



# FUTURE CHALLENGES IN WORKERS' COMPENSATION INSURANCE AN OPPORTUNITY FOR INTERNATIONAL COOPERATION

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Dr. Hector Upegui, MD

## Our Unit - History and Main Activities

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MR WORKERS' COMPENSATION UNIT WAS ESTABLISHED IN 1998 AS CENTRE OF COMPETENCE

- Observe and accompany private participation and/or reform processes
- Develop worldwide opinion leadership position for comparing and developing systems either with private participation &/or public Workers' Comp. Systems
- Provide advice and service on both insurance and reinsurance questions, from legislative to operational
- Exchange know how and expertise with Munich Re America
- Generate substantial reinsurance business for Munich Re
- Concentrate and amplify expertise within the Munich Re Group

# Introduction – General Characteristics

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- Workers' compensation insurance provides coverage in order to help the insured and the families to overcome the burden of an occupational injury or an occupational disease
- Some major characteristics of WC systems:
  - No fault
  - Compulsory
  - Highly regulated
  - Employer pays
  - Links to Social Security systems

## New trends of occupational hazards

Developments in last decades in hazards whose effects appear

Long after exposure → **long-latency risks**

As well as diseases with multiple causes → **multi-causality risks**

Easy/clear attribution

Complex attribution



Traditional, e.g. metal poisoning, dermatitis, vibration diseases, etc.

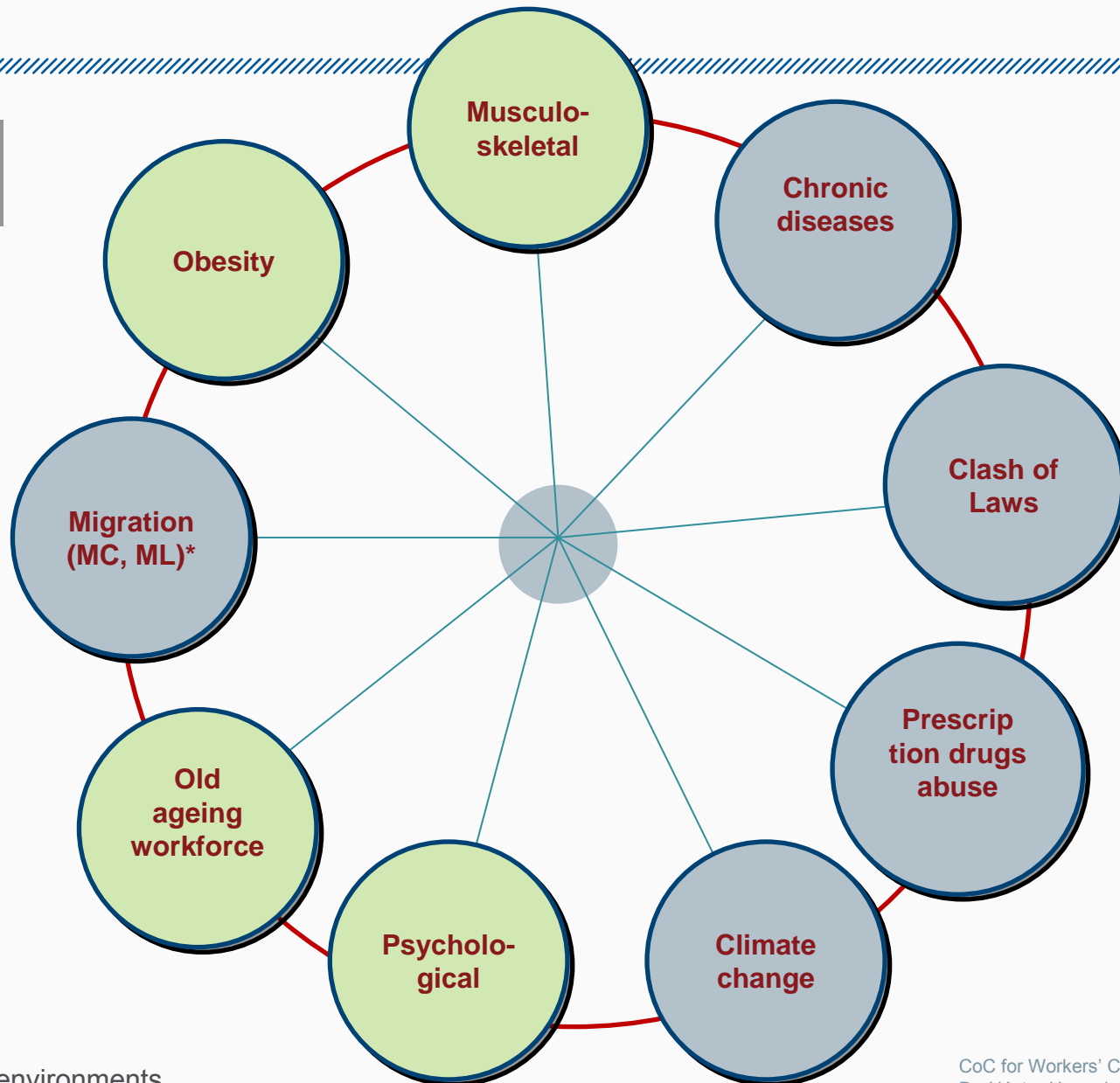
Long latency, multi-causality, diseases induced by new technology, mobile and flexible work force, etc.

Two major groups of ODs can be established: ODs with easy/clear attribution and ODs with complex attribution.

### Which trends do we see for the future?

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- Definition: Any condition that might affect the performance of a Workers' Compensation System
  - The condition/challenge must follow the following criteria :
  - **Independent:** should be able to affect any workers' compensation system, independently of the way in which it operates (under competition, without competition, public, with private participation, etc.)
  - **International:** should be able to affect any workers' compensation system, independently of the country or territory where the system operates
  - **Important:** where the expected impact in terms of frequency and severity is important enough to raise awareness
  - **Identifiable:** there should be evidence to show that the risk/condition might cause an impact on the workers' compensation insurance

**Under the  
4I's criteria**



\*Multicultural-lingual environments



# Future challenges in Workers' Compensation

## Obesity



- Defined as a body mass index (BMI) above 30
- Considered to be a global epidemic by the International Obesity Task Force and the World Health Organisation
- Obesity is also an issue of tomorrow: According to the British Medical Association 30.3% of boys and 30.7% of girls were overweight in 2002 (thereof 16% obese)

Country	Females		Males	
	% of population aged 15+	Ranking amongst 192 countries	% of population aged 15+	Ranking amongst 192 countries
<b>Belgium</b>	11	140	14	62
<b>Chile</b>	39	23	24	23
<b>Colombia</b>	26	58	20	36
<b>Denmark</b>	8	147	12	80
<b>Finland</b>	19	93	21	31
<b>Germany</b>	22	79	23	26
<b>Norway</b>	11	141	13	73
<b>Peru</b>	38	28	18	44
<b>Portugal</b>	18	103	16	59
<b>USA</b>	48	13	44	5

Source: WHO, Global Database on Body Mass Index, Oct. 2010

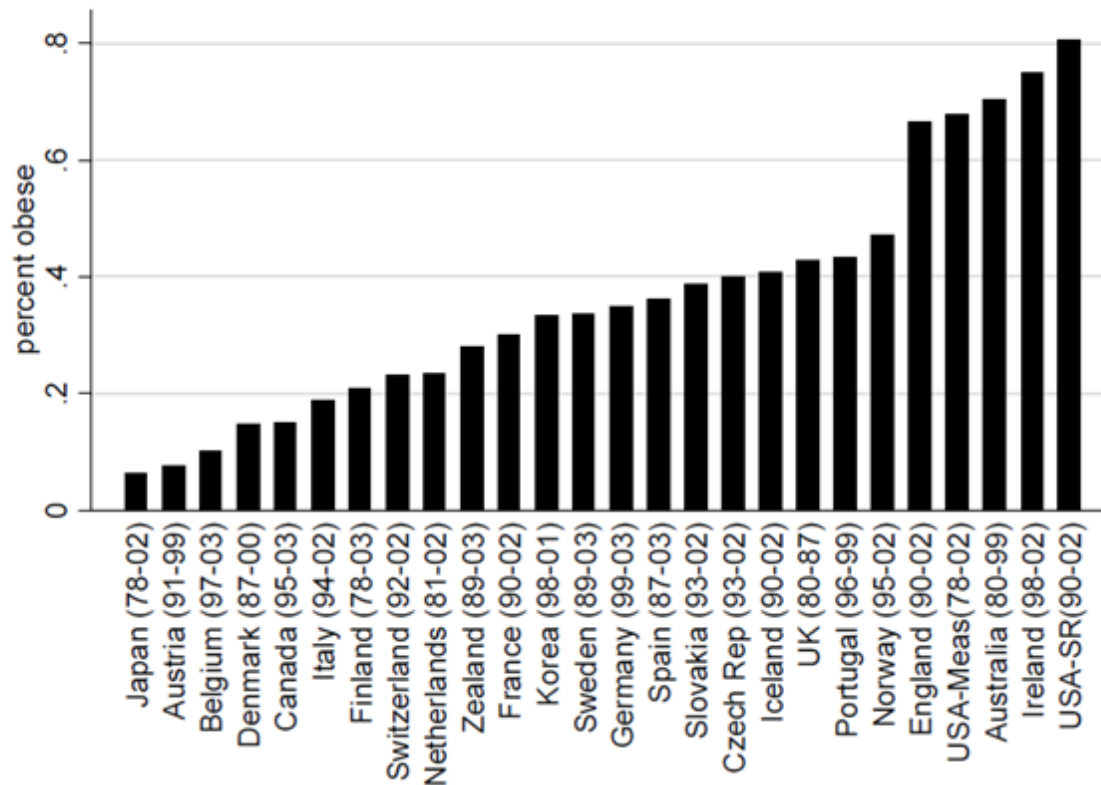
Formula: Body weight in kg divided by body height in m, which is squared.  
 e.g. 100kg, 2 m tall person:  $100/(2*2) = 25$

# Future challenges in Workers' Compensation Obesity

Formula:  
Body weight  
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e.  
g. 100kg, 2  
m tall  
person:  
 $100/(2*2)=$   
25

Average Annual Change in the Percent Obese



Source: OECD Health data; for detailed information about country surveys see:

<http://www.irdes.fr/ecosante/OCDE/814010.html>

Note: The years of available survey data differ by country. The United Kingdom and England have been separated on the graph since the most recent obesity data are not available for the entire country. "USA-Meas" refers to data from the National Health and Nutrition Examination Surveys (NHANES) and "USA-SR" refers to data from the Behavioral Risk Factor Surveillance Surveys (BRFSS).

# Obesity Research

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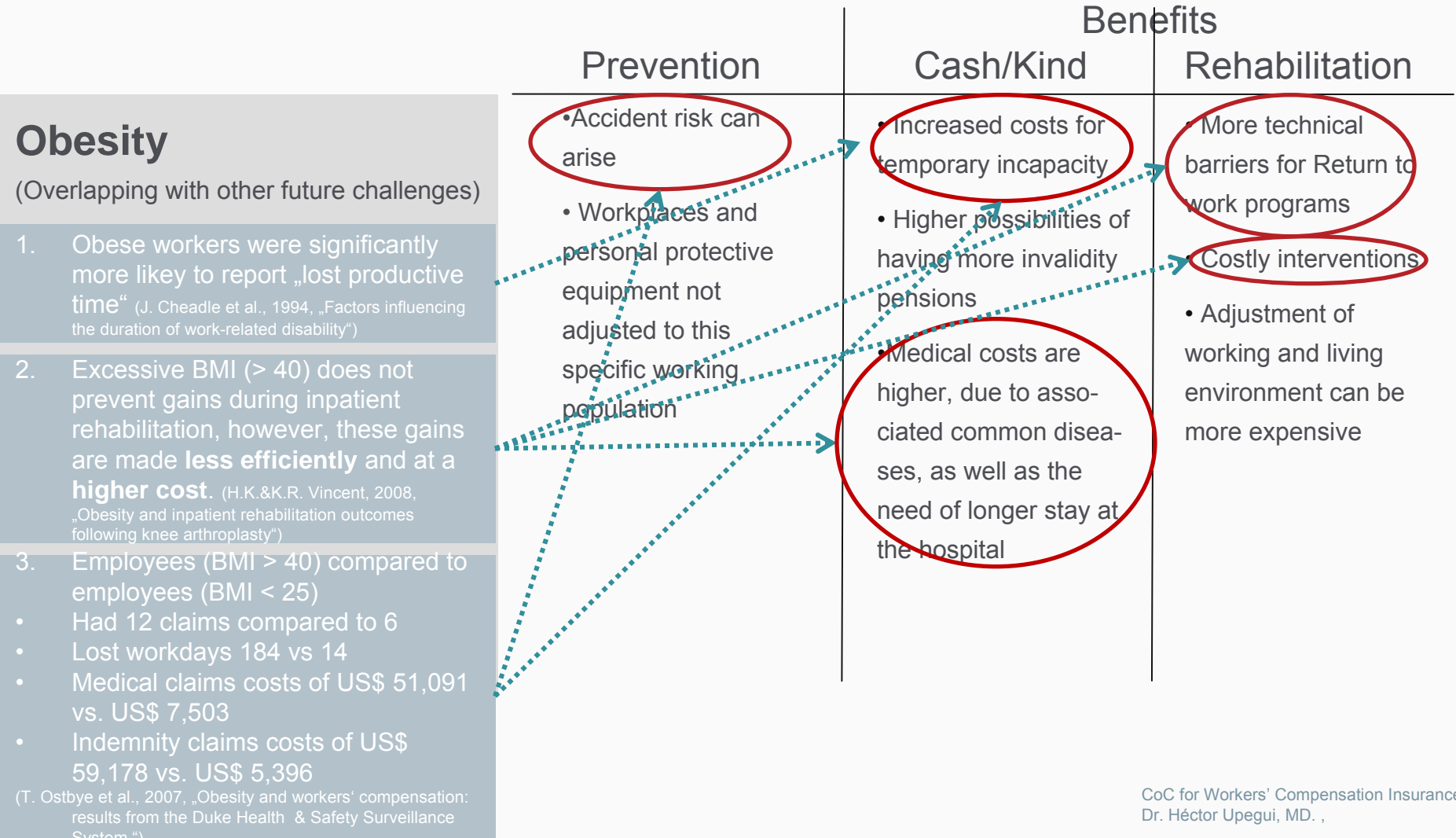
NCCI Research Brief – Nov 2010:

## “ RESERVING IN THE AGE OF OBESITY”

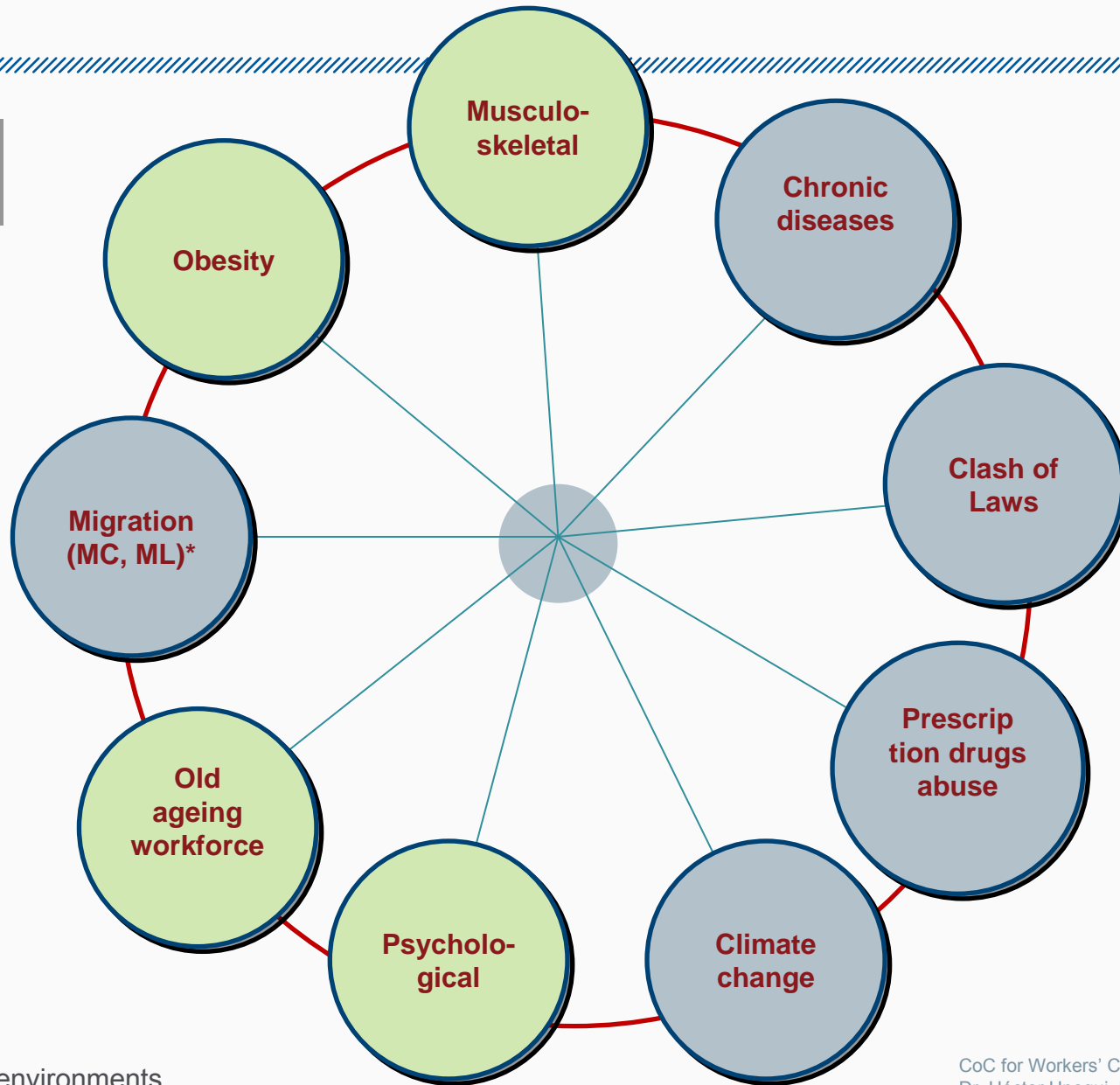
Some Key Findings:

- Obese claims are more expensive than non-obese claims, and the differences in costs are magnified as the claims mature
  - Obese claims are 2.8 times more expensive at the 12-month maturity
  - Obese claims are 4.5 times more expensive at the 36-month maturity
  - Obese claims are 5.3 times more expensive at the 60-month maturity
- The cost difference (at the five year maturity) is less for females than for males.
- Mandatory utilization review and, in particular, mandatory bill review significantly reduce the cost difference between obese and non-obese claims.

# Future challenges in Workers' Compensation Obesity



**Under the  
4I's criteria**



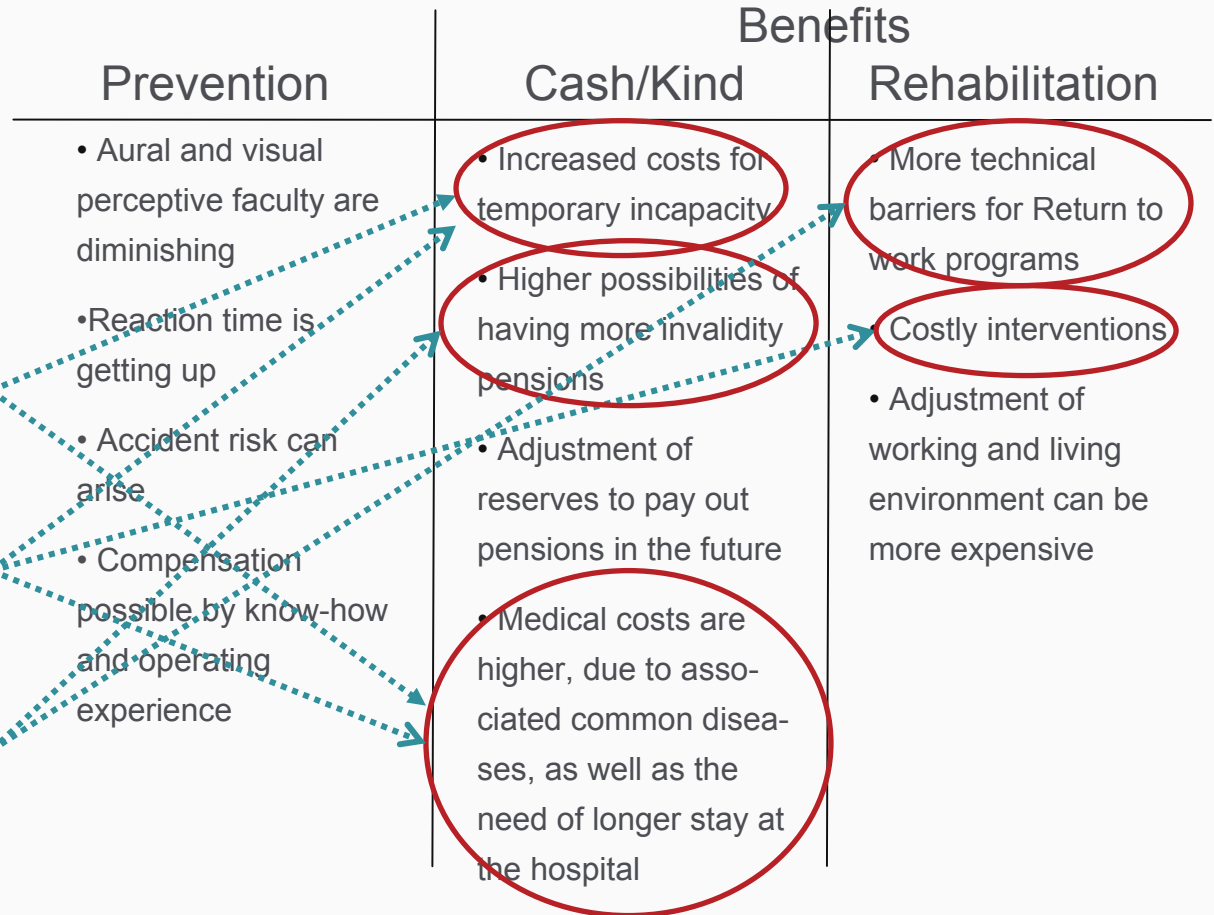
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# Future challenges in Workers' Compensation

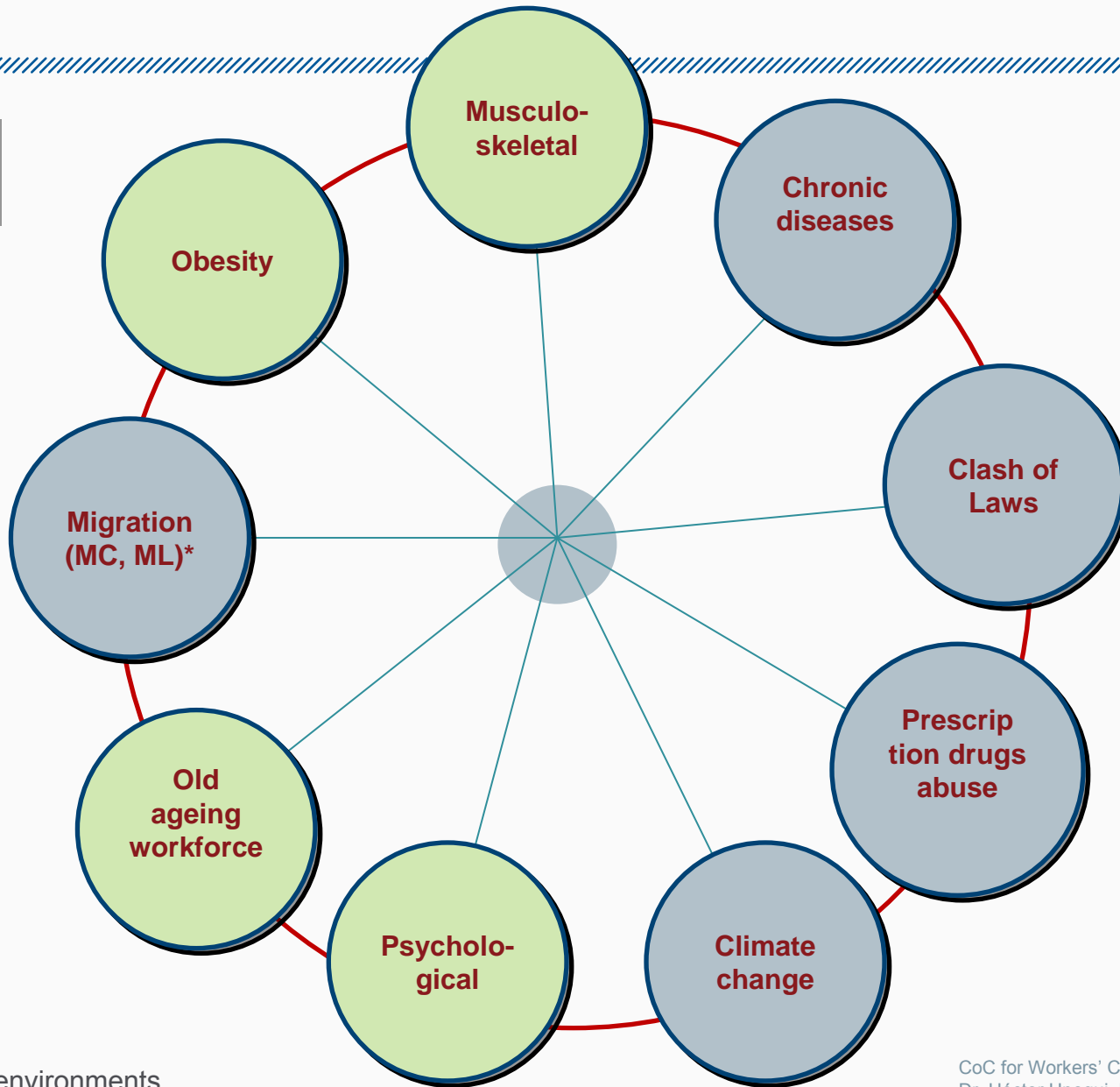
## Old ageing workforce



- ### Old ageing workforce
- (Overlapping with other future challenges)
- Severity of injury, **older age**, female gender predict **longer duration of disability** (A. Cheadle et al., 1994, „Factors influencing the duration of work-related disability“)
  - Positive linear relationship between **age and costs** was observed (G.A. Wood et al., 1995, „Factors influencing the cost of workers' compensation claims...“)
  - Most **significant individual predictors** of „RTW“ status were education, **age**, ... (Blackwell et al., 2003, „Predictors of vocational rehabilitation RTW outcomes in WC“)



**Under the 4I's criteria**



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# Future challenges in Workers' Compensation

## Psychological disorders

### Top 5 of most recognised diseases

Country	N°1	N°2	N°2	N°4	N°5
<b>Germany</b>	Hearing loss 4,971	Asbestosis and pleural plaques 1,973	Mesotheliomas 903	Silicosis 870	Lung and larynx cancers caused by asbestos 817
<b>Austria</b>	Hearing loss 594	Skin diseases 220	Allergic bronchial asthma 109	Respiratory diseases (chemical agents) 81	Infectious diseases 66
<b>Belgium</b> (2005)	MSDs 338	Paralysis of nerves caused by pressure 293	Hearing loss 258	Skin diseases 256	Asbestos-related diseases 170
<b>Denmark</b> (2005)	Skin diseases 768	MSDs 593	Hearing loss 314	Respiratory diseases 241	cancers 135
<b>Spain</b>	MSDs 18,605	Skin diseases 1,405	Hearing loss 578	Infectious diseases 202	Asthma 172
<b>France</b>	MSDs 38,000	Asbestos-related diseases 6,615	Back pain 2,785	Hearing loss 1,056	Skin diseases 443
<b>Italy</b>	MSDs 2,647	Hearing loss 2,183	Respiratory diseases 873	Cancers 767	Skin diseases 465
<b>Luxembourg</b>	Infectious diseases	Asbestosis	Carpal tunnel syndrome	Periarticular diseases	Skin diseases
<b>Portugal</b>	MSDs	Hearing loss	Respiratory diseases	Skin diseases	Other diseases
<b>Sweden</b>	MSDs 3,126	Hearing loss 440	Psycho-social disorders 307	Diseases of the digestive system 221	Respiratory diseases 156
<b>Switzerland</b>	Hearing loss 855	Infectious diseases 760	Skin diseases 752	Disorders of the locomotor apparatus 583	Respiratory diseases 340

# Future challenges in Workers' Compensation

## Psychological disorders

Current and projected ranking of contributors to the global burden of disease			
Disease or Injury	2002 Rank	2030 Rank	Change In rank
Perinatal conditions	1	5	-4
Lower respiratory infections	2	8	-6
HIV/AIDS	3	1	+2
Unipolar depressive disorders	4	2	+2
Diarrhoeal diseases	5	12	-7
Ischaemic heart disease	6	3	+3
Cerebrovascular disease	7	6	+1
Road traffic accidents	8	4	+4
Malaria	9	15	-6
Tuberculosis	10	25	-15
Chronic obstructive pulmonary disease	11	7	+4
Congenital abnormalities	12	20	-8
Hearing loss, adult onset	13	9	+4
Cataracts	14	10	+4
Violence	15	13	+2
Self-inflicted violence	17	14	+3
Diabetes mellitus	20	11	+9

Source: Mathers et al. <sup>13</sup>

WHO "Integrating mental health into primary care", 2008

**High workers' compensation costs** were related to individual health risks, especially Health Age Index, smoking, **poor physical health**, physical inactivity (→ Obesity, old age) and **life dissatisfaction** (→ depression, psychological disorders. )

(S. Musich et al., 2001, „The association of health risks with workers' compensation costs“)

# Future challenges in Workers' Compensation Psychological Disorders



## Benefits

Prevention	Cash/Kind	Rehabilitation
<ul style="list-style-type: none"> <li>• Reaction time is getting up</li> <li>• Accident risk can arise due to lack of concentration</li> <li>• Use and abuse of prescription drugs (e.g. stimulants, anti-depressants, anti-dementia)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased costs for temporary incapacity</li> <li>• Higher possibilities of having more invalidity pensions</li> <li>• Medical costs are higher, due to associated common diseases, as well as the need of longer stay at the hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Costly interventions</li> </ul>

## Psychological Disorders

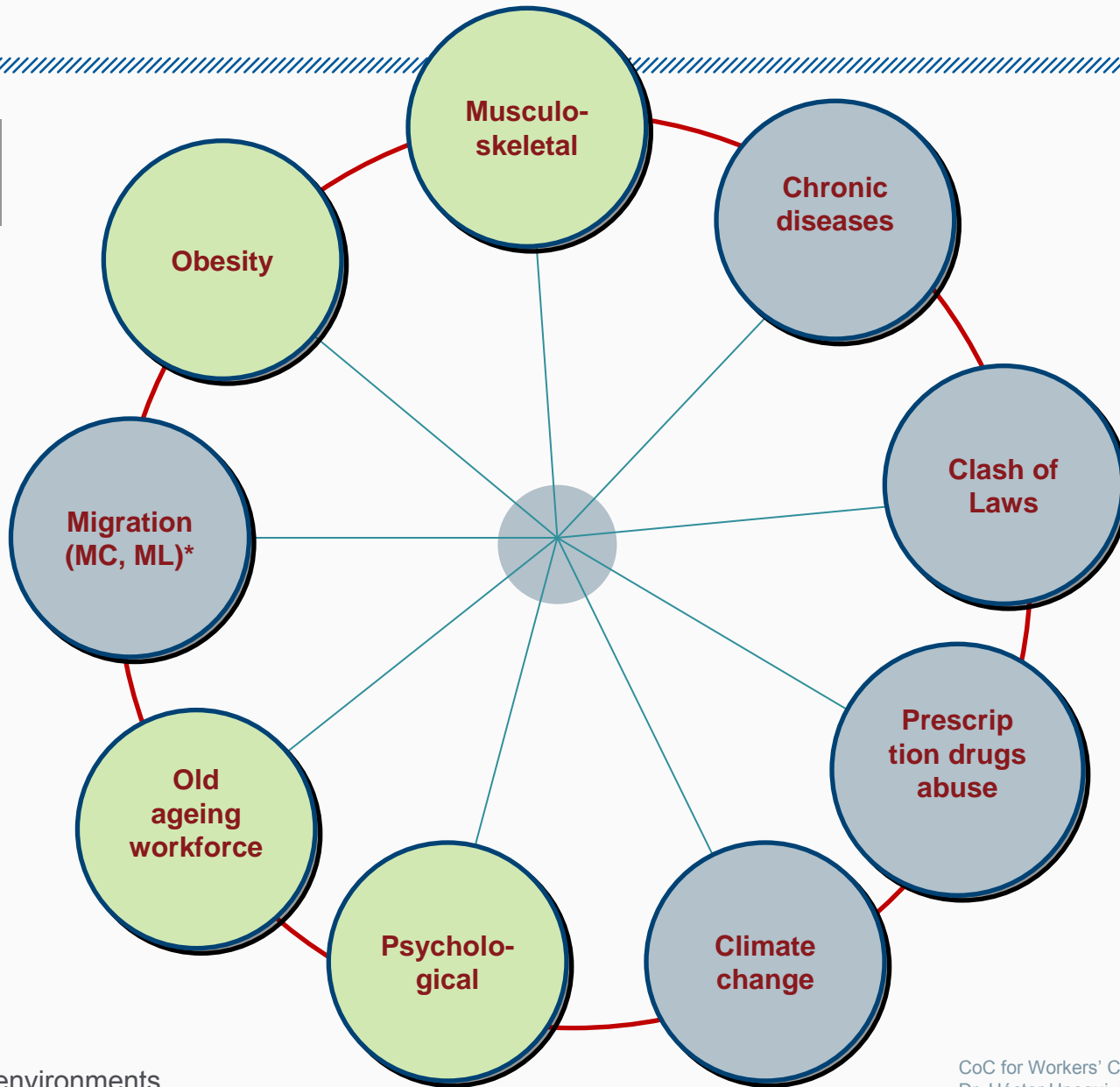
(Overlapping with other future challenges)

1. Level of depressive symptoms is a strong predictor of returning to work. (P. Ash, 1995, „Predictors of returning to work“)

2. Depressive component, if left untreated, would hinder significantly rehabilitation. (Monsein, Cliff, 1995)

3. Cognitive behavioural therapy has a useful role in the rehabilitation of people on WC compensation who are seeking employment. (C.Della-Posta, 2006, „CBT increases re-employment of job seeking WC clients.“)

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# Future challenges in Workers' Compensation

## Musculoskeletal disorders (MSD)

### Top 5 of most recognised diseases

Country	N°1	N°2	N°2	N°4	N°5
<b>Germany</b>	Hearing loss 4,971	Asbestosis and pleural plaques 1,973	Mesotheliomas 903	Silicosis 870	Lung and larynx cancers caused by asbestos 817
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# Future challenges in Workers' Compensation Conclusions

## **FUTURE CHALLENGES**

Old ageing workforce

Obesity

Musculoskeletal

Migration

Psychological

Climate change

Chronic diseases

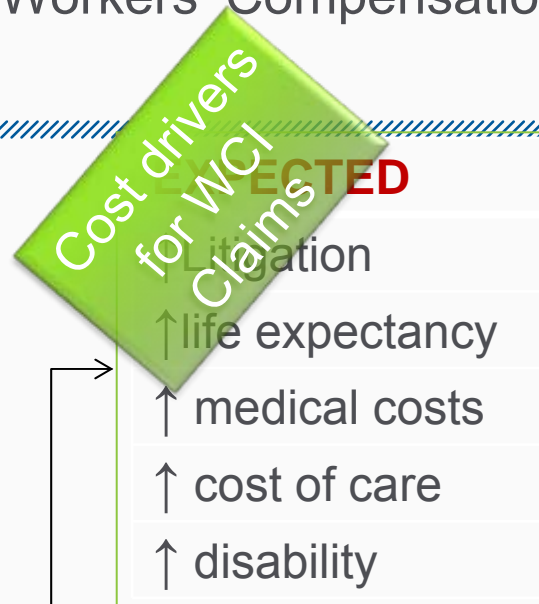
Prescription Drugs  
abuse

Clash of laws

# Future challenges in Workers' Compensation Conclusions

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# Future challenges in Workers' Compensation Conclusions

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### **COST DRIVERS for WCI Claims**

#### **EXPECTED**

↑ litigation  
↑ life expectancy  
↑ medical costs  
↑ cost of care  
↑ disability

### **PRESSURE ON the premium**

#### **CONSEQUENCES**

↑ reserves. Especially, IBNER & IBNR  
↑ investment in claims management (health care and care)  
↑ return to Work programs  
↑ investment in knowledge management

# Future challenges in Workers' Compensation Conclusions

## FUTURE CHALLENGES

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Drugs/Medicaments abuse  
Clash of laws

### Cost drivers for WCI Claims

#### EXPECTED

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### Pressure on the premium

#### SEQUENCES

↑ reserves. Especially, IBNER & IBNR  
↑ investment in claims management (health care and care)  
↑ return to Work programs  
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## ACTIONS AND SOLUTIONS

Macrolevel: More lobby, improve contact with social policy makers and decision takers

Generate platforms, forums, to foster the exchange of knowledge (Risk knowledge)  
→ transform the risk (Claims management, RTW, etc.)

Create new scenarios  
Rethink triggers

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THANK YOU VERY MUCH!



Dr. Héctor Upegui, MD  
Senior Consultant  
[hupegui@munichre.com](mailto:hupegui@munichre.com)

