

Magnet4Europe – The impact of an organizational redesign intervention on mental health outcomes of nurses and physicians in Europe

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About the project



www.magnet4europe.de



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Context

Mental Ill-health Related Cost

240
BILLION

1.6% of EU GDP was lost on the labour market (2018) [1]

People Affected

165
MILLION

Europe-wide, 165 million are affected each year [2]

Primary effects include anxiety, mood, and substance use disorders



Strategies for redesigning health work



Primary stress-intervention strategies [3]

- reducing strain inducing demands
- increasing job resources
- other



Secondary stress-intervention strategies [3]

- stress management training
- mindfulness
- other

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Focus Areas & Attributed Benefits



Magnet4Europe Focus Areas

- Proven program implementation processes
 - Twinning
 - Learning collaborative
 - Development of critical mass
- Scope extension to include physicians



Magnet®
blueprint and
Gap Analysis
Tool



One-to-one
twinning with
US Magnet®
hospitals



Learning
collaboratives

Magnet4Europe Attributed Benefits

- Better work environments
- Improved job-related health outcomes of nurses and physicians [4,5,6]
 - Lower nurse burnout
 - Lower intent to leave
 - Higher job satisfaction



Critical mass and
network
creation



Actionable
feedback report

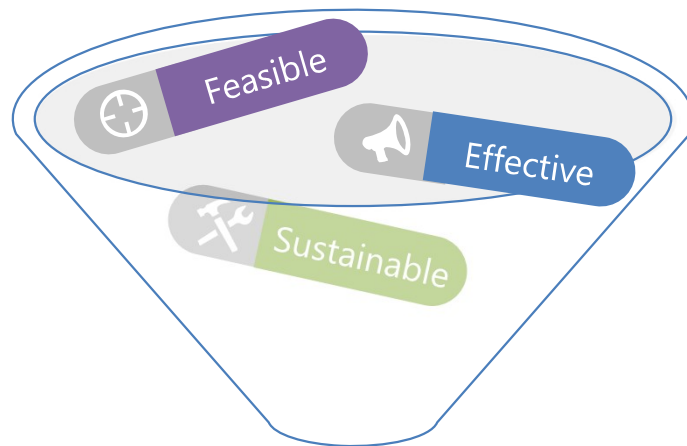
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Research Purpose & Key Research Question

Research Purpose

To **determine if redesign** of hospital work environment guided by the Magnet principles **is feasible, effective, and sustainable** in Europe in improving workforce outcomes.



Primary outcome:

- Burnout

Secondary outcomes:

- Job satisfaction
- Intention to leave

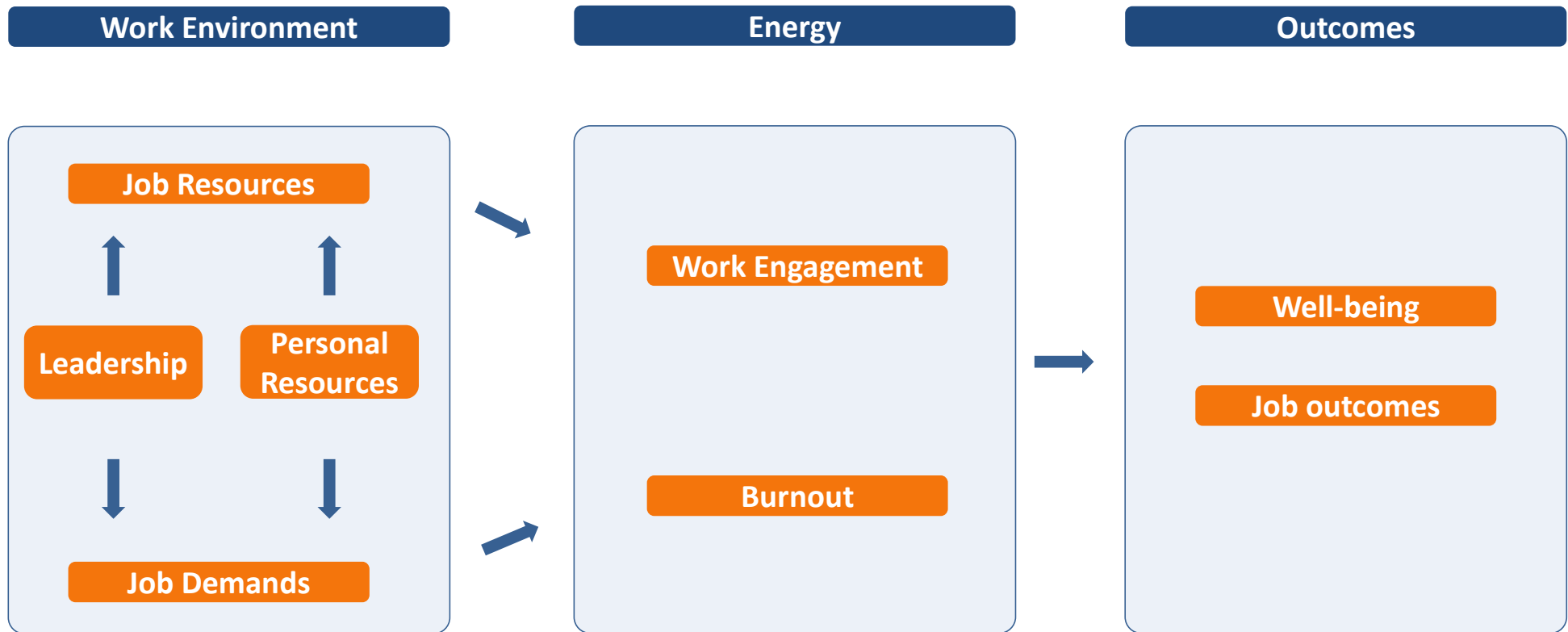
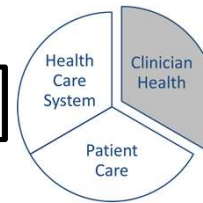


Key Research Question

Did the **intervention improve work environments** in European hospitals and did those changes lead to improved clinician mental health and well-being?

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The Job Demands-Resource Model [7,8]



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Research sample



74 acute care hospitals in Europe



- no prior Magnet[®] designation before the intervention
- Bed size ≥ 150 per hospital
- Focus on acute care for adults



▶ Hospitals are randomized and allocated to an immediate intervention or a wait-list control group



Health professionals



1. Practice as nurse/physician (incl. residents) in a participating hospital
2. Have direct patient contact
3. Work on adult inpatient unit including intensive care unit (ICU) and the emergency room (ER)

▶ The aim is to recruit and survey ~200 clinicians per hospital

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Data Collection & Survey



Data Collection

- Four measurement occasions
 - Baseline measurement
 - Three follow-up measurements with 6-12-month intervals
- Repeated observations on individuals
- Open-cohort design (i.e. the pool of participants may change during the study)

Survey

- Validated instruments and measures incl. Maslach Burnout Inventory, Burnout Assessment Tool
- Includes > 100 items
- Questions applicable to both physicians and nurses

C. ABOUT YOUR WELLBEING

18. Please mark the response that best describes how frequently the following feelings occur in relation to your current job in this hospital.

	Never	Seldom	Sometimes	Often	Always
I have to do things that should be done differently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have to work around rules or policies in order to carry out an assignment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I receive incompatible requests from two or more people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. The following statements are about how you experience your work and how you feel about it. Please indicate how often each statement applies to you by ticking the most appropriate answer.

	Never	Seldom	Sometimes	Often	Always
At work, I feel mentally exhausted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After a day at work, I find it hard to recover my energy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work, I feel physically exhausted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I struggle to find any enthusiasm for my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel a strong aversion towards my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm cynical about what my work means to others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work, I have trouble staying focused.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I'm working, I have trouble concentrating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I make mistakes in my work because I have my mind on other things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work, I feel unable to control my emotions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not recognize myself in the way I react emotionally at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work I may overreact unintentionally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. In the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Seldom	More than half the days	Nearly every day
or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
or about on edge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
or control everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. rate your health during the past 4 weeks?

	Good	Fair	Poor	Very poor
workability with respect to the mental demands of your work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
you rate your sleep quality overall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
miss during the past 4 weeks (28 days)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. My work leaves me enough time for my personal and/or family life.

	Strongly disagree	Disagree	Agree	Strongly agree
How would you rate your usual job performance over the past year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How would you rate your best job performance over the past year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Expected Results



Intervention



Improved Work Environment

- Decreased undesirable effects of job demands
- Increased job resources
- Reduced burnout and mental health morbidity among nurses and physicians
- Enhanced work engagement among clinicians

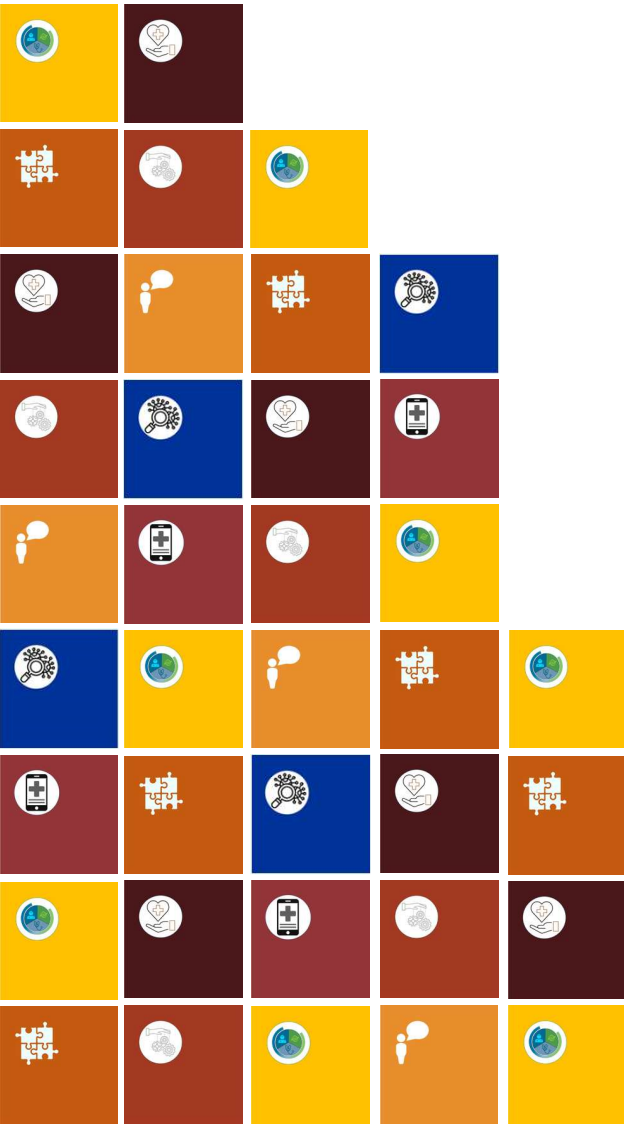
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