

# EHMA 2024

Shaping and managing  
innovative health ecosystems

## Magnet4Europe:

### Results from a randomised intervention trial to improve clinician wellbeing in the healthcare workplace

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On behalf of the Magnet4Europe consortium

5 – 7 June 2024 – Bucharest, Romania

Politehnica University of Bucharest, Bucharest, Romania

#EHMA2024

# Overview of Magnet4Europe

## Funding & Duration

EU-Horizon2020 01/2020 –06/2024

## Aim

Evaluation of the effect of hospital redesign according to the principles of the Magnet Model on mental health and wellbeing of physicians and nurses

## Design

Wait-list cluster randomized controlled trial with a nested mixed-methods evaluation

## Sample

Acute general hospitals (n=67) in 6 European countries (Belgium, Germany, Ireland, Norway, Sweden, England)

## Coordination

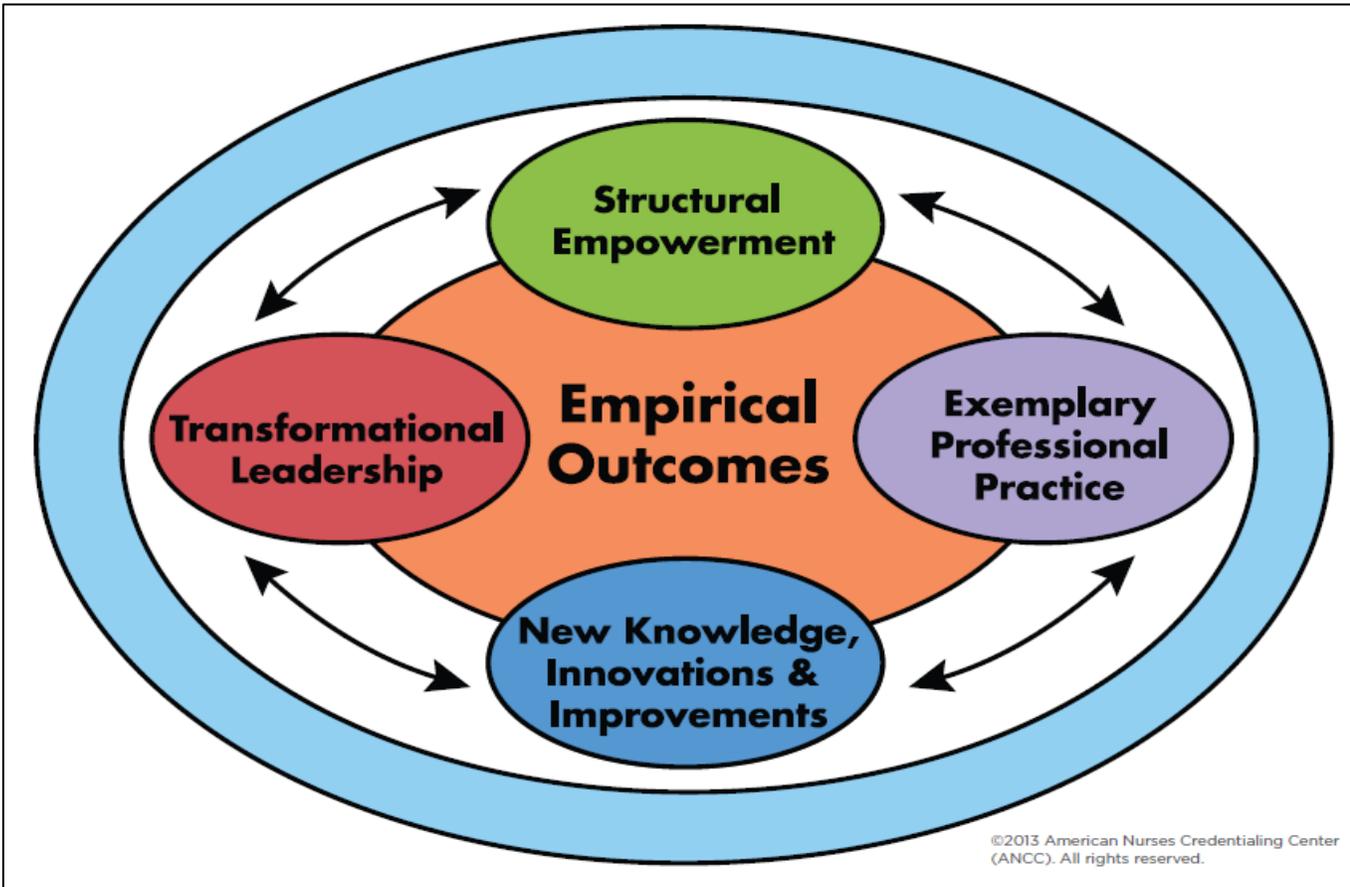
KU Leuven  Universiteit Pennsylvania 

## Partners



# MAGNET<sup>®</sup> MODEL

## THE MAGNET<sup>®</sup> BLUEPRINT



## RATIONALE

### Impact of redesigning the organization of hospitals

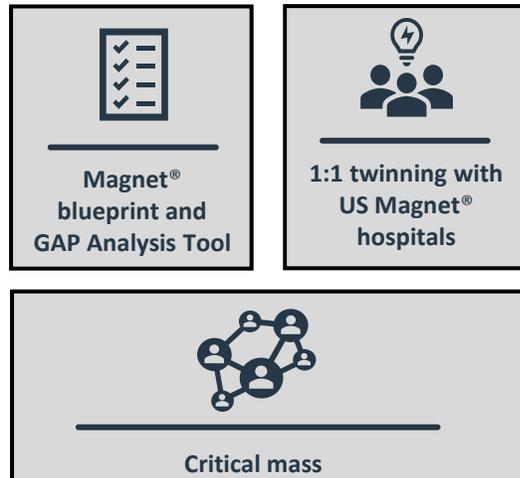
- >40 year of evidence
- Leading to better work environment
- Leading to better job and patient outcomes

### Proved replicability of knowledge

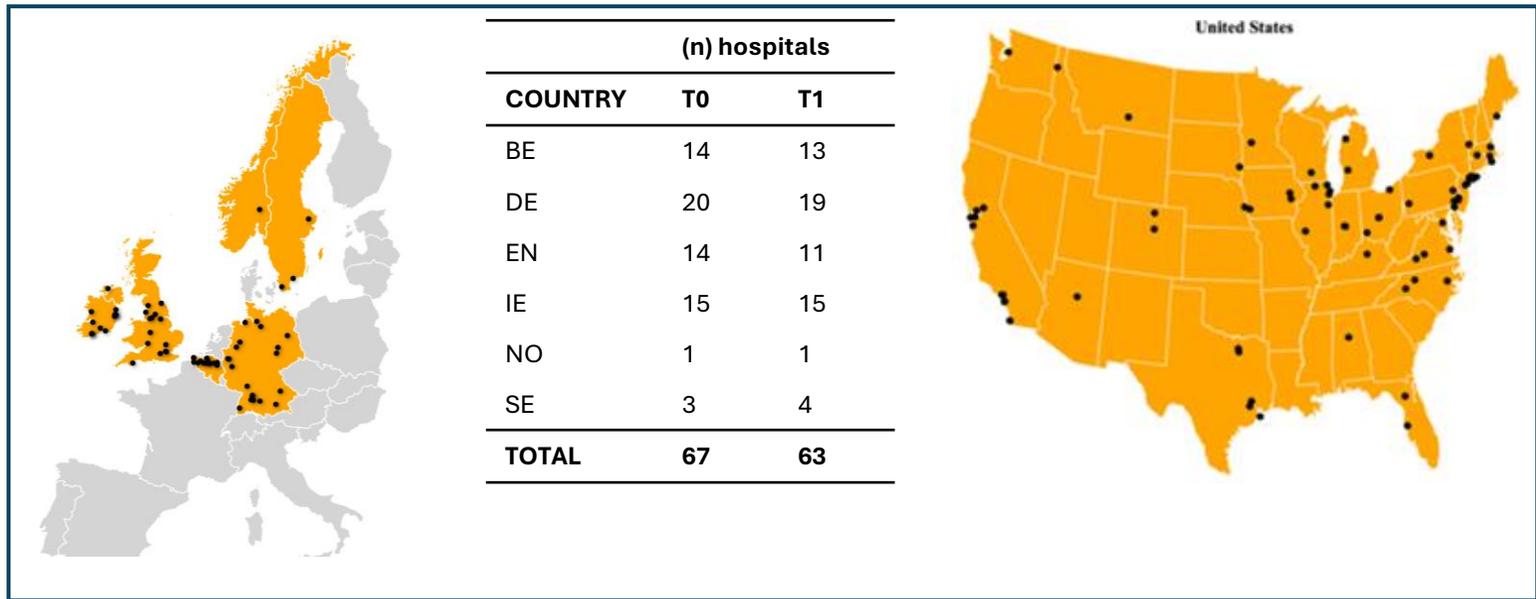
- Available blueprint allowing replication
- Critical mass in USA (>600 hospitals or ±10% of US hospitals) & increasing internationalization
- A lot of interest but few concrete implementations in Europe

# MAGNET4EUROPE – SYSTEM LEVEL INTERVENTION

## SYSTEM LEVEL INTERVENTION



## 1:1 Twinning EU intervention hospitals with US Magnet hospital



# Twinning between hospitals

American Nurse Journal. 2023; 18(6).  
 Doi: 10.51256/ANJ062338  
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## Magnet4Europe

Fostering partnership and collaboration

By Rocel dela Rosa-Besa, PhD, RN, CV-BC, NPD-BC, CNE; Lisa Guinta, MSN, RN, NEA-BC; and Katrin Mueller-Duemke, MsC

In November 2020, Klinikum Lüneburg (KL) in Lüneburg, Germany, partnered (twinned) with a Magnet-designated U.S. hospital, Hackensack Meridian-Jersey Shore University Medical Center (HM-JSUMC) located in Neptune, New Jersey.

### SYSTEM LEVEL INTERVENTION



Magnet®  
 blueprint and  
 GAP Analysis Tool



1:1 twinning with  
 US Magnet®  
 hospitals



Critical mass



### Implementing Magnet components

Next steps for Klinikum Lüneburg include the following:

Magnet components	Next steps
<b>Transformational Leadership</b>	<ul style="list-style-type: none"> <li>Conduct leader-led team-building activities to enhance physician–nurse relationships.</li> <li>Develop leader-led initiatives to improve nursing image.</li> <li>Communicate performance metrics data and results to nursing leaders and clinical nurses.</li> <li>Provide continued leadership support for embedding Magnet culture to improve the work environment.</li> <li>Use the newsletter to keep nurses and team members informed.</li> </ul>
<b>Structural Empowerment</b>	<ul style="list-style-type: none"> <li>Reward and recognize nurse achievements.</li> <li>Perform market analysis of RN salaries and benefits.</li> <li>Recruit ancillary support staff to relieve RN workload.</li> <li>Develop recruitment initiatives (internal recruitment).</li> <li>Initiate retention strategies (education and career advancement assistance and opportunities).</li> </ul>
<b>Exemplary Professional Practice</b>	<ul style="list-style-type: none"> <li>Collect and benchmark nurse-sensitive indicators, nurse satisfaction, and patient satisfaction.</li> <li>Evolve the professional practice model to reflect current organizational and nursing goals and priorities.</li> </ul>
<b>New Knowledge, Innovation &amp; Improvement</b>	<ul style="list-style-type: none"> <li>Conduct training and engage staff in performance improvement, evidence-based projects, and research.</li> <li>Deploy the newsletter to disseminate information on projects and research.</li> <li>Expand evidenced-based design of units/departments.</li> </ul>

# Learning collaboratives – Online, Cork (2022), Oslo (2023), Leuven (2024)

**SYSTEM LEVEL INTERVENTION**



Magnet®  
blueprint and  
GAP Analysis Tool



1:1 twinning with  
US Magnet®  
hospitals



Critical mass



Learning  
collaboratives



Actionable  
feedback report



# RIGOROUS EVALUATION

## SYSTEM LEVEL INTERVENTION



Magnet®  
blueprint and  
GAP Analysis Tool



1:1 twinning with  
US Magnet®  
hospitals



Critical mass



Learning  
collaboratives



Actionable  
feedback report



Rigorous Evaluation

At Baseline  
2020-21  
Mid covid-19

Survey among  
Nurses / physicians  
(N=11,603)

**BMJ Open** Physician and nurse well-being, patient safety and recommendations for interventions: cross-sectional survey in hospitals in six European countries

Linda H Aiken,<sup>1</sup> Walter Sermeus,<sup>2</sup> Martin McKee,<sup>3</sup> Karen B Lasater,<sup>4</sup> Douglas Sloane,<sup>1</sup> Colleen A Pogue,<sup>1</sup> Dorothea Kohlen,<sup>5</sup> Simon Dello,<sup>6</sup> Claudia B Bettina Maier,<sup>7</sup> Jonathan Drennan,<sup>8</sup> Matthew D McHugh,<sup>9</sup> For the Magnet4Europe Consortium

Interviews (N=23)



Laying the foundations for implementing Magnet principles in hospitals in Europe: A qualitative analysis

Ingrid Svensson,<sup>1,2,3,4</sup> Jackie Bridges,<sup>5</sup> Jaimie Ellis,<sup>6</sup> Noeleen Brady,<sup>7</sup> Simon Dello,<sup>8</sup> Jonathan Hooft,<sup>9</sup> Joan Kleine,<sup>1</sup> Dorothea Kohlen,<sup>10</sup> Elaine Lehane,<sup>11</sup> Rikard Lindqvist,<sup>12</sup> Claudia B. Maier,<sup>1</sup> Vera J.C. Mc Carthy,<sup>13</sup> Ingeborg Strömseng Sjetne,<sup>14</sup> Lars E. Eriksson,<sup>15,16</sup> Lisa Smeds Alenius,<sup>17</sup> Magnet4Europe Consortium<sup>1</sup>

2021-22  
Start implementation  
of the intervention

Survey among  
Nurses / physicians  
(N=8,905)



Improvements in  
the  
Nurse Work  
Environment

Interviews (N=22)  
Process evaluation  
(N=254)

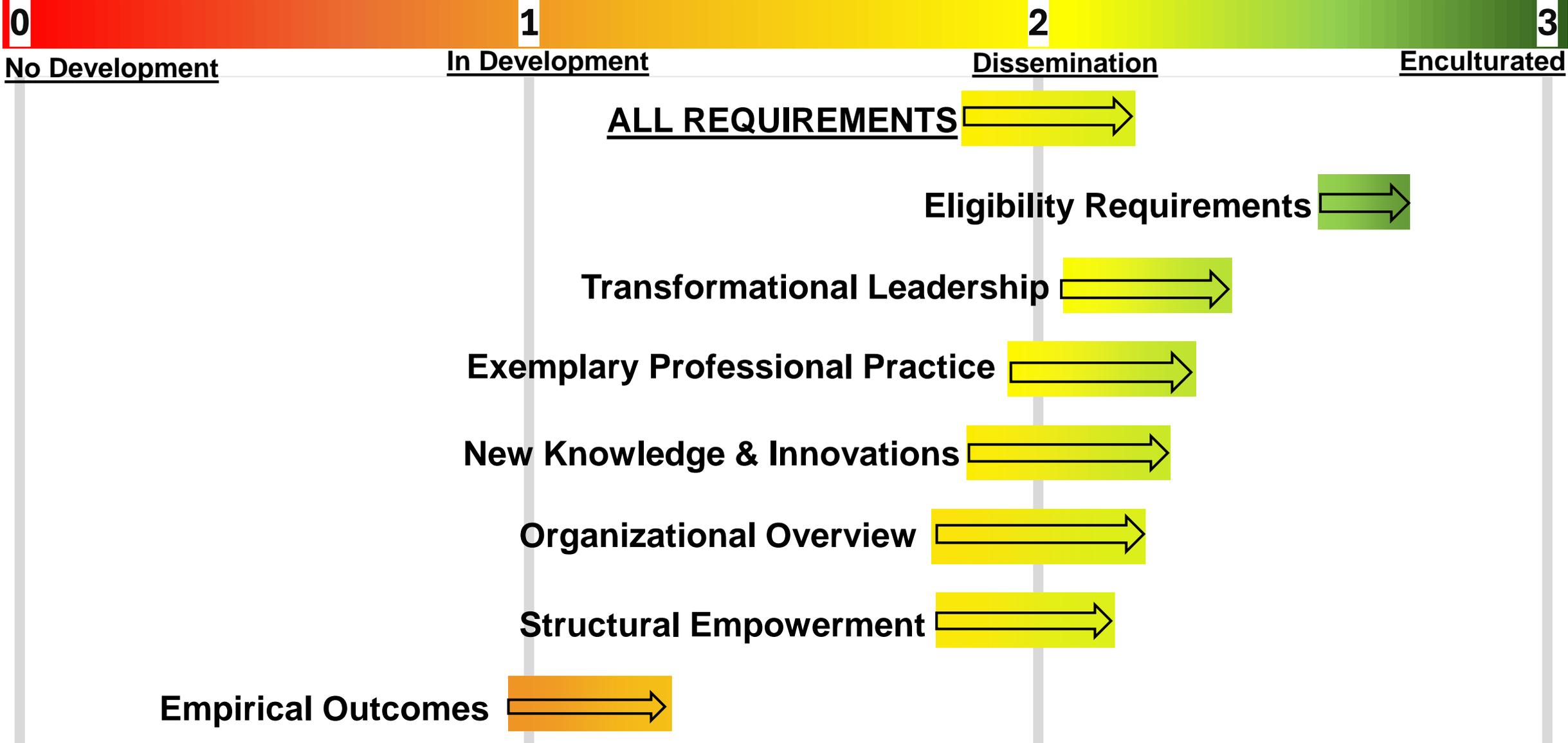
End 2023  
Evaluation

Survey among  
Nurses / physicians  
(N=5,963)

Improvements in  
Clinician Wellbeing,  
Patient Safety,  
Care Quality

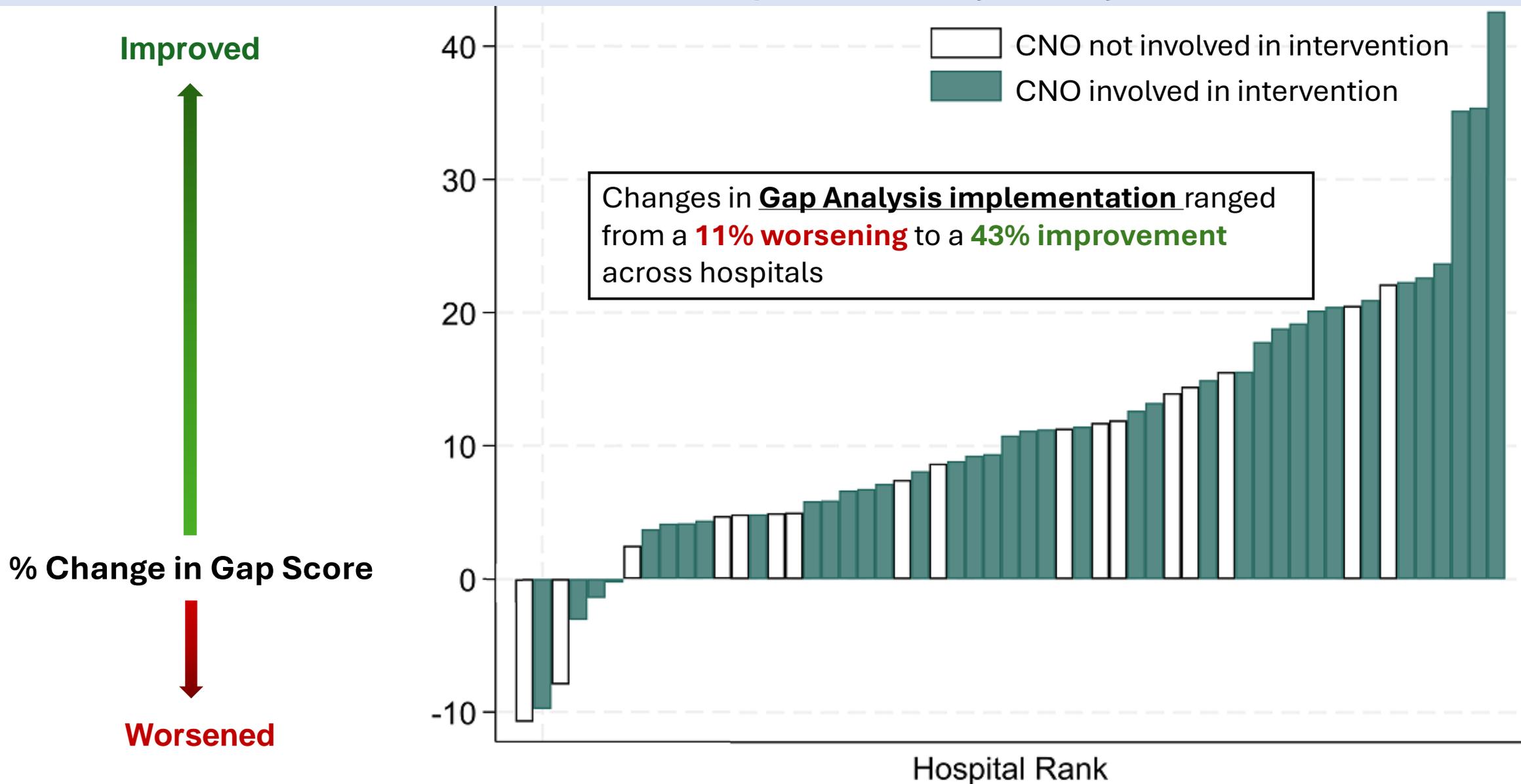
Interviews (N=20)  
Focusgroups (n=74)  
Process evaluation  
(N=299)

# Magnet4Europe hospitals moved, *on average*, towards greater implementation of the Magnet Blueprint in Gap Analysis



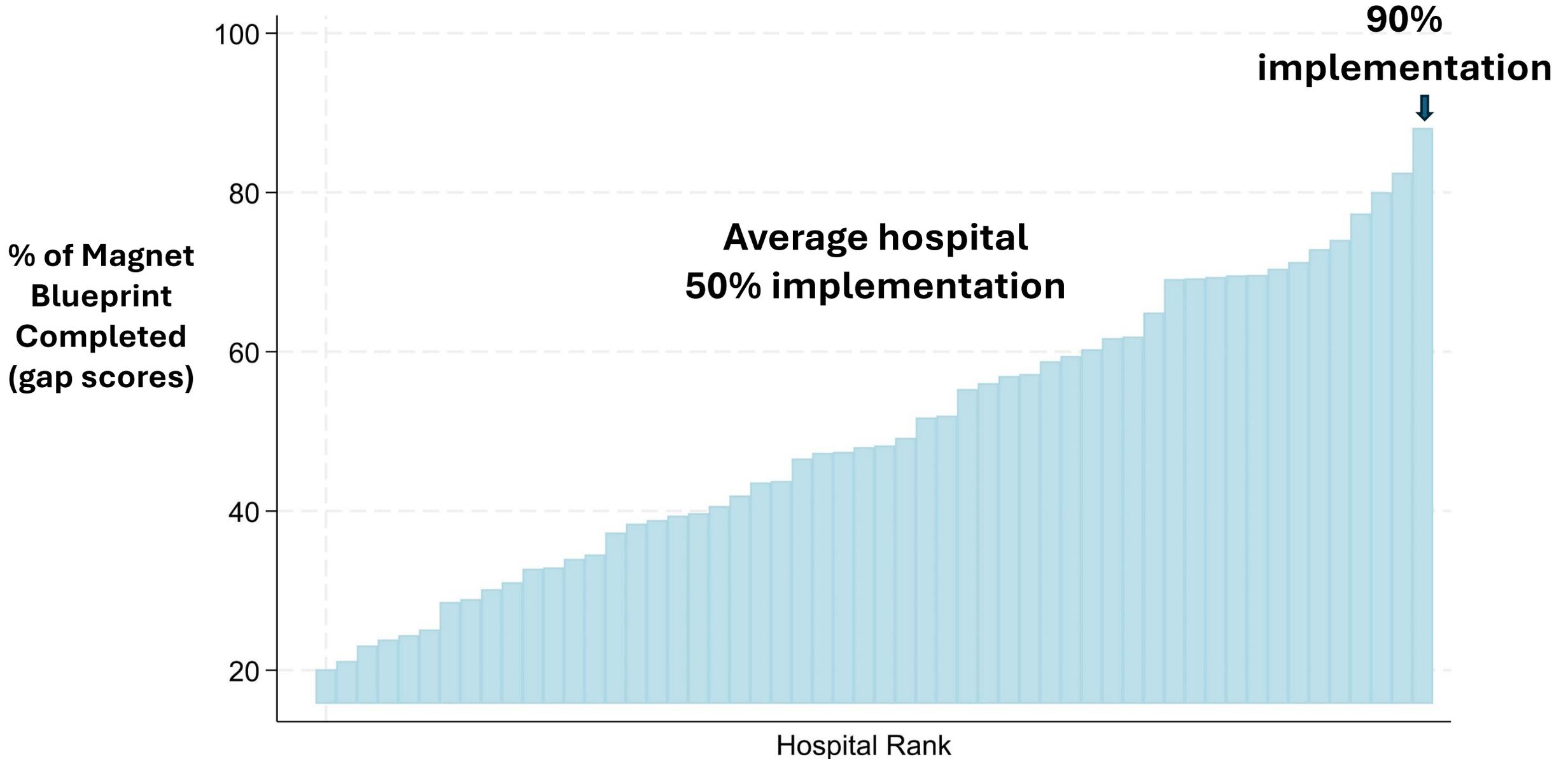
# Wide variation by hospital in implementing the Magnet Blueprint:

No Differences in Implementation by Country

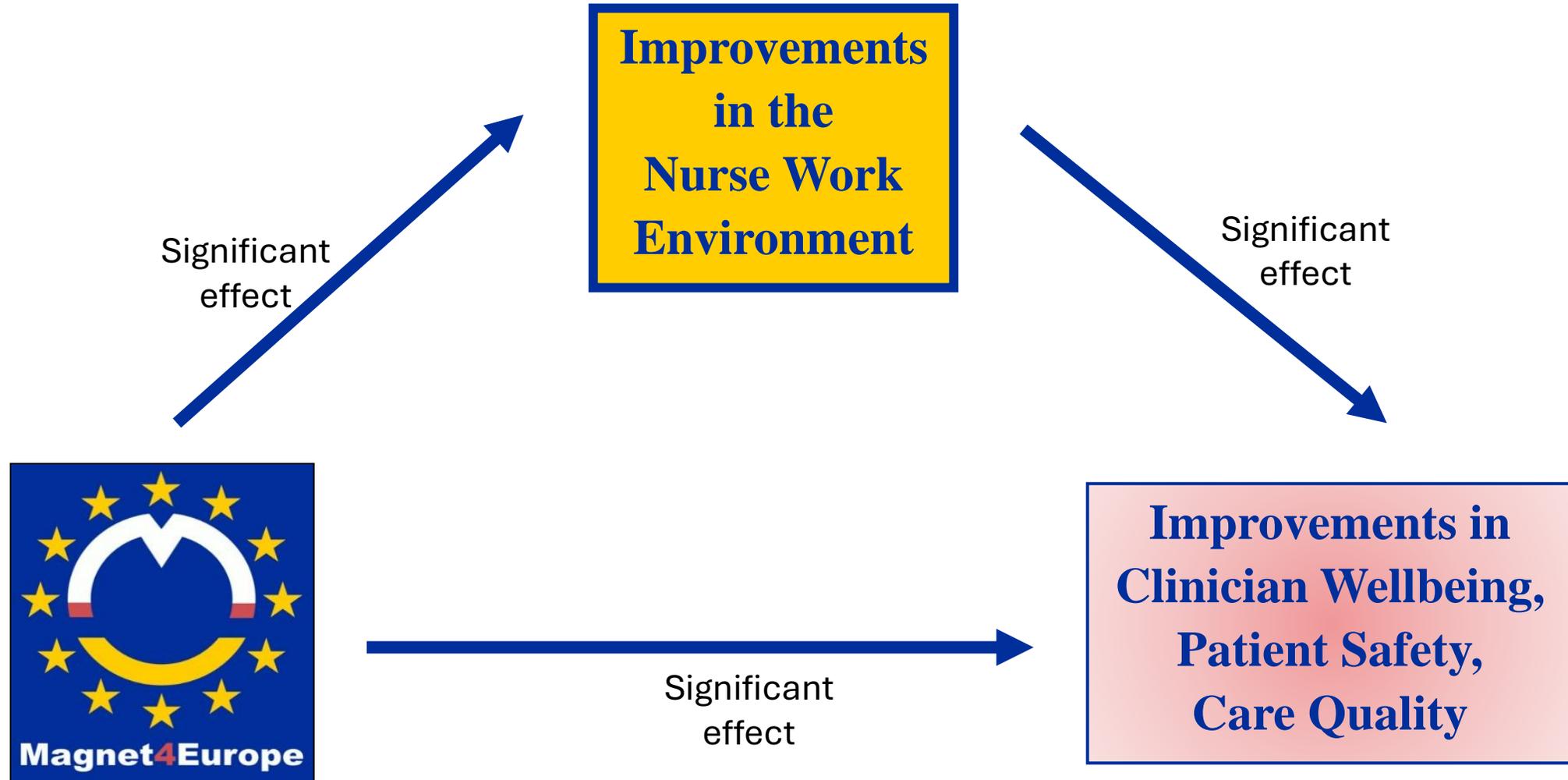


# Is Magnet Feasible in Europe?

Some hospitals currently close to 100% implementation of Magnet Blueprint



# Hospitals that more fully implemented the intervention had statistically significant improvements in the nurse work environment, clinician wellbeing, quality, safety



## Summary & Outlook for the Future

- **Strong evidence** that the work environment is modifiable and lead to better job outcomes through improvements of the working environment
- **The Magnet4Europe** intervention is likely to yield **favorable changes in work environments and outcomes**
  - If all Magnet4Europe hospitals reached at least 80% implementation of the Magnet Blueprint we estimate:
    - **18% reduction in nurses with high burnout**
    - **15% reduction in intent to leave**
    - **12% reduction in job dissatisfaction**



# EHMA 2024

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# Thank you



[www.magnet4Europe.eu](http://www.magnet4Europe.eu)