# Work-related psychosocial risks and mental health in the EU health and social care sector

Report





Authors: Andrea Broughton, Sophie Buckingham, Neringa Collier (Ecorys)

The authors would like to thank the research team that supported the study, in particular Radosław Antczak, Anna Chowaniec, Anna Linter, Agnieszka Makulec, Dorottya Meszner, Agnese Moroni and Clara Percival.

Project management: Maurizio Curtarelli and Lorenzo Munar (EU-OSHA)

This publication was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect the views of EU-OSHA.

Neither the European Agency for Safety and Health at Work nor any person acting on behalf of the Agency is responsible for the use that might be made of the following information.

Luxembourg: Publications Office of the European Union, 2025

© European Agency for Safety and Health at Work, 2025

Reproduction is authorised provided the source is acknowledged.

For any use or reproduction of photos or other material that is not under the copyright of the European Agency for Safety and Health at Work, permission must be sought directly from the copyright holders.

PDF ISBN: 978-92-9402-459-6 doi: 10.2802/4941138 TE-01-25-011-EN-N

# **Table of Contents**

Ε	xecu	ıtive su	mmary	7
1		Introd	uction	12
	1.1	1 Relevance of the report		12
	1.2	Object	tives	13
	1.3	Struct	ure of the report	14
2		Metho	dological overview	14
	2.1	Desk i	research and literature review	14
	2.2	Intervi	ews	15
	2.3	Good	practice case studies	15
3		Sociodemographic, contextual and organisational factors affecting PSR exposure for HeSCare workers		17
	3.1	Gende	er	17
	3.2	Age		18
	3.3	Migrar	nt status	19
	3.4	Wider	contextual factors	20
4		Work-	related PSRs and mental health-related outcomes	21
	4.1	Organ	isational factors and working conditions	22
	4	.1.1	High workload and time pressure	22
	4	.1.2	Long working hours	24
	4	.1.3	Work scheduling (including atypical working hours) and shift work	
	4	.1.4	Poor work-life balance	26
	4	.1.5	Pay, effort–reward imbalance and precarious working conditions	27
	4	.1.6	Lack of autonomy	29
		.1.7	Use of digital technologies and the automation of tasks	
	4.2 Socia		environment of work	32
	4	.2.1	Adverse social behaviour, including violence, (sexual) harassment and bullying	32
	4	.2.2	High emotional and ethical burden	34
	4	.2.3	Stigma, including against seeking mental health support	36
	4	.2.4	Low social support	37
	4.3 Interlinkages with MSDs		nkages with MSDs	38
4.4 Mental health outcomes		l health outcomes	40	
	4	.4.1	Stress	41
	4	.4.2	Burnout	43
	4	.4.3	Anxiety	44
	4	.4.4	Sleeping problems and fatigue	44
	4	.4.5	Legacy of COVID-19	45
	4	.4.6	Other mental health outcomes	46
	4	.4.7	Costs and consequences of mental health outcomes	46

5		Prever	ntion measures	47
	5.1	Risk m	nanagement and risk assessment	51
	5.2	Interve	entions aimed at addressing organisational factors and working conditions	54
	5	5.2.1	Adequate staffing	55
	5	5.2.2	Ensuring adequate rest and improving work–life balance	55
	5	5.2.3	Participatory shift scheduling	57
	5	5.2.4	Recognition and remuneration	59
	5	5.2.5	Promoting job autonomy	60
	5	5.2.6	Worker influence and participation in decision-making	61
	5	5.2.7	Awareness-raising and training	64
	5	5.2.8	Regulatory initiatives and social dialogue	65
	5.3	Creatin	ng a supportive work environment	66
	5	5.3.1	Improving social support in the workplace	66
	5	5.3.2	Providing mental health support and reducing mental health-related stigma	67
	5	5.3.3	Addressing violence and adverse social behaviour	70
	5.4	Succe	ss factors for the implementation of initiatives	72
6		Policy	pointers	73
	6.1	Compr	ehensive risk assessments	73
	6.2	Suppo	rt networks	74
	6.3	Individ	ual and collective autonomy and control	74
	6.4	Ensuri	ng adequate staffing levels	74
	6.5	Encou	raging worker involvement	75
	6.6	Provid	ing information and training	75
	6.7	Proact	ive prevention and management of PSRs	75
	6.8	Focusi	ng on the long term	75
	6.9	Making	g use of available funding	76
R	efer	ences		766
Α	nne	x: Exam	ples of the longlist of interventions considered for the case studies	87

# List of figures and tables

Table 1: Stakeholders interviewed for this study	15
Table 2: PSR factors and associated prevention measures	48
Table 3: Overview of the measures to reduce mental health stigma in healthcare sector propose Kirk (2021)	
Figure 1: Workers with precarious employment conditions (*) in the HeSCare sector, by gender, El 27, 2021 (%)	
Figure 2: Workers with precarious employment conditions in the HeSCare sector*, by age, EU-27, 2021 (%)	
Figure 3: Establishments providing training to employees on OSH-related topics in other language sector, EU-27, 2019 (%)	
Figure 4: The most prevalent PSR factors identified by the primary and secondary research conduct for this study	
Figure 5: Workers exposed to several PSR factors at work in the HeSCare sector and in all sectors, EU-27, 2022 (%)	
Figure 6: Workers by estimated prevalence of exposure to severe time pressure within the HeSCard sector, by subsector, EU-27, 2020 (%)	
Figure 7: Workers working sometimes/often/always at night by sector, EU-27, 2021 (%)	25
Figure 8: Workers reporting difficulties in balancing work and life in the HeSCare sector, by country, EU-27 (+ CH and NO), 2021 (%)	
Figure 9: Remuneration of hospital nurses, 2022 (or nearest year), ratio to average wage in each country	28
Figure 10: Workers experiencing low payments for achievements; effort–reward imbalance in the HeSCare sector, by gender, EU-27, 2021 (%)	28
Figure 11: Workers experiencing some/great difficulty to make ends meet financially in the HeSCa sector, by gender, EU-27, 2021 (%)	
Figure 12: Workers' mean scores on low task autonomy* in the HeSCare sector by gender, EU-27 2021 (%)	
Figure 13: Workers' mean scores of low organisational participation* in the HeSCare sector by education level, EU-27, 2021 (%)	31
Figure 14: Workers by consequences of the use of digital devices at work in the HeSCare sector a in all sectors, EU-27, 2022 (%)	
Figure 15: Workers exposed to violence or verbal abuse from third parties in the HeSCare sector a in all sectors, EU-27, 2022 (%)	
Figure 16: Workers reporting dealing with difficult customers, patients, that can adversely affect me health, by sector, EU-27, 2020 (%)	
Figure 17: Establishments by main obstacles to dealing with PSRs in the HeSCare sector and in a sectors EU-27, 2019 (%)	
Figure 18: Workers' mean scores of low social support* in the HeSCare sector by subsector, EU-2 2021 (%)	
Figure 19: Workers with co-exposure to musculoskeletal risks and PSRs in the HeSCare sector by subsector, EU-27, 2021 (%)	
Figure 20: Establishments reporting work-related stress in the workplace, by sector, EU-27, 2019 (	(%)
Figure 21: Workers reporting work-related stress, depression or anxiety, by sector, EU-27, 2020 (N	

	Vorkers reporting mental health problems caused or made worse by work in the past 12 months in the HeSCare and in all sectors, EU-27, 2022 (%)4	2
	Norkers reporting availability of preventive initiatives in their workplace, in the HeSCare sector and in all sectors, EU-27, 2022 (%)5	51
	Establishments that regularly carry out workplace risk assessments in the HeSCare sector by subsector, EU-27, 2019 (%)5	
	Establishments that regularly carry out workplace risk assessments in the HeSCare sector by number of employees, EU-27, 2019 (%)5	
	Establishments by reasons for not conducting regular risk assessments in the HeSCare sector and in all sectors, EU-27, 2019 (%)5	;3
	Establishments by type of measures taken to prevent PSRs in the human health and socia work activities (Q) sector, 2014 and 2019 (%)5	
Box 1: Deve	eloping a digital risk assessment tool in France5	54
Box 2: Long	working hours in the Finnish HeSCare sector: the Traffic Light Model5	56
Box 3: Man	naging shift work through annualised hours in emergency medical care in the UK5	57
Box 4: Traffi	ic Light Model as a participatory shift planning tool in Finland5	58
Box 5: Bulga	aria: Social workers secure wage increases5	59
Box 6: Colle	ective sectoral agreements in Lithuania5	59
Box 7: Stren	ngthening job autonomy at the regional hospital in Horsens in Denmark 6	30
	easing autonomy and empowering decision-making, based on the Magnet4Europe model 6	
Box 9: Euro <sub>l</sub>	pean Works Council at Clariane in France6	32
	production of a fatigue risk management strategy in maternity services at the Newcastle spitals NHS Trust, UK6	3
Box 11: Five	e-day mind–body medicine professional training programme	35
	ion plan to improve the psychological wellbeing of staff in the personal healthcare sector i uania6	
Box 13: 'Tea	am talk' at the regional hospital in Horsens, Denmark6	37
Box 14: The	e Psychological Counselling Centre of the Vienna Health Network (WIGEV) in Austria 6	37
Box 15: Viol	lence prevention and management in healthcare institutions in Lithuania	'0

# **Executive summary**

This report is the culmination of a research study carried out for the European Agency for Safety and Health at Work (EU-OSHA) providing an overview of research on work-related psychosocial risks (PSRs) and mental health-related outcomes in the health and social care (HeSCare) sector in the EU.

#### Background and objectives

The HeSCare sector is a significant component of the EU economy, employing over 21.5 million people in 2022 and accounting for around 11% of the total EU workforce. This sector has experienced employment growth over the past decade across its three main subsectors: healthcare, residential care, and social work. However, the sector faces several challenges that impact occupational safety and health (OSH) conditions. One of the primary challenges is the ageing EU population, leading to increased demand for HeSCare services. While the population aged 65 or over is expected to grow by 23% by 2035, projected employment growth in the HeSCare sector over the same period is only 12%, indicating potential labour shortages. Additionally, the sector itself has a high proportion of older workers; this is notable given that age-related physical changes can increase vulnerability to OSH risks. Further lifestyle factors, such as increased sedentary behaviour, contribute to a general rise in preventable illnesses like obesity, diabetes and heart disease, further straining the HeSCare sector.

HeSCare workers are exposed to a wide range of OSH risks, including PSRs and musculoskeletal risks, and these risks interact with each other. The combination of these diverse risks makes HeSCare a high-risk sector for workers. In 2020, HeSCare was identified as the sector with the highest reported exposure to risks adversely affecting mental wellbeing in EU Member States.

The overarching aim of the report is to provide a review of research on the topic of work-related PSRs and mental health-related outcomes in the EU's HeSCare sector. In order to do this, the report identifies 11 of the most common PSRs in the sector, according to triangulated evidence from the desk research and interviews that were conducted. For the purposes of the study, PSR factors for workers in the HeSCare sector have been categorised into two groups:

- PSRs linked to organisational factors and working conditions. These relate to the working environment and aspects of workers' terms and conditions of employment, for example, workload, time pressure, working time, work schedules, work-life balance, pay and job autonomy.
- PSRs linked to the social environment of work, namely the psychosocial environment in which
  work is performed. These include experiences of adverse social behaviour, exposure to high
  emotional or ethical burdens and potentially traumatic events, stigma against seeking support
  and low workplace social support.

#### Methodology

The study employed a mixed-methods approach, encompassing desk research, interviews and case study research. The desk research included a review of both scientific literature from peer-reviewed journals and 'grey literature' from authoritative sources and studies. All sources selected for the review focused either explicitly on PSRs and mental-health outcomes in the HeSCare sector or on directly related topics (i.e. interlinkages between PSRs and musculoskeletal disorders (MSDs)). Additionally, 12 in-depth interviews were conducted with key stakeholders and experts to validate and build upon findings from the desk research. Based on the evidence gathered through primary and secondary research, eight case studies were selected for further research and analysis via additional desk research and an interview with a key stakeholder for each case study.

These case studies have been published as stand-alone documents,<sup>1</sup> with findings from them integrated into this report to illustrate effective prevention measures and innovative approaches for addressing work-related PSRs.

#### Identified PSRs, mental health outcomes and interlinkages with MSDs

As already noted, the most prevalent PSR factors identified by the primary and secondary research conducted for this study fall into two main categories: those linked to organisational factors and working conditions; and PSRs related to the psychosocial environment in which work is performed. Further, given that PSR exposure often correlates with the development of MSDs, which can exacerbate both physical and mental health issues, the interplay between PSRs and MSDs was explored.

#### PSRs linked to organisational factors and working conditions

Data confirm that **high workload coupled with severe time pressure** is one of the most cited PSR factors in the HeSCare sector. This is particularly true in the healthcare and residential care subsectors. Excessive workloads and time constraints can lead to physical and mental exhaustion and to burnout, stress, anxiety and depression. Ageing populations are placing increasing demands on the sector, as are staffing shortages. The COVID-19 pandemic also exacerbated these challenges, contributing to higher stress levels as a result of increased workload.

Long or irregular working hours are another of the top three risks resulting from the way in which work is organised in the HeSCare sector. **Long working hours** have clear implications for the mental wellbeing of sector staff, work–life balance (and therefore the recruitment and retention of staff), and patient safety. Scientific literature shows that working long hours is associated with a range of mental health issues such as depression, anxiety and increased levels of occupational stress. However, evidence shows that interventions to combat long or irregular hours worked were least common among all measures taken to prevent PSRs.

Atypical working hours and irregular shift patterns, including night and weekend shifts, are common in the HeSCare sector. They disrupt natural sleep patterns and can contribute to sleep deprivation, depression, work-related stress and occupational burnout. The prevalence of shift work, and indeed low levels of control over shift patterns and/or notification of shifts being given at short notice, impacts upon work-life balance and contributes to chronic fatigue and heightened stress levels. Studies have also shown a link between shift work and MSDs, with rotating and irregular shifts contributing to the development of MSDs such as lower back pain, shoulder pain and knee pain in healthcare professionals.

The challenges of managing professional responsibilities alongside demands related to personal life can lead to **poor work–life balance** among HeSCare workers. Evidence shows that work–life conflict is a PSR associated with numerous indicators of poor health and impaired wellbeing. Work–life imbalance or conflict is frequently the result of cumulated effects involving other PSRs such as low influence over shifts, weekend or night shifts, long working hours per week and high work demands. In addition, the possibility of space or separation from work is very low in certain occupations and care settings (e.g.

<sup>&</sup>lt;sup>1</sup> CS1: France's G2P: a digital risk assessment tool for the social care sector: <a href="https://osha.europa.eu/en/publications/g2p-frances-digital-risk-assessment-tool-social-care-sector">https://osha.europa.eu/en/publications/g2p-frances-digital-risk-assessment-tool-social-care-sector</a>

CS2: Action plan and collective agreements help ensure healthcare employee wellbeing in

Lithuania: https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania

CS3: The benefits for emergency medicine of an annual approach to rostering – HealthRota:

https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-healthrota

CS4: Increasing mental health awareness among staff - the work of Vienna's Psychological Counselling Centre: https://osha.europa.eu/en/publications/increasing-mental-health-awareness-among-staff-work-viennas-psychological-counselling-centre

CS5: Magnet4Europe - empowering nurses at Cork University Hospital:

https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-university-hospital

CS6: Empowering healthcare workers through participation - a Danish case study:

https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study

CS7: Supporting mental health of long-term care workers - European Works Council case study:

https://osha.europa.eu/en/publications/supporting-mental-health-long-term-care-workers-european-works-council-case-study

CS8: Finland's model for supporting mental health through shift scheduling and ergonomics:

 $<sup>\</sup>underline{https://osha.europa.eu/en/publications/finlands-model-supporting-mental-health-through-shift-scheduling-and-ergonomics:\\$ 

live-in care<sup>2</sup>), rendering it virtually impossible to separate working and recreational time and to maintain a healthy work–life balance.

**Effort–reward imbalance** (the disparity between the effort expended for work and the rewards received in recognition, appreciation and respect) is a critical PSR factor in job dissatisfaction and burnout in the HeSCare sector. Salaries in the sector vary considerably, with personal care workers being some of the lowest-paid HeSCare workers, earning around 30% less than the economy-wide average wage across EU countries. Evidence also shows that female workers in the HeSCare sector are more likely to experience lower pay than men. In parallel, the prevalence of precarious employment conditions in the HeSCare sector is higher than the EU-27 average across all its subsectors, particularly in the social work subsector. Precarious work is understood as when workers experience at least one of three working conditions: very low pay, very low intensity working hours, and/or low job security. This inability in certain cases to make ends meet means that jobs in the sector that used to be secure now need to be supplemented with extra shifts or side jobs, contributing to financial and psychosocial stress.

In the HeSCare sector as a whole, 57% of workers report having **low task autonomy** (defined by never, rarely or only sometimes deciding on: i) the order of tasks, ii) methods, or iii) the speed or rate of work). A lack of autonomy in the workplace has negative impacts on both physical and mental health. Evidence shows that workers in 'high-strain' jobs are more susceptible to stress-related illnesses, including anxiety, depression and cardiovascular diseases. Studies have shown this to be true for emergency healthcare workers, nurses and midwives, in different national contexts.

**Organisational participation** is another factor linked to task autonomy, referring to the involvement and engagement of workers in decision-making processes and activities within the workplace. Data show that low organisational participation is more common in the healthcare and residential care subsectors than the EU average across all sectors. Low organisational participation brings with it low psychological wellbeing scores and increased negative mental health outcomes such as stress.

The use of digital technologies and the automation of tasks can help streamline administrative and bureaucratic processes, freeing up time that could be spent on caring for patients. In this sense, it is a potential enabling factor for reduced PSR exposure, given that standardised, repetitive, technical tasks with low levels of autonomy — tasks that are typically susceptible of being automated — are negatively associated with PSRs. However, 39% of workers in the EU's HeSCare sector reported that the use of digital devices at work has increased their workload. This may be due to insufficient training provided to workers in relation to digital tools.

#### PSRs related to the social environment of work

Workers in the health sector reported the highest prevalence of **intimidation** across all sectors analysed, with the highest exposure of any sector to: **i) verbal abuse**; **ii) bullying, harassment and violence**; **and c) unwanted sexual attention**. Abusive behaviour against HeSCare workers can come from both members of staff (e.g. colleagues and managers) and third parties, such as patients or clients. While such behaviour exists in other types of workplaces, third-party violence is particularly pervasive in the sector due to workers' intense contact with patients or clients. Violence against workers has been associated with mental health outcomes like anxiety, depression, sleeping problems and suicidal thoughts. Evidence also points to the lack of a zero-tolerance culture regarding harassment and violence in the workplace, or having relevant strategies and risk assessment measures in place, as amplifying this risk factor.

Exposure to adverse social behaviour, including violence, harassment and bullying, in the workplace can cause severe anxiety, depression and significant workplace stress. This hostile environment can lead to long-term psychological trauma, affecting workers' mental health and their ability to perform their duties effectively. Such behaviours undermine a sense of safety and trust within the workplace, making it difficult for workers to feel secure and supported.

Workers in the HeSCare sector frequently encounter **emotionally taxing situations and ethical dilemmas**. The HeSCare sector also has the highest share of people reporting exposure to dealing with difficult third parties and dealing with ethical dilemmas, which can adversely affect their mental health.

.

<sup>&</sup>lt;sup>2</sup> Live-in care is a type of long-term care where a trained carer lives in a person's home to provide support and assistance.

Professionals in the HeSCare sector may struggle with **self-stigmatisation**, with research showing that doctors tend to consider their state of health, especially mental health, as an indicator of their medical competence. This means they may fail to seek mental health support for fear of being perceived as weak or incompetent. One of the knock-on effects of stigma is reluctance to talk openly about issues (including in relation to mental health), which can act as a barrier to effective PSR management.

Weak social support, both from colleagues and management, can increase stress levels and feelings of isolation, depression and loneliness. Supportive relationships are crucial for buffering the impact of stressors, with research demonstrating the importance of well-functioning relationships within and between workers and their respective units as a positive psychosocial factor.

#### **Key prevention measures**

The report identifies various effective interventions to mitigate PSRs. Integrating regular risk assessment of PSR factors into overall risk management practices is crucial. There are several tools available that can be used to assess PSRs at workplace level, which have been developed by national and international OSH organisations. These include the Online interactive Risk Assessment tool at EU level, as well as the G2P tool developed in France.

Creating a supportive work environment is another important factor for the success of interventions to prevent and mitigate PSRs. Interventions to foster a supportive working environment include those that implement/improve social support structures, for example, through peer support groups (see the Danish case study<sup>3</sup>). The report also identifies interventions aimed at providing access to mental health support, raising awareness and reducing mental health-related stigma (e.g. see the services provided by the Psychological Counselling Centre to Vienna Health Network (WIGEV) employees in the Austrian case study<sup>4</sup>). Finally, there are interventions that address adverse social behaviour through zerotolerance policies on violence, harassment and bullying, notably the Violence and Harassment Prevention Policy in Lithuania. For details, see the Lithuanian case study.5

Ensuring adequate staffing levels is critical for managing workloads and reducing patient-professional ratios, thereby alleviating work-related stress. This includes measures to create a more effective rostering system that would allow, for instance, doctors to have more control over their working hours and ultimately enjoy a better work-life balance, as in the case of the annualised hours in emergency medical care intervention in a hospital trust in the United Kingdom (UK). For details, see the UK case study.6

Equally, promoting job autonomy by enhancing workers' control over their schedules and decisionmaking processes can significantly reduce stress and improve mental health. The same is true of participatory management and encouraging workers' influence over decisions affecting them, such as control over the working environment. Engaging workers in decision-making processes ensures that they have a say in matters that affect them directly. Evidence shows that where there is collective representation of workers, preventive actions lead to better results (e.g. in the cases of trade union support for the creation of works councils in healthcare organisations in France, and the Magnet4Europe project to improve mental health and wellbeing among health professionals in Europe<sup>7</sup>).

Fair remuneration and recognition of workers' efforts are vital for job satisfaction and mental health. Collective bargaining, unionisation and industrial action, up to and including strikes, can serve as effective tools for negotiating higher wages.

Given that evidence shows that the lack of stakeholder awareness of PSRs, their effect on workers and how to manage them effectively in the workplace are key barriers to preventing and managing PSRs in

<sup>&</sup>lt;sup>3</sup> More information available at: https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-

<sup>&</sup>lt;sup>4</sup> More information available at: <a href="https://osha.europa.eu/en/publications/increasing-mental-health-awareness-among-staff-work-">https://osha.europa.eu/en/publications/increasing-mental-health-awareness-among-staff-work-</a> viennas-psychological-counselling-centre

<sup>&</sup>lt;sup>5</sup> More information available at: https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensurehealthcare-employee-wellbeing-lithuania

<sup>&</sup>lt;sup>6</sup> More information available at: https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-<u>healthrota</u>

<sup>&</sup>lt;sup>7</sup> More information available at: https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-universityhospital

the HeSCare sector, providing **information**, **awareness-raising and training** can have a considerable positive impact on the management and mitigation of these risks.

Finally, **regulatory initiatives** such as legislation, non-binding or voluntary policies developed by international, European and national organisations to prevent and manage PSRs are helpful for providing a framework for comprehensively addressing PSRs. An example is the National Nursing Policy Guidelines (2016-2025) and Action Plan introduced in Lithuania to improve the psychological wellbeing of staff in the personal healthcare sector.<sup>8</sup>

Implementing comprehensive risk management frameworks involves regularly evaluating the work environment for potential PSRs and taking proactive measures to address them. This includes conducting thorough risk assessments, engaging in continuous monitoring and adapting strategies based on feedback from workers. By fostering a culture of continuous improvement, organisations can better anticipate and mitigate PSRs before they escalate. Fostering a positive organisational culture is also vital for preventing PSRs, promoting open communication and encouraging collaboration within the workplace.

#### Conclusions and policy pointers

The study concludes that the HeSCare sector faces significant challenges in terms of the presence of PSR factors, which can result in workers' mental health issues and overall reduced job satisfaction. Key resources to prevent such risks include the importance of creating support networks, promoting autonomy, ensuring adequate staffing, involving workers in PSR management, and providing training and awareness-raising initiatives. The interlinkages between PSRs and MSDs underscores the need for integrated preventive measures to address PSRs and musculoskeletal risks when carrying out risk assessments.

**Investing in research and data collection** is crucial in terms of understanding the evolving landscape of PSRs in the HeSCare sector. Policymakers should support efforts to collect comprehensive data on PSRs and their impact, using this information to inform evidence-based decision-making and policy development.

Finally, given the examples highlighted in this study that relate to successful cooperation and the creation of innovative solutions in terms of PSR prevention and mitigation, seeking out and using available funding for pilot initiatives and projects on these themes should be encouraged. Sharing knowledge, resources and best practices across borders will encourage an improved risk prevention and management culture and foster open dialogue about these PSRs and related mental health outcomes

\_

<sup>&</sup>lt;sup>8</sup> More information available at: <a href="https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania">https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania</a>

# 1 Introduction

# 1.1 Relevance of the report

This report is the culmination of a research study carried out for the European Agency for Safety and Health at Work (EU-OSHA), providing an overview of research on work-related psychosocial risks (PSRs) and mental health-related outcomes in the health and social care (HeSCare) sector in the EU.

The HeSCare sector is an important one in the EU economy, with over 21,500,000 people employed in the sector in 2022. It currently **accounts for around 11% of EU workers** (EU-OSHA, 2023a). Levels of employment in the HeSCare sector have increased over the last decade, as well as in the three subsectors that make up the sector: healthcare, residential care, and social work.

The HeSCare sector is characterised by a **high degree of segmentation of its providers**, as in many EU Member States there exists a mix of public sector bodies operating at different administrative levels (e.g. central, regional and/or local), private actors and non-profit organisations (Eurofound, 2020c). This makes a comprehensive overview of the sector at EU level challenging.

The ageing of the EU population creates two important effects, namely the steady decline in the working-age population coupled with an older society in which HeSCare needs increase. This results in an increasing demand for HeSCare workers. While the EU population aged 65 or over is expected to grow by 23% by 2035, projected employment growth in the HeSCare sector over the same period is only 12% (Cedefop, 2023c). This means that there will be significant labour market shortages, which in turn impact upon organisational factors and working conditions of those employed in the sector.

Furthermore, the HeSCare sector has a high proportion of older workers, with 34% in the 50-64 age bracket (EU-OSHA, 2024a). In certain sectors this imbalance is even more pronounced. For example, in the long-term care (LTC) sector, the proportion of workers aged 50 years or older is even higher, at 38% in 2019 (Eurofound, 2020b). This has important implications for the sector, as workers may have a reduced ability to perform certain tasks as their motor, vision or hearing skills change (EU-OSHA, 2024e), leaving them more vulnerable to occupational safety and health (OSH) risks.

The strains felt on the HeSCare sector linked to an ageing population are further exacerbated by changing lifestyle factors in the EU population as whole, in particular the increase in sedentary behaviour that leads to a growing number of adults developing preventable illnesses such as obesity, diabetes and heart disease (EU-OSHA, 2024a). Evidence shows that individuals with lower socioeconomic status in particular tend to have higher needs for LTC due to a generally worse health status stemming from factors including poor living conditions and specific types of lifestyle (i.e. in relation to nutritional habits, sedentarism or a lack of physical activity, obesity and smoking) (DG EMPL, 2021). This places increasing strain on a sector in which high workloads, long working hours and increasing patient–professional ratios are already prevalent.

In addition, the **trend towards home-based care** (i.e. LTC provided at the elderly and disabled care recipients' own residences or the residence of their close family) instead of residential care has become more pronounced. Academic literature has found that informal care (either by family members or live-in care providers<sup>9</sup>) is the predominant type of care in many southern and eastern European countries, particularly in Hungary, Italy and Poland (Szenkurök et al., 2024). As will be explored further in this report, workers in a home-based setting are at particularly high risk of exposure to certain PSRs given the isolated environment in which they work.

Workers in the HeSCare sector are exposed to a large number of risks to their OSH. These include a multitude of PSRs, musculoskeletal risks related to the often physically demanding nature of working with patients, risks related to exposure to biological agents, risks linked to repeated use of hazardous chemical substances, and finally physical risks such as noise, slips, trips and falls. According to the European Survey of Enterprises on New and Emerging Risks (ESENER), the two main risk categories that HeSCare workers face are musculoskeletal risks and PSRs. These risks are interdependent in that physical limitations and difficulties can have an impact on the mental health of workers (including

\_

<sup>&</sup>lt;sup>9</sup> Live-in care is a type of long-term care where a trained carer lives in a person's home to provide support and assistance.

stress and anxiety), while if a worker is suffering from poor mental health, this can also manifest in physical symptoms. Health and social work was identified in 2020 as the sector with the highest reported exposure (59%) to risks adversely affecting mental wellbeing in EU Member States (ETUI, 2024).

For the purposes of this study, based on the evidence analysed and building on existing theoretical models on PSRs, **PSR** factors for workers in the **HeSCare sector have been categorised into two groups**:

- PSRs linked to organisational factors and working conditions refer to the working environment and aspects of workers' terms and conditions of employment, for example, workload, time pressure, working time, work schedules, work-life balance, pay, autonomy and so on.
- PSRs linked to the social working environment, namely the psychosocial environment in which work is performed, for example, experiences of adverse social behaviour, exposure to high emotional or ethical burdens and potentially traumatic events, stigma against seeking support, low workplace social support and so on.

Resulting from these PSR factors, **our research has identified a range of mental health outcomes** for workers in the HeSCare sector. These include stress, burnout, anxiety, fatigue and sleeping problems. Given the consequences of these mental health outcomes, not only for individuals concerned but also for their patients and the organisation as a whole, **preventive measures** addressing organisational factors can play a crucial role in limiting work-related PSRs and mental health-related outcomes. These preventive measures are explored in section 5 of this report, and they have led to the development of conclusions and policy pointers for preventing OSH-related issues and promoting good mental health at work among the HeSCare workforce and its employers (see section 6).

# 1.2 Objectives

The overarching objective of the report is to provide a review of research on the topic of work-related PSRs and mental health-related outcomes in the EU's HeSCare sector.

There is also a range of more specific objectives, as listed below:

- To contribute to providing a comprehensive overview of the state of play when it comes to OSH
  in the HeSCare sector, by providing and developing new knowledge or information on very
  prevalent PSRs and mental health outcomes.
- To increase visibility and awareness of existing, new and emerging PSRs, with special attention being given to risks that are specific or unique to the HeSCare sector.
- To contribute to the prevention of OSH-related risks by:
  - improving knowledge on the risks;
  - sharing good practice examples, approaches, methods, schemes, interventions and tools addressing PSRs; and
  - focusing not only on OSH prevention but also on the promotion of good mental health among the HeSCare workforce.
- To provide policymakers, social partners, OSH practitioners and researchers with a better understanding of and a comprehensive, cross-national insight into the state of the HeSCare sector when it comes to OSH in general, and more especially to mental health in the sector.
- To contribute to identifying gaps in research on PSRs and mental health-related outcomes in the HeSCare sector.
- To provide data and information to support the preparation of the forthcoming European-wide campaign 'Together for Mental Health at work' (EU-OSHA Healthy Workplaces Campaign 2026-28).

# 1.3 Structure of the report

The report begins with an overview of the methodology used to conduct the study (section 2). It then considers the most important sociodemographic, contextual and organisational factors affecting PSR exposure for HeSCare workers (section 3). It goes on to explore 11 of the most commonly identified PSRs in the sector (sections 4.1 and 4.2), according to the triangulated evidence from the desk research and interviews that were conducted for the study. In light of parallel research commissioned by EU-OSHA into work-related musculoskeletal risks and musculoskeletal health in the HeSCare sector, the report analyses interlinkages between PSRs and musculoskeletal disorders (MSDs) (section 4.3)). Resulting from the specific risks identified for HeSCare workers, the report explores a range of mental health outcomes for workers (section 4.4).

In line with the objective specified above, namely, to contribute to the prevention of OSH-related issues and the promotion of good mental health at work among the HeSCare workforce by sharing good practice examples, this report includes boxes throughout illustrating positive case study examples for preventing and managing PSR factors (section 5). More information on these eight selected case studies can be found in the respective stand-alone reports

Finally, the report concludes by drawing policy pointers to preventive approaches to tackle PSRs and improve mental health in the HeSCare sector (section 6). These conclusions are firmly rooted in the evidence presented and contain a selection of policy pointers for improving the situation regarding PSRs and mental health-related outcomes in the sector.

# 2 Methodological overview

### 2.1 Desk research and literature review

In this first step of the study, a rapid evidence assessment methodology was used to identify and appraise key literature items of relevance to the research. This approach involved the development of clearly defined research questions, the definition of a search strategy (including key search terms), screening of sources found and the inclusion of the identified resources in a dedicated mapping tool. The tool contained the following main entries:

- Source identification (type of literature, title and type of publication, author, date, link, HeSCare subsector(s) covered, brief description of the content).
- Detailed information on PSRs and related mental health outcomes (PSRs and mental health outcomes for HeSCare staff mentioned, factors that may impact PSRs such as organisational and sociodemographic factors, link(s) between PSRs and MSDs, if mentioned).
- Prevention policies and good practices identified in the source (interventions at the workplace, visibility and awareness initiatives with regard to PSRs and mental health outcomes).
- Assessment of the relevance of the source (high, medium, low) for the study and rationale for this assessment.

A detailed mapping of the most relevant sources was then carried out, including both scientific literature from peer-reviewed journals and 'grey literature' from authoritative sources and studies. All sources selected for the review focused either explicitly on PSRs and mental health outcomes in the HeSCare sector or on directly related topics (i.e. interlinkages between PSRs and MSDs). The results of the literature review were recorded in a second literature review mapping tool. The complete list of literature referenced in this report is included in the References.

When conducting the literature review and analysis, the research team paid close attention to the specificities of certain jobs and tasks within the HeSCare sector. While the report presents data about workers in the HeSCare sector as a whole, where possible, we have provided analysis at a more granular level, including for groups of workers at increased risk due to their socio-demographic characteristics (i.e. gender, age, etc.). Equally, where relevant, intersectionality was examined to understand how the combination of such characteristics increases risks for individual workers or groups of workers with similar combined characteristics. The factors highlighted in section 3 underline the complexity of the challenge that certain workers and groups of workers in the HeSCare sector face.

#### 2.2 Interviews

To validate and build upon the findings of the desk research, 12 in-depth interviews with key stakeholders and experts were conducted. These interviews deepened the understanding of the most important PSR factors and mental health issues in the HeSCare sector, helping to fill any gaps that remained after the desk research and literature review.

In selecting experts and stakeholders for the in-depth interviews, the research team ensured that a range of individuals was consulted: EU-level policymakers, social partners, researchers, academics and labour inspectors. This list of interviewed organisations is presented in Table 1.

Table 1: Stakeholders interviewed for this study

Stakeholder category	Organisation
FU-level institutions/	European Commission, DG EMPL, Health and Safety at Work, EU-OSHA (C2)
policymakers	Eurofound
	Joint Research Centre (JRC)
	European Federation of Public Service Unions (EPSU)
	Federation of European Social Employers
Social partners	UNI Europa
·	European Trade Union Institute (ETUI)
	European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT)
	KU Leuven Institute for Healthcare Policy
Researchers and academics	University of London and European Academy of Occupational Health Psychology (Healthy Healthcare Network)
	Norwegian University of Science and Technology and St. Olav's University Hospital (Healthy Healthcare Network)
Labour inspectors	European Commission, Senior Labour Inspectors Committee (SLIC)

The interviews were semi-structured, following a topic guide developed according to the study's aims and the analytical framework that we created. The research team tailored the topic guide during the interview process to reflect the interviewees' different roles, levels and areas of expertise, considering desk research findings and any potential data gaps.

The key findings from the interviews were analysed and then triangulated with the evidence collected from the literature review and desk research. These triangulated findings allowed the research team to define the most commonly identified PSRs in the sector (those included in section 4), as well as to identify potential good practice measures (further elaborated upon in section 5).

# 2.3 Good practice case studies

Based on the primary and secondary data collection activities described above, a longlist of potential workplace examples was developed. These examples were all primary-level interventions (i.e. those aiming to reduce potential PSR factors or alter the nature of the mental health outcome(s) — commonly

stress — before workers experience it) (OSHwiki, 2015). As such, these interventions all targeted PSRs at their source, commonly in relation to the way in which work is organised or the conditions in which HeSCare workers operate.

Another important consideration when compiling the list of potential workplace examples was the timescale of the intervention. Particular attention was dedicated to interventions implemented before or during the COVID-19 pandemic, and which continued after it. Interventions aimed at addressing specific COVID-19-related risks were not included, unless they were adapted to the post-COVID-19 context and remain relevant.

Equally, while priority was given to interventions from the 27 EU Member States, relevant workplace examples from European Free Trade Association (EFTA) countries and the United Kingdom (UK) were also included in the list. This was especially true of interventions that have been developed in non-EU Member States but replicated in EU Member States.

The following information was collected for each of the longlist potential workplace examples: the type of intervention, when it was implemented, the country/region it was implemented in, the PSR factors addressed, the organisation(s) implementing the measure, the involvement of social partners, evidence of participatory approaches being incorporated, the HeSCare subsectors involved, specific groups of workers targeted, and finally potential stakeholder contacts who could provide further information and links to additional sources of information.

From the longlist of potential workplace examples (see Annex), the research team used the following criteria to narrow the list down to eight selected workplace interventions to further explore in the form of case studies:

- a balance of PSR factors and mental health outcomes based on those identified in the primary and secondary data collection;
- workplace interventions implemented by organisations of different sizes and different types;
- a balance between interventions focusing specifically on PSRs and mental health outcomes and those that have a broader scope but also cover PSRs and mental health as a wider set of activities;
- a balance between interventions that include the participation of workers and other stakeholders such as employers or sectoral bodies;
- geographical scope, ensuring a balance of cases from different EU Member States, in addition to those from EFTA countries and international experiences if relevant;
- the inclusion of interesting and innovative approaches; and
- evidence of positive results (e.g. organisations reporting positive results, expert and interviewee recommendations, evidence of uptake and use beyond the initial organisation, etc.).

The list of selected case studies is included below:

- 1. France's G2P: a digital risk assessment tool for the social care sector
- 2. Action plan and collective agreements help ensure healthcare employee wellbeing in Lithuania
- 3. The benefits for emergency medicine of an annual approach to rostering HealthRota
- 4. Increasing mental health awareness among staff the work of Vienna's Psychological Counselling Centre
- 5. Magnet4Europe empowering nurses at Cork University Hospital
- 6. Empowering healthcare workers through participation a Danish case study
- 7. Supporting mental health of long-term care workers European Works Council case study
- 8. Finland's model for supporting mental health through shift scheduling and ergonomics.

For each case study, additional desk research was conducted, as well as an interview with a relevant stakeholder. Based on the evidence collected, eight self-standing case study reports were developed (published as stand-alone documents). In addition, evidence from these case studies has been included in boxes throughout the report to provide illustrative examples of prevention measures and innovative approaches to tackle work-related PSRs and mental health-related outcomes.

# 3 Sociodemographic, contextual and organisational factors affecting PSR exposure for HeSCare workers

In examining the factors that could increase the risk of exposure to PSRs for workers in the HeSCare sector, it becomes evident that certain groups are disproportionately affected due to their sociodemographic characteristics. These factors include gender, caregiving responsibilities, age, migrant status and educational background, all of which interact in complex ways to increase exposure to PSRs. Moreover, wider contextual factors come into play, notably demographic changes including population ageing and labour migration, as well as organisational-related factors. These will be explored in more detail in the sub-sections below.

## 3.1 Gender

Evidence from the literature shows that gender is a key sociodemographic factor associated with increased exposure to PSRs in the HeSCare sector. The **sector is highly gender segregated, with around 79% of the total workforce being women** (EU-OSHA, 2024c). In certain subsectors, such as domestic care, this is even higher (90-95%). One study reported male domestic carers experiencing stigma and thoughts of leaving the profession due to elderly care recipients expressing the belief that the home care profession is for women (Grasmo et al., 2021). Another scientific study from Poland on horizontal segregation in nursing found that in almost all the evaluated aspects of work arduousness (particularly haste, complexity and hazards), the nursing profession was assessed more negatively by surveyed men than women, and that this constitutes a significant factor in the small number of men present in the nursing profession in Poland (Kowalczuk, 2018).

**Vertical segregation** is also evident in that women healthcare workers tend to occupy lower-status positions (e.g. nurses and midwives) and, at the same time, to be a minority among more highly trained health professionals (e.g. doctors and dentists) (EIGE, 2017). This is also true of the residential care subsector, with a majority of female workers occupying low-paid positions (Economic Policy Institute, 2022). **Women are typically underrepresented in managerial and decision-making positions** in the sector and often have less favourable working conditions. Figure 1 shows the percentage of workers with precarious employment conditions in the HeSCare sector by gender, with women being more likely to experience precarity than men.

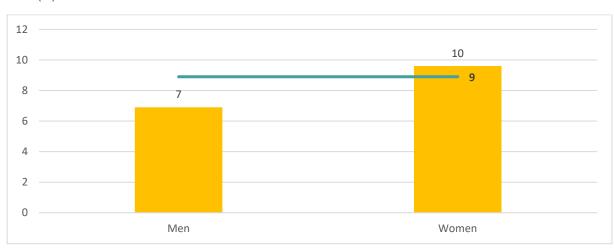


Figure 1: Workers with precarious employment conditions (\*) in the HeSCare sector, by gender, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 71 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) Precariousness defined as: parttime or fixed-term job, and difficulty making ends meet or multiple jobs.

The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

\_

<sup>&</sup>lt;sup>10</sup> Interviews with representatives of two social partners, August 2024.

In addition to this horizontal and vertical segregation in the sector, women are more frequently exposed than men to several psychosocial and organisational risk factors, including, but not limited to, harassment, discrimination, bullying, verbal abuse, job insecurity, lower compensation and limited career advancement opportunities (EU-OSHA, 2024a). The literature also shows that women are more likely to experience sexual harassment and violence in the workplace (European Parliament, 2023). Healthcare workers (the vast majority of whom are women, as mentioned earlier) report up to three times higher levels of unwanted sexual attention than the EU average (5.7% compared with 1.7%) (Eurofound, 2023c). This has knock-on effects in terms of mental health outcomes: 'People who experience adverse social behaviour in the workplace are around three times more likely to experience physical and emotional burnout (32% compared to 10%) and emotional exhaustion (40% compared to 14%), and almost twice as likely to suffer from anxiety (53% compared to 27%) or be at risk of depression (38% compared to 20%)' (Eurofound, 2023c).

Given that the sector is so female-dominated, a large number of workers are affected by **dual caregiving responsibilities**. Women still bear the primary responsibility for childcare, and in 2022 were twice as likely as men to spend at least five hours on childcare per day (EIGE, 2023). Women employed in HeSCare roles frequently balance their paid employment with caregiving responsibilities at home, whether for children and/or elderly relatives. This puts them at increased risk of chronic overload and deteriorating health (EU-OSHA, 2024a), when the concurrence of caring responsibilities and associated multiple demands becomes a serious risk factor. Furthermore, one interviewee highlighted that societal expectations towards women as carers can lead to **blurring lines between what constitutes someone's work and what is their 'life mission'**. <sup>11</sup> This is particularly evident in the live-in care sector, where evidence shows that there is sometimes pressure from the care recipient to extend the scope of work beyond their caregiving responsibilities, for example to housekeeping, cleaning and cooking for the entire family (EESC, 2020). It is also a subsector where the nature of the work renders it virtually impossible to separate working and recreational time (given that breaks and time off are likely to be spent in the care recipient's house), making it difficult to prevent the risks related to working too many hours per week.

# 3.2 Age

Age also plays a significant role in HeSCare workers' vulnerability to PSRs. In 2022, 37% of care workers in the EU were aged 50 years or above (accounting for more than 3% of the overall workforce) (EU-OSHA, 2024a), compared to 28% across all occupations (Cedefop, 2023b). In the residential care subsector, there is a high proportion of workers aged over 65 years in the EU as a whole, with the number having nearly doubled in the last decade (EU-OSHA, 2024a).

A recent EU-OSHA study found that **younger workers** in the 16-34 age bracket **report greater emotional exhaustion and stress** than their older colleagues (especially workers aged over 56 years) (EU-OSHA, 2024a). Indeed, one scientific study found that emotional exhaustion among young intensive care unit nurses has a positive predictive effect on turnover intention — that is, the intention to leave the profession (Zhang et al., 2025). This not only has an impact on the health of the worker and on critically ill patients, but also on the efficient operation of the intensive care health system. Additionally, as shown in Figure 2, workers in the 16-34 age bracket have the highest share of precarious employment conditions (11%) (EU-OSHA, 2024a).

\_

 $<sup>^{\</sup>rm 11}$  Interviews with representatives of two social partners, August 2024.

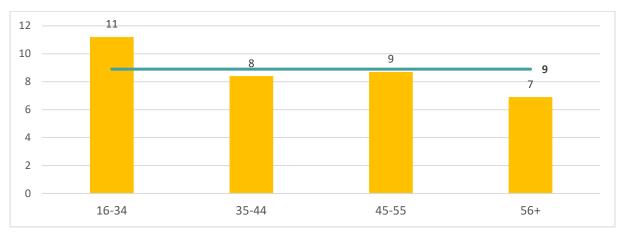


Figure 2: Workers with precarious employment conditions in the HeSCare sector\*, by age, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 79 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) Precariousness defined as: parttime or fixed-term job, and difficulty making ends meet or multiple jobs.

The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

However, uncertainty about the future and career stagnation concerns among older workers are associated with increased stress, anxiety, depression and burnout (EuroHealthNet, 2022). Moreover, studies have found that workers' abilities to adapt to night shifts deteriorate with age, that it is particularly detrimental to the quality of sleep, and that hysical issues that come with age may increase the need to recover after strenuous work shifts (FIOH, 2022). Correspondingly, participative working time scheduling has been shown to increase opportunities to influence working times and make them more suitable to workers' needs, thus reducing absence due to sickness, work-related stress and sleep problems (Härmä, 2022). This demonstrates the interlinkages between age and PSR exposure, and the fact that there is a need to support the work ability of people of all ages.

The **cumulative effect of PSR exposure** in the HeSCare sector has tangible impacts, especially for older workers. Nurses systematically leave the profession before they reach official retirement age due to physical, psychological and social demands (ETUI, 2022b). In addition, high psychological burdens are the strongest factor associated with an intention to leave the profession (ETUI, 2022b). These findings are supported by the outcomes of the Nurses' Early Exit study, which concluded that 15.6% of nurses in Europe think frequently and seriously (several times a month) of leaving the profession early (European Commission, 2011).

# 3.3 Migrant status

Along with gender and age, migrant background was the most frequently cited determinant associated with increased PSR exposure in the HeSCare sector among interviewees for this study. Research from the OECD has found that: 'Foreign-born care workers often work with shorter contracts, more irregular hours, broken shifts, for lower pay and in lower classified functions than non-migrant care workers and may have to work with the least favourable care recipients' (OECD: Colombo, 2011, p.175). Indeed, one study found that 38.2% of migrant personal and household services workers said that their job does not allow for a good work-life balance, compared to 25.8% of non-migrant workers who said the same (Jarrow Insights, 2024). Given that precarious working conditions such as those outlined above also act as determinants of PSR exposure (see also section 3.2), migrant workers in the HeSCare sector are particularly vulnerable to negative mental health outcomes, such as stress.

Language barriers and cultural differences can further exacerbate these challenges, making it difficult for migrant workers to communicate effectively with colleagues and care recipients, which in turn can heighten feelings of isolation and job dissatisfaction (Gjylsheni, 2023). Moreover, despite the relatively high share of migrant workers in the HeSCare sector, only 9% of establishments within the sector provide OSH training in languages other than that of the country of the establishment (EU-OSHA, 2024a). This is the lowest among any of the sectors examined, and significantly below the 21% EU average across all sectors (see Figure 3). The consequence of this is that migrant workers are less

likely to be aware of OSH-related topics, and potentially therefore more likely to be exposed to both PSR and musculoskeletal risk factors.

H Transportation and storage 41 N Administrative and support service activities A Agriculture, forestry and fishing 33 J Information and communication K/L Financial and insurance activities: Real estate activities I Accommodation and food service activities 22 EU-27 average 21 20 B/D/E Mining and quarrying; Electricity, gas etc; Water supply, sewerage. 20 G Wholesale and retail trade; repair of motor vehicles and motorcycles 20 R Arts, entertainment and recreation 19 19 M Professional, scientific and technical activities 19 19 C Manufacturing O Public administration and defense; compulsory social security 18 S Other service activities 17 Q Human health and social work activities 35 Λ 10 15 20 25 30 40 45

Figure 3: Establishments providing training to employees on OSH-related topics in other languages, by sector, EU-27, 2019 (%)

Source: EU-OSHA, 2024a, p. 165 (elaboration on ESENER 2019 data).

Base: All establishments in the EU-27

The LTC sector in the EU is made up of a significantly higher proportion of foreign nationals (7.9%) than the healthcare sector as a whole (4.8%) (Eurofound, 2020b). Of this 7.9%, there are more third-country nationals (4.5%) than mobile workers from within the EU (3.4%). Evidence shows that third-country nationals in both the LTC and live-in care subsectors are more likely to experience precarious working conditions, are more exposed to undeclared work, and tend to be more excluded from social protection and welfare assistance than EU workers (ELA, 2021). A 2020 study shows a **high incidence of workplace stress among live-in migrant carers** in German households (Schilgen et al., 2020), Germany being the Member State with the highest number of live-in migrant care placement agencies active on the market, and one of the seven Member States where live-in care is particularly common (European Commission, 2024).

#### 3.4 Wider contextual factors

In addition to the sociodemographic factors affecting PSR exposure in the HeSCare sector explored in the sub-sections above, evidence from the literature review and interviews shows that certain wider contextual factors have a role to play. The most commonly identified of these are demographic changes including population ageing and labour migration.

The ageing population in the EU is driving an increasing demand for HeSCare services (Cedefop, 2023a), while simultaneously making the recruitment of new staff more challenging. When paired with shortages of personnel in the HeSCare sector (Cedefop, 2023b), there is a significant impact on organisations and individuals in terms of 'increased workload and financial expenditure due to stress-related employee absenteeism and turnover' (EU-OSHA, 2023a, p. 1). The workforce within the HeSCare sector is also relatively aged, a circumstance that will intensify skills shortages in the coming years (Cedefop, 2023b). Efforts to mitigate staffing shortages by extending the working life of workers, such as raising the official retirement age, further expose HeSCare workers to occupational risks over an extended period.

Care workers are listed as shortage occupations in Belgium, Czechia, Denmark, Germany, France, Cyprus, Austria, Poland and Slovakia (Cedefop, 2023c). Evidence from the literature shows that: 'Labour migration can offer a solution to current and growing labour shortages in the health and social care sector, especially for labour-intensive long-term care provision' (EU-OSHA, 2024c, p. 4). Indeed, Germany, Cyprus and Austria are three of the seven EU Member States where the phenomenon of live-in care is particularly common (European Commission, 2024). However, a large amount of live-in care work is undeclared and thus unregulated in the informal economy (EESC, 2020). In Austria, around 80% of live-in care workers travel to Austria to work on short-term cyclical rotas, usually ranging from two to four weeks (Leiblfinger & Prieler, 2018). Ninety-five per cent of live-in carers are women, and three in four are over 45 years of age (Leiblfinger & Prieler, 2018). One of the key challenges for these individuals is that, as 99% of live-in caregivers are formally self-employed (a move to counter undeclared work) (Leiblfinger & Prieler, 2018), they are 'excluded from collective bargaining arrangements concerning minimum wages, and are entitled neither to paid holiday nor full social security benefits' (European Commission, 2024, p. 96). These precarious working conditions are clearly associated with PSRs, and place workers who are already in a vulnerable situation due to their isolation in people's homes at greater risk.

# 4 Work-related PSRs and mental health-related outcomes

This section presents the **main sector-specific PSR factors** identified in the literature reviewed for this study, their **key characteristics** and, where relevant, the **underlying reasons for their prevalence** in the sector. Where available and relevant, differences between subsectors and occupations within the HeSCare sector regarding exposure to and prevalence of PSRs are also explored. The section also explores the main mental health outcomes for workers in the HeSCare sector and the interlinkages between PSRs and MSDs.

Overall, the reviewed literature shows that work-related determinants of poor mental health are common among European workers. According to Eurostat statistics, in 2020, an average of 44.6% of all employed persons in all sectors reported facing risk factors for their mental wellbeing at work (Eurostat, 2021a). While work-related determinants of poor mental health are present on average in all occupations, statistics show that **high levels of work-related stress are particularly prevalent in the HeSCare sector** (European Parliament, 2023). For instance, in 2020, **59% of workers in the human health and social work activities industry reported being exposed to PSRs**, which was the sector with the highest rate (Eurostat, 2020).

Based on primary and secondary data collection, including existing theoretical models on PSRs (Gray et al., 2019) in the HeSCare sector, PSR factors have been categorised into the following two groups for the purposes of this study:

- Organisational factors and working conditions refer to the working environment and aspects
  of an worker's terms and conditions of employment, for example, working time, work–life
  balance, organisation of work and activities, pay and so on (Eurofound, 2011).
- The **social environment of work** refers to the psychosocial environment in which work is performed, for example, exposure to high emotional or ethical burdens and potentially traumatic events, experiences of adverse social behaviour, low workplace social support, stigma against seeking care and so on.

According to this classification, the study identifies the following 11 PSR factors (as shown in Figure 4) as being particularly prevalent and posing a challenge to workers in the HeSCare sector.

Figure 4: The most prevalent PSR factors identified by the primary and secondary research conducted for this study

# Organisational factors and working conditions

- High workload and time pressure
- · Long working hours
- Work scheduling and shift work
- Poor work-life balance
- Pay, effort-reward imbalance and precarious working conditions
- Lack of autonomy
- The use of digital technologies and the automation of tasks

# The social environment of work

- Adverse social behaviour, including violence, (sexual) harassment and bullying
- High emotional and ethical burden
- Stigma, icnluding against seeking mental health support
- Low social support

While the above categorisation has been used, it is important to consider that the PSR factors explored in the sub-sections below are not 'clear cut'. For example, a high workload and long working hours typically result in a poor work–life balance. These interlinkages between the PSR factors are analysed in further detail below.

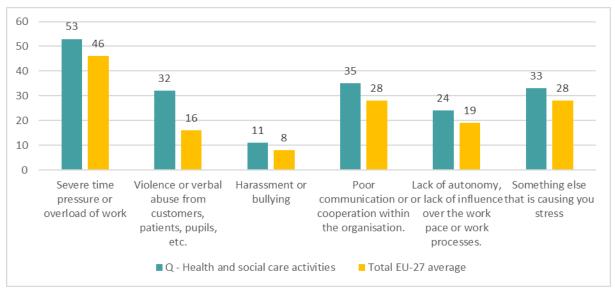
# 4.1 Organisational factors and working conditions

Organisational factors and working conditions refer to the working environment and aspects of an worker's terms and conditions of employment, for example, working time, work-life balance, organisation of work and activities, pay and so on.

# 4.1.1 High workload and time pressure

High workload coupled with severe time pressure is one of the most commonly cited PSR factors in the HeSCare sector. This is confirmed by the OSH in figures in the HeSCare sector report, which noted that 53% of workers in the sector reported being faced with severe time pressure or work overload (see Figure 5) (EU-OSHA, 2024a).

Figure 5: Workers exposed to several PSR factors at work in the HeSCare sector and in all sectors, EU-27, 2022 (%)



Source: EU-OSHA, 2024a, p. 88 (elaboration on OSH Pulse 2022 data)
Base: All respondents.

In Denmark, according to Section 14 of the Executive Order on Psychosocial Working Environment, heavy workloads and time pressure are defined as 'an imbalance between the work to be performed and the time available to perform

- 1. intensively and quickly without breaks for restitution
- 2. many working hours, which may affect the possibility of restitution' (Arbejdstilsynet, 2020).

The Executive Order acknowledges that excessive workloads and time pressure may involve a risk to health or safety. Indeed, when individuals are consistently required to perform under intense time constraints while managing heavy workloads, it can **compromise the quality of patient care, increase the likelihood of errors and negatively impact the individual's mental wellbeing**. This combination places a significant strain on workers, often leading to physical and mental exhaustion, decreased job satisfaction, and a heightened risk of severe stress and/or burnout.

As shown in Figure 6, among the three key HeSCare subsectors, healthcare workers and residential carers report significantly higher exposure to severe time pressure than social workers. The high patient influxes and demand for services in these subsectors, together with labour shortages and increasing patient—professional ratios, are all factors explaining this.

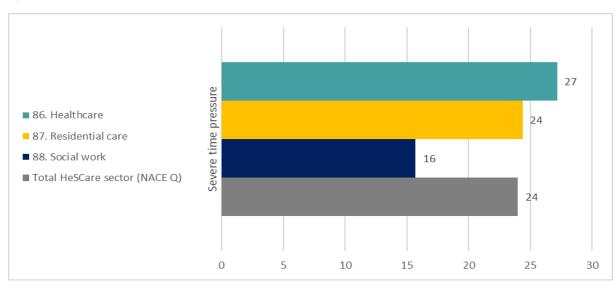


Figure 6: Workers by estimated prevalence of exposure to severe time pressure within the HeSCare sector, by subsector, EU-27, 2020 (%)

Source: EU-OSHA, 2024a, p. 90 (elaboration on EU Labour Force Survey 2020 data)
Base: % of total employed exposed and not exposed, age group 15-64.

In combination with other work-related factors, a **high workload can lead to high rates of mental ill health for workers**, such as burnout, stress, anxiety and depression. For instance, a systematic review and meta-analysis of research studies on hospital nursing staff showed that an increase of one patient per registered nurse is consistently associated with a 7% increase in the odds of **burnout** among nurses and a 5% rise in **intention to leave the profession** (Shin et al., 2018). Furthermore, a study among nurses in Greece found that excessive workloads were associated with 'quiet quitting' (the practice of choosing not to leave a position or profession but remaining in it and offering only what is absolutely necessary to keep one's job), turnover intention and work-related burnout (Galanis et al., 2025). This ultimately leads to a deterioration in the quality of care provided, as well as exacerbating nursing shortages.

To compound the already high workload of HeSCare staff, ageing populations are placing increasing demands on the sector. According to the World Health Organisation (WHO), Europe had an estimated shortfall of around 1.6 million HeSCare workers in 2013 and will be 4 million short by 2030, at which point Europe will be short of 600,000 doctors, 2.3 million nurses, and 1.1 million social care staff and assistants (WHO, 2016). According to the European Commission, there will be 8 million

job openings in the healthcare workforce across the EU in the same period, which signals increasing pressure on the sector (European Commission, 2021). In Belgium, a survey highlighted that 74% of healthcare workers nationally experience structurally unsustainable workloads, primarily due to staff shortages (The Brussels Times, 2023). Half of those surveyed said that they regularly had to work overtime to complete their tasks, leaving them extremely tired, with 70% reporting feeling 'empty' at the end of the day. Additionally, 70% of surveyed healthcare workers under 35 were considering leaving the sector, indicating a potential future increase in turnover rates and further labour shortages.

The issue of staffing shortages was found by interviewees to be linked to various other circumstances that could hinder mental wellbeing, such as the lack of sufficient time for workers to perform their tasks while maintaining quality standards, <sup>12</sup> insufficient breaks and days away from work, <sup>13</sup> passing work to staff members who may be unqualified (e.g. doctors passing certain responsibilities to nurses, nurses to healthcare assistants, etc.), <sup>14</sup> and limited opportunities for skills and career development. <sup>15</sup>

The COVID-19 pandemic also exacerbated these persisting challenges, contributing to increased stress levels as a result of increased workload (EU-OSHA, 2022a). According to interviewees, **after the pandemic, workers are still dealing with the increased care needs of patients** (as non-acute care needs were put on hold during the pandemic), which were made worse by budget cuts in the sector. This has contributed to excessive workloads and an increased risk of PSR exposure, which continue to hinder systemic change and the retention of HeSCare workers.<sup>16</sup>

Heavy workloads and excessive time pressures should be avoided, as far as possible, to safeguard the psychosocial health of HeSCare workers. In Denmark, according to government guidelines on heavy workload and time pressure (Arbejdstilsynet), employers have a duty to identify and assess heavy workloads and time pressures, prevent the conditions at work that cause these factors, and ensure that effective supervision is conducted on an ongoing basis, to ensure that the work is carried out safely and that the measures taken are effective.

## 4.1.2 Long working hours

Evidence from the 2022 ESENER shows that **long or irregular working hours are one of the top three risks resulting from the way work is organised** in the HeSCare sector (EU-OSHA, 2022a). Equally, 31% of HeSCare workplaces identified long or irregular working hours as being a risk, compared to only 21.5% of workplaces as a whole (EU-OSHA, 2022a).

The EU Working Time Directive stipulates that the **maximum weekly working time for each seven-day period, including overtime, should not exceed 48 hours.** <sup>17</sup> According to EU-OSHA, long working hours 'may refer to working days that are longer than eight hours and working weeks that are longer than 40 hours, but also to working days longer than 10 or 12 hours or working weeks longer than 48 hours' (EU-OSHA, 2023b)

Scientific literature shows that working long hours is associated with a range of physical and PSR factors, including an elevated risk of early cardiovascular death and hospital-treated infections before the age of 65, an **increased risk of psychological stress** which can suppress host resistance to infections, and **elevations in injuries, accidents and sleep problems** (Ervasti, 2021).

Long working hours have clear implications for the mental health of sector staff, work–life balance (and thus the recruitment and retention of staff), and patient safety (EU-OSHA, 2014b). Working longer hours also exacerbates other risk factors and mental health outcomes: 'working long hours without appropriate breaks will increase the effects of fatigue, which in turn can lead to lapses in attention, difficulty in staying focused, compromised problem solving, memory lapses, poor communication, slower or faulty information processing, poor judgement and reduced productivity' (EU-OSHA, 2014b, pp. 83-

<sup>&</sup>lt;sup>12</sup> Interview with a representative of a social partner, August 2024.

<sup>&</sup>lt;sup>13</sup> Interviews with representatives of two social partners, August 2024.

<sup>&</sup>lt;sup>14</sup> Interview with a representative of a research organisation, August 2024.

<sup>&</sup>lt;sup>15</sup> Interview with a representative of a social partner, August 2024.

<sup>&</sup>lt;sup>16</sup> Interviews with representatives of two social partners, a research organisation and an EU-level policymaker, August 2024.

<sup>&</sup>lt;sup>17</sup> Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 concerning certain aspects of the organisation of working time, Article 6.

84). Finally, long working hours (which are likely to fatigue workers) can potentially lead to MSDs (Coggon et al., 2013).

# 4.1.3 Work scheduling (including atypical working hours) and shift work

Particularly within certain subsectors of HeSCare (for example, among the LTC workforce (residential care and homecare)), **the** *organisation* **of working time** as opposed to the number of working hours appears to be the more important factor affecting work–life balance (Eurofound, 2020b). Evidence shows that '**atypical working hours** (frequent work at night and during the evenings and, even more so than in healthcare, at weekends), **shift work** (with accompanying work–life balance problems), [and] short-notice work' are all part of the challenging working conditions in LTC (Eurofound, 2020b, p. 60).

Work schedules in the HeSCare sector frequently involve **atypical working hours**, which may be defined as working outside of the standard hours of between 08:00 and 18:00 on weekdays (EU-OSHA, 2023b). As recognised by EU-OSHA: 'Work at non-standard hours may have negative effects on the health and well-being of workers because of **tiredness and problems of combining work and private life**' (EU-OSHA, 2023b). This shows the interlinkages between organisational PSRs, with atypical working hours impacting upon work–life balance.

The percentage of workers in the HeSCare sector working at night (28%) is much higher than the EU average across all sectors (21%); see Figure 7. While the average across the HeSCare sector as a whole is 28%, it is particularly high in the healthcare subsector (33%) (EU-OSHA, 2024a). Night work (which may be defined as 'work during the regular sleeping hours of the general population' (International Agency for Research on Cancer, 2020, p. 42)) poses specific OSH risks due to disruptions to the circadian rhythm. Indeed, studies have found a statistically significant association between night shift work and depression among nurses (Okechukwu et al., 2023). Significant positive correlations have also been found between night shifts and both work-related stress and occupational burnout, two of the main mental health outcomes explored in section 4.4. Finally, the International Agency for Research on Cancer has even classified night shift work as 'probably carcinogenic to humans', due to the limited evidence of cancer in humans (for cancers of the breast, prostate, colon and rectum) and sufficient evidence of cancer in experimental animals exposed to shifts in the light—dark schedule (International Agency for Research on Cancer, 2020, p. 365).

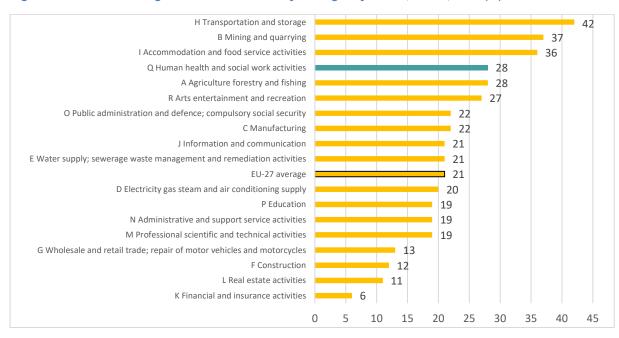


Figure 7: Workers working sometimes/often/always at night by sector, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 109 (elaboration on EWCTS 2021 data)
Base: All workers in the EU-27.

Shift work is commonplace across multiple occupations in the HeSCare sector (e.g. nurses, doctors, paramedics, social care workers). Workers in the healthcare and residential care subsectors are particularly likely to be engaged in shift work (EU-OSHA, 2024a), while the LTC workforce frequently work according to rotating shifts, with no say in their working arrangements and being requested to come to work at short notice (Eurofound, 2020b). These **low levels of control over shift patterns** and shifts being given on short notice make it difficult to arrange one's private and social life around work, which can cause 'de-socialisation' 18 and work-life imbalance.

'The effects of atypical working times and shift work on health have been well studied and include an increased risk of accidents at work, cardiovascular disease and depression' (Eurofound, 2017). Shift work is also correlated with disrupted sleep patterns, reduced sleep quality and poor rest (Grasmo et al., 2021), which could add to workers' stress. According to the International Labour Organisation (ILO), these working time arrangements impact workers' safety, health, motivation and the quality of care that they provide (ILO, 2017). Studies have also shown a link between shift work and MSDs, with rotating and irregular shifts contributing to the development of MSDs such as lower back pain, shoulder pain and knee pain in healthcare professionals (EU-OSHA, 2023a).

#### 4.1.4 Poor work-life balance

Work–life balance refers to the level of prioritisation between an individual's work and personal life, with a good work–life balance being achieved 'when an individual's right to a fulfilled life inside and outside paid work is accepted and respected as the norm – to the mutual benefit of the individual, business and society' (Eurofound, n.d.b). Evidence shows that **work–life conflict is associated with numerous indicators of poor health and impaired wellbeing**, including 'poorer mental and physical health, less life satisfaction, higher levels of stress, higher levels of emotional exhaustion, less physical exercise, higher likeliness to engage in problem drinking, increased anxiety, burnout and depression levels, poor appetite, and fatigue' (EU-OSHA, 2015a).

Moreover, and as shown in the previous section, evidence shows that in the HeSCare sector, work–life imbalance or conflict is frequently the result of **cumulated effects involving other PSRs** such as low influence over shifts, weekend or night shifts, long working hours per week and high work demands. <sup>19</sup>

In the HeSCare sector, the share of workers reporting that they have difficulties managing their work–life balance is higher (23%) than the EU-27 average across all sectors (19%) (EU-OSHA, 2024a). In certain Member States, particularly Greece, France, Italy, Cyprus and Latvia, between 29% and 26% of HeSCare workers report either a 'not very well' or 'not at all well' work–life balance (see Figure 9). Part of the reasoning for this could be that Greece, Cyprus and Latvia are three of the Member States with the highest number of actual weekly hours of work in the EU (across all sectors), with 39.8 hours, 38.3 hours and 38 hours, respectively (the EU-27 average being 36 hours) (Eurostat, 2024b).

.

<sup>&</sup>lt;sup>18</sup> Interview with a representative of a social partner. August 2024.

<sup>&</sup>lt;sup>19</sup> Interview with a representative of a social partner, August 2024.

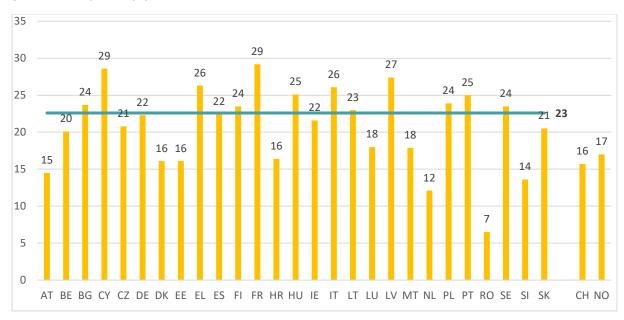


Figure 8: Workers reporting difficulties in balancing work and life in the HeSCare sector, by country, EU-27 (+ CH and NO), 2021 (%)

Source: EU-OSHA, 2024a, p. 68 (elaboration on EWCTS 2021 data) Base: All HeSCare workers in the EU-27, Switzerland and Norway. The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

In addition, the **possibility of space or separation from work is very low in certain occupations**. As noted above, this is particularly true of **live-in carers**, where the nature of the work renders it virtually impossible to separate working and recreational time, making it difficult to keep a healthy work–life balance.

Measures to increase the numbers of experienced and trained staff (thereby decreasing patient ratios and reducing workload) and provide participatory management and influence over scheduling could significantly improve work–life balance for workers in the HeSCare sector (ETUI, 2022c). These are discussed in further detail in section 5.

# 4.1.5 Pay, effort-reward imbalance and precarious working conditions

Effort–reward imbalance is the imbalance between the effort expended for work and the rewards received in recognition, appreciation and respect (EU-OSHA, 2015b). 'Rewards can be related to salary, esteem, status control, job security or career opportunities' (Eurofound, 2019, p. 15). Data (Eurostat, 2021b) and evidence collected from the interviews point to **the large effort–reward imbalance in several occupations within the sector**. Workers in such situations report 'more physical impairments, lower job satisfaction, more emotional exhaustion and more depersonalisation' (Eurofound, 2019, p. 15), and are a **high-risk group for burnout**.

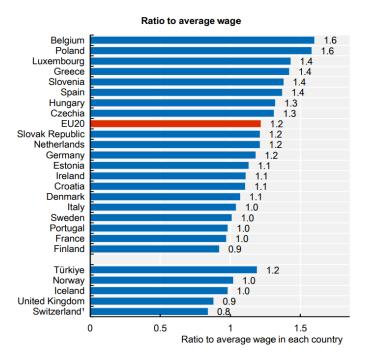
Salaries in the HeSCare sector vary considerably depending on the subsector and occupation, as well as individual factors such as qualification levels, years of experience, working time (or activity rates) and negotiating power (OECD, 2024). Research from the OECD shows that in general across the EU Member States, 'the remuneration of doctors is several times higher than the average wage of workers in all occupations reflecting their higher qualifications and longer working hours' (OECD, 2024, p. 44). For nurses, the average across the EU is that they earn about 20% more than the average wage of workers across all sectors. In France, Italy, Portugal, Finland and Sweden though, nurses do not earn more than the national average wage (see Figure 10). **Personal care workers**<sup>20</sup> are some of the lowest paid HeSCare workers, earning around 30% lower than the economy-wide average wage across EU countries as a whole (OECD, 2024). Equally, evidence shows that workers in healthcare

-

<sup>20</sup> Defined in this OECD report as workers who carry out care work but who are not classified as nurses on the basis of qualifications and tasks.

assistant positions (i.e. at the lower skilled end of the spectrum of HeSCare positions) earn considerably less than the national average wage in their country (ETUI, 2019).

Figure 9: Remuneration of hospital nurses, 2022 (or nearest year), ratio to average wage in each country



Source: OECD,2024, p. 197

Data from the OSH in figures report also show that **female workers in the HeSCare sector are more likely to experience lower payment for their achievements (53%) than men (45%)**, as depicted by Figure 10.

Figure 10: Workers experiencing low payments for achievements; effort–reward imbalance in the HeSCare sector, by gender, EU-27, 2021 (%)



Source: EU-OSHA, 2024a, p. 72 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) Precariousness defined as: parttime or fixed-term job, and difficulty making ends meet or multiple jobs.

The horizontal line indicates the HeSCare (NACE Q) EU-27 average

Finally, during the COVID-19 pandemic, many of the 'essential workers' who provided fundamental care and who experienced significant job strain (linked with poor health and wellbeing) were undervalued in terms of not being covered by policy measures that applied to frontline workers (Eurofound, 2023b). This ultimately contributed to workers experiencing stress, exhaustion or burnout,

many of them wanting or deciding to leave the sector (another factor contributing to additional staff shortages post-pandemic).<sup>21</sup>

Prevention measures aimed at increasing both recognition and renumeration for HeSCare workers are discussed in more detail in section 5 of this report.

Closely linked to aspects of pay, the prevalence of precarious employment conditions in the HeSCare sector is higher (9%) than the EU-27 average across all sectors (7%), with the **highest prevalence of precarious employment conditions being found in the social work subsector** (13%). Precarious work is understood as when workers experience at least one of three working conditions: **very low pay, very low intensity working hours or low job security** (Buckingham et al., 2020). 'The latter condition has a number of related characteristics, including few training and career development opportunities, a lack of collective representation and an absence of social protection rights or employment-related benefits' (Buckingham, et al., 2020, p. 9). This is highly relevant for one of the PSRs discussed in the social environment of work section below, namely weak social support and a lack of social dialogue.

One of the consequences of precarious employment conditions (closely related to very low pay) is the **inability to make ends meet**. As depicted in Figure 11, an average of 25% of HeSCare workers in 2021 reported experiencing either some or great difficulty in making ends meet financially, with **women being much more likely (27%) to report this than men (22%)**.

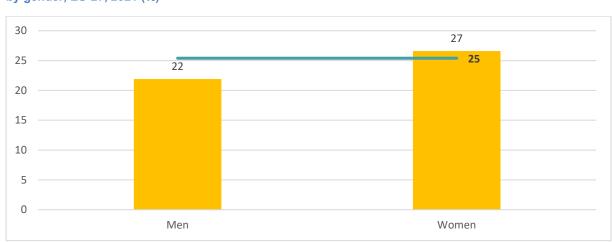


Figure 11: Workers experiencing some/great difficulty to make ends meet financially in the HeSCare sector, by gender, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 75 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.
The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

In addition, jobs in the sector that used to be secure now need to be supplemented with extra shifts or side jobs, contributing to financial and psychosocial stress.<sup>22</sup> This could have serious consequences in terms of workers' health, as shown by data collected by the European Working Conditions Survey (EWCS) by Eurofound. According to these results, the high levels of already existing stressors in the sector, combined with workers **experiencing job insecurity and financial worries, could be linked to low mental wellbeing and high levels of ill health**, such as MSDs, anxiety and perception of one's health being at risk (Eurofound, 2023a).

# 4.1.6 Lack of autonomy

Autonomy and task discretion refer to 'the scope workers have to decide the way in which they carry out their activities, their working methods and their pace of work' (Eurofound, 2022b, p. 35). Autonomy is a key resource in allowing individuals to effectively deal with the demands of their job, and so **a lack of** 

<sup>&</sup>lt;sup>21</sup> Interviews with representatives of two social partners, an EU-level policymaker and a labour inspector, August and September 2024.

<sup>&</sup>lt;sup>22</sup> Interviews with representatives of a social partner, a research organisation and an EU-level policymaker, August 2024.

autonomy can put a strain on individuals' health (both mental and physical) and wellbeing. Indeed, in the workforce as a whole, low levels of freedom to make decisions about work are associated with an increased risk of cardiovascular disease, MSDs and mental health issues (Eurofound, 2022b).

In the HeSCare sector as a whole, **57% of workers report having low task autonomy** (defined by never, rarely or only sometimes deciding on: i) the order of tasks, ii) methods, or iii) the speed or rate of work (EU-OSHA, 2024a)). Low task autonomy was more frequently reported by women (58%) than by men (54%) (see Figure 12). Data from the 2021 EWCTS indicate that **autonomy in terms of choosing or changing the speed of one's work was least reported by workers in the health sector<sup>23</sup> (43%) (Eurofound, 2022b), and that frontline workers in the health sector<sup>24</sup> are least able to take time off during working hours (Eurofound, 2022b).** 

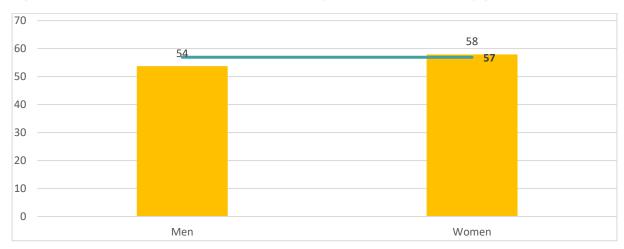


Figure 12: Workers' mean scores on low task autonomy\* in the HeSCare sector by gender, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 72 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) Deciding never/rarely/sometimes yourself on 'order of tasks'; 'methods'; 'speed or rate of work'. Dichotomised 3-item scale.

The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

As mentioned, a lack of autonomy in the workplace has negative impacts on both physical and mental health. According to the **Karasek Job–Demand–Control model**, the most adverse health outcomes occur in jobs characterised by **high demands** and **low control/autonomy**, termed 'high-strain' jobs (Karasek, 1979). While job demands refer to the psychosocial stressors involved with high workloads, time pressured environments and mental load, job control encompasses skill discretion and decision-making authority over tasks and processes. **Workers in 'high-strain' jobs are more susceptible to stress-related illnesses**, including anxiety, depression and cardiovascular diseases.

Applying this model to the HeSCare sector, one study among French **emergency healthcare workers** found that job control was lowest and job demand highest for groups of physicians and paramedics, compared to 'control groups' (25,000 workers from other occupations) (Bouillon-Minois, et al., 2023). The prevalence of job strain was massively higher for physicians (95.8%) and paramedics (84.8%) than for control groups (23.9%), indicating high levels of workplace stress. Another study among **nurses** found that in the presence of low job control, the negative effect of psychological demands on work–life balance is more intense (Navajas-Romero et al., 2020). Finally, in a study among **midwives**, a lack of autonomy and recognition in their work, a lack of self-fulfilment and an overcommitment to unrewarded work were found to be the most influential factors in work-related burnout and dissatisfaction (Andina-Díaz et al., 2024).

Organisational participation is another factor linked to task autonomy, referring to 'the involvement and engagement of employees in decision-making processes, policies and activities within the

30

<sup>&</sup>lt;sup>23</sup> As defined in Eurofound (2022b).

<sup>&</sup>lt;sup>24</sup> Ibid.

workplace' (EU-OSHA, 2024a, p. 107). Low organisational participation brings with it low psychological wellbeing scores (Eurofound, 2013), and increased exposure to negative mental health outcomes such as stress. Data from the 2021 EWCTS also showed that in the healthcare (50%) and residential care (48%) subsectors, low organisational participation is more common than the EU average across all sectors (45%). Those with only primary education are particularly affected by low organisational participation, with a 40% difference between those with primary and tertiary education in terms of being able to influence decisions, be consulted about objectives and be involved in improving work organisation/processes (see Figure 13).

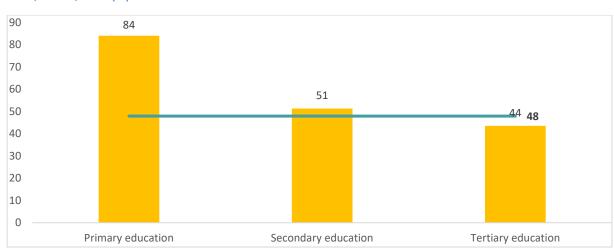


Figure 13: Workers' mean scores of low organisational participation\* in the HeSCare sector by education level, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 62 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) Never/rarely/sometimes 'can influence decisions'; 'consulted about objectives'; 'involved in improving work organisation/processes'. Dichotomised 3-item scale.

The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

Greater organisational participation and increased autonomy are valued by workers in the HeSCare sector, with measures allowing workers to take more decisions on how to do their job being the most popular to mitigate PSRs in the 2019 ESENER findings (EU-OSHA, 2022a). Promoting job autonomy is discussed in further detail in section 5.2.5 of this report.

# 4.1.7 Use of digital technologies and the automation of tasks

Using digital tools and AI can be particularly helpful in addressing some of the root causes of existing PSRs. For example, they can **help streamline administrative and bureaucratic processes**, freeing up time that could be spent on caring for patients. <sup>25</sup> A recent EU-OSHA study looking at digital platform work in the HeSCare sector found that 'there has been an **8% increase in cognitive tasks, while physical routines and interactional tasks have become less important**' (EU-OSHA, 2024c, p. 3). This shift in the type of tasks being performed in HeSCare organisations that automatised some of the tasks in the sector is a **potential enabling factor for reduced PSR exposure**, given that standardised, repetitive, technical tasks with low levels of autonomy are negatively associated with PSRs (ETUI, 2022b).

However, interviewees warned that these technologies could become PSR factors if related challenges are not addressed. <sup>26</sup> For example, 39% of workers in the EU's HeSCare sector reported that the **use of digital devices at work has increased their workload** (in contrast to the EU average across all sectors of 33%) (EU-OSHA, 2022b; EU-OSHA, 2024a) (see Figure 14). This may be due to **insufficient training provided to workers in relation to digital tools**. <sup>27</sup> It could also be linked to **lower levels of control in** 

<sup>&</sup>lt;sup>25</sup> Interviews with representatives of two social partners and a labour inspector, August and September 2024.

<sup>&</sup>lt;sup>26</sup> Interviews with representatives of two social partners and a labour inspector, August and September 2024.

<sup>&</sup>lt;sup>27</sup> Interviews with representatives of a social partner and a research organisation, August 2024.

terms of skill discretion and influence over how work is done (see also Figure 14 in relation to reduced autonomy), a known PSR factor discussed in the section above. Additionally, PSRs related to advanced robotics and AI may be linked to 'misplaced trust, a low level of acceptance, automation bias or fear of job loss' (EU-OSHA, 2024b, p. 1)

60 53 51 50 42 42 39 39 37 40 33 30 21 20 20 10 0 Determine the speed Increase surveillance Results in you working Increase your Reduce your workload or pace of your work autonomy at work of you at work alone Q - Health and social care activities ■ Total EU-27 average

Figure 14: Workers by consequences of the use of digital devices at work in the HeSCare sector and in all sectors, EU-27, 2022 (%)

Source: EU-OSHA, 2024a, p. 190 (elaboration on OSH Pulse 2022 data)
Base: All respondents.

Another issue linked to the use of digital tools for work is that employers may use them to monitor workers which, if done pervasively, could reduce trust and increase associated stress. <sup>28</sup> **Pervasive workplace monitoring could increase workload and time pressure by eliminating any potential downtime**, as well as increasing concerns about job insecurity if individuals are pressured to work longer hours for fear of not achieving certain targets (Joint Research Centre, 2021).

Although few studies are available that examine the impact of digitalisation specifically in the HeSCare sector, one study from 2023 found that managers tended to describe the effects of digitalisation on the work of HeSCare professionals more positively than the professionals themselves (Kaihlanen, et al., 2023). The risk is therefore that 'the potential negative effects of digitalisation may not be adequately addressed and that managers will adopt systems that do not support the work of professionals. Increased workload, slowing down of work, new skills requirements, and insufficient time to become acquainted with new systems, among others, can be serious issues if not adequately considered in the implementation of new digital services and systems' (Kaihlanen, et al., 2023, p. 11). In order to act as an enabling factor for reduced PSR exposure (as detailed above), joint discussions and cooperation between managers and professionals are needed to increase the likelihood that digitalisation will deliver its intended benefits.

#### 4.2 Social environment of work

The **social environment of work** refers to the psychosocial environment in which work is performed, for example, exposure to high emotional or ethical burdens and potentially traumatic events, experiences of adverse social behaviour, organisational culture, low workplace social support, stigma against seeking care and so on.

# 4.2.1 Adverse social behaviour, including violence, (sexual) harassment and bullying

Adverse social behaviour covers all acts of **physical and verbal violence and intimidation** at work, including the acts of **violence**, **harassment and bullying** (Choi et al., 2018). According to Article 1 of the ILO's Violence and Harassment Convention: 'the term "violence and harassment" in the world of

-

<sup>&</sup>lt;sup>28</sup> Interviews with representatives of a social partner and a policymaker, August 2024.

work refers to a range of unacceptable behaviours and practices, or threats thereof, whether a single occurrence or repeated, that aim at, result in, or are likely to result in physical, psychological, sexual or economic harm, and includes gender-based violence and harassment' (ILO, 2019b, p. 5). This definition already includes reference to the gendered dimension of violence and harassment; **85% of victims of violence and harassment at work being women** (UNI Europa, 2021).

Data from the 2021 EWCTS showed that workers in the health sector <sup>29</sup> reported the highest prevalence of intimidation as a whole across all sectors analysed, with the highest exposure of any sector to: i) verbal abuse; ii) bullying, harassment and violence; and c) unwanted sexual attention (Eurofound, 2022b). Women healthcare <sup>30</sup> workers reported more exposure to each of these than men, with a particular disparity in terms of unwanted sexual attention (4.8% of women health workers reporting this, compared to 2.5% of men in the sector) (Eurofound, 2022b).

Abusive behaviour against HeSCare workers can come from both members of staff (e.g. colleagues and managers) and third parties, such as patients or clients. While such behaviour prevails in other sectors, third-party violence is particularly pervasive in the sector due to workers' intense contact with patients and clients. The EU-OSHA OSH Pulse survey from 2022 shows that those working in services relating to HeSCare are twice as likely (32%) to be at risk of violence or verbal abuse from third parties compared with workers across all EU sectors (16%) (see Figure 15) (EU-OSHA, 2022b). Violence against workers has been associated with mental health outcomes like anxiety, depression, sleeping problems and suicidal thoughts (Eurofound, 2020b). An ETUI study also notes that in some instances, mental health outcomes, including those related to third-party violence, can lead to relationship breakdown, suicidal thoughts and even suicide attempts (ETUI, 2022c).

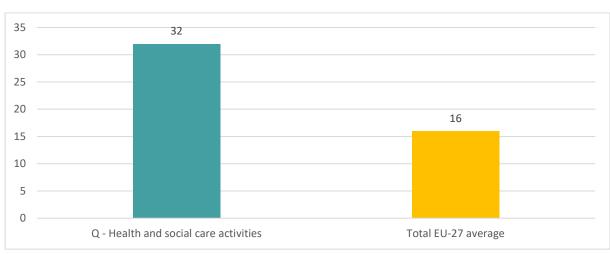


Figure 15: Workers exposed to violence or verbal abuse from third parties in the HeSCare sector and in all sectors, EU-27, 2022 (%)

Source: EU-OSHA, 2024a, p. 94 (elaboration on OSH Pulse 2022 data)
Base: All respondents.

As regards third-party violence, **certain HeSCare professions** (e.g. nurses and workers working in their customers' homes) are at even **higher risk of exposure** due to their work-related context and/or their client being their employer. For example, a Eurofound study focusing on the **LTC** sector found that one in three workers has been exposed to adverse social behaviour such as verbal abuse, humiliating behaviour, physical violence and threats <sup>31</sup> (Eurofound, 2020b). According to interviewees, this behaviour can also be linked to certain medical conditions of patients, including dementia and a higher

<sup>30</sup> Health sector as defined by Eurofound in this report.

<sup>&</sup>lt;sup>29</sup> As defined by Eurofound in this report.

<sup>31</sup> The prevalence of verbal abuse, unwanted sexual attention, threats and humiliating behaviours refers to the month prior to the survey, and the prevalence of physical violence, sexual harassment and bullying/harassment refers to the year prior to the survey.

need for support with physical care. <sup>32</sup> In the case of LTC in a person's home, abuse that occurs in a home care setting may often go undetected, as it is hard for employers and colleagues to support the carer and to intervene at an early stage (Eurofound, 2020b). According to one interviewee, for **frontline workers** (e.g. nurses and paramedics), the risk of aggression is also particularly high, often due to patients' frustration with waiting times. <sup>33</sup>

Interviewees warn that patient violence could be **linked to staffing shortages** and growing frustration of those (including both workers and patients) in the sector (EU-OSHA, 2011). Previous studies have found that high-strain work (due to or amplified by staffing shortages) could directly or indirectly lead to lower job performance, which might evoke aggressive behaviour in customers, patients and so on (EU-OSHA, 2011). This is highly relevant as the quality of healthcare (as perceived by patients), including long waiting times and satisfaction with treatment, has been linked to violence risks (EU-OSHA, 2015c).

In terms of the **organisational context** of violence and harassment at the workplace, evidence from the literature review pointed to the **lack of a zero-tolerance culture regarding harassment and violence** in the workplace, or not having relevant strategies and risk assessment measures in place, as amplifying this risk factor (ETUI, 2022c).

## 4.2.2 High emotional and ethical burden

The Danish Working Environment Authority (Arbejdstilsynet – WEA) has an Executive Order on the Psychosocial Working Environment that defines high emotional demands when working with people as 'work that involves direct or indirect contact with people, including citizens and customers, and where this contact require that you:

- 1. familiarise yourself with, manage or deal with the thoughts, feelings or behaviour of these people;
- 2. manage or hide own thoughts or feelings, or
- 3. adapt communication or behaviour to the people being worked with' (Arbejdstilsynet, 2020, para. 14).

The guidelines accompanying the Executive Order highlight that high emotional demands can 'increase the risk of long-term sickness absence and, for example, mental and physical exhaustion, sleep problems, concentration difficulties, long-term stress, anxiety, depression and burnout' (Arbejdstilsynet, 2023b, para. 17).

Evidence from the literature shows that the emotional demands of working in the HeSCare sector are typically high, as a result of dealing with angry patients, emotionally disturbing situations or potentially traumatic experiences (Eurofound, 2019). The HeSCare sector has the highest share (18%) of people reporting exposure to dealing with difficult third parties that can adversely affect their mental health wellbeing (see Figure 16). According to Eurofound, 23% of LTC workers and 22% of healthcare workers report being exposed to emotionally disturbing situations for three-quarters of the time or more, which is more than twice as often as the overall workforce (10%) (Eurofound, 2020b). Evidence shows that women workers typically face more emotionally disturbing situations than men (71% and 66%, respectively) (EU-OSHA, 2024a).

\_

<sup>&</sup>lt;sup>32</sup> Interviews with representatives of a researcher and an EU-level policymaker, August 2024.

 $<sup>^{\</sup>rm 33}$  Interview with a representative of a social partner, August 2024.

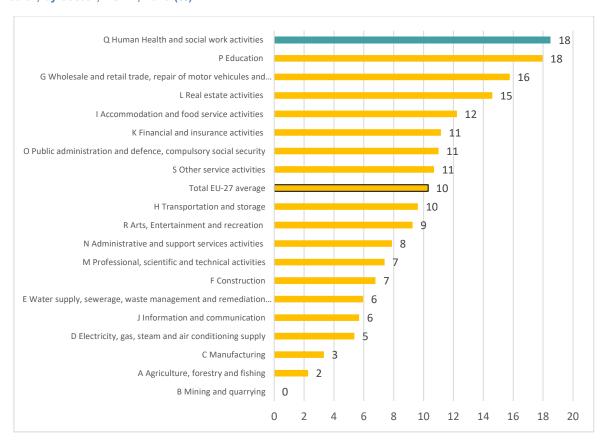


Figure 16: Workers reporting dealing with difficult customers, patients, ... that can adversely affect mental health, by sector, EU-27, 2020 (%)

Source: EU-OSHA, 2024a, p. 92 (elaboration on EU Labour Force Survey 2020 data)

Base: % of total employed exposed and not exposed, age group 15-64.

Workers also frequently encounter **ethical dilemmas and challenging decisions** when required to do something against their beliefs. These include situations where a worker needs to help a patient whose beliefs clash with medical advice (e.g. refusing a blood transfusion on religious grounds) or balancing professional and personal boundaries. As a result of such situations, the mental health of workers could be particularly affected (e.g. even more so in times of crisis, for example, during the COVID-19 pandemic) (Eurofound, 2020a). **Emotional and ethical demands are significantly associated with the likelihood of experiencing exhaustion and reduced mental health** (Eurofound, 2019).

While high emotional demands are viewed as intrinsic to the nature of work in the sector, working conditions can exacerbate them. For example, understaffing can lead to higher patient—professional ratios and longer working hours, increasing exposure to emotional demands (ETUI, 2022c). As a result, emotionally disturbing situations can be amplified by organisational structures and budgetary constraints. These may contribute to work overload that forces workers in the sector to compromise on basic healthcare values (including choosing between patients), leading to moral and ethical dilemmas. Intensified job demands in the sector may increase the 'stress of conscience' and risk of burnout caused by ethically challenging situations (Heikkilä et al., 2022).

Another element to consider is the relationship with users or patients as well as the social context in which work takes place. For instance, in the case of **live-in and home care workers**, who largely work alone, studies have found that close and **meaningful work-related interactions and relationships with users and their families can have positive mental health and wellbeing effects** (Grasmo et al., 2021). On the other hand, strong, meaningful relationships with users can also have detrimental impacts on a worker's health. This can be seen with **emotional strain and even grief that can arise due to excessive emotional attachment** to users or patients, especially those who suffer due to severe health conditions or die (Grasmo et al., 2021).

A recent EU-OSHA study found that '[w]orkers in larger organisations are at a higher risk of emotional exhaustion when compared to those in smaller ones, which can often be associated with the fact that larger organisations in HeSCare are more likely to have higher patient volumes, heavier workloads and increased pressure, less autonomy and decision-making authority' (EU-OSHA, 2024a, p. 91).

High emotional demands should not compromise the OSH of workers, and in certain countries (e.g. Denmark) employers have an obligation to take effective measures to prevent workers from getting sick or injured due to high emotional demands (Arbejdstilsynet, 2023b).

## 4.2.3 Stigma, including against seeking mental health support

Professionals in the HeSCare sector may struggle with **self-stigmatisation**, which has been defined as: 'Personal acceptance and agreement with stereotypes and prejudicial beliefs held against oneself' (Beard, 2023). Research shows that doctors 'tend to consider their state of health, especially mental health, as an indicator of their medical competence. A doctor suffering from burnout may be perceived by their peers and by themselves as weak and incompetent' (Favre, et al., 2023, p. 2). Moreover, the study found that **doctors with burnout were more likely to hold stigmatised views** (47%) than those without burnout syndrome, and that **emotional exhaustion was correlated with perceived structural stigma** (i.e. policies and/or practices that restrict the opportunities or wellbeing of the stigmatised individual) (Favre et al., 2023).

One of the knock-on effects of stigma is **reluctance to talk openly about issues** (including in relation to mental health), **which can act as a barrier to effective PSR management** (Eurofound, 2017). Indeed, the stigma that is still attached to mental health and the reluctance to speak openly about it was the most commonly reported obstacle to dealing with PSRs in the HeSCare sector in 2019 (51%) (EU-OSHA, 2022a, 2024a) (see Figure 17).

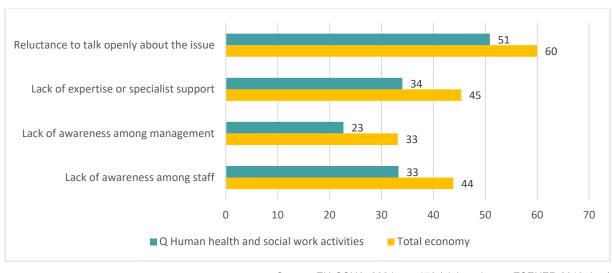


Figure 17: Establishments by main obstacles to dealing with PSRs in the HeSCare sector and in all sectors EU-27, 2019 (%)

Source: EU-OSHA, 2024a, p. 176 (elaboration on ESENER 2019 data)
Base: Responses only of those establishments that have identified one or more psychosocial risk and report that psychosocial risks are more difficult to adress than other risks in the EU-27.

Evidence from the literature review shows that during the COVID-19 pandemic, essential healthcare workers were 'significantly more likely to experience COVID-19-related stigma and bullying, often in the intersectional context of racism, violence and police involvement in community settings' (Dye, et al., 2020, p. 1). These experiences had clear impacts on their mental health (see also section 4.4.5). In another study from 2024, data collected in 2020, 2021 and 2022 showed that the **intensity of exposure to COVID-19 was associated with greater experiences of stigmatisation, discrimination and violence** across all three years (Janoušková et al., 2024). The study found that the most strongly

associated mental health outcomes of these factors were **psychological distress** (2020) and **depressive symptoms** (2021). The study also found that women were at greater risk of negative experiences, while older age was associated with lower odds of experiencing stigma, discrimination and violence (Janoušková et al., 2024). These findings show ongoing effects of stigmatisation experienced by essential healthcare workers, suggesting that the destigmatisation of contagious diseases and the prevention of discrimination and violence in the sector should be given further attention.

PSR prevention measures aiming to reduce mental health-related stigma are explored in section 5.2.7 of this report.

## 4.2.4 Low social support

Social support refers to 'the assistance, encouragement and comfort that individuals receive from their social networks, including colleagues and supervisors' (EU-OSHA, 2024a, p. 106). In the HeSCare sector, workers experience less social support from colleagues, peers and management than the EU average across all sectors (34% of HeSCare workers report experiencing low social support, compared to the EU-27 average across all sectors of 32%) (EU-OSHA, 2024a). As shown in Figure 18, this lack of support is particularly prevalent among workers in the residential care and social work subsectors.

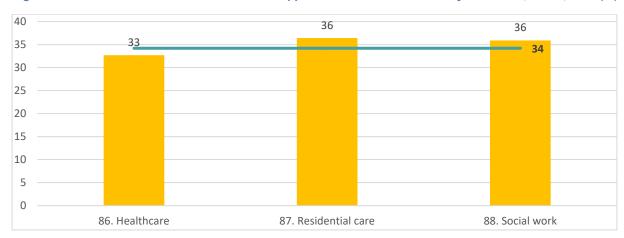


Figure 18: Workers' mean scores of low social support\* in the HeSCare sector by subsector, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 107 (elaboration on EWCTS 2021 data)
Base: All HeSCare workers in the EU-27.

(\*) 'Colleagues', 'peers', 'manager' never/rarely/sometimes 'help and support'. Dichotomised 3-item scale.
The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

Evidence shows that **low social support from both colleagues and management is a PSR factor associated with increased stress** (EU-OSHA, 2002). ETUI highlights that 'risk increases when there is no scheduled time for peer support, no physical space to meet with colleagues, when a command and control management style is used, and with poor communication between management and workers' (ETUI, 2022c, p. 10). **Poor social support has also been linked to depression and loneliness**, while another study has found that social support elements (including peer mentoring) 'effectively reduce the severity of anxiety, depression, and burnout among young healthcare professionals' (Waqas, et al., 2020, p. 22).

Linked to the concept of social support is **social capital**: 'the **interaction of individuals participating and communicating in formal or informal networks** in which higher levels of trust develop' (Eurofound, n.d.a, para. 1). One study divides social capital in the workplace (i.e. connections between

people at work) into three dimensions: 'bonding' in the work unit, <sup>34</sup> 'bridging' between units, <sup>35</sup> and 'linking' social capital between work units and management <sup>36</sup> (Pedersen et al., 2023). By investigating the associations between these three elements and the quality of healthcare services reported by over 1,500 Danish hospital workers, the researchers found that there were **significant positive associations between bonding and bridging with quality care** (Pedersen et al., 2023). It also identified significant negative associations between workload and quality care. This demonstrates the **importance of well-functioning relationships within and especially between hospital units as a positive psychosocial factor** (with effects comparable to or even more important than workload on the quality of healthcare provision) (Pedersen et al., 2023). These interactions are further explored in section 5.2 of this report.

PSR prevention measures linked to social support, collective representation and social dialogue are explored in sections 5.2.1, 5.5, 5.8 and 5.9 of this report.

## 4.3 Interlinkages with MSDs

There is a **convincing body of evidence that points to linkages between PSR exposure and MSDs**. While the principal cause of MSDs in the HeSCare sector, and in all sectors, is still physical exertion, for example, during patient handling and transfer (EU-OSHA, 2020), psychosocial factors have been shown to also exhibit a strong association to MSDs, even after controlling for exposure to physical demands (Bernal et al., 2014). EU-OSHA research also shows that workers in this sector are subject to both musculoskeletal risks and PSRs to a greater extent than workers in other sectors — 33% of workers in this sector compared with the EU average of 22% (EU-OSHA, 2024a). It is thought that one of the reasons for this high level of exposure to both types of risk could be due to severe time pressure. Within the sector, workers in the social work subsector were found to be less exposed to both types of risks than healthcare and residential care workers, possibly due to residential and healthcare workers being more exposed to emergency and emotionally loaded situations during their work. See Figure 19.

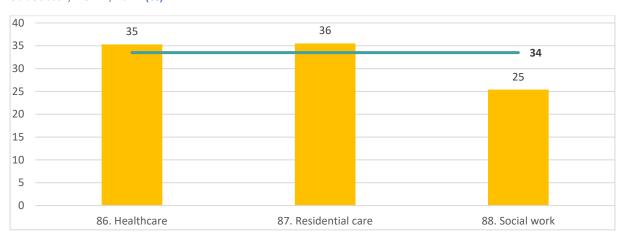


Figure 19: Workers with co-exposure to musculoskeletal risks and PSRs in the HeSCare sector by subsector, EU-27, 2021 (%)

Source: EU-OSHA, 2024a, p. 98 (elaboration on EWCTS 2021 data)

Base: All HeSCare workers in the EU-27.

ure defined as: one or more physical risks (MSK) and low social support

(\*) Co-exposure defined as: one or more physical risks (MSK) and low social support combined with low task autonomy combined with high work intensity (PSR).

The horizontal line indicates the HeSCare (NACE Q) EU-27 average.

<sup>&</sup>lt;sup>34</sup> Bonding social capital is defined as 'the existing and potential resources found in close networks like workgroups or work teams consisting of two or more members. These networks are characterised by direct and frequent meetings and interactions between the members'.

<sup>35</sup> Bridging social capital is defined as 'the existing and potential resources in less tied networks between social units, which are characterised by less direct and less frequent meetings and interaction between the members and where the interaction often is undertaken by representatives or so-called network builders'.

<sup>&</sup>lt;sup>36</sup> Linking social capital is 'the existing and potential resources included in the hierarchal social relations between employees and the managers at the different hierarchal levels in organisations and social units'.

Data from the literature review and interviews carried out as part of this study highlight that PSR exposure such as **low social support at work** (EU-OSHA, 2020), **mental health outcomes** (e.g. stress, burnout, depression, anxiety, fatigue), **effort–reward imbalances, harassment and violence**, and in some cases **low control**, can all contribute to causing or exacerbating physical ailments, such as MSDs. These risks are symptomatic of a wider issue of often poor working conditions in the HeSCare sector characterised by excessive workload, staffing shortages, <sup>37</sup> high emotional demands, <sup>38</sup> and a lack of healthy behaviours like regular exercise and proper eating habits, which are not supported by the physical environment (e.g. there are no proper sleeping facilities or healthy food available in or near hospitals). <sup>39</sup>

It is thus clear from the evidence that PSRs and MSDs are interlinked in the HeSCare sector and more broadly. Although physical exertion is a greater cause, the PSRs experienced by HeSCare workers can also lead to MSDs, and vice versa. **MSDs can amplify the impact of psychosocial factors** like job demand and satisfaction, which in turn shape the individual's long-term perception of the psychosocial environment (EU-OSHA, 2021b). The fact that MSDs can contribute to stress and mental overload, and vice versa, is particularly relevant in the HeSCare sector given the high prevalence of both musculoskeletal risks and PSRs (EU-OSHA, 2023a). This leads to the conclusion that ergonomic solutions for HeSCare workers could be beneficial not just as a relief for MSDs but also in improving their psychosocial workplace environment. However, ergonomic solutions would have to go hand in hand with wider preventive measures to tackle PSRs at their root. This is particularly relevant given that the majority of the evidence from the literature points at PSRs exacerbating or leading to MSDs, rather than the other way around.

Recent evidence also suggests that ergonomic improvements in HeSCare workplaces not only reduce the risk of injury (for example, repetitive strain injuries) but 'can improve worker satisfaction and reduce turnover, which is essential in maintaining a stable and experienced workforce' (Guilmore & Olszewski, 2024). If ergonomic solutions can improve workers' wellbeing and help retain staff, they can help to mitigate some of the issues that understaffing can lead to (e.g. higher patient–professional ratios and longer working hours), thereby potentially reducing exposure to excessive emotional demands and PSRs. Further, Colin et al. (2022) in a study looking at care workers in France, found that workplace injuries were related to both physical risks and PSR exposure. Their study of over 4,400 workers found higher workplace injury rates where there was exposure to both physical risks and PSRs. They found that nursing assistants and hospital services officers were particularly vulnerable and that the risk factors included a lack of predictability and flexibility in schedules, overtime working, work–life imbalance and insufficient preventive measures having been put into place.

The linkages between PSRs and MSDs have been explored through various studies, using methodologies including meta-analyses, literature reviews and statistical analysis of datasets, covering both specific countries and the EU level. These studies explore specifically the HeSCare sector, but also other sectors. Therefore, when reporting on these linkages, it will be made clear where wider trends have been identified and where the HeSCare sector is particularly mentioned. It is important to note, however, that the HeSCare sector has been identified as one of the sectors with the highest prevalence of MSDs among its workforce, which is linked to the physical demands of the job, but is also influenced by PSR factors, especially in the healthcare subsector (EU-OSHA, 2024a; Keyaerts et al., 2022). For example, PSR factors were found to be associated with pain in the lower back, neck, shoulder, upper extremity, knee and/or pain at any anatomical site in both nurses and aides (Bernal et al., 2014).

Regarding the three main areas of musculoskeletal pain, that is: i) back pain, ii) shoulders, neck and/or upper limb pain, and iii) lower limb pain, statistical analysis of the Insula 2019 dataset (Boccuni et al., 2021) exhibited a significant positive correlation between MSDs and several key psychosocial factors at work in all sectors.

In the following text more details are presented on some of the interlinking factors identified, in addition to other examples of how exposure to certain PSRs are associated with MSDs. Furthermore, where possible, specific examples related to the HeSCare sector are given.

<sup>&</sup>lt;sup>37</sup> Interviews with representatives of two social partners, August 2024.

<sup>&</sup>lt;sup>38</sup> Interview with a representative of a social partner, August 2024.

<sup>&</sup>lt;sup>39</sup> Interviews with representatives of a social partner and a research organisation, August 2024.

#### Mental health outcomes

Studies from Denmark and Spain have shown that poor mental health and depressive symptoms in healthcare workers are risk factors for MSDs in general and for lower back pain (EU-OSHA, 2020). Furthermore, a Danish study showed that poor sleep, which may be caused by stress or other factors, is also a risk factor for developing lower back pain in healthcare workers without prior experience of such pain (EU-OSHA, 2020).

An ILO report also found that MSDs (across multiple sectors) are associated with high perceived work-related stress levels, in addition to high workload and demands, low social support, low job control, low job satisfaction and monotonous work (ILO, 2016).

#### Effort-reward imbalance

According to studies in France, increased upper-body MSDs in healthcare workers were associated with effort–reward imbalances and with workers over-committed to work (EU-OSHA, 2020). Furthermore, a systematic review from 2014, based on cross-sectional studies, also found that an effort–reward imbalance was associated with MSDs (EU-OSHA, 2020).

#### Harassment and violence

There have also been positive associations found between MSDs in the back and lower and upper limbs and verbal abuse, unwanted sexual attention, bullying and unclear work instructions. By contrast, satisfaction with one's own work, fair treatment at work and being able to take breaks were negatively correlated with upper limb problems, which could indicate a possible protective effect (across all sectors) (EU-OSHA, 2021c, p. 4). Furthermore, from a broader perspective, evidence suggests that victims of violence and harassment in the workplace suffer from musculoskeletal complaints and decreased physical strength, in addition to being at a heightened risk of cardiovascular diseases (ILO, 2020).

#### Lack of social support

Inadequate support structures at the workplace and a lack of understanding from colleagues can lead to a stressful workplace culture that can, in turn, result in the risk of MSDs. For example, a Norwegian study with more than 3,000 nurses' aides found that a lack of support to do the work and an unpleasant and stressful culture increased the risk of lower back pain and resulting sickness absence (EU-OSHA, 2020).

#### Low control

Various studies show that low control experienced by HeSCare workers, in particular in relation to demanding work schedules and shift work, often combined with overtime, can also contribute to the development of MSDs (EU-OSHA, 2023a). More generally, low control (also sometimes referred to as low decision latitude, low decision authority and low autonomy) is correlated with MSDs across many sectors (EU-OSHA, 2021a). This is something that is being exacerbated further in the digital age, with teleworking, digital surveillance and monitoring, and algorithmic management determining workers' schedules, which can 'expose less qualified workers to a job strain situation' (EU-OSHA, 2021b, p. 8) which can lead to MSDs (although this is more prevalent in manufacturing sectors and platform work).

#### Other factors

Beyond these specific examples of PSR exposure, individual characteristics can also further exacerbate the likelihood of MSDs in the HeSCare sector. Indeed, gender (being a woman) in particular appears to be a predictor of MSDs related to PSR exposure, stress and other mental health issues. Specifically in the HeSCare sector, '[b]urnout seems to be associated with musculoskeletal diseases among women and with cardiovascular diseases among men' (De Hert, 2020, p. 179). The fact that the HeSCare sector is dominated by women, as detailed in section 3.1, would indicate that a significant proportion of the workforce is at risk of MSDs when exposed to PSRs, and consequently to mental health issues such as stress and burnout.

#### 4.4 Mental health outcomes

This research identified a range of mental health outcomes for workers in the HeSCare sector, resulting from the specific risks faced by these workers, as set out above. In fact, health and social work was reported as being the sector with the highest reported exposure (59%) to risks adversely affecting mental

wellbeing in EU Member States in 2020 (ETUI, 2024). Many of the mental health outcomes for workers in this sector are interlinked and can lead to more serious outcomes if left untreated. These mental health outcomes can have significant consequences for organisations as it will be discussed at the end of this section.

In the rest of this section, specific mental health outcomes are analysed in more detail.

#### 4.4.1 Stress

In the case of care workers, work-related stress is seen as a serious problem (European Commission , 2023) and defined as 'tension experienced when the demands of the work environment exceed the workers' ability to cope with or control them' (EU-OSHA thesaurus, n.d.). Evidence from the literature review shows that **stress among healthcare workers is highest under working conditions with high job demands and low job control** (EU-OSHA, 2023a, p. 2). Figure 20 shows a comparison of the number of establishments indicating work-related stress by sector. The HeSCare sector tops the table, with 68% of establishments indicating the identification of work-related stress, compared with the EU average of 46%.

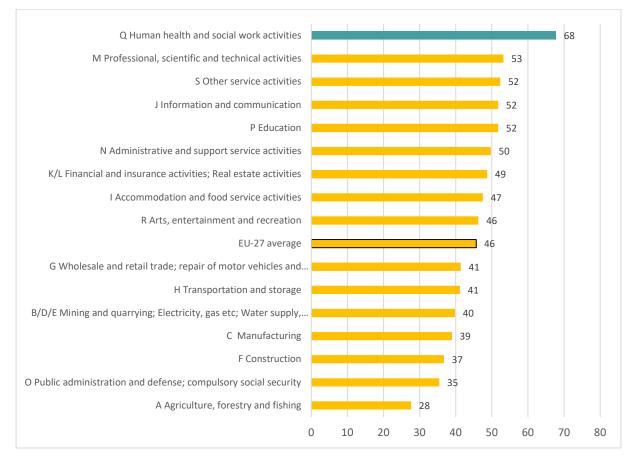


Figure 20: Establishments reporting work-related stress in the workplace, by sector, EU-27, 2019 (%)

Source: EU-OSHA, 2024a, p. 119 (elaboration on ESENER 2019 data)
Base: All establishments in the EU-27.

Further, the 2024 OSH in figures report shows that employees in the HeSCare sector were also more likely to report work-related stress, depression or anxiety than workers in other sectors. Just over 582,200 workers reported this in the HeSCare sector, significantly higher than any other sector. For details, see Figure 21.

Q Human health and social work activities 582,203 P Education 436,458 C Manufacturing 392,282 G Wholesale and retail trade, repair of motor... 359,545 O Public administration and defence, compulsory.. 336,339 M Professional, scientific and technical activities 256,916 J Information and communication 153,469 H Transportation and storage 146,339 K Financial and insurance activities 144,505 N Administrative and support service activities 125,665 F Construction 103,604 I Accommodation and food service activities 90,533 S Other service activities 80,024 R Arts, entertainment and recreation 54,149 100,000 200,000 300,000 400,000 500,000 600,000 700,000

Figure 21: Workers reporting work-related stress, depression or anxiety, by sector, EU-27, 2020 (N)

Source: EU-OSHA, 2024a, p. 120 (elaboration on EU Labour Force Survey 2020 data)
Base: Employed, age group 15-64.

Similarly, the OSH in figures survey found that the percentage of workers who indicated that they had mental health problems that were caused or made worse by work in terms of stress, depression or anxiety was 31% in the HeSCare sector, compared with the EU average of 27%. The figure in relation to overall fatigue was 42% in the HeSCare sector, compared with the EU average of 37%. For details, see Figure 22.

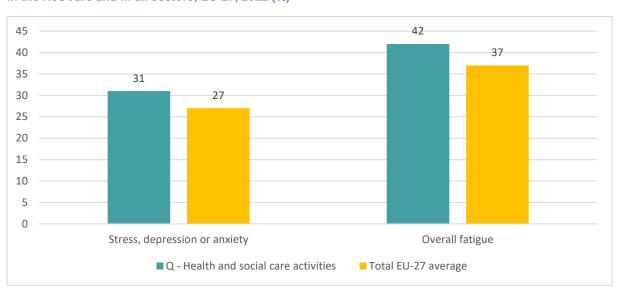


Figure 22: Workers reporting mental health problems caused or made worse by work in the past 12 months in the HeSCare and in all sectors, EU-27, 2022 (%)

Source: EU-OSHA, 2024a, p. 120 (elaboration on OSH Pulse 2022 data)
Base: All respondents.

This high incidence of stress causes **knock-on effects in terms of impaired health, as well as increased risk of burnout** (making stress an enhancer of PSR factors). There are also clear links between stress and MSDs, with MSDs contributing to both stress and mental overload, and vice versa, (EU-OSHA, 2023a) as mentioned in section 4.3. Other studies show that higher levels of work-related stress are reported in the HeSCare sector, compared with other sectors, and that the number of workers in this sector who report work-related stress, depression or anxiety is also higher than in other sectors (EU-OSHA, 2024a). A study looking specifically at the UK found that over 40% of healthcare staff survey respondents reported feeling unwell as a result of work-related stress in the last 12 months. In the UK National Health Service (NHS), the most common cause of sickness absence was anxiety, stress, depression and other psychiatric illnesses, which accounted for nearly a quarter of staff absences (Eurostat, 2021b). Further, Eurofound notes that stress among healthcare workers is highest in the case of high job demands and low job control (Eurofound, 2019).

In the LTC sector, evidence shows that the **inherently stressful nature of the work**, together with comparatively low wages (see **Effort–reward imbalance** in section 4.3), contributes to high staff turnover, and ultimately staff shortages (Eurofound, 2020b). In turn, this increases the likelihood of moral dilemmas and ethical issues in service delivery.

Much of the literature reviewed cited the consequences of prolonged exposure to stressful situations, which can lead to **poor quality of sleep, anxiety, confusion and feelings of loss of control over one's job**, and in turn to feelings of loss of control more widely in one's life. This can then bring about depression, emotional exhaustion and excessive fatigue. A general lack of wellbeing was also cited by some studies as a mental health outcome for workers in this sector. While not as critical as, for example, burnout (see below), a prolonged lack of wellbeing could lead to more severe mental health outcomes.

Finally, the consequences of mental health outcomes in relation to workers in the HeSCare sector and **increased absence**, **reduced performance and leaving the sector** impact the quality and sustainability of the care that can be offered, as noted by interviewees. This can also have significant costs for national governments in relation to productivity losses and also healthcare and medical costs.

Although not focused solely on the HeSCare sector, other studies have noted a link between PSR factors and specific mental health outcomes. For example, Niedhammer et al. (2021), in a meta-review of 72 studies, found significant associations between psychosocial work exposures and mental health disorders, particularly depression, and the magnitude of the associations was a little stronger for mental health disorders than for other health outcomes, such as cardiovascular diseases. There were significant estimates for associations between job/high strain and long working hours and depression, as well as for job insecurity and depression and anxiety.

#### 4.4.2 Burnout

The WHO defines burnout as 'a syndrome conceptualised as resulting from **chronic workplace stress** that has not been successfully managed' (WHO, n.d.). It is characterised by three indicators: feelings of energy depletion or exhaustion; increased mental distance from one's job or feelings of negativism or cynicism; and a sense of ineffectiveness and lack of accomplishment.

As with stress, studies show that 'job demands such as work intensity or emotional demands are the most important predictors of impaired occupational health (burnout) and health in general' (Eurofound, 2019, p. 16). This is particularly concerning when considering that 22% of workers in the LTC sector<sup>40</sup> report being in situations that are emotionally disturbing for at least three-quarters of the time (Eurofound, 2020b). Indeed, burnout rates among healthcare workers<sup>41</sup> in the EU range from 4.3% in Finland to 20.6% in Slovenia, with a positive correlation between rates of burnout and workload (De Hert, 2020).

As well as **significant negative personal consequences**, **burnout can have professional outcomes**, including negative impacts upon patient safety (Matthews, et al., 2022), lower patient satisfaction, impaired quality of care and medical errors (De Hert, 2020). One study found that doctors with burnout

-

<sup>&</sup>lt;sup>40</sup> In this report, LTC workers include people who work in residential care, home care (in sheltered or non-sheltered homes) and community (day) care services, which can be publicly or privately provided or financed. LTC workers may also be privately employed by households.

<sup>&</sup>lt;sup>41</sup> Based on data from the 6<sup>th</sup> EWCS, which uses the following classification for the health sector: Q Human health and social work activities 86–88.

are twice as likely to be involved in patient safety incidents and exhibit low levels of professionalism, compared to those without (Fighting Fatigue Together, n.d.). A study of physicians noted that approximately one in three physicians is experiencing burnout at any given time (De Hert, 2020).

There may also be differences between different subsectors of the HeSCare sector in terms of risk of burnout. This was explored by Fattori et al. (2023), who compared PSR factors and burnout among workers in inpatient hospice and in home care settings. They note that although the literature suggests that home care professionals could be at higher risk of burnout than their colleagues in hospital settings, the results of this study suggest that home care workers might not be exposed to a higher psychological burden compared to those working in a hospice setting. The study found that the average scores in relation to burnout scales were similar for both groups of workers, with the exception of caregiver-related burnout, which was higher among inpatient hospice workers compared to home care colleagues.

Schneider et al. (2019) also looked at specific types of workers in the HeSCare sector, focusing on those providing care in emergency departments. They noted that emergency departments are highly dynamic work environments and that adverse work factors contribute to high work stress among those who work in these environments. In particular, burnout has been reported by 26% of emergency nurses and by up to 51% of emergency physicians.

## 4.4.3 Anxiety

Workers in the HeSCare sector generally report high levels of anxiety (38% of workers according to EU-OSHA's OSH in figures report 2024). In relation to subsectors of the HeSCare sector, workers in the social work subsector were most likely to report anxiety (42%), followed by those in residential care (40%) and those in healthcare (36%).

The presence of high levels of anxiety among the sector's workforce was confirmed by interviewees, who cited a lack of autonomy, which is often the case for frontline workers, as a factor leading to anxiety and other poor mental health outcomes.

Anxiety can also lead to **unhealthy eating, lack of exercise and unhealthy coping strategies**, such as increased consumption of alcohol and/or smoking, as noted by interviewees and also by studies from organisations such as the ILO (ILO, 2020).

Adverse mental health outcomes can lead to periods of sick leave due to stress and burnout. While it is clear that in these cases workers need to take a step back from their stressful work situation, absence due to sickness can lead to **feelings of isolation** (EU-OSHA, 2022a), which can exacerbate anxiety and depression.

In some cases, these symptoms can lead to a desire to leave the profession, for example, in the case of nurses (EU-OSHA, 2016). This was confirmed by interviewees, who noted that high turnover and staff leaving the sector was the consequence of mental health issues for staff. There are also consequences for the staff who remain, as noted by interviewees, as a lack of staff increases their workload due to a need to cover for absent colleagues. This in turn can create stress for these workers, who may feel overwhelmed and experience a sense of powerlessness if they find themselves unable to provide the care their patients need as a result of understaffing, high workloads or a lack of resources (Franklin, 2021).

Research carried out among Greek hospital workers found that stress and anxiety, caused by continuous interaction with patients and their families and friends, could also lead to a range of emotions such as frustration, anger, fear and desperation, particularly in cases where there are no solutions to the patients' problems (Koinis, et al., 2015).

### 4.4.4 Sleeping problems and fatigue

Sleeping problems and fatigue are **common in work that involves long working hours and irregular shifts**, including evening and night-time work and on-call work (key characteristics of the HeSCare sector, see above under section 4.1). Fatigue is a risk factor for burnout and other mental health problems and has significant impacts on patient safety (Franklin, 2021).

Both unsocial working hours and being asked to come to work at short notice are risk factors for increased sleeping problems (showing sleeping issues as a mental health outcome), as well as other mental health challenges and work-life conflicts (Eurofound, 2023a). For example, experiencing

**discrimination** on several grounds has been reported to reduce workers' sleep quality (Eurofound, 2023a).

There is also evidence that burnout (see above) can affect sleep quality and lead to sleeping problems. Looking at nurses in Spain, one study found that high levels of burnout levels correlated with higher levels of sleep problems in the nurses studied: the higher the level of burnout in nurses, the greater the presence of sleep disorders. Factors such as gender, shift type, work environment and workplace violence were found to influence the degree of burnout and sleeping problem (Membrive-Jiménez, et al., 2022).

Other studies also show the link between sleep problems, insomnia, anxiety and depression among healthcare workers. For example, Fruscione et al. (2024) found that insomnia is a common predictor of anxiety and depression, and it is a factor that increases the risk of developing these conditions among healthcare workers. This is linked to the stress caused by the demanding nature of their work, long working hours, exposure to traumatic events and pressure to provide optimal patient care. They conclude that: 'Insufficient sleep, combined with high levels of anxiety and depression, can have detrimental effects on both the individual health worker and the quality of care provided' (Fruscione, S. et al., 2024, p. 8).

## 4.4.5 Legacy of COVID-19

The impact of the COVID-19 pandemic on workers in this sector was especially severe in many cases and has been well documented in this research. The mental health outcomes for workers in this sector include **stress**, **depression and anxiety**. This has resulted from factors such as being obliged to work in environments with **inadequate personal protection equipment** or other protections, **overwork** due to the volume of work necessary, **staff shortages** due to illness, and the **fact of needing to deal with death and serious illness on such a large scale** (AXA Asia & Columbia University WHO CGMH, 2020; Eurofound, 2023a; Bertuzzi, et al., 2021). A 2022 EU-OSHA report reviewing a range of literature, noted that healthcare providers and informal caregivers were at an increased risk of adverse mental health effects during the pandemic and that these effects were expected to continue in the aftermath of the pandemic. This study praised the effectiveness of the mental health interventions that were delivered digitally in terms of their success in reducing distress and burnout, while promoting self-efficacy and wellbeing in both healthcare providers and informal caregivers. Although the COVID-19 pandemic is now over, there is indeed a lasting legacy for workers in the HeSCare sector (EU-OSHA, 2022a).

More recent research carried out by EU-OSHA (2024d) evaluates the prevalence of work-related mental health conditions resulting from the COVID-19 pandemic in the HeSCare sector in the EU. Based on 113 studies from 22 countries in the EU, the research noted that anxiety in the sector (considering any level, from mild to severe forms) was reported by 37% of workers. When considering only anxiety of moderate and severe intensity, the proportion of affected workers was 21%.

It also found that the overall prevalence of depression as reported by workers was 33%. Some 20% of workers reported depression of moderate-to-severe intensity, while 44% of workers reported acute stress. Some 36% of workers reported acute stress of moderate-to-severe intensity. A total of 46% of workers reported post-traumatic stress disorder and 46% reported psychological distress. A total of 36% of workers reported moderate-to-severe insomnia and sleep disturbances and 38% reported burnout. Finally, 11% of workers reported suicidal thoughts.

The study acknowledges that there is a lack of reliable pre-pandemic estimations that could serve as a baseline to compare the results of this research, and the impossibility of drawing a work-related causal attribution to the COVID-19 pandemic for its findings. It notes, however, that the impact of the COVID-19 pandemic in terms of PSR exposures and mental health problems on HeSCare workers is 'worrying', and that actions and interventions are therefore needed to mitigate these adverse effects on workers' mental health and to improve wellbeing in the sector. It therefore makes a number of recommendations to organisations and individuals to help mitigate the effects of the COVID-19 pandemic in relation to ongoing work-related mental health conditions.

Some of the lessons learned during the pandemic about what works in terms of mitigating the mental health outcomes of PSRs are set out in Soto-Rubio's study (2020), which looks at the exposure of nurses to PSRs in Spain. This study analysed the effect of PSRs and emotional intelligence on nurses' health, wellbeing, burnout levels and job satisfaction during the rise and main peak of the COVID-19 pandemic

in Spain. It found that emotional intelligence had a protective effect against the adverse effects of PSRs such as burnout and psychosomatic complaints, and a favourable effect on job satisfaction.

Interviewees for our study also noted that the prolonged exposure to trauma that large numbers of staff experienced during the pandemic may lead to **post-traumatic stress disorder**. This is particularly a problem in cases where the increased levels of stress and fear following the COVID-19 pandemic have not been addressed.

#### 4.4.6 Other mental health outcomes

Issues such as high levels of organisational change can result in less acute but nevertheless significant mental health outcomes for workers, such as an **increased level of cynicism**, a **loss of commitment to the organisation** or the work that individuals carry out, **decreased morale**, **compassion fatigue** and **a decreased buy-in to the psychological contract**, resulting in an increase in absence from work. This is documented by EU-OSHA (OSHwiki, 2022), and while that particular research is not sector-specific, it is relevant for the HeSCare sector in that this sector can often be characterised by high levels of job insecurity, linked to restructuring or budget issues (EU-OSHA, 2014b).

Compassion fatigue among nurses in central European settings was explored by Ondrejková and Halamová (2022), who characterise this as 'a state of tension and preoccupation with traumatized patients through re-experiencing traumatic events, resulting in a desire to avoid patients and reminders of their trauma, and a reduced capacity or interest in bearing the suffering of others' (p. 468). This can be a combination of burnout, associated with a feeling of hopelessness and having to deal with work, and secondary traumatic stress linked to work-related secondary exposure to traumatic and stressful events. Compassion fatigue can also be a mental health outcome for workers in this sector. Nurses are considered to be at a high risk of compassion fatigue due to the fact that they have high exposure to patients' traumatic experiences. The authors acknowledge the body of research that has been carried out in US studies and their study also found high levels of compassion fatigue among nurses in the Czech Republic and Slovakia, possibly linked to the characteristics of the participants, the low status of nurses in the healthcare hierarchy, the poor state of the healthcare system in which they were working and the COVID-19 pandemic.

Other non-sector-specific research also finds correlations between factors such as working in the evenings, job content (in terms of frequent disruptive interruptions), poor work-life balance, low decisional autonomy, poor social relations at work and workplace violence, and poor mental health outcomes (Russo, et al., 2019).

## 4.4.7 Costs and consequences of mental health outcomes

In conclusion, it is worth highlighting that these mental health outcomes can have significant consequences for organisations. For example, **high levels of absence or reduced performance of staff lead to increased costs for employers** (ETUI, 2022a).

The literature on the costs of absence to organisations divides this into three categories, as noted by Lipovac (2020): direct costs (salaries, bonuses, overtime, business cars, insurance, etc.); indirect costs (costs of internal replacement workers, costs of external replacement workers); and management costs (costs of the line manager for organising replacements, conducting interviews after returning to work, monitoring of substitute workers, costs of the HR sector in monitoring absence and training of line managers, etc.). The author also notes that in the case of organisations that are focused on project work, the costs of the absence of project team members can be high if projects are stopped or delayed if a vital task was dependent on the inputs of the absent person. This can in consequence significantly affect an organisation's profits.

The cost to employers that results from absence due to mental health has also been found to be significant in other studies. For example, Bryan et al. (2021), analysing UK data, found that a change in mental health has a much larger effect on absence rates than a change in physical health. They found that the mental health effect is three times as large (0.6 percentage points compared with 0.2 percentage points).

Other studies have also shown that mental health issues have a considerable impact both on organisations and more widely on society. For example, Żółtaszek (2024) notes that the impact of mental health difficulties creates significant costs, not only for employers but also for the economy more widely

and for society at large. The author estimates that the total cost of mental health conditions to the global economy will reach USD 6 trillion by 2030, which is more than cancer, diabetes and chronic respiratory disease combined. The direct burden of costs is related to the cost of public and private expenditure on treatment and mental health programmes, while the indirect burden of costs is related to the cost to society and to economies of untreated mental health conditions, the income that is lost as a result of individuals not being able to work, the reduction of productivity due to absence from work and also due to workers not being able to work fully while at work, and the fact that many workers may leave the labour market early or work reduced hours as a result of mental health issues. Żółtaszek notes that in the case of Poland, the overall burden of mental conditions on the Polish economy is estimated to be PLN 2.6 billion a year. Further, the EPRS (2023) notes that, based on OECD data, the economic burden of mental ill health can be up to 4% of EU gross domestic product annually, equivalent to over €600 billion per year. This is based on reduced productivity, healthcare costs and social welfare expenditure.

This was also confirmed by interviewees, who noted that if qualified staff leave an organisation or the profession, their replacement requires additional resources, not just in terms of finance but also time, as replacements can take some months. EU-OSHA also notes that the mental health outcomes for workers can have a significant impact on employers due to lost productivity and cites some examples of the cost for employers. For example, it notes that the Sainsbury Centre for Mental Health (2007) estimated that employers' costs in terms of stress, anxiety and depression in Britain amount to €1,220 per worker per year (EU-OSHA, 2014a). In the Netherlands, in 2020 the costs of sickness absence due to work stress were estimated at €11,000 per absent worker per year (EU-OSHA, 2023a).

## 5 Prevention measures

PSRs can arise from poor work design, organisation and management, as well as a poor social context of work (EuroHealthNet, 2022). Prevention measures addressing organisational aspects can therefore play a crucial role in preventing PSRs in the workplace. As part of the literature review, prevention policies were mapped and good practices identified in a total of 80 sources, focusing on interventions at the workplace level, visibility, and awareness initiatives with regard to PSRs and mental health. The indepth interviews, including those focusing on specific workplace interventions, also provided insights into examples of practices for preventing and managing PSRs.

Interventions to prevent and manage stress are often categorised into one of three levels of interventions: primary, secondary, and tertiary. **Primary-level interventions**, also known as organisational-level or stress prevention interventions, aim to eliminate sources of stress in the workplace and their negative impact on individuals. These interventions are informed by risk assessments and include strategies such as redesigning tasks, establishing flexible work schedules and providing social support. **Secondary-level interventions** focus on detecting and managing experienced stress and enhancing workers' ability to cope through education and stress management training. These strategies target at-risk groups and often combine individual and workplace approaches. **Tertiary-level** interventions are reactive, addressing stress-related health issues through treatment and management to minimise their impact on daily functioning (i.e. return-to-work measures after extended sick leave) (EU-OSHA, 2015b).

The prevention measures identified through the literature and the case studies in this report differ in complexity, scale of implementation and the number of PSRs that they aim to address. For example, provisions in collective agreements, considering PSRs in OSH risk assessments or training could be used to address a broad range of PSRs, while measures such as participatory shift scheduling are more focused on providing more control to workers in relation to their working hours and shift patterns that have the potential to improve work–life balance (ETUI, 2022a). Improvements in work organisation and work culture more broadly can contribute to positive mental health outcomes for staff, even if this is not necessarily the primary reason for these interventions. Therefore, a comprehensive set of actions at the policy, sectoral and organisational levels are needed to prevent PSRs and improve mental health outcomes in the HeSCare sector.

At the policy level, primary prevention measures could include clear and well-set-out policies covering a combination of increasing salaries, support for social dialogue processes, addressing gender discrimination, improving training provision, delivering public information campaigns, improving the attractiveness of the sector and other similar measures (Centola et al., 2024). At the sectoral level,

collective agreements and social dialogue could play a role in improving working conditions, including pay, working time, staffing levels, training and occupational safety standards (ESPAN, 2024). Similarly, at organisational level there is a need for the development of a clear and comprehensive set of processes and procedures to identify and manage PSRs in order to prevent mental health issues.

Recognising the complexity of prevention measures, a recent ETUI report (ETUI, 2022b) provides insights into primary and secondary prevention measures tailored to prevent PSRs in the HeSCare sector. Using the typology proposed in this ETUI report, Table 2 provides an overview of types of interventions that were identified to address the PSRs covered in this study. The information is further adapted to findings from the literature review and case studies conducted for this study.

Table 2: PSR factors and associated prevention measures

Psychos	social Risk Factors	Psychosocial Risk Sources	Prevention Measures
Organisational factors and working conditions	High workload and time pressure	Excessive workloads associated with recruitment challenges, staff shortages in the sector, high sickness levels  High number of staff reassigned from one unit to another  Hiring untrained staff	Adequate staffing levels (primary) Hiring more and adequately trained staff (primary) Ensuring recovery time (primary)
	Long working hours	Understaffed facilities	Increasing the number of experienced and trained staff and decreasing patient ratios (primary)
	Work scheduling (including atypical working hours) and shift work	Changes in work schedules with short notice	Participatory work scheduling tools (primary)
			Scheduling to consider care work at home, e.g. using self-rostering or being consulted on the number of working hours and working time organisation and distribution (primary)
	Poor work–life balance	Low influence on the management of shifts  Lack of flexibility by management	Participatory management and decision-making (primary)
			Gender training to understand the inequalities that women experience as a result of poor work–life balance (primary)

Psychosocial Risk Factors		Psychosocial Risk Sources	Prevention Measures
		Low salaries Poor promotion opportunities Undervalued/unrecognised expertise	Fairness of remuneration in relation to needs, allowing purchasing power to be maintained or improved (primary)
	Pay and effort– reward imbalance and precarious		Income that recognises qualifications, experience and job requirements (primary)
	working conditions		Valuing different care professions through recognition of professional competence derived from training and experience (primary)
			Job certificates (primary)
	Lack of autonomy	Lack of worker involvement and influence on decisions regarding how jobs are done	Practising participatory management style (primary)
			Transparent decision- making (primary)
		Deskilling through job design that favours standardised tasks  Lack of influence over how the job is done	Developing direct group participation practices; enabling worker participation in work organisation through time and workload reduction (primary)
	The use of digital technologies and the automation of tasks	Insufficient training for using digital tools  Reduced control over how the work is done  Pervasive workplace monitoring	Training on the use of digital tools (primary) Promoting supportive work culture (primary)
Social environment of work	Adverse social behaviour, including violence, (sexual) harassment and bullying	Lack of zero-tolerance culture regarding harassment and violence at the workplace	Establishing a clear policy for the prevention of psychological and sexual harassment and developing specific procedures (primary)  Training directors and managers on harassment and violence prevention (secondary)

Psychosocial Risk Factors		Psychosocial Risk Sources	Prevention Measures
			Provision of reporting mechanisms and psychological support at the workplace (secondary)
	High emotional and ethical burden	High expectations from the clients, patients and their relatives  Stereotypical expectations that women are destined to be carers and must 'give their all' when doing so  Sense of powerlessness associated with not being able to fulfil tasks due to lack of resources  Lack of psychological and therapeutical support	Acknowledging the relational nature of care work (primary)  Adequate staffing and decreased patient ratios (primary)  Resources to cope with emotional demands, such as offering psychological group and individual therapy support during working time, offering professional mental health support and time off (secondary)  Providing confidential support options for trauma-exposed staff (secondary)
	Stigma, including against seeking mental health support	Perception that mental health issues are a sign of weakness  Lack of supporting working culture  Lack of awareness of mental health issues in the workplace	Training and awareness raising (primary)  Peer support initiatives, e.g. psychological first aid (primary and secondary)
	Low social support	Low quality leadership, e.g. authoritative management style Lack of support from management and/or colleagues in carrying out work; absence of shared workspace	Developing participatory leadership procedures and direct group participation (primary), e.g. through training managers in participatory management and communication  Functional support from management in day-to-day work; built-in opportunities for functional peer support during shifts; reserving time for weekly review meetings to resolve issues (primary and secondary)

Source: Adapted by the research team based on (ETUI, 2022b).

The extent to which these preventive measures are available to workers of the HeSCare sector was collected through the OSH Pulse Survey conducted in 2022. As Figure 23 shows, the awareness-raising and training activities were the measures most reported by the workers, followed by the consultation with workers on stressful aspects of their jobs and access to counselling or psychological support. The figure also shows that the workers in the HeSCare sector are more likely to have access to PSR prevention measures compared to the EU-27 average across all the economic sectors.

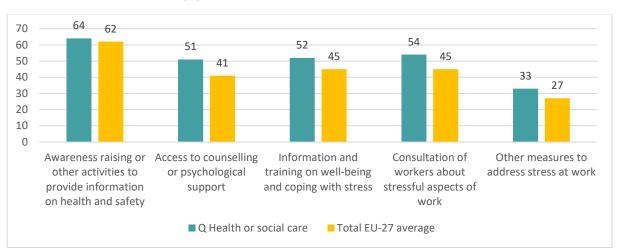


Figure 23: Workers reporting availability of preventive initiatives in their workplace, in the HeSCare sector and in all sectors, EU-27, 2022 (%)

Source: EU-OSHA, 2024a, p. 142 (elaboration on OSH Pulse 2022 data)
Base: All respondents

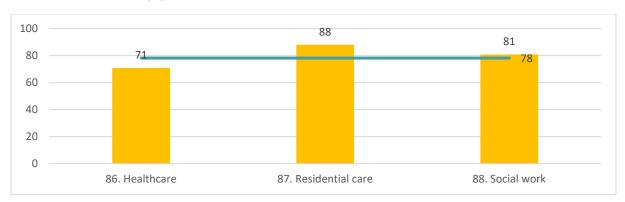
This study focused on **primary-level interventions**, which aim to address the PSRs presented earlier in this report. The following sub-sections outline the comparative findings from the literature review, interviews and case studies, providing examples of the interventions and lessons learned, structured around the PSRs that are particularly relevant to the HeSCare sector. The risk management and risk assessment used for all the PSRs are outlined first, before setting out details of the interventions aimed at improving working conditions and the social environment of work.

## 5.1 Risk management and risk assessment

Conducting regular risk assessments is widely accepted as one of the most important measures to identify, prioritise and manage a broad range of risks to workers' health and safety. Identifying specific risks early and developing clear follow-up action plans enable organisations to manage the risks by eliminating their sources or controlling them to prevent poor physical and mental health outcomes for workers. All employers, including those in the HeSCare sector, are obliged to assess OSH risks in accordance with the EU OSH Framework Directive (89/391/EEC). The directive covers physical, environmental and psychosocial risks and requires employers to develop clear action plans to address the major risks identified (EU-OSHA, 2024a).

ESENER-19 data show that 78% of HeSCare sector organisations regularly conduct risk assessments compared to 75% of all economic sector workplaces contributing to the survey. There are some differences within the HeSCare subsectors, with 88% of residential care workplaces reporting carrying out regular risk assessments compared to 71% in the healthcare subsector, as presented in Figure 24 (EU-OSHA, 2024a).

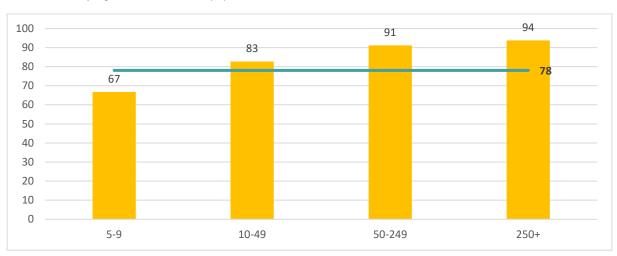
Figure 24: Establishments that regularly carry out workplace risk assessments in the HeSCare sector by subsector, EU-27, 2019 (%)



Source: EU-OSHA, 2024a, p. 128 (elaboration on ESENER 2019 data)
Base: All HeSCare sector establishments in the EU-27.
The horizontal line indicates the HeSCare (NACE Q) EU-27 average

Larger organisations are more likely to carry out regular risk assessments than smaller workplaces. The ESENER-19 data presented in Figure 25 show that 67% of micro and small enterprises (MSEs) report carrying out regular risk assessments compared to 94% of large workplaces employing more than 250 employees (EU-OSHA, 2024a).

Figure 25: Establishments that regularly carry out workplace risk assessments in the HeSCare sector, by number of employees, EU-27, 2019 (%)



Source: EU-OSHA, 2024a, p. 129 (elaboration on ESENER 2019 data)
Base: All HeSCare sector establishments in the EU-27.
The horizontal line indicates the HeSCare (NACE Q) EU-27 average

Integrating PSRs into the general risk assessment is essential. However, the ESENER-19 data indicate that organisations tend to pay more attention to assessing musculoskeletal risks compared to PSRs. For example, 90% of HeSCare workplaces report having regularly assessed the risks associated with dangerous chemical or biological substances, while only 65% regularly assessed supervisor—employee relationships and 77% included organisational aspects such as work schedules in regular risk assessments (EU-OSHA, 2024a). Including PSRs in regular risk assessments in HeSCare organisations should be treated in the same way as musculoskeletal risk factors, and they should be fully integrated into the regular risk assessments. The follow-up actions should also cover PSRs in line with the risk assessment results.

The reasons for not carrying out risk assessments in the HeSCare sector are associated — as emerged from the literature review and from interviews — with a lack of expertise in and knowledge of conducting risk assessments within the sector and the complexity of the organisations and job roles within them,

resulting in complex risk assessment processes, which require expertise and resources. The data from ESENER-19 presented below also indicate that 78% of the HeSCare workplaces do not conduct regular risk assessments because the risks are already known to them. However, the most commonly reported reason for not conducting risk assessments is the perception that there are no major problems within the organisation. This perception is to some extent contradictory to the data on prevalence of PSRs in the sector, which is presented above in this report (EU-OSHA, 2024a).

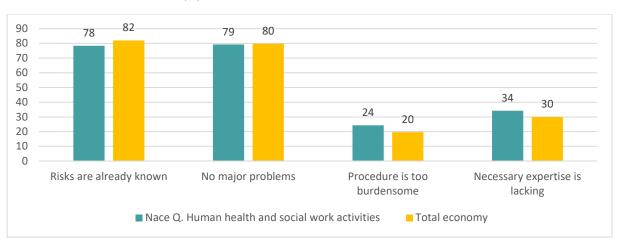


Figure 26: Establishments by reasons for not conducting regular risk assessments in the HeSCare sector and in all sectors, EU-27, 2019 (%)

Source: EU-OSHA, 2024a, p. 136 (elaboration on ESENER 2019 data)
Base: Responses only of those HeSCare sector establishments that do not carry out regularly workplace risk assessments

There are several tools available that can be used to assess PSRs at workplace level, which have been developed by national and international OSH organisations. The ILO (2016) report on workplace stress provides a list of questionnaires and tools available for workplaces to assess PSRs, work-related stress and burnout. These sources are not specifically adapted to the HeSCare sector but are aimed at supporting a wide range of workplaces in conducting the risk assessments. At the EU level, a notable example is the European Framework for Psychosocial Risk Management (PRIMA-EF), which was developed by a consortium of national and international OSH organisations and is aimed at being a practical guide to assess and manage work-related PSRs (Leka & Cox, 2008). Another example of a practical tool available at the EU level is the Online interactive Risk Assessment (OiRA) tool, developed by EU-OSHA and its partner organisations. This is an online tool that is specifically aimed at supporting MSEs in conducting risk assessments, which often lack resources and expertise, and as shown by ESENER-19 data above, are less likely to conduct regular risk assessments. The OiRA tool can be adapted to the specific sector and, at the time of writing, there were 20 OiRA risk assessment tools available specifically for the HeSCare sector (EU-OSHA, 2025).

An example of a risk assessment tool developed at national level is the G2P tool developed in France. This is a digital platform for OSH risk assessment that is specifically tailored to cover the social care sector and covers musculoskeletal risks and PSRs. It has been developed in cooperation between a private provider and social partners active in the HeSCare sector. Further details of the tool and what has been achieved are set out in Box 1.

#### Box 1: Developing a digital risk assessment tool in France

In France, as part of the French labour code (derived from EU Council Directive 89/391), employers have a legal and regulatory obligation to assess risks to health and safety in the workplace. This legal requirement can be challenging for organisations with fewer resources allocated to OSH and often requires the support of experts to accurately assess risks (FORTE, 2023). In addition, French employers are legally required to set up an occupational health service within their organisation, known as a 'médecine du travail' (Molina, 2024).

To assist with this requirement, the social partners for the social care sector, working in a joint committee, worked with a private consulting company to create a tailored digital tool to help social care organisations to better assess OSH risks. As a result of this joint effort, **the G2P tool** was developed.

The G2P tool has been available for use since 2022 and uses its algorithmic technology combined with inputs from organisations to accurately rank risks and produce action plans to address them. The overall aim of the tool is to reduce the risk of work-related accidents and sick leave in the sector, of which the incidence is very high in this sector in France (interview data). This intervention is thus in line with the work of the social partners related to the CCN 66 (*convention nationale 66*), covering workers of social care services, and the G2P tool has been adapted to the needs of the employers represented by the social partners under CCN 66 (Didacthem, n.d.). All risks in social care workplaces are assessed via the tool, including PSRs.

The development and implementation process was carried out in three phases. The **first phase** involved a field survey conducted by the consulting company, which visited 30 organisations and services to take stock of the risks present and how they were managed. This took around a year. It then came back to the social partners with a series of questionnaires that organisations using the tool needed to fill out to create their risk assessment. The social partners then revised these questionnaires based on their experience of the needs of the sector.

During the **second phase**, each questionnaire (one for each activity) was reworked to ensure consistency in terms of language and vocabulary. This required a significant level of resources from the social partners given the number of questionnaires (around 30-40), each with up to 80 questions (interview data). This required another two years (until 2022) before the first version of the tool was ready to be published.

Once online and ready for use, the intervention entered into a **third phase**, relating to testing. This included a statistical analysis from the early results of organisations completing the questionnaires to fine-tune the tool and to identify and correctly rank the relevant risks. The joint committee also received direct feedback from organisations highlighting areas that still needed additional work or development, for example, where additional care activities needed to be included. This led to the creation of new questionnaires, although with the caveat that not all changes requested by organisations can be implemented due to the high IT development costs.

For more details, please see the self-standing French case study available at: <a href="https://osha.europa.eu/en/publications/g2p-frances-digital-risk-assessment-tool-social-care-sector">https://osha.europa.eu/en/publications/g2p-frances-digital-risk-assessment-tool-social-care-sector</a>.

# 5.2 Interventions aimed at addressing organisational factors and working conditions

This section focuses on organisational-level interventions that aim to improve HeSCare workers' mental health by changing the ways in which the work is designed and organised. Such interventions have been shown to address PSRs associated with high workload, long working hours, atypical and shift working, poor work–life balance, low remuneration and recognition, lack of autonomy, and pressures linked to digitalisation and automation of work. Examples of interventions identified during the study to address each of these PSRs are presented in the remainder of this sub-section.

## 5.2.1 Adequate staffing

High workload and staff shortages is a commonly found PSR linked to working conditions in the HeSCare sector (Shin et al., 2018). High demands at work, time pressure and lack of personnel are also factors that have been linked to the cause and development of burnout as a mental health outcome (De Hert, 2020). Literature suggests that increasing staff numbers is crucial for preventing and managing PSRs (ETUI, 2022b). Furthermore, it has been suggested by literature and interview findings that staff shortages and high-demand work could be linked to patient violence (ILO, 2002). Therefore, ensuring adequate levels of staffing seems to be an effective way to address these different PSRs.

Increasing resources and providing adequate funding to ensure safe staffing levels are key to creating a safe psychosocial and physical environment in the HeSCare sector. However, a lack of funding is not always the only barrier to providing adequate staffing levels. Staff shortages in the sector are prevalent in most of the EU Member States due to low attractiveness of the sector, low remuneration, lack of career progression opportunities, high job demands and other similar factors. Moreover, the COVID-19 pandemic has exacerbated an already challenging situation and has led to more people leaving the profession. To address these challenges, several workplaces have implemented a variety of interventions related to the improvement of working conditions, staff autonomy, work organisation and working culture, which has been shown to contribute to increasing the attractiveness of their workplaces and higher recruitment and retention rates in their organisations. Several case studies carried out for this research consider staff retention and increased numbers of applicants among the key success factors of their interventions even when their primary goal is not directly linked to providing adequate staffing.

Examples of interventions covered by the study that have contributed to increased attractiveness of the workplace and higher worker retention rates include the annualised hours in emergency medicine in a hospital in the UK<sup>42</sup>(see Box 3). This shows how improved visibility of the staffing needs to provide 24/7 doctors coverage and increased control over the working patterns introduced by the self-rostering system have contributed to higher staff retention rates, increased the attractiveness of the department and reduced reliance on the agency staff.

Efforts in introducing changes to the way organisations operate, providing more autonomy and control for staff, and increasing staff participation have also contributed to higher staff retention rates (as in the case study of the regional hospital in Horsens<sup>43</sup> — see Box 7) and to increased numbers of applicants for vacancies (as in the Magnet4Europe<sup>44</sup> case study in the Cork University Hospital in Ireland — see Box 8).

These examples illustrate how a wide range of interventions aimed at preventing the PSRs and improving work organisation and culture can enhance attractiveness of workplaces for current and future workers. This advantage is particularly significant in the context of the structural challenges that the HeSCare sector faces in many European countries. Consequently, these efforts can reduce workload demands and foster a more sustainable, positive work environment, reducing staff exposure to PSRs overall.

## 5.2.2 Ensuring adequate rest and improving work-life balance

The 2019 data from the ESENER survey show that interventions to tackle long or irregular hours worked were the least common among all measures taken to prevent PSRs (see Figure 27) (EU-OSHA, 2022a).

-

<sup>&</sup>lt;sup>42</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-healthrota">https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-healthrota</a>

<sup>43</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study">https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study</a>

<sup>44</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-university-hospital">https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-university-hospital</a>

Allowing employees to take more decisions on how to do their job

Confidential counselling for employees

Reorganisation of work in order to reduce job demands and work pressure

Training on conflict resolution

Intervention if excessively long or irregular hours are worked

Q Sector - ESENER2 (2014)

Q Sector - ESENER3 (2019)

Figure 27: Establishments by type of measures taken to prevent PSRs in the human health and social work activities (Q) sector, 2014 and 2019 (%)

Source: EU-OSHA, 2022a, p. 31 (elaboration on ESENER 2014 and ESENER 2019 data)
Base: all establishments in the Q sector in the EU-27 with 20 or more employees

Given the overall shortage of measures to tackle excessively long or irregular working hours, legislation guaranteeing appropriate periods of rest and interventions such as the Traffic Light Model to more appropriately plan shifts (both present in this Finnish case) are particularly notable in helping to tackle PSRs and promote good mental health in the workplace (see Box 2).

#### Box 2: Long working hours in the Finnish HeSCare sector: the Traffic Light Model

One of the case studies for this research looks at working time characteristics that could constitute PSRs in the HeSCare sector in Finland. These characteristics include the **length of working hours**, **recovery time between shifts**, **opportunities to influence working time** and **patterns of sickness absence**. Research has established connections between some of these working conditions and factors that can lead to mental health-related outcomes.

For example, a cross-national study of Finnish and German healthcare employers studied associations between five working time-related dimensions, namely duration (weekly working hours), timing (shift work and weekend work), on-call work, working time autonomy, and work pressure (deadline and performance pressure), considering them in relation to wellbeing. The study used data on working time dimensions and indicators of wellbeing (work–life conflict, poor perceived health, sleep difficulties and fatigue). As cited by the study, **long working hours have been previously linked to physiological and psychological impairments** in various outcomes (Joyce, et al., 2010), including increased risk of shortened sleep (Bannai & Tamakoshi, 2014) symptoms of depression (Theorell, et al., 2015), psychosomatic symptoms (Müller, et al., 2018) and work–life conflict (Karhula, et al., 2017). A low level of control over working time has also been linked to increased stress, poor perceived health and sleep disturbances (Ala-Mursula, et al., 2002). The study itself also found that **shift work, weekend work and low control over taking breaks showed some detrimental associations with the wellbeing outcomes for workers** (Karhula, et al., 2020).

In Finland, the Working Hours Act (872/2019), which came into force in 2020, introduced two key changes to how shift work is organised: one introduced a **minimum of 11 hours of rest between shifts**; and the other **limited the number of consecutive shifts to a maximum of five** (Eurostat, 2024a). According to Eurostat data, in 2023, 21.9% of the Finnish population aged 16 to 65 worked shifts. Among women, this was even higher, at 25.6%. Both of these figures are above the EU

average. Irregular shift work is particularly prevalent in the female-dominated HeSCare sector in the country. Consistent with European research, studies in Nordic countries, including Finland, have found a **link between shift work and increased work–life imbalance, sleep disorders, sick leave, and various physical health issues** (e.g. cardiovascular disorders, cerebrovascular disorders and breast cancer). The health problems and sickness absences most frequently observed were associated with consecutive night and evening shifts, intervals of less than 11 hours between shifts, long shifts exceeding 12 hours and limited opportunities to influence working hours (Härmä, et al., 2024).

To tackle these issues, the **Traffic Light Model for Working Hours** has been developed. This model recommends assessing workload and working hours, ensuring that critical shift characteristics (such as total working hours, shift lengths, consecutive shifts, evening and night shifts, recovery time, predictability, influence over schedules and breaks) are considered during shift planning. Further details on this model are presented in the next sub-section on shift scheduling.

For more details, please see the self-standing Finnish case study.<sup>45</sup>

## 5.2.3 Participatory shift scheduling

An area in which a higher degree of influence over decisions can be particularly beneficial is working time **scheduling**. HeSCare workers are frequently exposed to risk factors such as **atypical or irregular working hours**, and they tend to have **low levels of control** over shift patterns, which in turn has a negative impact on their private and social life and overall **work-life balance** (Interview data, 2024). Moreover, **sleeping problems and fatigue** are **common in work that involves long working hours and irregular shifts**, and they are also risk factors for burnout and other mental health problems (Interview data, 2024). Literature findings suggest a correlation between work-life balance and greater worker control regarding schedules, resulting in increased influence on working hours and the possibility of adjusting working hours to family care needs (Allinger, 2022). For example, in the LTC sector, interventions designed to increase control over working time may benefit caregivers, especially those with 'double duty' elder caregiving at home and work, and 'triple duty' responsibilities, which also includes childcare (Allinger, 2022).

A specific case example of this is the **implementation of annualised hours in emergency medicine** presented in Box 3. It allowed staff to have an influence on decisions regarding scheduling by stating their shift preferences and working patterns, thus improving work—life balance of staff in the department overall and reducing fatigue among staff due to better structuring of shifts, for example, not working more than three night shifts in a row.

#### Box 3: Managing shift work through annualised hours in emergency medical care in the UK

University Hospitals Sussex (UHSussex) is an NHS Foundation Trust in the UK, currently comprising six hospitals. 46 The Emergency Department of the Trust, located principally in the Royal Sussex County Hospital and Princess Royal Hospital, became a major trauma centre in 2013, which required it to provide 24/7 Accident and Emergency (A&E) consultant cover, intensifying the demands on doctors' capacity. It also further reduced flexibility in rotas, which led to issues with retention of staff and difficulties in providing sufficient coverage in the department. As a consequence, there was an increase in associated PSRs such as high workload and excessive time pressure, poor work–life balance and low autonomy, together with associated mental health outcomes such as low morale, stress and burnout.

The Trust decided to create a more effective rostering system that would allow doctors to have more control over their working hours and ultimately enjoy a better work–life balance, without compromising

4

<sup>&</sup>lt;sup>45</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/finlands-model-supporting-mental-health-through-shift-scheduling-and-ergonomics">https://osha.europa.eu/en/publications/finlands-model-supporting-mental-health-through-shift-scheduling-and-ergonomics</a>

<sup>&</sup>lt;sup>46</sup> Since 2017, the Foundation Trust is made up of: Worthing Hospital, Royal Alexandra Children's Hospital, Princess Royal Hospital, Royal Sussex County Hospital, St Richard's Hospital and Southlands Hospital.

on patient care. To achieve this, it adopted an annual approach to rostering, bringing together all consultant clinical hours over the year to plan a collective rota taking into account available working hours after annual leave, training and study leave requests had been accounted for. This was then compared to the clinical hours needed to cover all the shifts. The system also included self-rostering (with accompanying guidance) via the HealthRota software, allowing individuals more control over their working hours and schedule.

One of the results of this annualised rota system was that shift patterns were better structured (e.g. ensuring that no one worked more than three night shifts in a row), thus avoiding excessive fatigue among staff.

For more details, please see the self-standing UK case study.<sup>47</sup>

Another initiative identified during the study focusing on participatory shift scheduling is the Traffic Light Model introduced in Finland. This is presented in Box 4 and as shown in the case study gave workers more **control over their working schedule**.

#### Box 4: Traffic Light Model as a participatory shift planning tool in Finland

According to the Traffic Light Model, shift planners, with the use of the Titania participatory shift scheduling software, are advised to consider five key factors when planning shifts for a period of two to six weeks:

- length of working hours
- · scheduling of working hours
- time for recovery
- work–life balance
- opportunities to influence working hours

Additionally, shift planners are encouraged to assess the predictability of working hours on a regular basis, such as once a year.

Each criterion is assessed using a scale of four different traffic light indicators:

Green: Optimal load
 Yellow: Increased load
 Orange: Overload
 Red: Severe overload

According to the recommendations associated with the model, load estimation should be conducted in accordance with all five criteria, along with other work-related factors, including the physical and emotional workload associated with the specific profession (FIOH, n.d.)

This approach aimed to provide a participatory shift planning tool, which supports workers to choose healthier working patterns. Overall, studies on the Titania participatory shift scheduling tool and related shift ergonomics recommendations have found several indicators of healthier working shifts.

These include a greater sense of control over and more predictability of workers' schedules, reduced excessive sleepiness in connection with evening shifts, and an overall reduced number of unhealthy shifts considering their length and intensity.

For more details, please see the self-standing Finnish case study.<sup>48</sup>

<sup>47</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-healthrota">https://osha.europa.eu/en/publications/benefits-emergency-medicine-annual-approach-rostering-healthrota</a>

<sup>&</sup>lt;sup>48</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/finlands-model-supporting-mental-health-through-shift-scheduling-and-ergonomics">https://osha.europa.eu/en/publications/finlands-model-supporting-mental-health-through-shift-scheduling-and-ergonomics</a>

## 5.2.4 Recognition and remuneration

It has been highlighted in the literature and interviews that fair rewards, such as equal pay and adequate remuneration, can help mitigate the devaluation of care work (EU-OSHA, 2015b). This is crucial, as there is evidence that suggests there is a large **effort–reward imbalance** in the HeSCare sector, which is closely linked to physical impairments, lower job satisfaction, higher levels of emotional exhaustion, depersonalisation (Eurofound, 2019) and a higher risk of burnout compared to many other sectors (De Hert, 2020). Ensuring more stable jobs and better working conditions is also crucial to addressing other PSRs (Allinger, 2022) such as **experiencing job insecurity and financial worries**, which could be linked to **poorer mental health and other health issues**, such as **anxiety** and **MSDs** (Eurofound, 2023a).

Collective bargaining, unionisation and strikes can serve as effective tools for negotiating higher wages. For example, Box 5 further highlights a successful outcome of sustained pressure from social workers on the Bulgarian Social Assistance Agency, resulting in improved compensation within the social sector.

#### Box 5: Bulgaria: Social workers secure wage increases

In October 2024, after months of protests and strikes organised by social workers and the administrative workers' union <a href="Podkrepa">Podkrepa</a>, the Social Assistance Agency introduced a significant wage increase for its workers. The adjustment follows a two-stage process: initially aligning wages with average rates for each position, followed by an additional fixed-amount increase.

The average monthly salary for social workers now surpasses BGN 2,100 (approximately €1,050), reflecting an increase of over 20%. The adjustment is retroactive, with the new rates effective from 1 July 2024. Newly hired social workers will receive a starting salary of no less than BGN 1,400 (around €700), which is BGN 400 (almost €200) higher than previous levels.

This latest increase builds on the wage adjustments made in April 2024, collectively achieving the workers' target of a 30% annual pay rise. These changes represent a significant step towards improved compensation within the social sector in Bulgaria (EPSU, 2024).

Source: EPSU, 2024

Such tactics have also been successful in other countries, for example, in Austria, private sector unions entered into collective bargaining with the social economy sector in spring 2020 and reduced working hours from 38 hours to 37 hours a week starting from 2022 (Allinger, 2022, p. 30). Furthermore, in Lithuania (see Box 6), recent collective agreements (effective since 2022 and 2025, respectively) are tackling issues of underpayment and overwork in the HeSCare sector.

#### Box 6: Collective sectoral agreements in Lithuania

Updated collective agreements were recently signed by the Lithuanian National Health System (Minister of Health) and social partners. <sup>49</sup> The two agreements, one effective since January 2022 and another since January 2025 (Collective Agreement, 2024), guarantee salary increases for healthcare staff, including nurses, doctors and nurse assistants. Additionally, these agreements provide extended paid leave, and more than standard entitlements for most workers (also for medical students working in hospitals) (Interviews 1 and 2; Collective Agreement, 2024). Currently, the nurses can take

\_

<sup>&</sup>lt;sup>49</sup> Lithuanian Medical Association, Lithuanian Nursing Professionals Organisation, Lithuanian Health Care Workers' Trade Union, Lithuanian Pharmaceutical Workers' Trade Union, Lithuanian Ambulance Workers' Trade Union 'Solidarumas', Medical Institution Workers' Trade Union 'Solidarumas', Lithuanian Trade Union Federation 'Sandrauga', Lithuanian Federation of Health Care Trade Unions, Trade Union Organisation 'Lithuanian Doctors' Forum'. To a degree, the social partners included in the collective bargaining process were the same as in the working group for the Action Plan, as both include the largest organisations in the sector (Interview 1 data).

up to 39 days of paid leave and additional days for mental health (they can use them as they see fit, without providing any reason for doing so). Furthermore, active union members are eligible for additional benefits, including organised trips and travel vouchers — all of these aim to help them relax and regenerate (Interviews 1 and 2).

Importantly, Point 7.5 in the chapter on Worker Safety and Health states that institutional leaders must create a working environment that ensures psychological wellbeing in all institutions, following the Psychological Wellbeing Action Plan and implementing the planned measures (Collective Agreement, 2024).

For more details, please see the self-standing Lithuanian case study.<sup>50</sup>

These examples all show the importance of recognition and remuneration in improving working conditions in the sector, as well as the effectiveness of social action by workers.

## 5.2.5 Promoting job autonomy

Several of the case examples covered by the study tackle the issue of job autonomy in the HeSCare sector. **Organisational changes seem to effectively foster** a culture of job autonomy among HeSCare workers, particularly challenging hierarchical structures. The Department of Gynaecology and Obstetrics at the Regional Hospital in Horsens implemented organisational changes to help improve the PSRs and working culture, which is presented in more detail in Box 7.

#### Box 7: Strengthening job autonomy at the regional hospital in Horsens in Denmark

To address challenges related to staff shortages, time pressure and long working hours — especially a lack of worker consultation, participation and influence in decision-making — for the past six years, the Department of Gynaecology and Obstetrics at the Regional Hospital in Horsens, Denmark, a 200-worker part of a small hospital with approximately 700 workers, has been implementing organisational transformation to address PSRs related to work organisation and culture. A key element of this process was the introduction of theory-based management changes centred around regular meetings held outside the hospital environment. These meetings — or workshops — provided a collaborative space for staff from different professions within the department to discuss challenges and identify practical solutions. In essence, the workshops serve as the starting point for projects — initiated and developed at the workshops — aimed at transforming and improving the department's operations. Once the workshop ends, these staff-led projects are implemented, giving workers a meaningful opportunity to influence and shape their workplace.

In practice, the intervention consisted of the setting up of regular two-day workshops, a space to develop bottom-up projects, and teams that aim to transform how the department operates and is managed. These projects and project teams are designed to address real issues identified by staff, empowering them in two key areas: decision-making in their daily practice; and influencing the broader workplace environment. Staff are encouraged to take ownership of organisational change by forming interdisciplinary teams tasked with the design and implementation of projects that address the challenges identified by the management team and staff.

The department has measured the impact of their efforts with the tangible results achieved in several areas showing the benefits for staff in terms of reducing the PSRs and also in improvements to patient care. Findings from the interviews and the literature review conducted for this study highlighted the positive impact on the working culture and also observed reduced burnout rates among staff. Measured using the Danish-validated version of the Maslach Burnout Inventory,<sup>51</sup> the burnout rates

<sup>&</sup>lt;sup>50</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania">https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania</a>

<sup>&</sup>lt;sup>51</sup> The Maslach Burnout Inventory (MBI) is a widely used psychological assessment tool designed to measure burnout. Developed by Christina Maslach and Susan E. Jackson in 1981, the MBI consists of 22 items, each rated on a frequency scale from 0 (never) to 6 (every day) (Maslach et al., 1997).

among staff reduced from 18% in 2019 to 9.4% in 2024. This change in management of the department also contributed to changes in clinical practice that were introduced by different teams working together. For example, hysterectomy is no longer the only option for women suffering from bleeding during menopause, with other treatment options having been introduced. As a result, fewer surgeries are scheduled, reducing the waiting list for surgeries substantially (Schelde, 2022).

For more details, please see the self-standing Danish case study.<sup>52</sup>

Another initiative aimed at increasing worker autonomy identified during the study is Magnet4Europe programme. Box 8 provides an example of how the programme contributed towards increasing the autonomy of nurses and empowering decision-making at the Cork University Hospital.

#### Box 8: Increasing autonomy and empowering decision-making, based on the Magnet4Europe model

A cross-sectional European study revealed that hospital staff working long shifts, of 12 hours or more, were more prone to job dissatisfaction, dissatisfaction with schedule flexibility, intentions to leave their jobs and high burnout rates (Dall'Ora et al., 2015). To prevent PSRs and to enhance the mental health and wellbeing of healthcare professionals, as well as improving patient safety, Magnet4Europe sought to address systemic organisational issues such as poor working environments and lack of autonomy in more than 60 hospitals.

At the Cork University Hospital (CUH) in Ireland, the following key principles of the Magnet4Europe model were implemented in order to bring about organisational change:

- Structural Empowerment, according to which nurses are empowered to make decisions about patient care, also through access to resources and opportunities for professional development.
- Transformational Leadership, according to which leaders in Magnet hospitals inspire and cultivate a culture of excellence by fostering collaboration through flat hierarchies.
- Exemplary Professional Practice, according to which high standards of nursing practice are established and maintained, and clear roles and tasks are allocated to nurses with the aim of increasing positive patient outcomes.
- New Knowledge, Innovation and Improvements, according to which improvements and innovations in everyday working life processes, based on the latest scientific findings, are encouraged.

Early indicators and qualitative insights from stakeholders at CUH and University College Cork suggest **improvements in staff mental health, wellbeing and workplace culture**, and that these are particularly associated with **structural empowerment initiatives**. The establishment of nursing councils has fostered an environment in which nurses are more involved in decision-making (Galvin & Jacob, 2024), potentially leading to a greater sense of autonomy and job satisfaction.

For more details, please see the self-standing Magnet4Europe case study.53

## 5.2.6 Worker influence and participation in decision-making

Influence over decisions affecting the individual, such as control over one's working environment and influence over management decisions (Interview data, 2024)<sup>54</sup> (e.g. restructuring), is linked to promoting job autonomy (see above). Countries with a positive combination of collective autonomy and high associational governance, meaning high collective bargaining coverage, usually provide extensive co-

61

<sup>&</sup>lt;sup>52</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study">https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study</a>

<sup>&</sup>lt;sup>53</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-university-hospital">https://osha.europa.eu/en/publications/magnet4europe-empowering-nurses-cork-university-hospital</a>

<sup>&</sup>lt;sup>54</sup> Internal analysis based on manual coding done on Atlas TI, September 2024. This rate refers to the total number of times interviewees quoted a risk factor.

determination rights or extensive rights to works councils (e.g. Sweden and Germany) (Caprile et al., 2018). Overall, it has been found that where there is a **collective representation** of workers and social dialogue, preventive actions lead to better results. Worker participation in planning and execution of work activities has been shown to increase job satisfaction and promote a healthy work environment. Trade unions and worker representatives can serve as crucial **support structures** for workers, particularly in their roles as OSH representatives working on PSR prevention (ETUI, 2022a, p. 22).

The case examples of a European Works Council (EWC) in a French LTC company (see Box 9) and Magnet4Europe (see Box 8) **show examples of how different models of collective representation of workers can help to prevent PSRs**. The EWC exemplifies how social dialogue at the company level can lead to the implementation of measures for the prevention of PSRs, such as a standard on social and psychological support for employees, which was developed by management and HR in consultation with workers' representatives. This is a clear example of influence over decisions that affect the individual as this standard includes tools and services to support employees for any psychological stress factors they have. Further details of an EWC in a company in France are presented in Box 9.

#### **Box 9: European Works Council at Clariane in France**

At Clariane — an LTC company headquartered in France and active in five other EU countries, predominantly in Germany, but also Belgium, Spain, Italy and the Netherlands — the EWC has been working closely with the company's management to reduce absence related to stress. A working group (WG) on absence reduction was created, and one of its outputs is a **common declaration on the reduction of absence**, signed in 2022 by Clariane's EWC and management. It contains a framework of actions that revolves around three key themes: (i) Management quality and the working environment, (ii) Work organisation, and (iii) Social and psychological support.

More specifically, the commitment to social and psychological support includes three actions. First, to implement PSR analysis procedures at all sites and corporate offices, at the request of manager and/or employee representatives and depending on the requirements and organisation of each group country. Second, develop social services in each country as far as possible, for example, through social workers, external social service providers or partnerships with expert associations (e.g. housing support, legal advice, assistance for women who are victims of domestic violence, assistance for employees with caring responsibilities). Third, psychological support actions include a support hotline for employees, services adapted to the needs of employees (individual psychological support, coaching, mentoring, supervision), and training on 'stress prevention and management' and 'conflict management and mediation' offered by the Clariane Academies, which are training facilities of the company in each country (Clariane/Korian, 2022). Therefore, the initial idea to develop social and psychological support structures for the benefit of all employees originated from the EWC, based on the research conducted by the WG on absence prevention.

An important measure originating from the common declaration on the reduction of absence is the **standard on social and psychological support**. The standard on social and psychological support was developed by management and the company's HR function, with input and consultation from workers' representatives through the EWC, and specifically via the Works Council's WG on absence (Interview 2 data). The aim is to deploy the standard in all countries by the end of 2026. The standard on social and psychological support for employees includes practical tools and procedures to support care workers and is organised around three pillars, which mirror the commitments to social and psychological support included in the common declaration on the reduction of absence.

The **first pillar** of the standard focuses on providing employees with the appropriate channels to raise concerns around psychosocial stress factors. They may voice their concerns to management, or to staff representatives. To facilitate this, specific processes have been set up. For example, a help hotline for employees has existed in France for several years and has recently also been introduced in Italy, while 'persons of trust' (*personnes de confiance*) are appointed in each facility in Belgium to enable employees to discuss issues they encounter in a confidential manner. In Germany, a system involving health champions has been set up within the company.

The **second pillar** focuses on the services and the support that can be offered to staff once they have expressed their issues. This includes services such as mediation, supervision, mentoring and

coaching related to professional matters. One example is in-person mediation between families and residents and staff in conflict situations by a qualified mediator to sort out the conflict and try to find a solution together.

The **third pillar** focuses on stress prevention and includes providing training and tools to employees to better manage stress. This training focuses on helping managers to effectively intervene in the case of conflicts between employees or employees and care recipients and their families, while the training for employees focuses on teaching them how to better prevent and manage their stress and to cope with emotionally difficult situations. According to a representative of Clariane, 'despite efforts, some aggression from residents and families might occur. Therefore, we focus on resilience and stress management for those who need it. We offer training, mostly online, that is accessible to everyone'.

For more details, please see the self-standing European Works Council case study.<sup>55</sup>

Recent Eurofound research suggests that 'PSRs are important aspects of health and care workers' working conditions that could be addressed by inclusive and effective social dialogue between workers and their representatives, on the one hand, and providers in the hospital sector and the wider health and care sector, on the other' (Cabrita & Cojocariu, 2023). Although social partners are typically not very engaged in social dialogue in the sector in many Member States (with collective bargaining tending to focus on pay and working time) (Cabrita & Cojocariu, 2023), research from Eurofound shows the prominent role that social dialogue played in several Member States during the COVID-19 pandemic in quickly and effectively addressing some of the challenges in the hospital sector (Eurofound, 2022a). For example, in Bulgaria, Czechia, Estonia, Cyprus and Malta, there was a significant boost in social dialogue in the hospital sector during the pandemic (Eurofound, 2022a). Given the increasing concern among social partners in the hospital sector about the impact of stress and high workload on job retention, the healthy functioning of social dialogue is particularly important going forward.

In another example, staff participation and involvement in risk assessment and development of followup actions has contributed towards positive mental health outcomes in the Newcastle Hospitals in the UK, as can be seen in Box 10.

## Box 10: Co-production of a fatigue risk management strategy in maternity services at the Newcastle Hospitals NHS Trust, UK

The intervention was introduced at the labour ward of the maternity services department based in the Newcastle Hospitals NHS Trust. The initiative was led by the consultant anaesthetist who was a joint co-chair of the Joint Fatigue Working Group set up by the Association of Anaesthetists, Royal College of Anaesthetists and Faculty of Intensive Care Medicine that recognised fatigue as an important challenge that needs to be addressed to improve staff wellbeing and patient safety.

The intervention was implemented as an action research project together with the researchers at Northumbria University. It involved staff representing all roles in the department, including midwives, obstetricians, theatre nurses, anaesthetists and healthcare assistants. It was implemented in three cycles:

- Focus group aimed at staff from different backgrounds to collect information on the experience of fatigue at work as well as to identify potential actions for mitigating it.
- The fatigue risk management group was set up consisting of 15 representatives from functions and levels of seniority at the ward. The group was tasked to analyse the proposed action plan and ranked the proposed activities by importance and feasibility.

\_

<sup>&</sup>lt;sup>55</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/supporting-mental-health-long-term-care-workers-european-works-council-case-study">https://osha.europa.eu/en/publications/supporting-mental-health-long-term-care-workers-european-works-council-case-study</a>

• The working groups were set up to implement various activities that were prioritised. The activities included increasing awareness among staff about the negative impact that fatigue has and importance of sleep, purchase of sofa bed for staff to have naps during breaks, use of an app to determine fatigue level of the person using it, review of tasks to reduce the workload overnight, self-rostering and extra trainee anaesthetist on call overnight to provide more capacity if needed.

The case study has shown positive impacts on the ward, particularly on increasing staff influence over the changes proposed, increasing recognition that fatigue is an important issue to address and reducing the stigma associated with it. It also provided a space for staff to propose changes to work organisation and consider fatigue in the context of work organisation.

Source: Teoh et al. (2023)

## 5.2.7 Awareness-raising and training

The literature reviewed for this study widely recognises that the lack of stakeholder awareness of the PSRs, their effect on workers and how to manage them effectively in the workplace are among the key barriers to managing PSRs in the HeSCare sector. This is particularly important given the prevalence of mental health issues in the sector and the potential stigma associated with them, leading to underreporting and reluctance to seek help. Research conducted by EU-OSHA also found that managing PSRs is also perceived to be expensive, complex and requiring high-level expertise, indicating that addressing such perceptions and awareness-raising are important PSR prevention measures (EU-OSHA, 2012).

Providing information and training is an integral part of employers' and management staff's responsibility for managing health and safety at work and it is also considered as a part of efforts to address changes to the work culture, normalise help-seeking and create a supportive work environment. Awareness-raising and training are also essential in **reducing stigma** in healthcare organisations and improving processes to encourage individuals with mental health struggles to seek support. Specific examples of training offered to HeSCare organisations can include, for example, training in ergonomics to prevent **musculoskeletal risks** among healthcare and nursing staff (European Commission, 2011). Worker health and wellbeing can be promoted through proper information and training on **violence and harassment** at work, in combination with **training on PSRs** (ILO, 2020). The WHO advises training managers to support their workers' mental health and to educate workers in mental health literacy and awareness. This aims to enhance mental health-related knowledge and attitudes in the workplace, including reducing stigmatising views (WHO, 2022).

Of the case examples in this study, there are **formal and informal training opportunities for HeSCare workers to try to mitigate PSRs** in their organisations. As part of the WIGEV psychological services provided (see Box 14), workers working in the organisation were entitled to free training to become psychological first aiders in order to be able to provide peer support in instances of secondary trauma among staff within their work (e.g. a patient dying). Another example of formal training was part of the measures implemented by the EWC in a French LTC organisation (see Box 9). One of the pillars of the standard introduced on social and psychosocial support for workers included training and tools to better manage stress, especially with regard to harassment at work by residents and families of patients.

Training can also be an effective secondary measure to prevent and mitigate burnout and enhance professional wellbeing among HeSCare workers. Box 11 illustrates the impact of mind-body medicine professional skills training on healthcare professional burnout.

#### Box 11: Five-day mind-body medicine professional training programme

A five-day mind-body medicine training programme for healthcare and social care professionals aimed to address burnout and improve quality of life. Participants included physicians, nurses, social workers and psychologists. Delivered by the centre for Mind-Body Medicine, the programme combined large group lectures on topics such as meditation, trauma and mindful eating, with small breakout sessions practising biofeedback, guided imagery and other techniques. These interventions promoted self-care, resilience and emotional wellbeing, resulting in statistically significant improvements in emotional exhaustion, depersonalisation, personal accomplishment and burnout, with the most significant gains in emotional exhaustion and depersonalisation sustained at 12 months.

Source: Weinlander et al. (2020)

## 5.2.8 Regulatory initiatives and social dialogue

Many **regulatory-level interventions** can be considered as primary or preventive measures (EU-OSHA, 2015b). Policy initiatives in the area of PSR prevention and management include, for example, legislation and non-binding or voluntary policies developed by international, European and national organisations. They can also take the form of specifications, guidance and social partner agreements (EU-OSHA, 2012) or information campaigns by social partners or policymakers.

Recently, Lithuania has put in place some regulatory initiatives at the national level (see Box 12), including National Nursing Policy Guidelines (2016-2025) and an Action Plan in order to strengthen the nursing profession by providing a clearer statutory framework and granting more rights in healthcare delivery such as ensuring more adequate regional distribution of nurses to address workload issues.

## Box 12: Action plan to improve the psychological wellbeing of staff in the personal healthcare sector in Lithuania

In order to make medical professions safer and more attractive, focusing on addressing PSRs and improving working and studying conditions, the Lithuanian government issued an Action Plan for Ensuring the Psychological Well-being of Employees in the Personal Healthcare System (2021-2024).

To implement the Action Plan, the Ministry of Health established a working group composed of representatives from medical associations, medical student organisations, mental health professionals (including psychologists), major hospitals and key social partners in the sector to support the development of the Action Plan. Many of the stakeholders participating in the working group were already actively engaged in topics related to the psychosocial work environment, having raised their concerns through formal and informal channels. Therefore, communication between the ministry and the key stakeholders was already in place prior to the establishment of the working group (Interview 1 data).

The Mental Health Division of the Ministry of Health led the development of the Action Plan, with contributions from the working group through expert opinions, positions and consolidated suggestions. The ministry representatives collected inputs from the social partners, conducted background research, including reviewing online resources and international documents, particularly from the WHO on challenges for the health workforce and solutions, and gathered relevant data from registers and national statistics. This evidence served as a background, with practical solutions and proposed measures being identified by and discussed with the working group (Interview 1 data).

Some 12 working group meetings and several parliamentary hearings were held to develop and approve the Action Plan. The Action Plan is organised around six objectives, covering broad measures, from changes in legislation to awareness raising, and providing options for professional development and supervision, further operationalised through activities. The objectives were as follows:

- To strengthen the competencies of medical and other health science students and their lecturers in the field of mental health and to improve psychological wellbeing in higher education institutions.
- To reduce stress risk factors and increase the psychological resilience of personal healthcare professionals and other personal healthcare employees.
- To empower personal healthcare managers to care for the psychological wellbeing of employees and evaluate their performance in this area.
- To define the factors and principles that create a work environment conducive to the psychological wellbeing of employees and to encourage personal healthcare to apply them in practice.
- To reduce and properly manage psychological violence (including mobbing) in personal healthcare.
- To ensure crisis management and psychological support for personal healthcare professionals.

For more details, please see the self-standing Lithuanian case study.<sup>56</sup>

The case study on the EWC (Box 9) showcases the benefits of using social dialogue to create standards and working practices conducive to reducing PSRs. This case study, along with the Lithuanian case study in Box 12, shows how regulatory initiatives can operate on different scales. However, while the EWC is **voluntary in nature**, as the organisation chose to implement it, the Lithuanian Action Plan and creation of a statutory framework **enforce more sustainable nursing practices nationwide**.

## 5.3 Creating a supportive work environment

A supportive work environment has been identified in the literature as an important factor to prevent and mitigate PSRs (Pollock et al., 2020). Creating a supportive work environment covers a broad range of efforts aimed at empowering workers to openly discuss their mental health issues, ensuring they feel supported by their colleagues and managers, establishing clear and effective communication channels, and implementing well-defined policies and processes to support workers dealing with mental health issues. Efforts to minimise third-party violence as well as harassment, bullying, and undermining and aggressive behaviours within HeSCare organisations also contribute to creating a supportive work environment. Examples of such interventions are presented in the remainder of this section.

Interventions aimed at creating a supportive work environment tend to address such PSRs as poor social support, high levels of mental health-related stigma, violence, bullying and harassment. However, creating a supportive work environment is a complex process, requiring actions at different levels of an organisation and it can take a long time to achieve results and see the difference. The recent research report produced by Teoh et al. (2023) indicated that staff wellbeing interventions are more effective when they adopt a systemic approach and incorporate activities at group, leader and organisation levels and also consider the overarching context. Interventions aimed at individuals alone are not likely to be sufficient to address the complex issues related to improving staff wellbeing and achieving a supportive work environment (Teoh, et al., 2023).

## 5.3.1 Improving social support in the workplace

Findings from the literature on prevention measures in the HeSCare sector conducted for this study show that workers generally appreciate having a workplace as a meeting point where they can offer help to each other, including built-in, scheduled opportunities for a team to check in on each other's wellbeing and provide peer support during shifts (ETUI, 2022b). Several case study examples have been identified during this study that aim to establish space for healthcare workers to come together to provide peer support. For example, interviews for the Danish case study identified that peer support groups had been

66

<sup>&</sup>lt;sup>56</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania">https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania</a>

set up at a hospital where a trained psychologist works with head nurses and doctors, to provide a space to identify work-related issues, and enable reflection, peer learning and support. The 'Team talk' initiative was initiated by staff to provide a space for reflection across the team on clinical practice. Further details about this initiative are presented in Box 13.

#### Box 13: 'Team talk' at the regional hospital in Horsens, Denmark

Team talk is a tool developed by workers in the context of the workshops that were set up to increase staff autonomy and control at the Department of Gynaecology and Obstetrics. Team talk created a space for learning and reflection among staff on everyday clinical practice. In this case, after the birth, the team gathers and everyone reflects on four questions: 1) What have we done? 2) What worked well? 3) What could have been done differently? 4) What did we learn? The idea is to be short and pragmatic (Storkholm & Christiansen, 2023): it is a way of creating psychological safety and practising feedback and collaboration. It is a space where everything can be shared, in a safe space, and as the Head of Department describes: 'A characteristic of Team talk is that everyone has to say something. It helps to break down the barrier for new workers who may not dare to say anything. Here they *have* to say something' (Graugaard, 2022). **For more details, see the self-standing Danish case study.** 57

# 5.3.2 Providing mental health support and reducing mental health-related stigma

Establishing support networks, including clinical psychologists or mental health support teams, and proactively offering this support is highly important in the mitigation of emotional demands on individuals (Interview data, 2024). In practice, such interventions can take different forms and encompass both the individual support for workers who need it and organisational-level measures such as training, raising visibility of the PSRs and mental health issues, access to resources, and breaking barriers related to negative attitudes towards mental health issues and addressing stigma associated with them. An example of such intervention covered during this study is the services provided by the Psychological Counselling Centre to the Vienna Health Network (WIGEV) employees, which are presented in more detail in Box 14.

#### Box 14: The Psychological Counselling Centre of the Vienna Health Network (WIGEV) in Austria

In 1983, the Vienna Health Network (Wiener Gesundheitsverbund (WIGEV)) established the Psychological Counselling Centre to offer psychological services for nursing school students (Schulpsychologischer Dienst). The service was initially established to address learning difficulties, concentration problems and addiction issues among students. In 2000, the scope of the service was expanded to encompass all employees of the WIGEV, with a view to addressing issues such as sexual harassment, bullying, conflicts and burnout. This broader mandate resulted in a wider range of activities implemented by the centre, involving information and awareness-raising activities such as seminars and workshops for staff and management teams as well as measures to support those who are already at risk or who are experiencing mental health challenges. The ultimate goal is to provide psychological support to staff and improve their mental health and wellbeing. Currently, six psychologists and one assistant are working at the centre, supplemented by six external psychologists. The main objective of the centre is to increase awareness of mental health issues among healthcare staff.

The WIGEV has also extended the role of its Psychological Counselling Centre by introducing the Psychological First Aid (PFA) service. The PFA offers immediate support to a worker involved in a

-

<sup>&</sup>lt;sup>57</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study">https://osha.europa.eu/en/publications/empowering-healthcare-workers-through-participation-danish-case-study</a>

traumatic event at the workplace, such as a medical incident resulting in severe health deterioration of a patient. The implementation of the PFA was carried out in two steps.

- In 2017, peer/collegial support projects ('KOHI Kollegiale Hilfe') were initiated independently in two of the clinics (the Hietzing and the Floridsdorf Clinics) belonging to the WIGEV. The Psychological Counselling Centre was involved in an advisory role and as the provider of training for peer first aiders from the beginning.
- In 2022, the Board of WIGEV commissioned the Psychological Counselling Centre to create a concept for the company-wide introduction of the PFA and to implement it in all its settings. In collaboration with the project teams at the Hietzing and Floridsdorf Clinics, the Psychological Counselling Centre developed the concept and introduced the project at the beginning of 2023. This confirms the commitment of the management to ensure a sense of security and belonging for all workers.

The project goals were defined from the organisation's and its workers' points of view. The goals for the organisation were to ensure that employees are not left alone in times of crisis when a traumatic event occurs and to build and implement a structured and helpful approach to dealing with employees after a critical event across the entire organisation. From a worker's point of view, the objectives were to offer easy access to support, to prevent acute stress reactions, to promote orientation, a sense of security and stability in the acute situation, and to expand the competencies of trained workers in handling people in crisis situations.

For more details, please see the self-standing Austrian case study.<sup>58</sup>

During the COVID-19 pandemic, when employees were dealing with many COVID-19-related deaths during their shifts, having access to formal therapy was very important and enabled staff to work through this trauma, which could potentially contribute to preventing burnout in the longer term. Giving HeSCare workers the opportunity to participate in a collaborative space to share their experiences of emotional burden can help them realise they are not alone and be the first step towards collectively mitigating the source of the emotional strain in their work, thus creating a more supportive working environment overall.

The confidential nature of mental health support initiatives has been common to several interventions analysed during the study, including the initiative implemented by the WIGEV as presented above. It enables workers to discuss their issues openly and without the fear of negative consequences for their work, particularly considering the **stigma** that can be associated with seeking mental health support and the high emotional and ethical burden linked to this.

Specific activities linked to **reducing mental health stigma** can include a broad range of interventions ranging from formal training to managers and staff as well as efforts to change the narratives and attitudes associated with mental health as argued by Kirk (2021). The author proposes several prevention measures to address mental health stigma, which are summarised in Table 3.

-

<sup>&</sup>lt;sup>58</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/increasing-mental-health-awareness-among-staff-work-viennas-psychological-counselling-centre">https://osha.europa.eu/en/publications/increasing-mental-health-awareness-among-staff-work-viennas-psychological-counselling-centre</a>

Table 3: Overview of the measures to reduce mental health stigma in healthcare sector proposed by Kirk (2021)

Proposed measure	Suggested actions to create a new culture
Transform the narrative	Use news stories, professional communication and role models to share personal stories of help seeking, recovery and healing, courage and hope as with any other medical concerns.
Address regulatory screening questions	Use questions about health conditions in regulatory screening exercises that do not treat mental health diagnoses as an impairment, encourage help seeking, and do not distinguish between mental and physical health.
Expand perspective of mental health disorders	Conceptualise mental health disorders as complex disorders with biological, psychological, behavioural and sociocultural factors.
	Address cognitive (beliefs and stereotypes), affective (attitudes and prejudice), and behavioural (e.g. discrimination versus support) aspects of stigma among colleagues and leaders.
Implement evidence- based practices	Have respected colleagues with a history of depression give presentations.
	Train leaders and colleagues to: (1) recognise depression, and (2) use supportive skills.
Use non-judgemental language	Maintain awareness of commonly used terms, phrases and labels that have judgemental connotations.
	Show respect to each other as members of the medical profession.
Create a culture of caring for each other	Provide peer support and care for each other in sickness and in health.
(professional courtesy)	Discuss professional or personal challenges and stressors without judgement.
Learn to be a patient	Establish routine medical care with a trusted primary care physician before an urgent need occurs.
	Develop acceptance of the physician–patient relationship.
Address training curriculum	Create visible structures and processes for normalising help-seeking and encouraging easy access to care (e.g. opt-out health checks and affordable, schedule-friendly services).

Source: Adapted by research team based on Kirk (2021)

According to several stakeholders, awareness-raising activities and training are essential in **reducing stigma** in healthcare organisations and improving processes that can encourage individuals to seek support and help them to return to work after longer absences due to mental health struggles (Interview data, 2024).<sup>59</sup>

<sup>&</sup>lt;sup>59</sup> Interviews with representatives of one social partner and two research organisations, August and September 2024 (Eurofound, FESE, Leuven Institute).

## 5.3.3 Addressing violence and adverse social behaviour

Effective strategies against the risk factor of adverse social behaviour, such as violence, (sexual) harassment and bullying, can also be seen as an integral part of a supportive working environment and workplace culture. This includes both initiatives that are aimed at addressing third-party violence and those that are aimed at reducing violence, harassment, bullying, mobbing and other forms of adverse social behaviour in the workplace.

Clear policies and specific procedures for psychological and sexual harassment in the workplace (at the primary level) and training staff on harassment and violence prevention, together with providing reporting and support mechanisms (at the secondary level), have been identified as possible prevention measures for these PSRs (ETUI, 2022c). Several professional bodies and international organisations active in the field of OSH have developed guidance on how to address work-related violence, which could be used by HeSCare organisations. Sector-specific guidance is also available, with one of the most notable examples being the 'Framework guidelines for addressing workplace violence in the health sector' developed in cooperation between the WHO, ILO, International Council of Nurses (ICN) and Public Services International (PSI). This suggests four types of actions that are needed for reducing violence in the healthcare sector: violence recognition; risk assessment; intervention; and monitoring and evaluation (ILO et al., 2002).

Organisational-level interventions to prevent work-related violence include establishing a supportive workplace culture, developing clear policy statements, ensuring adequate staffing, adopting a supportive management style, improving information and communication, optimising work organisation and job design, and setting working hours that prevent excessive work pressure (ILO et al., 2002). In this context, clear and well-established policies on zero tolerance for violence, harassment, bullying, mobbing and other forms of adverse social behaviour are essential for preventing incidents, raising awareness and outlining the necessary steps to take when such behaviours occur. Developing national and workplace policies on prevention of violence in healthcare institutions has gained attention in the context of the implementation of Lithuania's Action Plan for Ensuring the Psychological Well-being of Employees in the Personal Healthcare System. One of the objectives of the Action Plan was to reduce and properly manage psychological violence (including mobbing) in personal healthcare. An overview of the associated activities and their results are presented in Box 15.

#### Box 15: Violence prevention and management in healthcare institutions in Lithuania

The Action Plan for Ensuring the Psychological Well-being of Employees in the Personal Healthcare System implemented between 2021 and 2024, identified violence prevention as one of the objectives, with the following actions established for its implementation:

- establish a model procedure for the prevention, recognition and response to psychological violence in personal healthcare;
- provide training and methodological support;
- monitor effectiveness;
- strengthen confidentiality mechanisms and institutional cooperation if violence is reported;
   and
- implement standards of performance for specialists serving the Ministry of Health's hotline for reporting psychological violence.

In the context of the implementation of the Action Plan, in 2021, a violence response algorithm, defining how to prevent and address violence and harassment when it is identified in healthcare institutions, was developed and tested at one of the large hospitals. Based on its results, in 2023, the ministry approved recommendations for developing and implementing a *Violence and Harassment Prevention Policy* in healthcare institutions. These included a recommended process for developing institutional policies for violence prevention and required all healthcare institutions under the Ministry

of Health's authority to review and, if necessary, update their violence and harassment prevention policies (Lithuanian Ministry of Health, 2023a). Between 2023 and 2024, indicators related to ensuring a psychologically safe work environment were included in the performance evaluation criteria of Lithuanian National Health System institutions: 'Number of implemented preventive actions and/or measures based on the approved Violence and Harassment Prevention Policy' (2023, with a minimum of two required), and 'Prepared and approved Action Plan for the Implementation of the Violence and Harassment Prevention Policy 2024–2027', requiring institutions to implement at least 50% of the planned measures (2024).

The Institute of Hygiene launched a training programme with methodological materials and an elearning module on psychological violence prevention in 2022. Over 6,300 healthcare workers have completed this training (Ministry of Health, internal document).

The Ministry of Health analysed the relevant laws and found that there was no legal provision allowing healthcare services to be stopped if a patient's behaviour puts a medical professional at risk or if disrespectful or inappropriate actions lead to negative consequences for the health of healthcare workers. Therefore, the ministry proposed amendments to relevant legislation (Lithuanian Ministry of Health, 2023b). One of the most important changes was the amendment to the Law on Patient Rights (Article 12, paragraph 9), which now allows healthcare providers to refuse or terminate services if a patient's actions pose a threat to the health or life of a healthcare worker or another employee of the institution (Republic of Lithuania, 2025a; Republic of Lithuania, 2025b).

For more details, please see the self-standing Lithuanian case study. 60

Further, multi-sectoral guidelines to prevent and tackle third-party violence and harassment related to work have recently been revised by the European sectoral social partners for hospitals and healthcare, local and regional governments, central governments, education, hotels, and restaurants and cafés (hospitality) (HOSPEEM, 2025). These guidelines build upon the ILO's Violence and Harassment Convention (ILO, 2019), existing policies, and collective agreements at national level to 'address pressing challenges in light of increased episodes of third-party violence and harassment at work following the COVID-19 pandemic and a changing world of work' (HOSPEEM, 2025, p. para 3).

The International Association for Healthcare Security and Safety (IAHSS) Foundation conducted a literature review of the sources examining the hospital-level interventions for violence prevention in hospitals. It identified the following types of interventions, largely related to the training and awareness-raising among staff that could contribute to reducing violence in hospitals (IAHSS Foundation, 2022):

- increasing the confidence of staff to manage aggressive behaviour;
- increased de-escalation training for staff, including through the use of simulation techniques;
   and
- developing a better understanding of workplace violence in the healthcare sector.

The same organisation, in cooperation with the American Hospital Association (AHA), has developed several recommendations for hospital leadership for creating violence reduction strategies. These include prioritising the culture of safety, risk assessment and mitigation strategies, trauma support and collaboration with community partners, hospital-based programmes to prevent ongoing or future violent incidents (IAHSS & AHA, 2021).

Recent research conducted by Lisak et al. (2021) also found a link between openness to cultural diversity and cultural sensitivity, particularly in multicultural settings, in reducing violence towards hospital staff at emergency departments. The study particularly found that when the patient or family members were positively associated with the healthcare providers' cultural characteristics and when the information was available in their own language, satisfaction with the care provided was higher and resulted in lower

\_

<sup>&</sup>lt;sup>60</sup> More information is available at: <a href="https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania">https://osha.europa.eu/en/publications/action-plan-and-collective-agreements-help-ensure-healthcare-employee-wellbeing-lithuania</a>

tendencies to show aggressive behaviour towards healthcare providers. This research highlights the importance of investing in policies, processes and procedures aimed at improving cultural sensitivities, including the accessibility of materials in different languages, which are likely to improve patient experience and reduce the aggressive tendencies towards staff (Lisak et al., 2021).

## 5.4 Success factors for the implementation of initiatives

Whether or not an intervention is effective and successful depends on many factors. In order to examine this more closely, based on the findings from this study and following the **realist review of workplace-based organisational interventions aimed to promote mental health at work among HeSCare workers** proposed by Gray et al. (2019), in this section the factors that can contribute to the successful implementation of preventive initiatives are presented.

- The importance of ensuring that PSRs are an integral part of risk assessments in the HeSCare sector: regular assessment of the PSRs as part of the OSH risk assessment exercise helps to identify and prioritise the highest risks and develop tailored follow-up actions. Identifying specific risks early enables organisations to effectively manage them by eliminating their sources or implementing control, thereby preventing poor physical and mental health outcomes for workers.
- The importance of aligning intervention strategy and workers' mental health needs: interventions and prevention measures should be aligned with the reasons for the intervention and the goals and be designed to fit the specific needs of the workforce. For example, an intervention to reduce stress should be tailored to the unique stressors and PSR factors of a particular work environment. This is especially important in the case of the HeSCare sector, which experiences high levels of PSRs and mental health outcomes
- The importance of buy-in from key stakeholders: the active involvement of key stakeholders within the organisational setting fosters a culture of collaboration and open communication, which is necessary for identifying and addressing the PSRs in HeSCare organisations (Gray et al., 2019). Stakeholder buy-in facilitates the visibility, implementation, monitoring and evaluation of the intervention, ensuring that it is effective and can be adjusted as needed based on feedback received from workers and other stakeholders.
- The importance of securing management commitment: management support provides the necessary resources and authority to implement and maintain PSR prevention measures. This has been highlighted as an important success factor in most of the case studies for the HeSCare sector covered by this study. The initiation of measures and interventions to address mental health and PSRs necessitates an appreciation of the significance of them. It is only when such acknowledgement is present that the implementation of necessary actions can be initiated. Further, as this type of intervention is a long-lasting activity and the effects are visible only in the long term, sustainable commitment is crucial.
- The importance of the involvement of social partners: several of the case studies carried out for this study have highlighted the importance of working with social partners in developing PSR prevention measures. The social partners can provide sector and organisational expertise, contribute to the development of the vision and the objective setting at the organisational and sectoral levels, which are crucial for the successful implementation of the PSR prevention measures. Worker representatives are likely to know in detail the issues that workers face in relation to OSH and can therefore work closely with them and with management to identify solutions. In addition, the social partners can make use of resources, schemes and budgets available to develop specific tools designed to prevent and manage PSRs and to actively promote and support their use among their members.
- The importance of worker participation: a lack of participation of workers or certain groups of workers is closely linked to an intervention not succeeding or not achieving the anticipated outcomes (Gray et al., 2019). This negative effect on interventions was confirmed by another study (Montano et al., 2014) alongside the findings from this study. To allow workers to

participate in interventions, they need to be provided with the time and capacity to participate, which may involve ensuring management support. The review by Gray et al. (2019) and findings from this study also highlighted that a positive psychosocial climate is associated with worker engagement, and that workplace culture can significantly influence the effectiveness and outcomes of primary prevention measures. Other sources confirmed that a positive learning climate for everyone involved in the implementation of an intervention can be considered to facilitate implementation (Pollock et al., 2020).

- Managing complexity: mental health in the workplace is influenced by a complex interplay of factors at the individual, organisational and societal levels, making it difficult to pinpoint a specific area or PSR on which to focus for targeted intervention and to accurately measure its outcomes. As such, a positive factor identified by this study is allowing workers themselves to identify the areas of PSR that require focus and to develop ideas and practical solutions to improve their working environment.
- Ensuring sustainability and long-term impact of interventions: some of the studies reviewed reported short-term improvements in the mental health of healthcare workers. However, given the complexity of the healthcare environment, Gray et al. (2019) recommended focusing on continuous improvement within the context of a comprehensive transformation strategy, rather than relying on isolated or short-term interventions.

# 6 Policy pointers

The research carried out for this study has highlighted a number of common themes in relation to work-related PSRs and mental health-related outcomes in the European HeSCare sector. It is clear that this sector has a high prevalence of PSRs and mental health issues. This is due to issues such as the nature of the work in the sector, factors related to the workforce itself, such as the gender, age and migrant status of many of the workers, which can increase exposure to risk of PSR factors due to issues such as occupational segregation in the case of gender, greater risk of anxiety and depression in the case of younger workers, and increased possibility of worse working and employment conditions in the case of migrant workers, and other factors around labour shortages, work intensity, and lack of autonomy and influence over work. These factors can contribute to a range of mental health outcomes, such as elevated levels of stress and anxiety, sometimes leading to burnout, problems with sleep and general fatigue. Further, there is a lingering impact from the COVID-19 pandemic, in terms of the levels of anxiety and stress felt by workers in the sector not having been adequately addressed.

It is clear that there is a strong link between a healthy and safe HeSCare workforce and the level of quality of the services that these workers provide: if the OSH of HeSCare sector workers is compromised, this will have a detrimental impact on service quality. Overall, therefore, it is key that the HeSCare sector has a healthy workforce, which benefits not only the workers themselves but also ensures that they can provide good quality of care to patients.

Based on the desk research and interviews carried out, and in particular the examination of the eight case studies included in this report, there are some common themes in terms of what can be done to minimise PSRs and improve mental health for workers in this sector. These link to policy pointers for policymakers, stakeholders and social partners.

## 6.1 Comprehensive risk assessments

The sector has a higher prevalence of PSRs and mental health outcomes compared to other sectors and therefore, in spite of the increasing number of initiatives to manage PSRs that are implemented in HeSCare workplaces, there remains much to do. This includes developing and putting into place systematic and structural risk assessments and developing and implementing protocols and policies designed to prevent and manage the factors that can increase PSRs, such as harassment, violence and working hours culture.

There is a clear interlinkage of PSRs and MSDs, as shown in this report. MSDs can contribute to stress and mental overload, and vice versa, and this is particularly relevant in the HeSCare sector, given the high prevalence of both musculoskeletal risks and PSRs. Therefore, **regular risk assessments in** 

**HeSCare organisations should include PSR factors in the same way as musculoskeletal risk factors** and should be fully integrated into these regular risk assessments. Follow-up actions should cover PSRs where risk assessments require this. The social partners can support organisations in risk assessment at the workplace.

#### 6.2 Support networks

It is clear that the **creation and maintenance of support networks** has a significant impact on mitigating the potentially damaging effects of the emotional demands placed on workers in this sector. If workers have a safe space in which they can debrief and express their views, with the support of colleagues who have had similar experiences, as well as that of a trained psychologist, this can significantly reduce PSRs.

Therefore, setting up peer support groups and offering access to free psychological support on or offsite should be considered, as this has been found to be very beneficial for workers in this sector. The case studies have shown that it can help workers to debrief and discuss their concerns and issues in a supportive environment. In addition, such groups are an excellent space for developing bottom-up initiatives to help mitigate PSRs, based on real experiences. Combining this with management support and involvement, as suggested above, can lead to the development of effective practices to support workers.

#### 6.3 Individual and collective autonomy and control

**Promoting autonomy at both an individual and a collective level** — both within teams and collectively under the leadership of a trade union or worker health and safety representative body at the workplace — is key to improving mental health for workers in this sector, and in turn preventing burnout. Many of the case studies explored in this study have measures in place to increase autonomy in terms of work scheduling, which then enables workers to take time off when they need it and to avoid last-minute and disruptive shift working.

Policymakers, stakeholders and the social partners should focus on **developing initiatives that give workers a sense of autonomy and control over their work**, as this is key in preventing PSRs. Any initiative that achieves this will therefore be helpful to workers. Bringing workers together to discuss solutions to workplace challenges and then giving these groups the responsibility to implement these solutions is an example of an initiative that could be easily implemented in different types of organisations, given that the costs involved are not high.

From the case studies in this research, it is clear that one of the key PSR factors for workers in this sector is the nature of working schedules. In many cases, schedules can lead to overwork, causing stress, anxiety, fatigue and burnout, and this also puts patients at risk. **Developing initiatives that give workers more control over their working time schedules should therefore be encouraged**, and there are a number of good examples of this in this research.

## **6.4 Ensuring adequate staffing levels**

Linked to the above point, it is important to **ensure that staff levels are adequate** to deal with the level of patient care required in order to avoid overloading individual staff members. This can be difficult in a sector that often struggles to recruit due to issues related to the image of the sector and sometimes quite unfavourable working conditions. Increasing the attractiveness of the sector by reducing PSRs in a range of areas, such as increasing the autonomy that workers have over issues such as shift scheduling, as evidenced above, can and has helped to attract more workers.

Given that staffing shortages are often at the root of long hours and working time pressure, policymakers, stakeholders and social partners, working with organisations in the sector, need to tackle this problem by looking at issues such as the attractiveness of the sector, for example, ensuring that pay and working conditions are adequate, and trying to ensure that funding for the sector overall is realistic and adequate.

#### 6.5 Encouraging worker involvement

**Involving workers in the management of PSRs** can have a significant impact on managing these risks. Formal worker representatives can work well with management through formal worker voice channels or informal mechanisms. The presence of worker representatives in an organisation can bring worker perspectives and experiences to management in a way that individual workers would not be able to. Worker representatives can also input into the formulation of policies and procedures and their implementation. Linked to this, **it is key that senior management supports initiatives**, as this will give guidance and direction, ensuring that the management of PSRs remains on the management agenda.

Workers should therefore be systematically involved in the prevention and management of PSRs. This is easier in cases where there is formal worker representation, either in the form of a trade union or statutory health and safety representation. Involving and consulting workers in areas such as the identification and monitoring of PSRs and in the design and implementation of risk prevention and management tools and procedures increases worker engagement, raises awareness of these issues and gives workers a sense of control over their situation, which in itself is a PSR prevention measure.

#### 6.6 Providing information and training

The **provision of information and training on PSRs** to the workforce can have a considerable positive impact on the management and mitigation of these risks. This increases awareness and understanding of PSRs and can help generate a culture in which open discussion about these risks can take place.

Policymakers, stakeholders and social partners should therefore ensure that workers receive information and training about PSRs, either from their employers or complementing what employers are offering, in order to raise awareness and knowledge of these risks. This can be carried out in cooperation with worker representatives, if they exist, but should always have the backing of the organisation's management.

#### 6.7 Proactive prevention and management of PSRs

Proactive prevention and management of PSRs is also key. This includes monitoring and reporting and adjusting policies and procedures to adapt to evolving risks and changes in the overall context. This is most effective when there is buy-in from the leaders of an organisation, which will ensure that proactive risk management remains high on the agenda of the organisation. This was clear in all the case study examples included in this study. Overall, investing in research and data collection is crucial in terms of understanding the evolving landscape of PSRs in the HeSCare sector. Policymakers should support efforts to collect comprehensive data on PSRs and their impact, using this information to inform evidence-based decision-making and policy development.

In relation to this, guidance and tools should be developed to support organisations to assess and better manage PSRs. Policymakers, stakeholders and social partners should work together to formulate these tools and ensure that they are tailored to the needs of specific parts of the sector and also to the needs of smaller organisations.

This research has also found a link between openness to cultural diversity and cultural sensitivity, particularly in multicultural settings, in reducing violence towards hospital staff at emergency departments. Therefore, **investing in policies**, **processes and procedures aimed at improving cultural sensitivities**, including the accessibility of materials in different languages, is also a key way of improving patient experience and reducing aggression towards staff.

# 6.8 Focusing on the long term

It is also key that initiatives focus on the long term rather than concentrating on short-term and temporary solutions. Long-term and sustained impact is more likely to result in culture change, which will help to ensure the sustained management of PSRs. Management's engagement in the prevention and management of PSRs is therefore important, as this will create a good risk prevention and management culture and foster open dialogue about these issues. Policymakers, stakeholders and social partners can play a role in this by working with organisations and employers to create and foster

this type of culture. This also helps to ensure that interventions are embedded and have a long-term focus, rather than a short-term impact.

### 6.9 Making use of available funding

Finally, the case study examples highlighted in this report are all excellent examples of successful cooperation and the creation of innovative solutions in terms of PSR prevention and mitigation. In order to facilitate the development of these types of initiatives, policymakers, stakeholders and social partners should **aim to seek out and use any available funding** for pilot initiatives and projects that can be implemented by an organisation. Information campaigns about available funding could target organisations in this sector.

#### References

- Ala-Mursula, L. et al., 2002. Employee control over working times: associations with subjective health and sickness absences. *J Epidemiol Community Health*, 56(272-278).
- Allinger, B. A. G., 2022. *Impact of Covid-19 Pandemic on the Social Service sector and the role of social dialogue*, s.l.: s.n.
- Andina-Díaz, E., Rodríguez-Puente, Z., Arias-Gundín, O. & Pérez-Rivera, F. J., 2024. Lack of autonomy and professional recognition as major factors for burnout in midwives: A systematic mixed-method review. *Jan*, 81(2).
- Arbejdstilsynet, 2020. Executive order on psychosocial working environment, s.l.: The Danish Working Environment Authority's Executive Order no. 1406 of 26 September 2020 on psychosocial working environment.
- Arbejdstilsynet, s.d. *Heavy workload and time pressure*. [En ligne]

  Available at: <a href="https://at.dk/en/regulations/guidelines/heavy-workload-time-pressure-4-1-1/">https://at.dk/en/regulations/guidelines/heavy-workload-time-pressure-4-1-1/</a>
  [Accès le 16 September 2025].
- AXA Asia & Columbia University WHO CGMH, 2020. Supporting Mental Health of Employees During and Beyond Covid-19, s.l.: s.n.
- Bannai, A. & Tamakoshi, A., 2014. The association between long working hours and health: A systematic review of epidemiological evidence. *Scand J Work Environ Health*, 40:5(18).
- Beard, C. P., 2023. What Is Self-Stigma and Why Does It Hurt?. [En ligne]
  Available at: <a href="https://www.psychologytoday.com/us/blog/from-lab-to-real-world/202011/what-is-self-stigma-and-why-does-it-hurt">https://www.psychologytoday.com/us/blog/from-lab-to-real-world/202011/what-is-self-stigma-and-why-does-it-hurt</a>
  [Accès le May 2025].
- Bernal, D. et al, 2014. Work-related psychosocial risk factors and musculoskeletal disorders in hospital nurses and nursing aides: A systematic review and meta-analysis. *International Journal of Nursing Studies*, Volume 52, p. 16.
- Bertuzzi, V. et al., 2021. Psychological Support Interventions for Healthcare Providers and Informal Caregivers during the COVID-19 Pandemic: A Systematic Review of the Literature. *Int J Environ Res Public Health*, 18(13).
- Boccuni, et al, 2021. Second National Survey on Health and Safety in the Workplace (Insula2). [En ligne]

  Available at: <a href="https://www.inail.it/portale/it/inail-comunica/pubblicazioni/catalogo-generale/catalogo-generale-dettaglio.2021.04.seconda-indagine-nazionale-sulla-salute-e-sicurezza-nei-luoghi-di-lavoro-insula2-.html?all=true">https://www.inail.it/portale/it/inail-comunica/pubblicazioni/catalogo-generale/catalogo-generale-dettaglio.2021.04.seconda-indagine-nazionale-sulla-salute-e-sicurezza-nei-luoghi-di-lavoro-insula2-.html?all=true</a>
- Bouillon-Minois, J.-B.et al., 2023. A cross-sectional study to assess job strain of emergency healthcare workers by Karasek questionnaire: The SEEK study. *Front Psychiatry,* Volume 13.
- Bryan, M.L. et al., 2021. The effect of mental and physical health problems on sickness absence. *Eur J Health Econ* 22, p. 1519–1533.

- Buckingham, S. et al., 2020. *Precarious work from a gender and intersectionality perspective, and ways to combat it,* s.l.: European Parliament, Directorate-General for Internal Policies of the Union.
- Cabrita, J. & Cojocariu, V., 2023. Healthy social dialogue for a healthy healthcare sector. 22 November.lssue https://www.eurofound.europa.eu/en/commentary-and-analysis/all-content/healthy-social-dialogue-healthy-healthcare-sector.
- Caprile, M., Miguel, P. S. d., Welz, C. & Contreras, R. R., 2018. *Measuring varieties of industrial relations in Europe: A quantitative analysis*, s.l.: s.n.
- Cedefop, 2023a. *Care workers: skills opportunities and challenges.* [En ligne]
  Available at: <a href="https://www.cedefop.europa.eu/en/data-insights/care-workers-skills-opportunities-and-challenges-2023-update.">https://www.cedefop.europa.eu/en/data-insights/care-workers-skills-opportunities-and-challenges-2023-update.</a>
- Cedefop, 2023b. Care workers: skills opportunities and challenges (2023 update), s.l.: s.n.
- Cedefop, 2023c. *Handling change with care: Skills for the EU cre sector.* [En ligne] Available at: https://www.cedefop.europa.eu/files/9185\_en.pdf.
- Centola, F. et al., 2024. Report on analysis of legislation, policies, care frameworks and funding schemes, s.l.: WELL CARE Project.
- Choi, S., Yi, Y. & Kim, J., 2018. Exposure to Adverse Social Behavior in the Workplace and Sickness Presenteeism among Korean Workers: The Mediating Effects of Musculoskeletal Disorders. *Int J Environ Res Public Health*.
- Clariane/Korian, 2022. Common declaration of the European Works Council and Korian Management on Corporate Social Engagement and Absenteeism Reduction, s.l.: s.n.
- Coggon, D. et al., 2013. Disabling musculoskeletal pain in working populations: Is the jon, the person, or the culture?. s.l.:s.n.
- Colin, R., Wild, P., Paris, C. & Boini, S., 2022. Co-exposures to physical and psychosocial work factors increase the occurrence of workplace injuries among French care workers. Issue <a href="https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.1055846/full">https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.1055846/full</a>.
- Dall'Ora, C. et al., 2015. Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: findings from a cross-sectional study of 12 European countries. *BMJ*.
- De Hert, S., 2020. Burnout in healthcare workers: prevalence, impact and preventative strategies. [En ligne]

  Available at: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7604257/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7604257/</a>
- DG EMPL, 2021. Long-term care report Trends, challenges and opportunities in an ageing society, s.l.: Publications Office.
- Didacthem, s.d. G2P: un service disponible dans le cadre du HDS Prévoyance de la CCN 66.
- Dye, T. D. et al., 2020. Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: an analytical cross-sectional global study. *BMJ Open*.
- Economic Policy Institute, 2022. Residential long-term care worked are underpaid and at high risk during the pandemic. [En ligne]

  Available at: <a href="https://www.epi.org/press/residential-long-term-care-workers-are-underpaid-and-at-high-risk-during-the-pandemic/">https://www.epi.org/press/residential-long-term-care-workers-are-underpaid-and-at-high-risk-during-the-pandemic/</a>.
- EESC, 2020. The future of line-in care work in Europe, Report on the EESC country visits to the United Kingdom, Germany, Italy and Poland following up on the EESC opinion on "The rights of live-in care workers". [En ligne]

  Available at: <a href="https://www.eesc.europa.eu/sites/default/files/files/report">https://www.eesc.europa.eu/sites/default/files/files/report</a> on the eesc country visits to uk germa ny italy poland 0.pdf.
- EIGE, 2017. *Health: Relevance of gender in the policy area.* [En ligne] Available at: https://eige.europa.eu/gender-mainstreaming/policy-areas/health.

- EIGE, 2021. Gender inequalities in care and consequences for the labour market. [En ligne]
  Available at: <a href="https://eige.europa.eu/publications-resources/publications/gender-inequalities-care-and-consequences-labour-market?language content entity=en.">https://eige.europa.eu/publications-resources/publications/gender-inequalities-care-and-consequences-labour-market?language content entity=en.</a>
- EIGE, 2023. A Better Work-Life Balance: Bridging the gender care gap. [En ligne]
  Available at: <a href="https://eige.europa.eu/publications-resources/publications/better-work-life-balance-bridging-gender-care-gap?language content entity=en.">https://eige.europa.eu/publications-resources/publications/better-work-life-balance-bridging-gender-care-gap?language content entity=en.</a>
- ELA, 2021. Different forms of cross-border undeclared work, including through third-country nationals. [En ligne]

  Available at: <a href="https://www.ela.europa.eu/sites/default/files/2022-01/Study-report-on-different-forms-of-cross-border-UDW.2021">https://www.ela.europa.eu/sites/default/files/2022-01/Study-report-on-different-forms-of-cross-border-UDW.2021</a> EN.pdf.
- EPSU, 2024. Bulgaria: Social workers secure wage increases after months of protests, s.l.: s.n.
- Ervasti, J., 2021. Long working hours and risk of 50 health conditions and mortality outcomes: a multicohort study in four European countries. *The Lancet Regional Health Europe,* Volume 11
- ESPAN, 2024. *Addressing knowledge gaps in relation to the long-term care workforce,* Brussels: European Commission.
- ETUI, 2019. She works hard for the money: tackling low pay seconts dominated by women evidence from health and social care, working paper 2019. [En ligne]

  Available at: <a href="https://www.etui.org/sites/default/files/2021-02/WP%202019.11%20She%20works%20hard%20for%20the%20money%20M%C3%BCller%20WEB.pdf">https://www.etui.org/sites/default/files/2021-02/WP%202019.11%20She%20works%20hard%20for%20the%20money%20M%C3%BCller%20WEB.pdf</a>.
- ETUI, 2022a. A case for an EU directive addressing work-related psychological risks. [En ligne]
  Available at: <a href="https://www.etui.org/publications/case-eu-directive-addressing-work-related-psychological-risks">https://www.etui.org/publications/case-eu-directive-addressing-work-related-psychological-risks</a>
- ETUI, 2022b. Psychosocial risks in the healthcare and long-term care sectors. [En ligne]
  Available at: <a href="https://www.etui.org/sites/default/files/2022-11/Psychosocial%20risks%20in%20the%20healthcare%20and%20long-term%20care%20sectors.%20Evidence%20review%20and%20trade%20union%20views-2022.pdf">https://www.etui.org/sites/default/files/2022-11/Psychosocial%20risks%20in%20the%20healthcare%20and%20long-term%20care%20sectors.%20Evidence%20review%20and%20trade%20union%20views-2022.pdf</a>.
- ETUI, 2022c. Work-related psychosocial risks in the healthcare and long-term care sectors. [En ligne] Available at: <a href="https://www.etui.org/sites/default/files/2022-11/Work-related%20psychosocial%20risks%20in%20the%20healthcare%20and%20long-term%20care%20sectors">https://www.etui.org/sites/default/files/2022-11/Work-related%20psychosocial%20risks%20in%20the%20healthcare%20and%20long-term%20care%20sectors</a> 2022.pdf
- ETUI, 2024. Conceptualising work-related psychosocial risks: current state of the art and implications for research, policy and practice. s.l.:s.n.
- EU-OSHA thesaurus, s.d. 702741 work-related stress. [En ligne]
  Available at: <a href="https://osha.europa.eu/en/tools-and-resources/eu-osha-thesaurus/term/70274i">https://osha.europa.eu/en/tools-and-resources/eu-osha-thesaurus/term/70274i</a>
- EU-OSHA, 2002. How to tackle psychosocial issues and reduce work-related stress. [En ligne]

  Available at: <a href="https://osha.europa.eu/sites/default/files/TE4502967ENC">https://osha.europa.eu/sites/default/files/TE4502967ENC</a> 
  How to Tackle Psychosocial Issues and Reduce Work-related Stress.pdf
- EU-OSHA, 2011. Workplace Violence and Harassment: a European Picture. [En ligne]
  Available at: https://osha.europa.eu/sites/default/files/2022-03/violence-harassment-report.pdf
- EU-OSHA, 2012. Policy, law and guidance for psychosocial issues in the workplace: an EU perspective, s.l.: s.n.
- EU-OSHA, 2014a. *Calculating the cost of work-related stress and pyschosocial risks*. [En ligne] Available at: <a href="https://osha.europa.eu/sites/default/files/cost-of-work-related-stress.pdf">https://osha.europa.eu/sites/default/files/cost-of-work-related-stress.pdf</a>
- EU-OSHA, 2014b. Current and emergina occupational safety and health (OSH) issues in the healthcare sector, including home and community care. [En ligne]

  Available at: <a href="https://osha.europa.eu/en/publications/current-and-emerging-occupational-safety-and-health-osh-issues-healthcare-sector.">https://osha.europa.eu/en/publications/current-and-emerging-occupational-safety-and-health-osh-issues-healthcare-sector.</a>

EU-OSHA, 2015a. Work-life balance - Managing the interface between family and working life. [En ligne]

Available at: <a href="https://oshwiki.osha.europa.eu/en/themes/work-life-balance-managing-interface-between-family-and-working-life.">https://oshwiki.osha.europa.eu/en/themes/work-life-balance-managing-interface-between-family-and-working-life.</a>

EU-OSHA, 2015b. Work-related stress: Nature and management. [En ligne]

Available at: <a href="https://oshwiki.osha.europa.eu/en/themes/work-related-stress-nature-and-management">https://oshwiki.osha.europa.eu/en/themes/work-related-stress-nature-and-management</a>.

EU-OSHA, 2015c. Workplace violence. [En ligne]

Available at: https://oshwiki.osha.europa.eu/en/themes/workplace-violence

EU-OSHA, 2016. Women and the ageing workforce Implications for Occupational Safety and Health: A research review. [En ligne]

Available at: <a href="https://osha.europa.eu/sites/default/files/women-and-the-ageing-workforce-implications-for-occupational-safety-and-health-a-research-review-executive-summary.pdf">https://osha.europa.eu/sites/default/files/women-and-the-ageing-workforce-implications-for-occupational-safety-and-health-a-research-review-executive-summary.pdf</a>

EU-OSHA, 2020. *Musculoskeletal disorders in the healthcare sector*. [En ligne] Available at:

https://osha.europa.eu/sites/default/files/Discussion paper MSDs in health care sector.pdf

EU-OSHA, 2021a. Musculoskeletal disorders: association with psychosocial risk factors at work. [En ligne]

Available at: <a href="https://osha.europa.eu/sites/default/files/2021-">https://osha.europa.eu/sites/default/files/2021-</a>

11/MSDs association pshychosocial risks factors at work report.pdf

EU-OSHA, 2021b. New forms of work in the digital era: implications for psychosocial risks and musculoskeletal disorders. [En ligne]

Available at:

https://www.irset.org/sites/www.irset.org/files/medias/files/teleworking\_psychosocial\_risk\_factors msds implications y-roquelaure.pdf

EU-OSHA, 2021c. Return to work after MSD-Related sick leave in the context of psychosocial risks at work. [En ligne]

Available at: <a href="https://osha.europa.eu/sites/default/files/documents/Return-to-work-after-MSD">https://osha.europa.eu/sites/default/files/documents/Return-to-work-after-MSD</a> EN.pdf, p.4.

EU-OSHA, 2022a. Human health and scoial work activites - evidence from the European Survey of Enterprises on New and Emerging Risks. [En ligne]

Available at: https://osha.europa.eu/sites/default/files/2022-

02/ESENER Human health and social work activities report.pdf

EU-OSHA, 2022b. OSH Pulse - Occupational safety and health in post-pandemic workplaces. [En ligne]

Available at: <a href="https://osha.europa.eu/sites/default/files/Eurobarometer-OSH-in-post-pandemic-workplaces">https://osha.europa.eu/sites/default/files/Eurobarometer-OSH-in-post-pandemic-workplaces</a> en.pdf

EU-OSHA, 2022c. Prevention of musculoskeletal disorders and psychosocial risks in the workplace: EU strategies and future challenges. [En ligne]

Available at: https://osha.europa.eu/sites/default/files/2022-

01/Musculoskeletal%20 disorders psychosocial risks in the workplaces.pdf

EU-OSHA, 2023a. *Psychosocial risks in the health and social care sector.* [En ligne] Available at:

https://osha.europa.eu/sites/default/files/Psychosocial risk management social care en.pdf

EU-OSHA, 2023b. Working time. [En ligne]

Available at: https://oshwiki.osha.europa.eu/en/themes/working-time

EU-OSHA, 2023. *Psychosocial risks in the health and social care sector.* [En ligne] Available at:

https://osha.europa.eu/sites/default/files/Psychosocial risk management social care en .pdf

EU-OSHA, 2024a. OSH in figures in the health and social care sector. [En ligne]

- Available at: https://osha.europa.eu/en/publications/osh-figures-health-and-social-care-sector
- EU-OSHA, 2024b. Strategies for safety and health in an automated world, info sheet. [En ligne] Available at:
  - $\underline{\text{https://osha.europa.eu/sites/default/files/documents/Automation\%20of\%20tasks infosheet } \underline{\text{N.pdf}}$
- EU-OSHA, 2024c. Digital Platform Work in the Health and Social Care Sector: Implications for Occupational Safety and Health. [En ligne]
  Available at:
  https://osha.europa.eu/sites/default/files/documents/Digital%20platform%20work%20health%2
  - https://osha.europa.eu/sites/default/files/documents/Digital%20platform%20work%20health%20social%20care\_en.pdf.
- EU-OSHA, 2024d. Mental health challenges in the EU health and social care sector during COVID-19: strategies for prevention and management. Literature Review.. [En ligne]

  Available at: <a href="https://osha.europa.eu/sites/default/files/documents/HeaSCare-mental-health-covid19">https://osha.europa.eu/sites/default/files/documents/HeaSCare-mental-health-covid19</a> EN.pdf
- EU-OSHA, 2024e. Automation of cognitive and physical tasks in health and social care sector: implications for safety and health, s.l.: s.n.
- EU-OSHA, 2025. Online Interactive Risk Assessment OiRA website. [En ligne] Available at: <a href="https://oira.osha.europa.eu/en">https://oira.osha.europa.eu/en</a> [Accès le 2025].
- Eurofound, 2011. *Working conditions*. [En ligne]
  Available at: <a href="https://www.eurofound.europa.eu/en/european-industrial-relations-dictionary/working-">https://www.eurofound.europa.eu/en/european-industrial-relations-dictionary/working-</a>
- Eurofound, 2013. *Work organisation and employee involvement in Europe*, Luxembourg: Publications Office of the European Union.
- Eurofound, 2017. Sixth European Working Conditions Survey Overview report (2017 edition). s.l.:Publications Office.
- Eurofound, 2019. Working conditions and workers health. [En ligne]
  Available at: <a href="https://www.eurofound.europa.eu/en/publications/2019/working-conditions-and-workers-health.">https://www.eurofound.europa.eu/en/publications/2019/working-conditions-and-workers-health.</a>
- Eurofound, 2020a. *Living, working and COVID-19, COVID-19 series*. [En ligne]
  Available at: <a href="https://www.eurofound.europa.eu/en/publications/2020/living-working-and-covid-19">https://www.eurofound.europa.eu/en/publications/2020/living-working-and-covid-19</a>
- Eurofound, 2020b. Long-term care workforce: employment and working conditions. [En ligne] Available at: https://assets.eurofound.europa.eu/f/279033/0d2e536e51/ef20028en.pdf
- Eurofound, 2020c. Representativeness of the European social partner organisations: Human health sector, Dublin: s.n.
- Eurofound, 2022a. Social dialogue and collective bargaining in the hospital sector during the COVID-19 pandemic, Luxembourg: Publications Office of the European Union.
- Eurofound, 2022b. *Working conditions in the time of COVID-19: Implications for the future*. [En ligne] Available at: <a href="https://www.eurofound.europa.eu/en/publications/2022/working-conditions-time-covid-19-implications-future">https://www.eurofound.europa.eu/en/publications/2022/working-conditions-time-covid-19-implications-future</a>
- Eurofound, 2023a. *Psychosocial risks to workers' well-being: Lessons from COVID-19 pandemic, European Working Conditions Telephone Survey 2021 series.* [En ligne]
  Available at: <a href="https://www.eurofound.europa.eu/en/publications/2023/psychosocial-risks-workers-well-being-lessons-covid-19-pandemic">https://www.eurofound.europa.eu/en/publications/2023/psychosocial-risks-workers-well-being-lessons-covid-19-pandemic</a>.
- Eurofound, 2023b. Job quality of COVID-19 pandemic essential workers'. European Working Conditions Telephone Survey series. [En ligne]

  Available at: <a href="https://www.eurofound.europa.eu/en/publications/2023/job-quality-covid-19-pandemic-essential-workers">https://www.eurofound.europa.eu/en/publications/2023/job-quality-covid-19-pandemic-essential-workers</a>

Eurofound, 2023c. Violence in the workplace: Women and frontline workers face higher risks. [En ligne]

Available at: <a href="https://www.eurofound.europa.eu/en/blog/2023/violence-workplace-women-and-frontline-workers-face-higher-risks">https://www.eurofound.europa.eu/en/blog/2023/violence-workplace-women-and-frontline-workers-face-higher-risks</a>.

Eurofound, n.d.a. Social capital. [En ligne]

Available at: <a href="https://www.eurofound.europa.eu/en/social-capital">https://www.eurofound.europa.eu/en/social-capital</a> [Accès le May 2025].

Eurofound, n.d.b. Work-life balance. [En ligne]

Available at: <a href="https://www.eurofound.europa.eu/en/topic/work-life-balance">https://www.eurofound.europa.eu/en/topic/work-life-balance</a> [Accès le May 2025].

EuroHealthNet, 2022. *Psychosocial risks and older workers' health.* [En ligne]
Available at: <a href="https://eurohealthnet.eu/wp-content/uploads/publications/2022/221020">https://eurohealthnet.eu/wp-content/uploads/publications/2022/221020</a> briefing psychosocialstrategies.pdf.

European Commission , 2023. European Social Fund Plus: Protecting care workers against burnout. [En ligne]

Available at: <a href="https://european-social-fund-plus.ec.europa.eu/en/projects/protecting-care-workers-against-burnout">https://european-social-fund-plus.ec.europa.eu/en/projects/protecting-care-workers-against-burnout</a>.

- European Commission, 2011. Occupational health and safety risks in the healthcare sector: guide to prevention and good practice. Issue Publications Office of the European Union, Luxembourg..
- European Commission, 2021. *Green Paper on Ageing: Fostering solidarity and responsibility between generations*. [En ligne]

  Available at: <a href="https://op.europa.eu/en/publication-detail/-/publication/d918b520-63a9-11eb-aeb5-01aa75ed71a1/language-en.">https://op.europa.eu/en/publication-detail/-/publication/d918b520-63a9-11eb-aeb5-01aa75ed71a1/language-en.</a>
- European Commission, 2024. Study supporting the Monitoring of the Posting of Workers Directive 2018/957/EU and of the Enformcement Directive 2014/67/EU The situation of tempory cross-border mobile workers and workers in subcontracting chains. [En ligne]
  Available at: https://data.europa.eu/doi/10.2767/531736.
- European Parliament, 2023. *Minimum health and safety requirments for the protection of mental health in the workplace.* [En ligne]

Available at:

https://www.europarl.europa.eu/RegData/etudes/STUD/2023/740078/IPOL STU(2023)740078 EN.pdf.

European Parliamentary Research Services (EPRS), 2023. *Mental health in the EU.* [En ligne] Available at:

 $\frac{\text{https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/751416/EPRS\_BRI(2023)751416}{\text{EN.pdf}}$ 

Eurostat, 2020. Persons reporting exposure to risk factors that can adversely affect mental well-being by sex, age and NACE Rev. 2 activity. [En ligne]

Available at:

https://ec.europa.eu/eurostat/databrowser/view/HSW\_EXP5B/default/table?lang=en&category=labour.employ.lfso.lfso 20.hsw exp.

- Eurostat, 2021a. Self-reported work-related health problems and risk factors. [En ligne]
  Available at: <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-reported">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-reported</a> work-related health problems and risk factors key statistics
- Eurostat, 2021b. Self-reported work-related health problems and risk factors key statistics. [En ligne]
  Available at: <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-reported">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-reported</a> work-related health problems and risk factors key statistics
- Eurostat, 2024a. Employees working shifts as a percentage of the total of employees, by sex and age (%).
- Eurostat, 2024b. Working time LFS series, Average number of actual weekly hours of work in main job, by sex, age, professional status, full-time/part-time and occupation. [En ligne].

- Fattori, e. a., 2023. The burden in palliative care assistance: A comparison of psychosocial risks and burnout between inpatient hospice and home care services workers. *Palliative and Supportive Care*, Volume 21(1), pp. 49-56.
- Favre, N. M. et al., 2023. Association between burnout and stigma in physicians. PLOS One.
- Fighting Fatigue Together, s.d. [En ligne]

  Available at: <a href="https://www.fightingfatiguetogether.eu/goals">https://www.fightingfatiguetogether.eu/goals</a>
  [Accès le 2025].
- FIOH, 2022. People over 50 years of age should be offered the opportunity to reduce night shifts and long hours, Press release 13.06.2022. [En ligne]

  Available at: <a href="https://www.ttl.fi/en/topical/press-release/people-over-50-years-age-should-be-offered-opportunity-reduce-night-shifts-and-long-hours.">https://www.ttl.fi/en/topical/press-release/people-over-50-years-age-should-be-offered-opportunity-reduce-night-shifts-and-long-hours.</a>
- FIOH, s.d. *Traffic light model for estimating working hours (Työaikojen arvioinnin liikennevalomalli).*, s.l.: s.n.
- FORTE, 2023. Improving working conditions in social services: good practices from across Europe.
- Franklin, G., 2021. A Scoping Review of Psychosocial Risks to Health Workers during the Covid-19 Pandemic. [En ligne]

  Available at: https://pmc.ncbi.nlm.nih.gov/articles/PMC7967576/
- Fruscione, S. et al., 2024. Anxiety, insomnia and depression disorders among healthcare workers after the COVID-19 pandemic: a pilot study. EUROMEDITERRANEAN BIOMEDICAL JOURNAL 2024,19 (2) 5 10. [En ligne]

  Available at: http://www.embj.org/wp-content/uploads/2024/05/Fruscione 02.pdf
- Galanis, P. et al., 2025. Workload increases nurses' quiet quitting, turnover intention, and job burnout: evidence from Greece. *AIMS Public Health*, pp. 44-55.
- Galvin, A. & Jacob, S., 2024. Structural Empowerment: A Framework for Change in Cork University Hospital. *Magnet4Europe Blog*.
- Gjylsheni, e. a., 2023. Evolving jobs, skills and training needs in the social services sector and the role of social partners in managing changes. [En ligne]

  Available at: <a href="https://www.socialemployers.eu/wp-content/uploads/2023/09/report Evolving jobs skills and training needs in the social services sector.pdf">https://www.socialemployers.eu/wp-content/uploads/2023/09/report Evolving jobs skills and training needs in the social services sector.pdf</a>.
- Grasmo, S. G., Liaset, I. F. & Redzovic, S. E., 2021a. Home care workers' experiences of work conditions related to their occupational health: a qualitative study. *BMC Health Services Research volume*, 21(962).
- Graugaard, M., 2022. Dissolving hierarchy in hospital department: Employees have gained more influence over their tasks, which improves quality and job satisfaction. *Horsens Folkeblad*, 29 12.
- Gray, P. et al., 2019. Workplace-Based Organizational Interventions Promoting Mental Health and Happiness among Healthcare Workers: A Realist Review. *International journal of environmental research and public health*, 16(22).
- Guilmore, S. & Olszewski, K., 2024. Enhancing Healthcare: The Role of Ergonomics for Safety & Efficiency. [En ligne]

  Available at: <a href="https://disa.com/news/enhancing-healthcare-the-role-of-ergonomics-for-safety-efficiency">https://disa.com/news/enhancing-healthcare-the-role-of-ergonomics-for-safety-efficiency</a>
- Härmä, M., 2022. Good opportunities to influence working time support the well-being at work of ageing shift workers in the social welfare and health care, Finnish Institute of Occupational Health. [En ligne]

  Available at: <a href="https://www.worklifedata.fi/en/analysis/good-opportunities-to-influence-working-time-support-the-well-being-at-work-of-ageing-shift-workers-in-the-social-welfare-and-health-care.">https://www.worklifedata.fi/en/analysis/good-opportunities-to-influence-working-time-support-the-well-being-at-work-of-ageing-shift-workers-in-the-social-welfare-and-health-care.</a>

- Härmä, M. et al., 2024. The effects of ergonomic shift planning and the COVID-19 pandemic on working hours and health in the social and health care sector. Final report. *Finnish Institute of Occupational Health*.
- Heikkilä, M., Huhtala, M., Mauno, S. & Feldt, T., 2022. *Intensified job demands, stress of conscience and nurses' experiences during organizational change.* s.l.:s.n.
- HOSPEEM, 2025. Press Release: "Violence is not part of the job!": Five sectoral social dialogue committees adopt revised guidelines to prevent and tackle third party violence and harassment (TPVH) at the workplace. [En ligne]

  Available at: <a href="https://hospeem.org/our-newsletter/press-release-violence-is-not-part-of-the-job/?utm\_source=mailpoet&utm\_medium=email&utm\_campaign=hospeem-newsletter-may-2025">https://hospeem.org/our-newsletter/press-release-violence-is-not-part-of-the-job/?utm\_source=mailpoet&utm\_medium=email&utm\_campaign=hospeem-newsletter-may-2025</a> [Accès le May 2025].
- IAHSS Foundation, 2022. Workplace Violence Training and Prevention in Hospital-Based Healthcare: Implications for Nursing and the Interdisciplinary Team in the Hospital, s.l.: s.n.
- IAHSS & AHA, 2021. Creating Safer Workplaces: a Guide to Mitigating Violence in Health Care Sector, s.l.: s.n.
- ILO, 2016. Workplace Stress: A collective challenge. [En ligne] Available at:

  <a href="https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed\_protect/@protrav/@safework/documents/publication/wcms-466547.pdf">https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed\_protect/@protrav/@safework/documents/publication/wcms-466547.pdf</a>
- ILO, 2017. *Improving employment and working conditions in health services*. [En ligne] Available at: <a href="https://www.ilo.org/wcmsp5/groups/public/---ed\_dialogue/---sector/documents/publication/wcms-548288.pdf">https://www.ilo.org/wcmsp5/groups/public/---ed\_dialogue/---sector/documents/publication/wcms-548288.pdf</a>.
- ILO, 2019. C190 Violence and Harassment Convention, 2019 (No. 190). s.l.:s.n.
- ILO, 2020. Safe and healthy working environments free from violence and harassment. [En ligne]
  Available at: <a href="https://www.ilo.org/publications/safe-and-healthy-working-environments-free-violence-and-harassment">https://www.ilo.org/publications/safe-and-healthy-working-environments-free-violence-and-harassment</a>
- ILO, I. W. a. P., 2002. Framework guidelines for addressing workplace violence in the health sector, s.l.: s.n.
- International Agency for Research on Cancer, W., 2020. Night Shift Work, s.l.: IARC.
- Janoušková, M. et al., 2024. Experiences of stigma, discrimination and violence and their impact on the mental health of health care workers during the COVID-19 pandemic. *Scientific Reports*, Issue 10534.
- Jarrow Insights, 2024. Personal and household service employment monitor, p13, s.l.: s.n.
- Joint Research Centre, 2021. Digital tools for worker management and psychosocial risks in the workplace: evidence from the ESENER survey. [En ligne]

  Available at: https://joint-research-centre.ec.europa.eu/system/files/2021-09/jrc125714.pdf
- Joyce, K., Pabayo, R., Critchley, J. A. & Bambra, C., 2010. Flexible working conditions and their effects on employee health and wellbeing. *Cochrane Database of Systematic Reviews,* Issue 2.
- Kaihlanen, A.-M.et al., 2023. The effects of digitalisation on health and social care work: a qualitative descriptive study of the perceptions of professionals and managers. *BMC Health Services Research*, 23(714).
- Karasek, R. A., 1979. Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), pp. 285-308.
- Karhula, K. et al., 2017. Objective working hour characteristics and work-life conflict among hospital employees in the Finnish Public Sector study. *Chronobiol Int*, 34(876-885).
- Karhula, K. et al., 2020. Working time dimensions and well-being: a cross-national study of Finnish and German health care employees. *Chronobiology International*, 37(9-10), p. 1312–1324.

- Keyaerts, S. et al., 2022. The association between work-related physical and psychosocial factors and musculoskeletal disorders in healthcare workers: moderating role of fear of movement. [En ligne]
  - Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8766293/
- Kirk J. Brower, 2021. Professional Stigma of Mental Health Issues: Physicians Are Both the Cause and Solution. *Academic Medicine*, 96(5), pp. 635-640.
- Koinis, A. et al., 2015. The impact of healthcare workers job environment on their mental-emotional health. Coping strategies: the case of a local general hospital. *Health Psychology Research*, 3(1).
- Kowalczuk, K., 2018. Psychosocial Hazards in the Workplace as an Aspect of Horizontal Segregation in the Nursing Profession.
- Leiblfinger, M. & Prieler, V., 2018. *Elf Jahre 24-Studen-Betreuung in Osterreich, Katholische Privat-Universitat Linz.* [En ligne]

  Available at: <a href="https://journals.sagepub.com/doi/full/10.1177/14680181211008340">https://journals.sagepub.com/doi/full/10.1177/14680181211008340</a>.
- Leka, S. & Cox, T., 2008. PRIMA-EF: Guidance on the European Framwork for Psychosocial Risk Management: A Resource for Employers and Worker Representatives, s.l.: s.n.
- Lipovac, A., 2020. Work absenteeism management in project-oriented organizations. *European Project Management Journal*, 10(2), pp. 32-40.
- Lisak, A. et al., 2021. The influence of culture on care receivers' satisfaction and aggressive tendencies in the emergency department. *PLoS ONE*, 16(9).
- Lithuanian Ministry of Health, 2023a. Order "On the approval of recommendations for the development of a policy on prevention of violence and harassment in personal health care institutions and its implementation. Volume V-257.
- Lithuanian Ministry of Health, 2023b. On the prevention of physical and psychological violence against healthcare professionals and ensuring their safety at the workplace.
- Matthews, R. P. et al., 2022. Who is at risk of burnout? A cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia. Women Birth, 35(6), e615–e623.. 35(6).
- Membrive-Jiménez, M. J. et al., 2022. Relation between Burnout and Sleep Problems in Nurses: A Systematic Review with Meta-Analysis. *Healthcare*, 10(5), p. 954.
- Molina, C., 2024. FAQ about Occupational Healt.
- Montano, D., Hoven, H. & Siegrist, J., 2014. Effects of organisational-level interventions at work on employees' health: a systematic review. 14(135).
- Müller, G., Tisch, A. & Wöhrmann, A., 2018. The impact of long working hours on the health of German employees. *Ger J Hum Resour Manag*, 32(217-235).
- Navajas-Romero, V., Ariza-Montes, A. & Hernández-Perlines, F., 2020. Analyzing the Job Demands-Control-Support Model in Work-Life Balance: A Study among Nurses in the European Context. *Int. J. Environ. Res. Public Health*, 17(8).
- Niedhammer I. et al., 2021. Psychosocial work exposures and health outcomes: a meta-review of 72 literature reviews with meta-analysis. *Scand J Work Environ Health*, 47(7), pp. 489-508.
- OECD: Colombo, e. a., 2011. *Help Wanted? Providing and Paying for Long-term Care, OECD Health Policy Studies.* [En ligne]

  Available at: <a href="https://doi.org/10.1787/9789264097759-en.">https://doi.org/10.1787/9789264097759-en.</a>
- OECD, 2024. Health at a Glance: Europe 2024 State of Health in the EU Cycle, Paris: OECD Publishing.
- Okechukwu, C. E. et al., 2023. The Relationship between Working Night Shifts and Depression among Nurses: A Systematic Review and Meta-Analysis. *Healthcare*, 11(7).

- Ondrejková N. and Halamová J., 2022. Qualitative analysis of compassion fatigue and coping strategies among nurses. *International Journal of Nursing Sciences*, October, 9(4), pp. 467-480.
- OSHWiki, 2015. Work-related stress: Nature and management. [En ligne]
  Available at: <a href="https://oshwiki.osha.europa.eu/en/themes/work-related-stress-nature-and-management">https://oshwiki.osha.europa.eu/en/themes/work-related-stress-nature-and-management</a>
- OSHwiki, 2022. *Organisational practices on psychosocial risks*. [En ligne]
  Available at: <a href="https://oshwiki.osha.europa.eu/en/themes/effects-organisational-practices-psychosocial-risks">https://oshwiki.osha.europa.eu/en/themes/effects-organisational-practices-psychosocial-risks</a>
- Pedersen, L. M., Jakobsen, A. L., Buttenschøn, H. N. & Haagerup, A., 2023. Positive association between social capital and the quality of health care service: A cross-sectional study. *International Journal of Nursing Studies*, 137(104380).
- Pollock, A. et al., 2020. Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review.. *Cochrane Database*, November.
- Republic of Lithuania, 2025a. Law of the Republic of Lithuania on Parents' Rights and Compensation for Damage to Heath. s.l.:s.n.
- Republic of Lithuania, 2025b. The Plan for Implementing the Provisions of the Nineteenth Programme of the Government of the Republic of Lithuania. s.l.:s.n.
- Russo, M., Lucifora, C., Pucciarelli, F. & Piccoli, B., 2019. Work hazards and workers' mental health: an investigation based on the fifth European Working Conditions Survey. *Med Lav.*, April, 110(2), pp. 115-129.
- Schelde, A. N., 2022. They have no shortage of midwives or nurses in this department. Here's how they got round the bureaucracy Hospitals and healthcare professionals are historically under pressure, but in Horsens they found a solution. [En ligne]

  Available at: <a href="https://www.zetland.dk/historie/se6Dkg1Q-mOMVvKxd-33542">https://www.zetland.dk/historie/se6Dkg1Q-mOMVvKxd-33542</a>
  [Accès le 31 10 2022].
- Schilgen, B., Savcenko, K., Nienhaus, A. & Mösko, M., 2020. Arbeitsplatzbezogene Belastungen und Ressourcen von ausländischen 24-Stunden-Betreuungskräften in deutschen Privathaushalten eine qualitative Studie. 82(2).
- Schneider, A., Wehler, M. & Weigl, M., 2019. Effects of work conditions on provider mental well-being and quality of care: a mixed-methods intervention study in the emergency department. *BMC Emerg Med.* 19(1).
- Shin, S., Park, J.-H. & Bae, S.-H., 2018. Nurse staffing and nurse outcomes: A systematic review and met-analysis, Nursing Outlook, Vol. 66 No. 3. 66(3).
- Soto-Rubio, A. et al., 2020. Effect of Emotional Intelligence and Psychosocial Risks on Burnout, Job Satisfaction, and Nurses' Health during the COVID-19 Pandemic. *Int. J. Environ. Res. Public Health*, 17(7998).
- Storkholm, M. & Christiansen, K., 2023. We started by going out to a scout hut. (Vi startede med at tage ud i en spejderhytte). Danish Society for Healthcare Management. [En ligne]

  Available at: <a href="https://dssnet.dk/vi-startede-med-at-tage-ud-i-en-spejderhytte/">https://dssnet.dk/vi-startede-med-at-tage-ud-i-en-spejderhytte/</a>
- Szenkurök, V., Weber, D. & Bilger, M., 2024. Informal and formal long-term care utilization and unmet needs in Europe: examining socioeconomic disparities and the role of social policies for older adults. *International Journal of Health Economics and Management*.
- Teoh, K. et al., 2023. *Organisational wellbeing interventions: case studies from the NHS. Technical Report,* s.l.: Birkbeck, University of London.
- The Brussels Times, 2023. *Healthcare staff on verge of collapse, survey shows*. [En ligne]
  Available at: <a href="https://www.brusselstimes.com/belgium/543464/healthcare-staff-on-verge-of-collapse-survey-shows">https://www.brusselstimes.com/belgium/543464/healthcare-staff-on-verge-of-collapse-survey-shows</a>

- Theorell, T. et al., 2015. A systematic review including meta-analysis of work environment and depressive symptoms. *BMC Public Health*, 15(738).
- UNI Europa, 2021. EU Cross-Sectoral Guidelines on Violence and Harassment at Work, s.l.: s.n.
- Waqas, A. et al., 2020. Social support interventions for young healthcare professionals: Insight analyses based on a mixed-methods systematic review & meta-analysis, s.l.: Wellcome.
- Weinlander, E. E., Daza, E. J. & Winget, M., 2020. *Impact of Mind–Body Medicine Professional Skills Training on Healthcare Professional Burnout*, s.l.: Sage Journals.
- WHO, 2016. *Global strategy on human resources for health: workforce 2030, Geneva.* [En ligne] Available at: https://www.who.int/hrh/resources/pub\_globstrathrh-2030/en/.
- WHO, 2022. Guidelines on mental health at work, Recommendation 4 Manager training for mental health, s.l.: National center for biotechnology information.
- WHO, s.d. *International Classification of Diseases (ICD 11)*. *QD85 Burnout*. [En ligne] Available at: <a href="https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2ficd%2fentity%2f129180281">https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2ficd%2fentity%2f129180281</a>
- Work Environment in Denmark, s.d. *High emotional demands when working with people: WEA Guideline no. 4.2.1 on high emotional demands when working with people.* [En ligne] Available at: <a href="https://at.dk/en/regulations/guidelines/high-emotional-demands-4-2-1/">https://at.dk/en/regulations/guidelines/high-emotional-demands-4-2-1/</a> [Accès le May 2025].
- Zhang, X. et al., 2025. Emotional exhaustion and turnover intentions among young ICU nurses: a model based on the job demands-resources theory. *BMC Nurs*.
- Żółtaszek A., 2024. Who Bears the High Costs of Mental Health Problems in the Labour Force?

  University of Lodz Working Papers 1/2024. [En ligne]

  Available at:

  <a href="https://dspace.uni.lodz.pl/bitstream/handle/11089/52544/LEWP202401.pdf?sequence=1&isAllowed=y">https://dspace.uni.lodz.pl/bitstream/handle/11089/52544/LEWP202401.pdf?sequence=1&isAllowed=y</a>

# Annex: Examples of the longlist of interventions considered for the case studies

Title	Short Description	PSRs or mental health outcome
Retaining a healthy workforce at the regional hospital in Horsens Denmark	This intervention includes several strategies such as an interdisciplinary 'employee camp' activity, implementing feedback to strengthen the work environment, engaging 'a process of liberation', focusing on redistribution of bureaucratic tasks among all employees and ensuring staff breaks.  De mangler hverken jordemødre eller sygeplejersker på denne afdeling. Her er, hvordan de sneg sig uden om bureaukratiet (zetland.dk))	Burnout; work stress; sick leave.
Magnet4Europe Belgium, Germany, Ireland, Sweden, Norway, UK and USA	Magnet4Europe was a 4.5-year Horizon 2020 EU-funded project that aimed to improve mental health and wellbeing among health professionals in Europe. It had five key components: Access to resources; twinning partnerships with hospitals in the USA; international learning collaboratives; building critical mass networking; and providing results of staff surveys at three timepoints.  MAGNET4EUROPE - Home	Burnout; low job satisfaction; stress; high turnover rates.
Nationwide campaign to improve conditions and care quality by the Polish Trade Union OPZZ 'Konfederacja Pracy'	The campaign focuses on 'helping workers unite and organise to ensure that long-term care workers are paid and respected properly for the important work they do, and to ensure that the sector is adequately funded and regulated.'  Polish care workers launch campaign to improve conditions, care quality (uniglobalunion.org)	Pressure on care workers.
Annualised hours in emergency medicine UK	Implementation of an 'annualised self-rostering system' to give staff more control over their working pattern, whilst also covering the clinical needs of the service.  Healthy Healthcare: A systems perspective to integrate healthcare organisations, worker wellbeing, and patient care - OSHwiki   European Agency for Safety and Health at Work (europa.eu)  https://eprints.bbk.ac.uk/id/eprint/50880/1/Organisational%2 OInterventions%20to%20Support%20Staff%20Wellbeing%2 Oin%20the%20NHS.pdf	High levels of burnout and turnover.

Title	Short Description	PSRs or mental health outcome
NHS Menopause Programme UK	The NHS Menopause Programme aims to create a supportive working environment that champions the wellbeing of women and others affected by the menopause transition, so they stay and thrive in the workplace whilst going through menopause.  Menopause Awareness - elearning for healthcare (e-lfh.org.uk)	Anxiety; absence from work; wellbeing issues; high staff turnover.
Working time reduction negotiated in the collective bargaining process Austria	Social partners in Austria agreed to wage increases for 2020 and 2021, and to working time reduction from 38 to 37 hours per week from 2022 onwards.  Impact of Covid-19 on the social services sector and the role of social dialogue.pdf (epsu.org)	Higher infection rates among workers; more difficult working conditions due to hygiene measures introduced during the COVID-19 pandemic.
Vienna Health Network (WIGEV) psychological service Austria	Psychological service centre where therapists and psychologists are available to staff members to receive digital supervision and support in difficult situations. Therapists are present digitally to allow employees to relieve stress and burdens.  Impact of Covid-19 on the social services sector and the role of social dialogue.pdf (epsu.org)	Higher infection rates among workers; more difficult working conditions due to hygiene measures introduced during the COVID-19 pandemic.
Trade unions support the creation of works councils in healthcare and eldercare organisations Germany, Spain and Sweden	Unions in Germany, Spain and Sweden consult and inform members and staff through bottom-up approaches. They involve workers to ensure PSR measures are appropriate and effective.  Work-related psychosocial risks in the healthcare and long-term care sectors 2022.pdf (etui.org)	Job and working conditions insecurity; emotional strain; high levels of work–life conflict.
Basic model for risk assessment Germany	Created model to standardise approaches to the assessment of mental strain in the workplace. Additional modules include questions for people working in the health sector or on stress relating to technology.  Minimum health and safety requirements for the protection of mental health in the workplace (europa.eu)	Mental strain, fatigue, stress, burnout and insomnia.

Title	Short Description	PSRs or mental health outcome
Co-production of a fatigue risk management strategy in maternity services UK	A fatigue risk management strategy for maternity services was co-produced with staff. A series of focus groups and workshops collected experiences of fatigue at work and developed action plans.  Organisational Interventions to Support Staff Wellbeing in the NHS.pdf (som.org.uk)	Fatigue.
Sector-level interventions to address staff shortages in the sector in Sweden Sweden	The Swedish Municipal Workers Union (Kommunal) developed a work environment strategy covering psychosocial risks. It developed several tools, such as guidelines and a toolbox considering sector-specific issues. https://osha.europa.eu/en/publications/psychosocial-risks-health-and-social-care-sector https://www.researchgate.net/publication/367207622_Psychosocial_risks_in_the_healthcare_and_long-term_care_sectors_Evidence_review_and_trade_union_views)	High levels of sick leave.
Participatory working time scheduling software in hospitals in Finland	A digital participatory working time scheduling software tool was evaluated among hospital employees in three districts in the Finnish public sector.  The Time-Varying Effect of Participatory Shift Scheduling on Working Hour Characteristics and Sickness Absence:  Evidence from a Quasi-Experiment in Hospitals (mdpi.com)  https://osha.europa.eu/en/file/147841/download?token=7RQ  MF8rX	Sick leave.
National action plan to develop positive psychosocial work environment in Lithuanian hospitals	Multiple measures to support healthcare workers and a support network system in Lithuania. The case study would focus on how this intervention was introduced in a hospital in Lithuania.  Interview	Multiple PSRs
A French digital tool for OSH risk assessment in the social care sector	The social partners for the social care sector worked with the private consulting company Didacthem to create the tailored digital tool G2P to help social care organisations better assess OSH risks. The G2P tool has been available for use by social care organisations since 2022 and uses its algorithmic technology combined with inputs from social care organisations to accurately rank risks and produce action plans to address them. The overall aim of the tool is to prevent and reduce the risk of work-related accidents and sick leave in the sector.	Multiple PSRs and MSD risks

Source: compiled by the research team based on literature reviewed

The European Agency for Safety and Health at Work (EU-OSHA) contributes to making Europe a safer, healthier and more productive place to work. The Agency researches, develops, and distributes reliable, balanced, and impartial safety and health information and organises pan-European awareness raising campaigns. Set up by the European Union in 1994 and based in Bilbao, Spain, the Agency brings together representatives from the European Commission, Member State governments, employers' and workers' organisations, as well as leading experts in each of the EU Member States and beyond.

European Agency for Safety and Health at Work

Santiago de Compostela 12 48003 Bilbao, Spain

E-mail: information@osha.europa.eu

https://osha.europa.eu

