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# Workplace-level risk and health-promoting factors within the healthcare sector

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# Aim of the report

...to increase the knowledge concerning the health of physicians, registered nurses (including midwives and radiographers) and assistant nurses, along with identifying potential risks and health promoting factors in the organizational and social work environment of these groups.



Map and compare  
&  
Identify risk factors in the work environment

# The Work Environment Act and the aligning Regulations

## Organizational and social work environment (2015:14):

1 § The regulations aim to **promote** a good working environment and **prevent** the risk of ill health due to organizational and social conditions in the work environment.

9 § The **employer must ensure** that the tasks and responsibilities assigned to workers do not create unhealthy workloads.

## Systematic work environment work (2001:1):



# Risk matrix

Risk Matrix		Consequence				
		Insignificant	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	High	High	Very High	Very High
	Possible	Low	Medium	High	High	Very High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Low	Medium

- Probability that an individual is exposed
- The consequences the exposure may have on ill health



Data and procedure

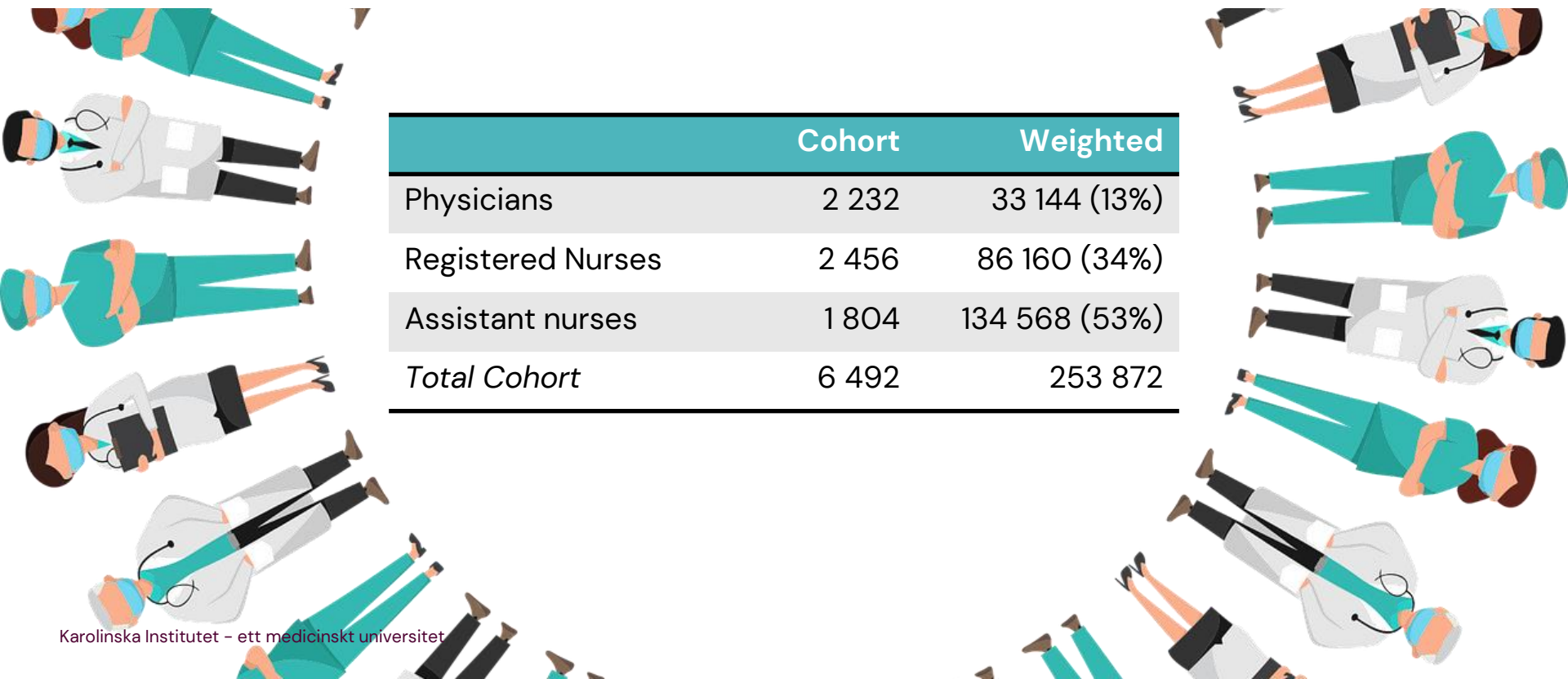
# Method

## The longitudinal occupational health survey in healthcare in Sweden (LOHHCS) from 2022

- A representative sample was drawn from the national occupational and educational registers in Sweden
- 6 geographical strata
- Statistic Sweden sent out an invitation letter and three reminders



# Sample



	Cohort	Weighted
Physicians	2 232	33 144 (13%)
Registered Nurses	2 456	86 160 (34%)
Assistant nurses	1 804	134 568 (53%)
<i>Total Cohort</i>	6 492	253 872

# Measurement – Health and wellbeing

- General Health (COPSOQ)
- Burnout (Karolinska Exhaustion Disorder Scale – KEDS)
- Turnover intention (Single item)





# Measurement – Organisational and Social work environment

## Demands:

- Efford–Reward imbalance (ERI)
- Quantitative and emotional demands (COPSOQ)
- Work–life interference (WLI)
- Moral stress
- Illegitimate tasks (BITS)
  - Unreasonable and unnecessary task

## Resources:

- Social support (COPSOQ)
  - Manager, colleagues and community
- Influence (COPSOQ)
- Work Control (COPSOQ)
- Meaningfulness
- Reward (from ERI)

# Measurement: Threats and violence

1. Prevalence of threats and violence
2. Perpetrator of the threats and violence
3. Whether the threats and violence were reported to the manager
4. To what degree the threats and violence impacted the exposed



# Data management

## **COPSOQ scales:**

- Each scale has answers on a 5-point Likert scale.
- 0-25-50-75-100
- Reference values from a sample of workers in the Swedish labor market

## **Other scales:**

- Other scales used (except ERI) have been modified to match COPSOQ
- Answers between 0-100
- ERI and KEDS: Reference values from scientific articles
- Moral stress, unreasonable and unnecessary tasks, control, influence, meaningfulness, and reward: Reference value from whole LOHHCS

# Data presentation: Traffic light system

	Difference between mean value and reference value	Exposure	Probability of ill health
Green	5 points better than the reference value	Low degree of exposure to risk factors	Limited
		High degree of exposure to health-promoting factors	
Yellow	Up to 5 points better or worse than reference value		Little
Orange	More than 5 and less than 10 points worse than reference value		Moderate
Red	More than 10 points worse than reference value	High degree of exposure to risk factors	High
		Low degree of exposure to health-promoting factors	



# Results

*Between professions and Within professions*

# Health and wellbeing

	Desired value	Total	Phys	RN	AN	Reference
Share (%)		100	13	34	53	
General health	H	51	59	53	47	61 <sup>b</sup>
Burnout (%)		31	21	30	36	
Turnover intentions (%)		43	34	44	46	

# Organizational and social work environment

		Desired value	Total	Phys	RN	AN	Reference
Demands (risk factors)	ERI	L	14	12	14	15	11 <sup>c</sup>
	Quantitative demands	L	45	54	46	42	41 <sup>b</sup>
	Emotional demands	L	56	53	60	54	47 <sup>b</sup>
	WLI	L	54	55	52	54	40 <sup>b</sup>
	Moral stress	L	66	62	66	68	67 <sup>d</sup>
	Unreasonable tasks	L	50	50	49	51	50 <sup>d</sup>
	Unnecessary tasks	L	51	55	50	50	51 <sup>d</sup>
Resources (health-promoting factors)	Support manager	H	64	66	63	63	75 <sup>b</sup>
	Support colleagues	H	83	83	86	81	80 <sup>b</sup>
	Social community	H	88	86	90	87	80 <sup>b</sup>
	Control	H	36	32	44	31	37 <sup>d</sup>
	Influence	H	57	66	62	50	57 <sup>d</sup>
	Meaningfulness	H	66	69	69	63	66 <sup>d</sup>
	Reward	H	50	50	49	50	50 <sup>d</sup>

# Summary



- One-third of active physicians, RNs, and ANs in Sweden exhibited mild to severe symptoms of exhaustion.
- The work environment in healthcare is characterized by several risk factors compared to employees in the general labor market.
- AN generally have low health and wellbeing and score particularly low in the perception of control and influence in their work.
- Healthcare workers reported low support from superiors compared to other job market sectors.



# Summary cont.



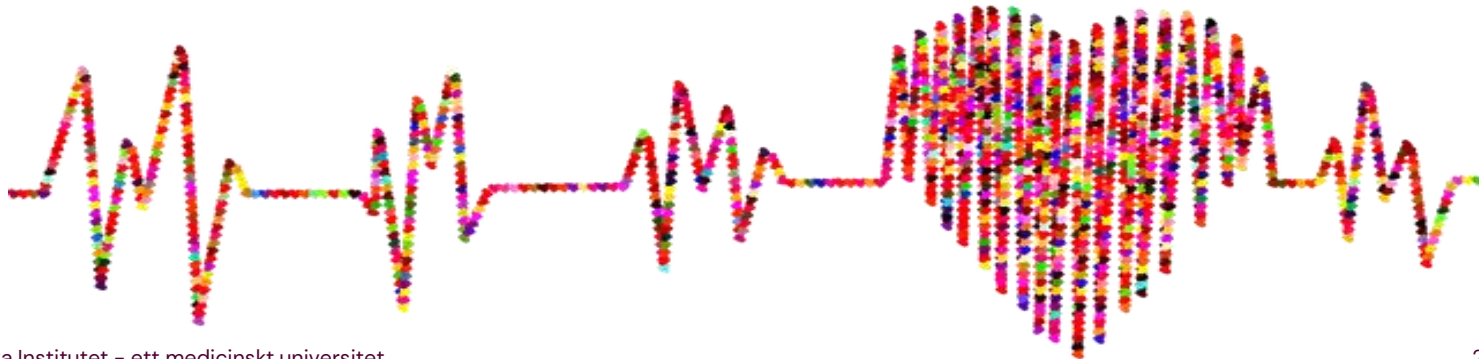
- Physicians, nurses and assistant nurses working long work weeks report worse work environment and health
- Nurses at the beginning of their career (during first five years), report worse work environment and health compared to their more senior colleagues.
- Healthcare workers older than 58 years report a better work environment than those younger than 58 years.

# Results: Threats and violence

	Total	Physicians	RN	AN
Experience	40 %	21 %	37 %	46 %
No	60 %	79 %	63 %	54 %
<b><i>Perpetrator of threats and violence</i></b>				
Internal	1 %	2 %	1 %	2 %
External	98 %	98 %	99 %	98 %
<b><i>Has the threats and violence been reported to a manager</i></b>				
Yes, every time	32 %	21 %	27 %	35 %
Yes, but not all of the time	29 %	15 %	23 %	34 %
No	39 %	64 %	49 %	31 %
<b><i>To what degree the threats and violence has impacted the exposed</i></b>				
Large impact	13 %	4 %	7 %	17 %
Some impact	52 %	49 %	54 %	52 %
No impact	35 %	47 %	39 %	31 %

# Concluding remarks

- Physicians, RNs, and ANs within the Swedish municipal and regional healthcare system frequently experience a **poorer organizational and social work environment than the broader Swedish labor market.**
- **There are distinct differences in experiences between and within professions.** Age, experience, and working hours strongly determine how individuals perceive their work environment, irrespective of the profession.





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