adjustments.

#### Objectives

To explore what drives PwMS to disclose or conceal the MS diagnosis at the workplace, particularly to their bosses and co-workers, as well as experienced consequences afterwards.

#### Methods

A web-based survey of PwMS was conducted in 2021 with linked individual-level sociodemographic and clinical data from nationwide Swedish registers. All individuals aged 20-50 listed in the Swedish MS registry were invited (n=8458), with 52% responding. This study included participants with open-ended responses to questions on disclosure and/or concealment of MS in a workplace setting in the survey (n=3810). These responses were analyzed using inductive content analysis.

#### Results

The majority (85%) of the participants had disclosed their MS diagnosis at work. Most of those who disclosed were aged 40-49 (51.1%) or 30-39 (32.6%) and had low levels of disability (Expanded Disability Status Scale score: 0-2.5).

Drivers were related to: enabling continued work participation, securing financial protection and career opportunities, preventing stigma, seeking social support and understanding, being considerate of others, protecting self-image, preserving or reconstructing identity, wanting to reach disease acceptance, being guided by moral values/personal beliefs, and maintaining personal well-being. Consequences were related to: work adjustments, working conditions, career aspects, dissemination of MS knowledge, MS-related stigma, workplace (mis)treatment, social support, emotional reactions of others to the diagnosis, disease acceptance, personal development, façade upkeep, emotional stressors, and integrity issues.

#### Conclusion

Although it was common to disclose MS at the workplace, it was often reported as problematic and cautiously navigated, as both disclosure and concealment yielded favorable and unfavorable outcomes. It is important to continue investigating and identifying factors that enable a safer psychosocial work environment for PwMS to disclose.

### Early communication between general practitioner, sick-listed patient, and employer – the Capacity Note project

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#### Background

Early and collaborative interventions are desirable to prevent long-term sick leave and promote sustainable return-to-work (RTW).

#### Objectives

The aim of this study was to follow sickness absence (SA) in patients with common mental disorders (CMD) after a brief primary healthcare intervention promoting early structured communication between general practitioner (GP), patient, and employer. Communication was supported by the Capacity Note, a form focussing on how CMD affect work capacity and measures possible to take at work to support work capacity.

#### Methods

In a pragmatic trial at eight Swedish primary healthcare centres, GPs were randomized to intervention (using the Capacity Note in addition to care as usual) or control (care as usual). The GPs identified and recruited eligible patients: employed women and men, 18-64 years, visiting a GP due to CMD and being sickness absent for less than 4 months. Outcomes of interest were time until full RTW, number of SA episodes and SA days during follow-up and SA status at end of follow-up (17 months).

#### Results

The GPs identified 99 patients as eligible. Of these, 58 chose to participate (30 intervention and 28 control). Common reasons for not participating were lack of energy and hesitation to involve the employer. Two intervention patients dropped out. Of the remaining 28 intervention patients, 50% completed the intervention. Time until full RTW was 102 and 90 days (median) in intervention and control group, respectively. The proportion of patients with full RTW after 17 months was 79.2% in the intervention group and 84.6% in the control group. We found no statistically significant differences between the groups for any of the outcomes.

#### Conclusion

A post-study estimation in local registers identified around 500 eligible patients. Despite efforts to increase recruitment only a fifth of those were asked to participate. The small study sample prohibits us from drawing any conclusions about the intervention's effect on SA. With early interventions follow a vulnerability in patients due to active CMD symptoms. Thus, GPs might have been hesitant to recruit patients. The pressured work situation in primary healthcare most likely also affected recruitment negatively. It seems that a more pronounced support structure is needed to make the intervention work, for example by integrating the Capacity Note into existing work routines.

### **Context, mechanisms and outcomes of motivational interviewing in public health insurance: A qualitative study among long-term work-disabled.**

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#### **Background**

Returning to work (RTW) is a complex process in which people need guidance. Motivational interviewing (MI) is a counseling style for coaching people during this process. We investigate work-disabled peoples' experiences with MI and how these contribute to their RTW process. We include patients with low back pain (LBP) and medically unexplained symptoms (MUS) as these are increasingly represented in this population.

#### **Objectives**

We investigate work-disabled peoples' experiences with MI and how these contribute to their RTW process. We include patients with low back pain (LBP) and medically unexplained symptoms (MUS) as these are increasingly represented in this population.

#### **Methods**

Eighteen people in work disability with LBP or MUS (29–60 years; absence from work > 12 weeks) participated in a semi-structured interview after one MI consultation. Thematic analysis was used with incorporation of the Medical Research Council process evaluation framework.

#### **Results**

MI-based consults enabled RTW steps. Supporting autonomy, affirmation and focusing on possibilities were perceived as the main working mechanisms. Despite similarities, LBP patients benefited more from competence support, whereas supporting relatedness was more important for MUS patients. Contextual factors (e.g. workplace, society) influenced how these consults and their further impact were perceived.

#### **Conclusion**

MI impacted these subsamples of work-disabled people. It led to both proximal (e.g. coping) and distal outcomes (e.g. taking steps in recovery). The working mechanisms related to MI, self-determination theory and solution-focused counseling. Future research will need to demonstrate the sustainability of these effects.

### Digital assisted or face-to-face outpatient rehabilitation: study protocol of a randomized non-inferiority trial

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#### Background

Physiotherapeutic telerehabilitation in various musculoskeletal and internal diseases, including back pain, might be comparable to face-to-face rehabilitation or better than non-rehabilitation. In Germany, a standardized back school for patients with chronic back pain is provided in outpatient rehabilitation centers. The effectiveness of this standardized back school was shown in a randomized controlled trial in face-to-face rehabilitation. Our study examines non-inferiority of a digitally assisted rehabilitation applying a digital version of the standardized back school against a rehabilitation applying the face-to-face back school.

#### Objectives

We hypothesize that patients receiving the digital assisted rehabilitation achieve comparable pain self-efficacy as patients receiving the back school within a conventional rehabilitation program.

#### Methods

We recruit 320 patients in eight German outpatient rehabilitation centers. Patients are randomized equally to the intervention and control groups. Patients aged 18 to 65 years with back pain are included. Patients lacking a suitable private electronic device and German language skills are excluded. Both groups receive the standardized back school as part of the 3-week rehabilitation program. The control group receives the back school conventionally in face-to-face meetings within the outpatient rehabilitation center. The intervention group receives the back school online using a private electronic device. Besides the back school, the patients participate in rehabilitation programs according to the German rehabilitation guideline for patients with chronic back pain. The back school consists of seven modules. We assess data at four time points: start of rehabilitation, end of rehabilitation, 3 months after the end of rehabilitation and, 12 months after the end of rehabilitation. The primary outcome is pain self-efficacy. We determined -4 points as the non-inferiority margin, since 4 points are slightly below the smallest clinically important difference (5.5 to 8.5) reported on pain self-efficacy in patients with low back pain. Hence, we assume non-inferiority of the digital assisted rehabilitation if the lower boundary of the one-sided 95% confidence interval exceeds -4 points. Secondary outcomes are, amongst others, motivational self-efficacy, cognitive and behavioral pain management, and disorder and treatment knowledge. Secondary outcomes will be tested on superiority. Guided interviews with patients, physicians, and other health care professionals supplement our study with qualitative data.

#### Results

Recruitment is ongoing.

#### Conclusion

Our randomized controlled trial aims to demonstrate non-inferiority of the online back school compared to conventional implementation of the back school.

### How do occupation and job exposures change after vocational rehabilitation in Germany?

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#### Background

Vocational rehabilitation (VR) services aim to support the vocational reintegration of persons with work disabilities. The type of occupation and associated job exposures are associated with health and influence return-to-work and further occupational perspectives.

#### Objectives

We examined occupations before and after VR services and the change in job exposures in a sample of individuals with approved VR services by the Federal German Pension Insurance.

#### Methods

Individuals with approved VR services between January and June 2016 completed questionnaires shortly after the approval (baseline) and approximately 3.5 years later (follow-up). Job titles were coded into the five-digit occupation coding scheme of the German Classification of Occupations and matched with parameters of physical and psychosocial job exposures (low, moderate and high). An improvement in job exposure was defined as a change in categories from high to low, medium to low, and high to medium, respectively.

#### Results

Data of 609 persons (73.7% female; mean age 47.8 years) were included. 494 persons (81.1%) completed at least one service during the observation period, 115 persons (18.9%) did not receive any services despite approval. At baseline, 52 persons (8.5%) had high physical and 276 (45.3%) high psychosocial job exposures. At follow-up, the proportion of persons with high job exposures decreased to 4.9% (physical) and 23.2% (psychosocial). Physical and psychological job exposures were reduced in 36.7% and 46.9% of persons with VR services, respectively, but only in 7.0% and 19.1% of individuals without services. At baseline 53.6% and 60.8% of persons with and without services were employed in health care and sales occupations, respectively. At follow-up, only 24.5% of persons with services, but still 52.2% of persons without services, were employed in these occupations.

#### Conclusion

The occupations of persons with approved VR by the Federal German Pension Insurance were mainly characterized by psychosocial job demands. Analyses at follow-up indicated, that individuals with VR were significantly less likely to work in occupations with high job exposures than individuals without services. Furthermore, the more frequent change from stressful occupations (e.g. health care occupations) among persons with VR services indicate an adjustment of occupational demands and skills due to the services. Returning to occupations with reduced job exposures can be a strategy for successful return to work in the context of VR.

### **A medical commission to replace a judge in a court : impact and relevance of changing legislation**

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#### **Issue/problem**

Prior to 2019 in France, if the insured people disagreed with the permanent disability percentage assessed by the insurance physician after an occupational accident or disease, their cases were sent to court. Starting from January the first 2019, those cases were sent to a medical commission called CMRA (Commission Médicale Recours Amiable) due to a change in the French legislation, establishing a compulsory medical amicable step before being sent to court.

#### **Description of the problem**

This commission is composed by physicians only : an insurance doctor and a judicial expert doctor. The objective of our study is to analyze the impact of this legislative change by answering the following questions : Are the initial assessments more or less often rejected by the CMRA than by the judge ? When the initial assessment is denied, what would be the discrepancy between the first and the second one ? We conducted a before / after study in one region of France. Among all of the insured people protests, we calculated the percentage of initial assessments rejected by the court in 2018 and the percentage of those rejected by the CMRA in 2019-2020-2021. Then we studied the discrepancy between the assessments : average, minimum, maximum, mathematical distribution.

#### **Results (effects /change)**

In 2018, there were 551 cases analyzed in which 41,0% were rejected by the judge. The average discrepancy when a new disability percentage was assessed reached +7,5 points [+1 ; +45]. In 2019-2020-2021, there were 2407 cases analyzed in which 16,5% were rejected by the CMRA. When a new disability percentage was assessed by the CMRA, the average discrepancy was +5,0 points [+1 ; +31].

#### **Lessons**

The main outcome of our study is that the disability percentage initially assessed by the insurance physician is less often rejected when the case is sent to a medical commission. Furthermore, when the commission rejects the first assessment, the discrepancy between the first and the second assessment is dimmer. This is probably due to the medical skills of the physicians composing the CMRA as opposed to a judge in a court lacking medical expertise. It could have a major impact on the French social care financial situation, which requires further analysis.

### Peer review procedure for case-related and global quality assurance of medical assessments for Swiss disability insurance (PRP-CH)

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#### Issue/problem

The quality of medical assessment reports in Switzerland's social insurance sector has recently been criticized by various stakeholders, including insured individuals, patient organizations, physicians, politicians, media, and the courts.

#### Description of the problem

The quality of expert reports has so far been assessed unsystematically and heterogeneously by the internal medical services (Regional Medical Services) of the Swiss disability insurance. An insurance-independent quality assessment was not carried out. In addition, until 2022, there was no institution in Switzerland responsible for general, non-case-related quality assurance.

#### Results (effects /change)

In response to this, the Swiss Peer Review Procedure (PRP-CH) for the evaluation of medical assessments was developed on behalf of the Federal Social Insurance Office in a working group. This involved representatives of insured persons, experts, professional societies and insurers in 2019-2022, taking into account the corresponding manual of the German Pension Insurance. The Federal Council established the extra-parliamentary Federal Commission for Quality Assurance of Medical Assessments (FCQMA) in 2022. This new independent Commission decided to evaluate the 24 items of the instrument of the Swiss Peer Review Procedure (PRP-CH) by eight independent experts in a double-blind setting to review 10 anonymized samples of expert reports in the PRP pilot project in 2023. The independent experts were also asked to rate the importance of the 24 items for the quality decision. The results of the evaluation of the PRP-instrument permit to reduce the number of items and to validate this instrument in order to provide general non-case-related quality assurance and to periodically assess the current status of expert report quality and for audits and accreditation checks of expert bodies.

#### Lessons

The standardised PRP-instrument enables a uniform evaluation of all expert reports. In the future, the independent Commission FCQMA will use the results of the non-case-related PRP to develop public recommendations for medical assessors, the accreditation of expert bodies, and the education and training of assessors.

### Neuropsychological effort validity in the context of insurance medical team assessment in Sweden

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#### Background

The prevalence of invalid effort has been estimated to be 20-40% in medico-legal contexts (Mittenberg, W., et al. J Clin Exp Neuropsychol 2002; 24(8): 1094-1102) and thus constitutes a major concern in the field of insurance medicine. As a mean to address this issue, performance validity tests (PVT) have become a standard tool for many clinical neuropsychologists. The Test of Memory Malingering (TOMM; Tombaugh, 1996; North Tonowanda, NY) is the most frequently used free standing PVT, validated in numerous studies and in diverse populations (Martin, P. K., et al. Clin Neuropsychol 2020 34(1): 88-119). Beyond regular cut-off-scores, the forced choice design of the test admits the detection of significantly lower-than-chance performance.

#### Objectives

We aimed to investigate the prevalence of invalid effort in a cohort of claimants referred for an insurance medical team assessment (AFU), at Danderyd Hospital, Sweden.

#### Methods

All claimants referred for AFU on behalf of the Swedish Social Insurance Agency between May 2019 and September 2022, and who underwent a neuropsychological examination, TOMM being administered, were included the study.

TOMM is a forced choice PVT including two trials, with a cut off score for valid effort set at >45 out of 50 correct answers in the second trial. Below-chance performance at the 95% confidence interval equal results <18.

The results of TOMM were categorized in three levels

- 1) Valid performance > 45 trial 2
- 2) Non-valid performance 18-44 trial 2
- 3) Below chance performance <18

#### Results

Included n = 869

Missing n = 3

Valid performance > 45 trial 2 n = 613 (71%)

Non-valid performance 18-44 trial 2 n = 213 (25%)

Below- chance performance <18 n = 40 (5%)

#### Conclusion

Our results are in line with what has been reported in previous studies carried out in the medico-legal field, emphasizing the value of including a PVT on a regular basis in the setting of insurance medical team assessment.

### Reliable digit span as a measure of neuropsychological effort validity in the frame of insurance medical team assessment in Sweden

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#### Background

The prevalence of non-valid effort has been estimated 20-40% in medico-legal contexts (Mittenberg, W., et al. J Clin Exp Neuropsychol 2002; 24(8): 1094-1102), thus representing an obstacle in the field of insurance medicine. To face this problem, performance validity tests (PVT) have become an important complement in neuropsychological evaluation. Reliable Digit Span (RDS) from the Swedish version of Digit span, Wechsler Adult Intelligence Scale (WAIS) (Wechsler, Publisher: Psykologiförlaget AB. 2003) is a well-studied embedded PVT. Cut off at  $\leq 6$  or  $\leq 7$  is standard, though caution has been urged of using such high cut off scores in cognitively impaired individuals and non-native speakers (Maiman, M., et al. (2019). Arch Clin Neuropsychol 34(2): 259-267).

#### Objectives

We investigated the prevalence of invalid effort as measured by RDS  $\leq 6$  in a cohort of claimants referred for an insurance medical team assessment (AFU) at Danderyds Hospital, Sweden.

#### Methods

All claimants referred for AFU on behalf of the Swedish Social Insurance Agency between May 2019 and September 2022, and who underwent a neuropsychological examination, the Digit span subtest of WAIS being administered, were included in the study. RDS was calculated by summing the maximum number of digits forward with the maximum number of digits backwards over two trials (Greiffenstein, M, Baker, J., & Gola, T. (1994). Psychological Assessment, 6, 218-224). Cut off was set at  $\leq 6$ .

#### Results

1005 claimants were included in the study. The prevalence of invalid effort as measured by RDS  $\leq 6$  in our cohort of claimants referred for an insurance medical team assessment was found to be 35 % whereas the prevalence for a valid performance was 65%

#### Conclusion

Our results suggest that RDS is a simple test for the assessment of performance validity and that lack of performance validity is one key factor that needs to be considered when assessing work limitations.

### Can evaluation of variations in sensory thresholds be used as a marker of validity performance?

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#### Background

There is little knowledge whether the effort of the insured in cognitive validity test is related to his or her performance in assessment of sensory thresholds.

#### Objectives

The aim of the study was to investigate differences in test results of sensory thresholds in men and women participating in an insurance medical evaluation, passing and not passing the cut off score for a valid effort while performing the Rey 15 item memory test.

#### Methods

An observational study was carried out in claimants undergoing an insurance medical evaluation. Data was collected consecutively using the PainMatcher for the assessment of the sensory thresholds (sensory detection (EST) and pain detection threshold (EPT)) and Rey 15 item memory test for performance validity in the cognitive assessment. Non-parametric methods were used for analyzing as there was skewness in the data.

#### Results

32 claimants were included in the study, of which 25 passed the cut off score for a valid effort performing using Rey15, and seven did not pass the cut off score. The median for sensory detection threshold was significantly lower in the study group not passing the cut off score. The group not passing the cut off score also had lower pain detection thresholds.

#### Conclusion

Low effort in a cognitive validity test seems to covariate with low sensory and electrical thresholds and with a high variability between repeated measures. Also, two individuals even reported sensory detection before start of the stimulation.

### Domestic violence – dare to ask.

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#### Background

Domestic violence is a public health problem, with serious physical and psychological consequences for the victim, and can lead to severe social problems. Many victims of violence seek health care with diffuse physical and psychological symptoms, but rarely talk about the violence (Socialstyrelsen 2014, ISBN 978-91-7555-224-8).

Studies show that approximately one in four women and one in six men has been exposed to physical or psychological violence by a relative at some point during their lifetime (Regionalt vårdprogram 2019 – Våld i nära relationer. Stockholm; 2019).

Domestic violence includes various forms of violence; physical, psychological, sexual, economic and neglect. There is strong evidence that a life where violence or threat of violence occurs, affects health negatively. Studies show that women and men who had been subjected to sexual, physical and/or psychological violence reported to a significantly higher extent symptoms of depression and risky use of alcohol, and physical symptoms such as headaches, pain in the shoulder or neck, dizziness or gastrointestinal problems compared to those who have not been exposed. It was also several times more common to state symptoms of post-traumatic stress disorder and self-injury behavior (Nationellt centrum för kvinnofrid. Befolkningsundersökning Våld och hälsa. Uppsala. NCK; 2014).

#### Objectives

The aim was to investigate if claimants undergoing an insurance medicine evaluation at Danderyds Hospital, Sweden, have a higher prevalence of experience of domestic violence compared to the Swedish population.

#### Methods

All claimants referred to an insurance medicine evaluation by the Swedish Social Insurance Agency between December 2019 and September 2022 were included in the study. Question regarding experience of domestic violence was asked during first visit to physician.

#### Results

Out of the 1775 claimants included in this study, 456 claimants (26%) reported experience of domestic violence. In the Swedish population there is a 21% lifetime expectancy of being subjected to any form of domestic violence.

#### Conclusion

There is significantly higher prevalence of claimants with experience of domestic violence undergoing an insurance medicine evaluation compared to the population in general.

Exposure to violence can be an underlying cause of some sick leave and it is therefore important that the question of experience of domestic violence is asked during an insurance medicine evaluation.

### How frequent is comorbidity in claimants with long-term sickleave referred from the Swedish Social Insurance Agency for insurance medicine evaluation?

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#### Background

In Sweden, sick leave during the first seven days is self-certified. Sick pay is covered by the employer from days 2 to 14. Thereafter, a person who still has reduced work ability due to disease may apply for sickness benefit from the Swedish Social Insurance Agency. On the eighth day of sick leave the claimant must demonstrate his or her incapacity to work, with a sickness certificate issued by a physician. The sickness certificate should specify, among other things, diagnosis, functional and activity limitations. The physician should also report their assessment of the person's ability to work and make recommendations about the degree and length of sick leave based on the National Board of Social Affairs and Health - Insurance medical decision support – which is based on a diagnosis - (Socialstyrelsen - Forsakringsmedicinska beslutsstod).

In 2011 a new form of in-depth independent medical examination (IME) was prepared by the Swedish Social Insurance Agency on behalf of the government for patients with a long-term sick leave. The activity ability investigation (Aktivitetsförmågeutredning, AFU) focuses on assessing the types of activities that can be done despite various medical problems and is based on a proficiency profile regarding the claimant's physical and psychological abilities, as well as the claimant's self-reported ability and view of opportunities for work. There are significant advantages with standardized investigations, such as the standardized examination and the standardized statement in AFU. It gives the independent medical examination report a good transparency regarding what is judged and how it is judged.

#### Objectives

To investigate comorbidity in claimants with a long-term sick leave.

#### Methods

2341 claimants referred for an insurance medicine evaluation (2020-2021) at Danderyds Hospital in Sweden on behalf of the Swedish Social Insurance Agency were included in the study. All the participants were examined and assessed by a medical doctor. In patients with several diagnosis the primary and secondary diagnosis was established on basis of symptoms signs and functional impairment.

#### Results

Out of the 2341 claimants included, 83% suffered from comorbidity. 54% had a primary somatic diagnosis and 46% a primary psychiatric diagnosis. In 17% of the claimants there was one diagnosis.

#### Conclusion

Claimants on long-term sick leave generally suffer from complex comorbidity. Recommendations about the degree and length of sick leave needs to take this into account.

### **Association between chronic fatigue and hypermobile Ehlers–Danlos syndrome (hEDS): insurance perspectives and diagnostic challenges in Switzerland.**

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#### **Issue/problem**

Chronic fatigue is a frequent symptom in primary care consultations and medical insurance assessments, with a significant impact on the social and professional life of patients. Sick leaves certification, work capacity evaluation, and return to work can be challenging, mainly if chronic fatigue is the principal manifestation. Sometimes, physicians and insurance experts tend to diagnose chronic fatigue syndrome (CFS), even though other comorbidities could remain underdiagnosed, such as the hypermobile Ehlers–Danlos syndrome (hEDS), with implications in work capacity evaluation and management.

#### **Description of the problem**

Our objective is to discuss strategies for a comprehensive assessment of the functional limitations and the work capacity of patients with chronic fatigue and illustrate the association with hEDS through a case report of insurance medicine. A 26-year-old Caucasian woman was examined in our Concilium university department of complex cases. CFS was previously diagnosed in a primary care setting, validated after a multidisciplinary insurance examination, and a complete appreciation of the functional somatic and psychiatric limitations. A total work incapacity was retained by the medical experts and by the insurance. We confirmed CFS's 2011 and 2015 criteria (International Consensus criteria, Institute of Medicine) and evaluated for other co-existing conditions.

#### **Results (effects /change)**

In the context of severe fatigue with multisystem symptomatology, the three criteria of 2017 international diagnostic criteria for hEDS were present: (I) Beighton score 8/9 ( $\geq 4$ ), (IIA) clinical signs 6/12 ( $\geq 5/12$ ), (IIB) family history of hEDS, (IIC) chronic musculoskeletal pain  $\geq$  two extremities, (III) exclusion criteria. The new diagnosis did not affect the previously described functional limitations of chronic fatigue, and the patient was oriented to a specialized hEDS team with therapeutic implications.

#### **Lessons**

The work capacity of a patient with chronic fatigue and other co-existing conditions, such as hEDS, can be estimated by the functional limitations in every aspect of everyday professional and social life, considering the resources and documenting possible inconsistencies. This multidisciplinary approach was validated from an insurance point of view, as the Federal Council of Switzerland announced in 2018 that the CFS could be assimilated into the persistent somatoform pain disorder and other psychosomatic pathologies, as published by the Federal Court of Switzerland in 2015 (141 V 281, case 18.1068). Furthermore, a case law of total work incapacity for every activity in CFS was announced in April 2020 in Switzerland, based on the standard evaluation indicators.

### Care pathway for patients with heart failure in the Nouvelle Aquitaine Area-France

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#### Issue/problem

Heart failure (HF) is a pathology that affects nearly 1.5 million patients in France, i.e. about 10% of the population, mainly patients over 70 years old.

Heart failure is the leading cause of hospitalization after the age of 65 and is responsible for 70,000 deaths per year.

This pathology and its management constitute a major challenge because it is a pathology :

- frequent
- severe:
- costly:

The problem of re-hospitalization is worrying.

This awareness has led the societies of cardiology and the public authorities to build a vast action plan based on a early diagnosis of failure.

To this end, they were assisted by the CNAM (Caisse Nationale d'Assurance Maladie), which produced maps based on the National Health Data System (SNDS).

#### Description of the problem

identify critical points in the care pathway of heart failure patients:

1. Late diagnosis and evaluation of heart failure that could be improved.
2. The hospital stay
3. discharge from hospital
4. poorly coordinated follow-up in the city
5. drug optimization sometimes not achieved
6. poorly developed non-drug management

#### Results (effects /change)

the results of the analysis show significant heterogeneity of management between territories.

Based on this observation, actions have been proposed.

A major communication campaign was launched in September 2022 by the CNAM aimed at, among other things, raising patients' awareness of certain clinical signs

At the regional level,

- In the short term: disseminate and explain the state of affairs, raise awareness among patients and health professionals of the clinical signs of heart failure in order to increase the identification of patients

To do this, we have set up the following actions

- Set up a regional steering committee led by the Assurance Maladie and including the main actors in the field of heart failure care,
- Support the deployment of multi-professional protocols within multi-professional health centers (MSP)
- Encourage all carers to work together on the heart failure pathway
- Encourage an agreement between hospital structures, and health institutions on the rate of re-hospitalization
- Improve access to cardiological expertise
- Share organizational innovations at a symposium dedicated to heart failure

#### Lessons

Medium term results – yet to come : Evaluate actions in terms of use of care, follow-up and re-hospitalization rates (CNAM) study very well appreciated by cardiologist and GP and nurses, constructive dynamic between insurance team and professionals

### **Adaptation and validation of the Work Disability Functional Assessment Battery (WD-FAB) to German (Germany).**

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#### **Background**

The Work Disability Functional Assessment Battery (WD-FAB) is a patient-completed measure consisting of eight domains of physical and mental functioning. Initially created to standardize assessments supporting claims adjudication for Social Security in the United States, the WD-FAB was rigorously developed based on the International Classification of Functioning, Disability and Health framework and administered using computer adaptive testing to minimize respondent burden while maintaining measurement accuracy.

#### **Objectives**

Cultural adaptation and validation of the WD-FAB in Germany.

#### **Methods**

Two independent forward translations from English to German (Germany) were first conducted by professional translators. Two researchers – a native English and a native German speaker – reconciled the translations into a first German version. Problematic items were 1) presented to a lay panel of seven native German speakers with varying experiences in the field of rehabilitation; 2) discussed with two developers of the original WD-FAB; and/or 3) revisited with the forward translators. The reconciled German items were translated into English by a third translator. Items for which the backward translation differed substantially from the original were revised. All items were then field tested for clarity and feasibility with conveniently sampled rehabilitation patients before being finalized. Validation of the German WD-FAB will sample physical and mental health rehabilitation patients as well as disability claimants. Each participant will complete a subset of 3 to 4 dimensions of the WD-FAB alongside questions about demographics, functional status and comorbidities. Classical test theory and item response theory will be used to analyze the German WD-FAB.

#### **Results**

We adapted 405 WD-FAB items into German: 60 presented to the lay panel, 26 revisited by translators, and 49 required consultation with WD-FAB developers. Certain problems in translation (e.g. “flights of stairs”) were anticipated and encountered little problems during the adaptation process. There were reoccurring problems with translations of “stress” and “anger.” Translators were asked to give their assessment for each translation. A field test was conducted to finalize items.

#### **Conclusion**

The German translation of the WD-FAB item bank is completed. The recruitment for the validation is slated to begin in early 2023. The accurate measurement of functional level with low respondent burden can be used to support disability claims adjudication; evaluate rehabilitation patients’ recovery progress and effectiveness of therapy; and provide a standardized measure for international comparisons as the WD-FAB is adopted by other countries.

### **Barriers and facilitators for interprofessional education in occupational healthcare: an integrative review.**

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#### **Background**

Interprofessional education (IPE) occurs when people from «two or more professions learn about, from and with each other to enable effective collaboration and improve health and functioning outcomes». IPE is suggested as a method to increase understanding of other professionals' roles and confidence in working in interprofessional teams. Better collaboration between occupational healthcare professionals is in turn expected to contribute to a faster reintegration trajectory of workers on long-term sick leave. However, an overview of barriers and facilitators related to effective IPE in occupational health has not been created yet.

#### **Objectives**

The goal of this integrative literature review is to identify barriers and facilitators for IPE in an occupational healthcare setting, to inform future development of IPE for occupational healthcare professionals.

#### **Methods**

An integrative literature review was conducted to identify literature on IPE aimed at occupational healthcare professionals (e.g., insurance physicians, occupational physicians, labour experts). The following databases were searched: CINAHL, Cochrane, ERIC, Embase, Google Scholar, Psycinfo, PubMed, and Web of Science. Only studies in which an occupational healthcare professional participated in IPE with at least one other (occupational) healthcare professional were included. All study types were eligible. Facilitators are factors that support achievement of IPE activity's goals, whereas barriers are identified as factors that hinder this goal achievement. Risk of bias is assessed by two independent researchers using a quality assessment tool developed by Hawker et al. Data will be synthesized in a narrative form. Overarching themes will be identified to structure barriers and facilitators. For example, barriers and facilitators can be classified on system-, organization-, process-, inter-individual or individual level.

#### **Results**

The search yielded 5432 unique articles to screen for inclusion. The analysis is currently underway and results will be available at the time of the conference.

#### **Conclusion**

We anticipate to find multi-level barriers and facilitators for development and implementation of IPE that either strengthen or inhibit the effectiveness of IPE. This information will be used as input for a program theory for realistic evaluation of interprofessional learning in occupational healthcare. This program theory can serve as a basis for suitable and successful development of future IPE activities in occupational healthcare, including insurance medicine.

### Insurance practitioners

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#### Background

Return to work (RTW) can be seen as a decision-making process which involves biomedical, psychological and social determinants. Health insurance practitioners are important stakeholders in this process as they provide work-disabled patients with personal guidance and evaluate their eligibility for benefits. Practitioners can use motivation-enhancing counseling to facilitate patients' RTW process. Motivational counseling (MC) is one such method, based on Self-Determination Theory's (SDT) principles integrated with conversational techniques from motivational interviewing (MI), adapted to the RTW context. Training health insurance practitioners requires a behavior change from their side. Building on the Capability, Opportunity and Motivation Model of Behavior (COM-B model) and the Theoretical Domains Framework (TDF), behavioral determinants may include factors such as knowledge, skills, beliefs about capabilities, intentions, beliefs about consequences and motivation.

#### Objectives

The effectiveness of a MC training will be analyzed in terms of practitioners' MC skills and behavioral determinants of these skills. Furthermore, since burn-out and turnover are highly present in health care professions, we will analyze whether implementing MC also contributes to health insurance practitioners' well-being at work.

#### Methods

32 health insurance practitioners (physicians and paramedics) received a 10-hour MC training including 5 sessions in 11 weeks. A quasi-experimental design with pre-post measurements was used. MC skills were measured by letting trainees interact online with a simulated patient within 1 month before (T0) and within 1 month after training (T2). Recordings were made and coded based on the Motivational Interviewing Treatment Integrity (MITI) code and the COUNSEL-CCE. Paired t-test were used to analyze within-trainee differences in MC skills. Behavioral determinants of MC skills (e.g. motivation for learning MC, readiness and self-efficacy towards implementing MC, attitudes on patient-physician relationship, beliefs about professional role, and effectiveness, normative and easy-to-implement beliefs) were measured with a questionnaire at T0, T1 (after the 2nd training session), T2 and T3 (3 months post-training). Trainee self-reports about need satisfaction, engagement and exhaustion at work were measured at T0, T2 and T3. Within-trainee comparisons on well-being at work and behavioral determinants of MC skills were analyzed through a repeated measures ANOVA.

#### Results

Pre-liminary T0-T2 comparisons indicated that trainees' need satisfaction at work ( $t(31)=-6.414, p<0.001$ ); self-efficacy towards MC ( $t(31)=-3,156, p<0.01$ ) and controlled motivation for learning MC ( $t(31)=-3,811, p<0.001$ ) were significantly higher after training than before. Full results will be obtained in June 2023.

### Assessment of the care pathway for patients with heart failure in France before and during the Covid-19 pandemic.

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#### Issue/problem

Background: The Covid-19 pandemic has altered the care pathway of numerous chronic and potentially severe diseases. Objective: To assess and compare the care pathway of heart failure (HF) patients before and during the SARS-CoV-2 periods in France.

#### Description of the problem

Methods: Retrospective observational study using the French national health data system (SNDS). Three cohorts of patients with pre-existing HF and complete follow-up (not deceased) were studied for the pre-pandemic (2019) and per-pandemic (2020, 2021) years. Annual rates of patients with at least one contact with a general practitioner (GP), cardiologist or nurse, blood renal function and brain-natriuretic peptide (BNP) testing and hospitalizations for HF or cardiovascular (CV) events were calculated.

#### Results (effects /change)

Results: Average number of HF patients followed each year was 605700 (median age of 80 years, 49% women). In 2020, rates of patients with at least one contact remained stable at 93% for GPs and dropped for cardiologists (60.6% in 2019 versus 58.5% in 2020) with a slight improvement in 2021 (60.7%). Increasing proportions of HF patients were referred to nursing care during the Covid-19 period (75.2% in 2019 versus 79.5% in 2020 and 81.6% in 2021) with a slight decrease of the median annual number of contacts (from 14 to 12 and 11 between 2019 and 2021). Rates of BNP testing were higher in 2020 and 2021 compared to 2019 (45.1% and 47.1% vs 44.1% respectively). Hospitalization rates for both HF and CV events were lower in 2020 and 2021 compared to 2019 (7.1% and 7.3% vs 8.3% for HF and 15.0% and 15.4% vs 16.8% for CV events respectively).

#### Lessons

Conclusion: We observed a decrease of referral to cardiologist and an increase of nursing care in the care pathway of HF patients in France during the pandemic. As seen in other countries, some patients may have been referred to hospital at a more severe stage of the disease. This interpretation is consistent with the increase in mean annual expenditure observed in 2020 for patients with acute HF in France (institutional publication). These findings emphasize the likely harmful impact of social distancing and lockdown on the care pathway of HF patients in France and the need for optimization of care coordination solutions for patients exposed to complex, multiple and potentially life-threatening clinical conditions.

### Long-term Impact of children sexual abuse on prolonged disabilities and medical care consumption

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#### Background

The World Health Organization (WHO) and Unicef's most recent studies show that preadolescents (age below 15) which are victim of sexual abuse approximate 18% in females and 8% in males.

These data are largely underestimated, following the social taboos associated .

Recent advances in neurobiology and neuroimaging highlight long-term effects of CSA on how the brain functions and the consequences of such acts. These consequences may be psychological or physical

#### Objectives

All these situations could lead to prolonged disabilities, for which this study aims to:

- 1) Identifying associated comorbidities by reviewing literature and patients files with past or present CSA diagnosis. Said review will facilitate detecting Complex Post Traumatic Stress Disorder ( PTSD), and a rapid and efficient psychotherapy ( Hypnosis EMDR)
- 2) Avoiding excessive, useless and potentially harmful care (ionizing radiations, potentially toxic drug consumption, ...)
- 3) Establishing guidelines in insurance Medicine to collect relevant indicators of such PTSD.

#### Methods

Our study comprises 80 cases-studies of CSA-related work disabilities (53 % < 40y)

#### Results

Given the little CSA data (10%)available, which is self-reported, encompassing life events that includes the family structure, employment (<5 years in 54.9% of cases) and working disabilities periods, appears challenging, yet a complete medical anamnesis seems necessary but often remains partial or missing.

#### Conclusion

Examining the above psychological and physical associated comorbidities (depression (42%), suicide attempt, borderline or bipolar personalities, various addictions (5%), at risk-behavior, self-harm , fibromyalgia (15%), irritable bowel syndrome, obesity (BMI >30 in 27 %), gynecological or sexual perturbations, ...) allows to detect complex PTSD consequences and an efficient psychological care. Moreover, it avoids overconsuming diagnostic tests , and inadequate physical or medical treatments.

### **Tobacco cessation: cooperation between general practitioners and Bouscat Hospital France**

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#### **Issue/problem**

Fight against smoking is a major public health concern in France, where the general practitioner has a major role in supporting the patient into quitting smoking. The Hôpital du Bouscat offers joint intake from both general practitioner and addiction doctors to smoking cessation candidates. Main goal of the study is to evaluate the medium term impact of this care on patients managed by general practitioners for smoking cessation

#### **Description of the problem**

This is a descriptive longitudinal observational quantitative study based on repayment datas from the french national health insurance. The study period goes from March 1st 2019 to February 29th 2020. Practitioners whose datas were studied took part in the coordinated path between September 2017 and December 2018. The most important evaluation criterion was the amount of patients, per practitioner, who obtained support for smoking cessation between March 1st 2019 and February 29th 2020.

#### **Results (effects /change)**

Three groups of general practitioners were made. Group 1 corresponded to doctors who were already involved in joint intake for quitting smoking with addiction doctors (n=50). Group 2 was made of doctors who never took part in the studied care (n=50). Group 3 was made of doctors who never took part in the care but they were practicing in one of the group 1 doctors offices (n=82). Group 1 and 3 doctors prescribed more smoking cessation medications than the ones of the group 2 (p=0.016 and p=0.01 respectively). There is a much more significant statistical difference on the results targeting varenicline.

#### **Lessons**

Joint intake for quitting smoking is an efficient solution to train practitioners. It would be interesting to distribute this cooperation model on a larger scale.

### Misuse of Rapid Acting Fentanyl (RAF) or transmucosal Fentanyl in the Nouvelle Aquitaine region - France

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#### Issue/problem

Misuse of RAF revealed by French Addiction screening Network.

Decision to promote the appropriate use of RAF by using graduated range actions from generalized information to monitoring of clear atypical use or more coercive actions, if necessary.

#### Description of the problem

Marketing Authorization of RAF in France specifies that this drug is intended exclusively for the treatment of breakthrough pain in adult patients suffering from chronic pain of cancer origin, already receiving an opioid background treatment for at least 7 days and at an adequate dose.

Recent data from the French Addiction screening Network have revealed:

- A significant increase in RAF misuse, whatever the specialty marketed,
- A topic of particular concern in Nouvelle-Aquitaine region, some of the highest rates of misuse in France,
- An off-label use highly increases risks of overdose and abuse/dependence for the consumer, which induces major harm.

It was hence necessary for the Regional Medical Service of New Aquitaine (DRSM-NA) to remember information on the proper use and good prescribing and dispensing practices of rapid-acting Fentanyl. This was done for all prescribers in the region likely to prescribe RAF, and pharmacists likely to dispense it for ambulatory care settings and in health care institutions.

Results (effects /change)

In May 2022, a mailing with information letters was sent to health professionals from the Local Medical Service of each department of this region. The letter contained:

- Prescribing/dispensing procedures (narcotic status and split dispensing),
- Necessary information to the patient,
- Careful monitoring during treatment,
- Prevention/management of overdose,
- A reminder of law obligations that apply in case of prescribing/dispensing out-of-scope of the marketing authorization

Was sent either one or the other RAF memos (physician/pharmacist) validated by the Health University of Poitiers, and the memo "Off-label use" drafted by the french medical and pharmaceutical boards.

Analysis of results: comparison of FAR claims in NA during the 2nd semester of 2021 and 2022 shows : - 4.8% patients; - 3.9% prescribers; - 4% pharmacists; -4.5% patients without on-going opioid treatment; -4.1% patients with DDD>1200mcg. The decrease is noticeable.

#### Lessons

According to results :

- a specific accompaniment of clear atypical use (physicians and pharmacists),
- or more coercive actions if necessary.

### **Evolution of anti-PCSK9 prescriptions (Alirocumab, Evolocumab), before and after the introduction of the «Request for Prior Ageement» by health insurance.**

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#### **Issue/problem**

Dyslipidemia is one of the major risk for cardiovascular disease. Even with well-conducted cholesterol-lowering therapy, many patients do not achieve therapeutic. However, the discovery of anti-PCSK9 (monoclonal antibodies targeting a protein involved in LDL metabolism) is a step forward for these patients. Initially reserved for hereditary dyslipidemia, the coverage of anti-PCSK9 was extended to situations of high cardiovascular risk in 2020. In order to prevent use beyond these situations, their prescriptions have been placed under a prior agreement policy by health insurance. This study describes the evolution of their prescriptions.

#### **Description of the problem**

Prescriptions have been extracted from the reimbursement databases of the Grand-Est Health Insurance since 2018. Each department in the Grand-est is the subject of a count and description of the target population as well as an evaluation of the amounts reimbursed monthly. A focus on a department from nominative database makes it possible to reconcile the number of patients benefiting from treatments with the number of requests for prior agreement received in the said department.

#### **Results (effects /change)**

The increase in the number of patients and the amount reimbursed from the date of the extension of coverage is constant but varies from one department to another. In 2021, a sharp rise in the number of patients on Evolocumab was observed in all departments.

The Alsace stands out in terms of the increase in the number of patients.

Alirocumab prescribers remain mostly hospital-based. Evolocumab prescribers have increased over time in favor of private practice cardiologists.

The sex ratio (M/F) increased from 1.3 in 2019 to 2.7 in 2021.

Over the years, the number of patients has increased in the older age categories.

The focus on Meurthe-et-Moselle shows that physicians did not request prior agreement for 15% of patients.

In addition, in 5% of cases, patients received a reimbursement even when their coverage had been refused.

#### **Lessons**

This mapping could be a tool to help develop a support action plan for healthcare professionals who do not seem to comply with the reimbursable therapeutic indication or the restricted prescription procedures.

### Recognition of prostate cancer as an occupational disease by the French health insurance system.

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#### Background

Presentation of the modalities of recognition as an occupational disease of malignant prostate tumors in France.

#### Objectives

Prostate cancer caused by pesticides / Table 61 of the agricultural regime

Prostate cancer caused by pesticides /Table 102 of the general regime

#### Methods

Collection in progress, from the chief MC responsible at the MSA for the pesticide fund, of documentary information (notably epidemiological studies) that contributed to this regulatory evolution to the drafting of the tables of recognition of MP of prostate cancers.

#### Results

Designation of diseases Time limit for coverage Restricted list of work likely to cause this disease

Prostate cancer 40 years (subject to an exposure period of 10 years) Work usually involving exposure to pesticides :

- during the handling or use of these products, by contact or inhalation;
- by contact with crops, surfaces, treated animals or during the maintenance of machines intended for the application of pesticides;
- during their manufacture, production, storage and packaging;
- during the repair and the cleaning of the equipment of production, conditioning and application of the pesticides;
- during the operations of depollution, collection and management of pesticide waste.

The term «pesticides» refers to products for agricultural use and products intended for the maintenance of green spaces (plant protection products or phytopharmaceutical products) as well as biocides and veterinary antiparasitics, whether or not they are authorized at the time of application.

#### Conclusion

Results of the analysis: Illustration planned, during the UEMASS congress, by the first figures of this recognition on the national territory (number of claims / number of recognitions / professions).

### Diabetes : incentive contract

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#### Issue/problem

Despite the establishment of clinical practice references for diabetes shared with health professionals, and the individual incentive compensation offered to them, the results in terms of public health remain insufficient.

Our action consists in establishing an overview of the quality of the care pathway of diabetic patients according to the recommendations of the high health authority (HAS), no longer by professional but at the level of the territories.

#### Description of the problem

This inventory is based on data of the national health data system (SNDS) and concerns patients with at least three deliverances of oral anti diabetic and/or insulin during the year 2021 and living in each territory (departmental and regional comparison). It includes two types of measures :

General characteristics : age (potential iatrogenia for therapies prescribed to elderly patients), social complementary health insurance benefit (CSS) (risk of less observance by patients with precarious situation), cardiovascular comorbidities.

Practice indicators: medical follow-up (ophthalmological, cardiological, biological, dental and podiatric), therapeutic care (initiation of treatment with metformin, discouraged drugs, use of biosimilars, non-refundable monotherapies), prevention (influenza and pneumococcal vaccination).

On the entire Auvergne-Rhône-Alpes region, 404 230 diabetics were included (10 % CSS and 32 %  $\geq 75$  years old), 15 % with coronary disease and 7 % cardiac insufficiency.

#### Results (effects /change)

##### The main gaps to good practice references were :

- 33 % of patients without biannual ophthalmological monitoring, 60 % without annual cardiological monitoring.
- 38 % of patients without metformin as initial treatment, 31 % of patients over the age of 75 treated with sulfonamides or glinides, 64% of patients undergoing combination therapy with not recommended concomitant uses, 91 % of patients not vaccinated against pneumococcal disease.

#### Lessons

Faced with this observation, bearing witness to the limits of our individual actions of accompaniment, we decided to share this inventory by territory with the medical, paramedical professionals and medical institutions groupings which are the territorial professional communities of health (CPTS). Resulting from the health system transformation strategy deployed in France since 2018, the CPTS have indeed a collective responsibility in a territory and can be collectively remunerated on public health objectives.

An impact measure of the influence of Health Insurance and of the remuneration on public health objective of integrated structures on the medical management of diabetic patients will be carried out in 2024.

### Prescribing proton pump inhibitors (PPIs) : relevance by contract ?

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#### Issue/problem

Despite the observations made by the high health authority (HAS) about the use of proton pump inhibitors (PPIs) (unjustified uses in 50 % of cases and too long treatment periods) and the individual accompanying actions conducted by the health insurance, the results in terms of public health remain insufficient.

Our action consists in establishing an inventory of the quality of the prescription of PPIs according to the recommendations of the high health authority, no longer by professional but by health institutions, whose prescriptions at discharge significantly influence the prescriptions of city general practitioners.

#### Description of the problem

This inventory is based on data of the national health data system (SNDS) and explores three potential misuses of PPIs :

- 1) long-term PPIs treatment without digestive risk medication
- 2) PPIs in prevention of digestive complications with platelet aggregation inhibitors and/or oral anticoagulants without corticoides or non-steroidal anti-inflammatory drugs (NSAID) treatment
- 3) PPIs in prevention of gastroduodenal lesions during NSAID treatment

During the year 2021, and across the region Auvergne-Rhône-Alpes, a total of 21,900 patients (105,200; 71,700) were included in the study for the misuse n°1 (n°2; n°3).

Results (effects /change)

- 25 % (18 %; 39 %) of the patients got a potentially unjustified prescription for PPIs at hospital discharge,
- and 39 % (34 % ; ND) a resumption of the potentially unjustified prescription by a city practitioner within two months.

#### Lessons

Faced with this observation, we decided to share these inventory with the health institutions and to offer them an incentive contract that allows them to access an incentive after annual evaluation in case of less use of PPIs. The objective of this contractualisation called CAQES (contract for the improvement of the quality and efficiency of care) is to promote and then collectively reward good medical and prescription practices and to strengthen city-hospital coordination.

The contractualisation took effect in July 2022, the sharing of the inventory took place during the 2nd half of 2022. The measurement of the impact of the influence of the health insurance and the remuneration on public health objective on the prescriptions of PPIs at discharge realised by all the doctors of the institution and by the city doctors after the hospitalization, on a before/after mode, will be carried out in the first half of 2024.

### **A qualitative study of immigrants' experiences of labour-market integration in Sweden – the role of the workplace**

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#### **Background**

Immigrants make important contributions to the labour force in Western countries, but labour-market integration of immigrants also brings challenges. In Sweden, the unemployment rate among immigrants is four times higher than among Swedish-born, and immigrants more often work in low-skilled and temporary jobs. Research on labour-market establishment has focused on newly arrived immigrants. Less attention has been paid to the sustainability of employment over time. Moreover, few studies have investigated how immigrants experience the labour-market integration process.

#### **Objectives**

The aim of this qualitative study was to explore immigrants' experiences of challenges and opportunities for labour-market participation, as well as perceptions on how to prevent long-term unemployment.

#### **Methods**

Semi-structured interviews with 11 women and 7 men who came to Sweden as adults and who had experiences of working in Sweden as well as of periods of unemployment. Participants came from the Middle East, Central Asia and the Horn of Africa and had been between 4-38 years in Sweden. Education level varied from four years of primary school to university degree reflecting the heterogeneity of the immigrant population in Sweden. The interview guide was based on Ilmarinen's work-ability house model, focusing on the interplay between individual capabilities and the workplace, as well as social and contextual factors. Interviews are analysed with content analysis.

#### **Results**

Data analysis is ongoing. Preliminary findings revealed that participants experienced difficulties to get a sustainable labour-market attachment. A striking feature was the lack of improvement in participants' labour-market situation over time, despite more working experiences, language skills and education. Some individuals even experienced diminishing opportunities, due to for example higher age and a deteriorating health. Participants stressed important aspects of having a job such as being able to do something meaningful/help others, a feeling of belonging to the workplace and society, and improved finances. On the other hand, to never get a permanent position, repeated subsidized employments who did not lead to a regular job, or experiences of discrimination at the workplace created feelings of disappointment and exploitation, which may affect future job-seeking activities.

#### **Conclusion**

Preliminary results from the content analyses and conclusions will be presented at the conference, together with recommendations for future research.

### Differences in psychosocial workplace conditions between migrant and native middle-aged workers in Germany

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#### Background

Worldwide, the number of international migrants nearly doubled from 153 million in 1990 to 271 million in 2019, with 74% of migrants in working age. Many migrants move away for a better living. However, migrants' occupational opportunities in the destination country may be restricted due to language barriers, non-recognition of education, or discrimination. Therefore, migrants are often precarious employed in job sectors such as construction, cleaning and care.

#### Objectives

Even though Germany is a frequent destination, little has been reported on the psychosocial working conditions of migrants. The aim of our analyses was to provide information on psychosocial working conditions of migrant workers (MW) in Germany compared to native workers (NW).

#### Methods

We used baseline questionnaire data in 2017 from a German cohort study (DRKS00011554) with employees aged 45 to 59 years. Migration status was assessed as a dichotomous characteristic (born in Germany or abroad). Psychosocial working conditions were measured with adapted scales from the COPSOQ on psychological job demands, job insecurity, support from supervisors, support from colleagues, work atmosphere, and general job satisfaction (all 0-100 points). In addition, physical workload (0-15) and bullying (1-5), occupational skill level (unskilled; skilled; complex; highly complex) derived from the German Classification of Occupations, and employment structure (shift work, fixed-term contracts, per se) were assessed. Group differences were tested using chi square test, trend test, Mann-Whitney U test, and t-test.

#### Results

We analyzed data from 9,901 persons (57.7% female; mean age 52.3 years). 7.2% (n=712) were born abroad. The majority worked in skilled jobs (69.3%; n=6,489), followed by unskilled jobs (12.2 %; n=1,145). In comparison, migrants were significantly more likely to be working in unskilled jobs (MW: 25.9%; NW: 11.3%; p<0.001), temporary jobs (MW: 2.8%; NW: 1.0%; p<0.001), and fixed-term employment (MW: 7.9%; NW: 4.4%; p<0.001). In addition, migrants reported significantly less support from colleagues (MW: Mean=57.5; NW: Mean=65.1; p<0.001) and supervisors (MW: Mean=47.1; NW: Mean=51.1; p=0.011), but more workplace bullying (MW: Mean=19.5; NW: Mean=16.9; p=0.045) and job insecurity (MW: Mean=43.0; NW: Mean=37.2; p<0.001). No differences were found for physical or psychological job demands, job satisfaction, or job atmosphere.

#### Conclusion

Migrants work in structurally worse conditions compared to native workers and report less support at work, more job insecurity, and more frequent bullying. However, migration was not associated with lower job satisfaction or worse job atmosphere.

### Feasibility of the PROM QUALITOUCH activity index as an app in rehabilitation of patients with pulmonary disease

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#### Background

Patient reported outcome measures (PROM) as an app could improve the rehabilitation process.

#### Objectives

The aim is to test whether digital self-documentation is feasible, meaningful and useful for treatment,- especially with regard to communication between physician and patients (shared decision making), therapists and insurance personal. Differences between the different diagnostic groups of pulmonary patients regarding complaints and activity restrictions in everyday life should be documented.

Outcome(s): The primary endpoint of this observational study is the evaluation of the PROM activity index questionnaire regarding adherence and user experience in the form of a smartphone APP. The app will be tested in 5 different groups of patients with pulmonary disease during 3 to 6 months. The patients enter an inpatient rehabilitation program. Power analysis will be calculated based on patient numbers from 2021.

Study design: Open non-randomized observational and survey study (pilot study).

Inclusion / Exclusion criteria

The study is conducted in patients of the Rehasentrum Wald. These patients were admitted for rehabilitation because of a pulmonary disease (St.n. pneumonia, COPD, asthma, St.n.Covid 19 infection, pneumo-oncological disease).

Inclusion

Patients with pulmonary disease who are in possession of a smartphone and have given informed consent. Minimum age 18 years.

Exclusion

Patients without a smartphone. Lack of speech comprehension. Cognitive impairment.

#### Methods

Patients included will have the patient reported outcome measure (PROM) activity index (AI) loaded on their SmartPhone. Patients will receive a weekly reminder to complete the questionnaire. At the end of the interview, a result related to the starting interview is shown. The result shows the change in health and disability status during the rehabilitation process.

Intervention: The included patients will have the APP QUALITOUCH activity index downloaded on their smartphone. Patients will receive a weekly reminder to complete the short questionnaire. After 3 and 6 months, patients will be interviewed by telephone about their experiences and difficulties with data collection via the smartphone APP. Patients who discontinue the observation will be asked about the reasons for discontinuation

#### Results

Until today preliminary results. The study started in October 2022. Additional results will be shown

#### Conclusion

Conclusion: First results will be shown and discussed. Such results could help insurances to use digital health tools to manage rehabilitation settings.

### **Antibiotics save lives, so let's save our antibiotics Dentists take action in the Grand Est.**

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#### **Issue/problem**

Infections have become drugs resistant worldwide. In France it caused 5,500 deaths in a year. Most of the prescriptions (93%) come from ambulatory medicine. In 2021, dentists prescribed 13% of them. Scientific literature indicates that 60% of dental antibiotics prescriptions are not justified.

It is urgent to change behaviours. We must fight against antibiotic resistance and get involved in the national strategy of Ministry of Health.

Description of the problem

We want to demonstrate that we can change behaviours through targeted actions.

Several actions of sensibilisation were carried out in the Grand Est region. It involved 3,000 dentists.

Three major steps :

A collective awareness (newsletters, articles, sending of recommendations...)

An individual awareness with prescription profiles

An e-learning conceived by the dental university to study the recommendations.

The prescription profile is based on 3 relevant indicators, which has been published by an expert group. These indicators assess the quality of dental prescription. Each of these indicators require a unique target to reach the ANSM recommendations.

#### **Results (effects /change)**

The monitor data show a decrease of dental prescriptions as dentists received their profiles. We compared with other French regions. These comparisons highlight the positive impacts of the action on the first two indicators since june 2020 : refer to indicators 1 and 2.

A difference in practice between the Grand Est region and the rest of the country is also visible since june 2021. At that time we sent prescriptions profiles to all dentists of the Grand Est region.

#### **Lessons**

The first results show the success of the mission. With a collective and personal support, we were able to change behaviours.

Dentist could fight the antibiotic resistance. They need to prescribe the use of antibiotics, with the proper drugs and the proper dose.

Thanks to the success of this project, the Ministry of health and « Assurance maladie » (the French public health insurance) have decided to develop the action all over France. Another action will involve the initial training of students at the university.

### Co-management of work stoppage, a participatory approach between the prescribing physician and the Health Insurance consulting physician

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#### Issue/problem

The Regional Medical Service of New Aquitaine (DRSM-NA) – France is committed to developing a co-management approach to work stoppage (IJ\*) between the consulting physician and the prescriber - mainly a general practitioner. This approach is based on the implementation of a personalized and long-term support of the liberal health professional, in a relationship of trust gradually acquired around joint studies of work stoppage situations patient cases, in order to :

- develop a more relevant and autonomous approach to the management of work stoppages by the prescribing physician,
- accompany him in the most complex stop work situations.

#### Description of the problem

- Improve practices in terms of prescribing work stoppages through discussion of «patient cases»: educational role of regulatory reminders illustrated by patient cases, delivery of memos, then long-term follow-up
- Improve the efficiency of the convocations of insured persons to the Medical Service, and reduce disagreement disputes since the prescriber becomes a stakeholder in the decision
- Reposition the role of the health insurance medical advisor in the management of work stoppages for greater medical value

#### Results (effects /change)

The co-management of work stoppages aims to :

- control the volume of IJs prescribed and the inherent direct and undirect expenses throughout the region
- promote the retention of insured persons in employment and the prevention of professional deinsertion
- respond to the demand for proximity and support expressed by health professionals.

#### Lessons

#### Results

From January 2022 to the end of January 2023

- 678 numbers of co-management exchanges carried out in the NA region
- 1 433 numbers of case-patients submitted

### **Claimants' and professionals' actions and criteria on which work disability benefits can be granted: a comparison between European countries**

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#### **Background**

The criteria for deciding a claimant's eligibility for work disability benefits and the claimants' and professionals' actions in the disability process vary across countries. Scientific literature illustrates this on many aspects in many countries. An up to date overview of the similarities and differences in criteria and assessments is missing. Such an overview is necessary for understanding differences in outcome in social security among countries. Moreover, understanding practices in other countries can serve to improve one's own practice.

#### **Objectives**

We describe and compare the medical criteria and the professional assessment process for work disability benefits in the social security setting in different European countries.

#### **Methods**

We developed a process scheme of assessing disability for work, from filing a claim up to the decision and appeal, based on existing research. We also developed a model of medical decision making in assessments, using ICF terminology. We tested the process scheme and the model of medical decision making first by using desk research of scientific papers on disability assessments and of descriptions of schemes in the various countries. Next, we asked experts in different countries to fill out a questionnaire about criteria for work disability, details of the assessment process and decision making, followed by interviews with these experts to clarify the answers. We drafted comparisons of countries and proposed these for validation by the experts.

#### **Results**

So far we have included The Netherlands and Finland completely. From Denmark, Estonia, France, Iceland, Romania and the UK we have results of the desk research and respondents have agreed to participate in the questionnaire and interview part in January- March 2023. We expect to include more EUMASS countries before the summer of 2023, which will make the results richer. Both the process scheme and the ICF based model appear to be applicable and show both similarities and differences among countries.

### **Need and access to medical services in Saxony. A retrospective secondary data analysis as an impetus for expert witness development.**

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#### **Background**

The Medical Services (MD) in Germany have the task of safeguarding the entitlement of every insured person to sufficient, appropriate and economic of medical services in accordance with what is necessary. Qualified expert witnesses must be available for this purpose in order to be able to make a valid statement of high quality.

#### **Objectives**

The aim of the study is to determine the prevalence in all areas of socio-medical assessment for insured persons and its regional variance in Saxony.

#### **Methods**

A retrospective secondary data analysis of Saxon insured persons for the years 2020 and 2021 was carried out. All applications from this period were included in the study. The descriptive analysis of the data included the concrete reason of the application, their diagnosis, and the regional variation of the application behaviour. For regional representation and comparability, age and gender adjustments were made so as raw values were reported. The district data of the population of the Federal Statistical Office from the GENESIS database were used for standardisation.

#### **Results**

41,821 applications were available for the observation period. 53% of the applicants are women (n=22,413) and the average age of all applicants was 54 years. 33% of orders included rehabilitation issues (n=14,033), 29% medical resources (n=12,256), and 10% drug issues (n=4,081). The most frequent basis of the orders were diagnoses from MDC 05 «Mental diseases and disorders» (20%, n=8,213). The number of applications, adjusted for age and gender, varies from 66.8 in Zwickau to 127.8 applications per 100,000 inhabitants in Nordsachsen.

#### **Conclusion**

The focus in the applications were in the areas of rehabilitation and medical resources as well as cognitive disorders. Expert witnesses should have qualifications specifically in these medical areas.

### Tracking drug megaconsuming and/or nomadic french social security policyholders, using the «SUROCO» shared tool in the Rochelle county France

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#### Issue/problem

Which refunding for megaconsumers and / or nomadic insured persons can establish the Primary Health Insurance Fund in France ?

#### Description of the problem

- Insured persons in healthcare break
- Precariousness, professional disinserted persons, marginality, ...
- Need for intensive overall care
- Medical and pharmaceutical nomadism
- High medicine consumption
- Potential risk for the entire society

#### Results (effects /change)

To improve the follow-up of drug mega-consuming and/or nomadic insured persons (medical and/or pharmaceutical nomadism) thanks to a monitoring by the SUROCO tool developed by the Primary Health Insurance Fund of the Charente-Maritime department – la CPAM 17.

This concerns insured persons who are drug megaconsumers and/or nomadic insured persons who are subject to a « healthcare protocol » and who have signed a commitment contract by which the insured person designates a single prescribing physician and a single dispensing pharmacy for the incriminated molecules.

Execution of a posteriori control of billings and prescriptions with regard to the designated health professionals.

Sending letters to professionals in case of discrepancies.

Potential penalties to professionals already warned during the procedure.

Developping partnership with the prescribers and pharmacists involved, in order to work jointly on this issue (co-management).

#### Lessons

- Better supervision for the followed insured persons
- Diminution of reaction time for the institution to react in front of the increase of the situation
- Access to the medical file of each followed insured persons (key informations) with the name of the prescriber, the name of the pharmacist, the name of drugs and the important dates : the beginning of the follow up, the date of the notification, the review ...

### Impact of COVID-19 on young adults mental health in Grand Est area: analysis of French Health Insurance database

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#### Issue/problem

Since March 2020, many actions were taken to end the Coronavirus epidemic (Covid-19). Lockdown, curfew, mask, sanitary pass... These actions have changed people's habits and may have had an impact on mental health.

We will examine changes in young adult mental health consumption before and after each lockdown or restriction.

#### Description of the problem

The study focused on 2,020,769 young adults, aged from 18 to 30 and living in the Grand Est area. We kept that number of insured people throughout the whole study.

We analysed French Health Insurance financial compensation monthly data in the years 2019 to 2021.

Many signs were observed to describe that population's mental health: general practitioner and psychiatrist appointments, psychotropic drugs consumption (antidepressants, anxiolytics, antipsychotics, and hypnotics), sick leaves and chronic diseases, including those for serious mental troubles.

This descriptive study spreads through years regarding sanitary restrictions. The evolution of monthly data was compared to the average on that analysis period. Many sub-periods were defined regarding the restrictions' establishment or ending.

#### Results (effects /change)

Before March 2020, 4.4% of medical appointments were followed by a psychotropic drug prescription. An increase was noticed between April and June 2020 (6.0%) and from November 2020 until May 2021 (5.8%). From June 2021, the psychotropic drug prescription rate decreased to 4.9% in average.

The amount of patients using psychotropic drugs increases during the analysis period. Between the last 2019 and 2021 quarters, the increase reaches 31% (23% anxiolytics, 26% hypnotics and 52% antidepressants).

The study on sick leaves is biased because the reason does not appear in the study data. The evolution of medical appointments is also influenced by the Covid-19 crisis and does not reflect the mental health of those who have been observed. Before the end of the lockdown, the psychiatrist appointments' average is 8,687 per month. From May 2020, this average reaches 10,845 per month, with a 26% increase of appointments between the last 2019 and 2021 quarters.

#### Lessons

This study gives an idea of the increase of young adults' drugs consumption especially in the Grand Est Area.

The absence of medical appointments reasons and sick leave reasons did not allow to assess the impact of the Covid-19 epidemic on these people's mental health. A complementary study will be essential to analyse thoroughly the process from a sample of insured people.

### **A policy and practices perspective study on work participation among people with partial work disabilities.**

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#### **Background**

The COVID-19 pandemic has led to consequences on labour, income and employment, whereby people with partial work disabilities were particularly vulnerable for negative outcomes on health and work. Promoting sustained employment is a critical public health priority and key actions following the COVID-19 crisis are needed to ensure that people with partial work disabilities are not left behind in the COVID-19 response and recovery. Our previous study included experiences during the COVID-19 crisis among people with partial disabilities. Lessons on building more equal and sustainable societies from the policy & practices perspective need to be explored in order to achieve inclusive policies on labour.

#### **Objectives**

1. To gain understanding of changes during the COVID-19 pandemic, among people with partial work disabilities from the perspective of occupational health professionals supporting people with partial work disabilities, employers and policy makers. 2. To outline recommendations on how employment and health protection could be strengthened for people with partial work disabilities in order to build resilience in times of crisis.

#### **Methods**

We used a qualitative approach to explore barriers and facilitators in employment, gaining understanding of changes during the COVID-19 pandemic and tried to find answers on how employment and health protection could be strengthened for people with partial work disabilities in order to build resilience in a next crisis. Semi structured in-depth interviews were conducted with occupational health professionals, employers and policymakers. Online interviews were held from March 2021 till September 2022. Data were analyzed through thematic content analysis.

#### **Results**

Interviews with occupational health professionals, employers and policymakers provided insight into their experiences regarding the new normal following the COVID-19 crisis. We also identified barriers, facilitators and needs to improve work participation for people with partial work disabilities. Improving collaboration between key stakeholders and providing suitable job fits were mentioned as important needs to enhance work participation among people with partial work disabilities. Employers should be extensively facilitated in the implementation of inclusive labour organisational policies, including support in re-designing work and sustainable support in the workplace both for employers and employees.

#### **Conclusion**

This study provides valuable insights from multi stakeholder perspectives on lessons learned during the COVID-19 crisis. Optimizing collaboration between stakeholders, prioritizing prevention in the work environment and adapting work to the capabilities of the employee seem to be key in achieving disability inclusive policies.

### **Cognitive variables predict return to work after mild/moderate traumatic brain injury: a systematic review**

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(1) -, Geneva, SWITZERLAND

#### **Issue/problem**

Traumatic brain injuries (TBI) range in severity from mild to severe and are typically classified based on the duration of unconsciousness, extent of post-traumatic amnesia, and findings on structural imaging. Among TBI survivors, the unemployment rate was reported to be substantially high. Multiple factors influence return to work outcomes in TBI rehabilitation: pre-injury demographics, injury-related variables, and post-injury variables.

#### **Description of the problem**

We analyzed the literature on cognitive rehabilitation related to mild/moderate TBI to learn the influence of cognition on return-to-work post TBI. We conducted a systematic review of the studies on CR related to return-to-work post TBI that were published between 2000 and 2022. To classify the obtained evidence, the author used the levels of evidence recommended by the American Occupational Therapy Association, Inc., in the document "Guidelines for Systematic Reviews". To synthesize the latest evidence, in a second time the author analyses the most recent publications 2016-2022.

#### **Results (effects /change)**

Cognitive evaluations, often in the form of neuropsychological evaluations, were reported to be effective in identifying an individual's capacity to work. Cognitive rehabilitation for individuals with TBI was reported to be an effective intervention. cognitive rehabilitation post TBI focused more on using compensatory strategies than remedial strategies and both the review and intervention studies highlighted multidisciplinary/interdisciplinary rehabilitation practices in facilitating return to work post TBI.

#### **Lessons**

Cognition plays a significant role in predicting and facilitating return to work in patients with traumatic brain injury. The unemployment issues among TBI survivors can be mitigated through multidisciplinary care coordination with an increased focus on cognitive assessment and rehabilitation. Longitudinal studies are recommended to gain an in depth understanding.

### Post exertional symptom exacerbation: a paradigm of post-COVID-19 syndrome?

SCOLARI S. (1)

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#### Issue/problem

Post COVID-19 condition, with WHO ICD-10 (U09) and ICD-11 (RA02) coding, occurs in individuals with a history of probable or confirmed SARS-CoV-2 infection, usually three months from the onset of COVID-19 with symptoms lasting for at least two months, that cannot be explained by an alternative diagnosis. Common symptoms include fatigue, shortness of breath, cognitive dysfunction among other 200 and generally have an impact on everyday functioning. Symptoms may be new-onset following initial recovery from an acute COVID-19 episode or persist from the initial illness. Symptoms may also fluctuate or relapse over time.

#### Description of the problem

Post-exertional malaise (PEM) or post-exertional symptom exacerbation (PESE) is a worsening of these symptoms after minimal physical or mental exertion and have been described in chronic fatigue syndrome (CFS) patients.

The author reviews the literature and tries to understand if the return to work of post-COVID-19 patients should not follow modulated strategies.

#### Results (effects /change)

According to current publications, more than 1/3 of patients with acute COVID-19 develop long COVID-19 symptoms. The experience of failure in context of return to work (RTW) is a cause of frustration and lengthens recovery times. A selection of 2477 papers, using string research on PubMed, Embase, Web of Science and Scopus from January 2020 to December 2022, were analysed. Results: Fifty-one articles were finally included, and the results obtained were discussed from three different points of view. Twenty articles concerning 'Remodelling of Work Organization' proposed some model strategies for resumption to work. Twenty-one papers, including 'Clinical Evaluation of Workers', mostly explored the psychosocial impact of returned workers. Finally, twelve articles explored the best 'Testing Strategies related to RTW'. Despite the heterogeneity of included articles, several interesting approaches have emerged in managing RTW.

#### Lessons

The reported experiences could help to develop an RTW model for COVID-19.

Despite the heterogeneity of included articles, several interesting approaches have emerged in managing RTW and the PESE/PEM are a recurring condition (frequency cannot be specified) to be considered in any RTW strategy.



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