Nurses as catalysts for quality & change
Anne Marie Rafferty DBE
With thanks to:

- RN4Cast Consortium
- Linda Aiken
- Walter Sermeus
- Danny van Heusden
- EU FP7
- Magnet4Europe Consortium
- H2020
Aims

. to reflect on nurses’ roles as catalysts for quality & role of evidence in driving policy change

. to introduce an organizational intervention designed to improve quality of care and outcomes patients & nurses

. to consider tactics and strategies nurses can use to champion quality & make change happen
Epub 2018 Feb 14.

Nurses as change agents for a better future in health care: the politics of drift and dilution

Anne M Rafferty

Affiliations + expand

PMID: 29441837 DOI: 10.1017/S1744133117000482
Deaths are significantly lower in hospitals with fewer patients per RN and more bachelor’s educated RNs

- Every 1 patient added to a RN’s workload is associated with a 7% increase in deaths after common surgery
- Every 10% increase in bachelor’s educated RNs is associated with 7% lower mortality
- If all hospitals in the 9 European countries in our study had at least 60% bachelor’s RNs and RN workloads of no more than 6 patients each, more than 3500 deaths a year might be prevented
Nurse Staffing, Readmissions, Infections, Patient Satisfaction, Costs

- Patients in hospitals with **BETTER NURSE STAFFING** have lower odds of **INFECTIONS** and **HIGHER PATIENT SATISFACTION**

- Each 1 patient increase in RN workloads is associated with increases in **READMISSIONS** by:
  - 9% for heart failure, pneumonia, AMI
  - 8% hip & knee replacements
  - 3% for general surgery
  - 11% for children

- Cost of additional nurses is offset by **SAVINGS** in preventing expensive complications

- 40% fewer **ICU ADMISSIONS** after surgery for matched patients in hospitals with best compared to worst nurse resources

- McHugh et al., Medical Care 2013; Cimiotti et al, Am J Infection Control, 2012; Silber et al, JAMA Surgery, 2016; Aiken et al, BMJ Open, 2018
Cost + cost effectiveness of improved nurse staffing levels

Costs and cost-effectiveness of improved nurse staffing levels and skill mix in acute hospitals: A systematic review

Peter Griffiths, Christina Saville, Jane Ball, Chiara Dall’Ora, Paul Meredith, Lesley Turner, Jeremy Jones

Affiliations + expand

PMID: 37742413 DOI: 10.1016/j.jinursstu.2023.104601

Free article
<table>
<thead>
<tr>
<th>Country</th>
<th>Administer medications on time</th>
<th>Treatments and procedures</th>
<th>Skin care</th>
<th>Educating patients and family</th>
<th>Comfort/talk with patients</th>
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<td>15</td>
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<td>16</td>
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Nurse staffing and inpatient mortality in the English National Health Service: a retrospective longitudinal study

Ben Zaranko, Natalie Jean Sanford, Elaine Kelly, Anne Marie Rafferty, James Bird, Luca Mercuri, Janice Signoretti, Mary Wells, Carol Propper

ABSTRACT

Objective To examine the impact of nursing team size and nurse diversity on inpatient mortality in a single National Health Service (NHS) Trust in England.

Design A retrospective longitudinal study using linked nurse staffing and patient data from four hospitals in a single NHS Trust in England.

Setting Three hospitals within a single National Health Service Trust in England.

Participants 71,732 adult patients for calendar year 2017.

Exposure Nursing staff rostering and patient data. Multilevel conditional logistic regression models with adjustment for the health and demographic characteristics of patients.

Results Increasing the number of band 6 or higher nurses (in NHS pay band 7 or 8) had 2.2 times the impact of Band 5 nurses (OR 0.9044, 95% CI 0.8727 to 0.9368, p=0.0416). An additional senior RN increases the odds of a patient death of 9.6% (OR 0.9883, 95% CI 0.9773 to 0.9996, p=0.0275; band 5: OR 0.9893, 95% CI 0.9760 to 0.9993, p=0.0907). The lack of association with patient mortality was stronger for bands 7 and 8: OR 0.9883, 95% CI 0.9551 to 0.9973, p=0.0045; band 5: OR 0.9892, 95% CI 0.9756 to 0.9993, p=0.0046. No statistically significant association between four nurse groups remained in the study.

Conclusion Improving nurse staffing at the ward level may reduce in-patient hospital deaths. Two staffing measures were constructed: the fraction of target hours worked by RNs and the absolute difference from target hours.

INTRODUCTION

Nurses save lives: one additional nurse during a 12-hour shift decreases the individual odds of patient death by 9.6%.

Senior nurses are especially valuable (bands 7 or 8 have 2.2x the effect of Band 5 nurses).

Adding healthcare support workers or agency nurses has no statistically significant effect.
Research on Nurse Staffing Interventions

- Victoria, AU, in 2000 1st public jurisdiction to establish nurse-to-patient ratios but little outcomes research
- California 2004 unfunded legislative mandate associated with
  - improved staffing and more rapid decline in mortality
  - improved nurse outcomes and end nurse shortage
  - historic gains for safety net hospitals and their patients
  - no major adverse unintended consequences
- Wales, Scotland, Ireland (pilot), Queensland, AU (27 public sector hospitals)

Establishing a Minimum Nurse Staffing Standard in Hospitals

- Research from other countries suggests this could improve quality of care, patient outcomes, and nurse recruitment and retention in England
- Other countries have accomplished this as an unfunded mandate
15 years later **California hospitals** still have significantly better RN staffing and hospital outcomes than other states

Patient to RN ratios

[Bar chart showing percentage of hospitals in NJ/FL/PA and CALIF for different patient to RN ratios.]
Results One Year After Implementation of Patient to Nurse Ratios in Queensland, AU

Reduction of 1 patient per nurse in 1st year associated with significantly lower odds of:

<table>
<thead>
<tr>
<th>Event</th>
<th>Odds</th>
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<tbody>
<tr>
<td>Mortality</td>
<td>12%</td>
</tr>
<tr>
<td>Failing grade on patient safety</td>
<td>35%</td>
</tr>
<tr>
<td>Failing grade on infection prevention</td>
<td>12%</td>
</tr>
<tr>
<td>Patients rating hospital less than excellent</td>
<td>8%</td>
</tr>
<tr>
<td>Patients would not recommend hospital</td>
<td>12%</td>
</tr>
<tr>
<td>Inadequate time to complete necessary care</td>
<td>16%</td>
</tr>
<tr>
<td>Inadequate time to detect patient changes</td>
<td>13%</td>
</tr>
<tr>
<td>Nurse job dissatisfaction</td>
<td>8%</td>
</tr>
<tr>
<td>Nurse burnout</td>
<td>7%</td>
</tr>
</tbody>
</table>

Data Source: RN4CAST-Australia
“The shortage of nurses should be treated as global health emergency...”

Magnet4Europe: Improving Mental Health and Wellbeing in the Healthcare Workplace

Funded under: H2020-EU.3.1.2

June 2022

The Magnet4Europe study described herein is under the European Union’s Horizon 2020 Research and Innovation programme from 2020 to 2023 (Grant Agreement 848031). The protocol of Magnet4Europe is registered in the ISRCTN registry (ISRCTN10196901).
Magnet4Europe Consortium

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About the project

www.magnet4europe.de

Twitter: @magnet4europe
# Magnet4Europe at a Glance

<table>
<thead>
<tr>
<th>Duration</th>
<th>01/2020 – 12/2023</th>
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<tbody>
<tr>
<td>Objective</td>
<td>To evaluate the effect of organizational redesign, guided by the Magnet® blueprint of organizational redesign, on nurses’ and physicians’ mental health.</td>
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<td>Design</td>
<td>Wait-list cluster randomized controlled trial with a nested mixed-methods evaluation</td>
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<td>Sample</td>
<td>Acute general hospitals (n=67) in six European countries (Belgium, Germany, Ireland, Norway, Sweden, UK)</td>
</tr>
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</table>
Proposed intervention: Magnet® hospital intervention

- Transformational Leadership
- Structural Empowerment
- Exemplary Professional Practice
- New Knowledge
- Empirical Quality Results
Opportunity for registered nurses to participate in policy decisions

Score

RN4CAST countries

BE  1.95
CH  2.19
DE  2.00
ES  1.55
FI  2.55
GR  1.89
IE  2.12
NL  2.29
NO  2.17
PL  2.01
SE  2.26
UK  2.19
Nurses matter: nurses are an asset and not a cost

“As nurses are the largest component of the health care workforce, and are also strongly involved in the commission, detection, and prevention of errors and adverse events, they and their environment are critical elements of stronger patient safety defences”.

IOM, 2004

“decreasing nurse workloads by 1 patient per nurse had no measurable effect in hospitals with poor work environments, while reducing the odds of death by 9-10% in hospitals with the best work environments ”

(Aiken et al, 2011)
Business case

• “A business case is a recommendation to decision makers to take a particular course of action for the organization” (Gambles, 2009)

• The development of a business case is a strategic tool for change (Weaver & Sorrell-Jones, 2007)

• “A well-developed business case can provide strategic rationale for change, generate robust comparative data for analysis, and mobilize support for innovation” (Shirey, 2011)

• Building BC: Alignment with strategic priorities of the organization as well as organizational vision and mission (Drenkard 2022)
Our secret sauce

- Strong leadership
- The nurse strategic plan
- Collaboration
Alignment: from corporate strategy to individual goal

- **UZA Strategy**
- **Departement Strategy**
- **Goals unit level**
- **Feedback loop**

**Doelstellingen afdeling: 2016-2018**

<table>
<thead>
<tr>
<th>Doelstelling</th>
<th>Indicator</th>
<th>Laste resultaat</th>
<th>Acties</th>
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<tbody>
<tr>
<td>Verbeteren van preseniele CAUTI met X %</td>
<td>CAUTI</td>
<td></td>
<td>Focus op (130)</td>
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<tr>
<td>Verbeteren van preseniele CLABSI met X %</td>
<td>CLABSI</td>
<td></td>
<td></td>
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<tr>
<td>Verbeteren van preseniele VAL met X %</td>
<td>VAL</td>
<td></td>
<td></td>
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<tr>
<td>Verbeteren van preseniele WAI met X %</td>
<td>WAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbeteren van preseniele WII met X %</td>
<td>WII</td>
<td></td>
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**Patient ervaring: zich voorstellen aan de patiënt**

**Kennis & Kwaliteit**

**Mission and vision**

As a university hospital, we aim to be a leading player in patient care, research, and education. We strive to be recognized as an innovative, high-quality organization with a strong research reputation, a training network, and enthusiastic employees.

**Patient**

**Quality Management**

**Leadership & Mindset**

**Verbeteren van de patiëntervaring:**

- Bejegening
- Education
- Pain management
- Patient response

**Verbeteren van patiëntbetrokkenheid**

- Further development of bedside briefing

**Standaardiseren van normen t.a.v. patiënteducatie**

(under teach back)

**Zorg afstemmen op professioneel praktijkmodel**

**Nurse Sensitive Outcomes:**

- HAPU
- CAUTI
- CLABSI
- VAL with injury

- Shaing the development of protocols/methods

- Implementatie van trainingen en vormingsbeleid in kader van accreditatie

**Alignering van strategie tot team en medewerkerniveau**

**Evaluatie van medewerkers inclusief opstart peer review, vastleggen opleidingsbehoeften, persoonlijke doelstellingen**

**Aanpassen governancestructuur i.f.v. Magnet accreditatie**

**Leiderschapsvorming**

**Focus op UZA als aantrekkelijke stageplaats (WPL sites ↑)**

**Monitoren en verbeteren van engagement/tevredenheid van medewerkers en studenten**

**Borging Lean PW methode**

**Doelmatige inzet van de mobiele equipe**

**Staffingsbeleid in functie van budget**

**Objectiveren van processen en capaciteit a.d.h.v. BI toepassing**

**Dossiervoering met oog op voorbereiding EPD**

**Herbepalen van workflows i.f.v. doelmatiger aanwenden van middelen**
Leadership and trust

03_01 The UZA has made sufficient effort to allow its employees to work in safe conditions and to provide them with the necessary personal protective equipment.

03_02 I am confident that the UZA is sufficiently prepared to cope with a second or third wave of the Coronapandemic.

03_03 The management and executives are taking the right steps to prepare the organization as well as possible for a second or third wave.
Interaction between nurses

02_01 RNs I work with count on each other to pitch in and help when things get busy.

02_02 There is a good deal of teamwork among RNs I work with.

02_03 RNs I work with support each other.

Source: RN satisfaction measured with Job Satisfaction Scale
### Intention to leave

<table>
<thead>
<tr>
<th>Year</th>
<th>UZA</th>
<th>RN Forecast Flanders (BEL)</th>
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<tbody>
<tr>
<td>2009</td>
<td>7.0</td>
<td>29.9</td>
</tr>
<tr>
<td>2013</td>
<td>6.8</td>
<td>-</td>
</tr>
<tr>
<td>2020</td>
<td>7.7</td>
<td>28.9</td>
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The Pro-Judge Study

Inside the Black Box of Nurses’ Professional Judgement in Nurse Staffing Systems in England and Wales
Aims

- How do clinical leaders and nurse managers deploy professional judgement in assessing need, planning staffing levels, deploying nurses, and organising nursing work in response to changing demand patterns?
- What are the skills and knowledge that underpin nurses’ professional judgments on staffing decisions?
- How do nurses articulate professional judgement in nurse staffing decisions?
- What weight is given to professional judgement in the triangulated approach to staffing decisions?
- What is the relationship between professional judgement, planning tools, and nurse sensitive patient outcomes data?
- Are there elements of nurses’ professional judgement that could be supported by new measurement or decision tools?
- What are the implications of the research for nurse education, professional development, and leadership?
- What are the implications of the research for nurse staffing systems and future policy and practice?
SUMMARY FINDINGS

1. Despite national policy differences in England and Wales, the role of professional judgement in nurse staffing systems followed a common pattern.

2. Two kinds of professional judgement were deployed in the nurse staffing systems: the judgement of clinical nurses and the judgement of senior nurse managers.

3. Nurses’ professional judgement was central to the generation of data, its interpretation and contextualisation.

4. Healthcare organisations relied on the professional judgements of clinical nurses and senior nurse managers in making operational decisions to mitigate risk, where real-world understanding of the status of the organisation was privileged over formal data.

5. Professional judgement had attenuated authority for the purposes of workforce planning, where data was a master actor and strategic decision-making prioritised safety and efficiency rather than quality.

6. Nurses expressed concerns that formal measurement systems did not capture important aspects of care quality or staff wellbeing, which made it difficult to articulate their professional judgement for the purposes of workforce planning.

7. There were no obvious differences in the policy impacts between England and Wales.

8. The operation of staffing systems in England and Wales were impacted by the workforce and recruitment challenges.

The operation of staffing systems in England and Wales were impacted by financial constraints.
On the picket line in Northern Ireland
Vous souvenez-vous?

Resultat 61%
Campaigning

• Let’s start to think of nursing as a social movement and agent for change
• What’s good quality for nurses is ultimately good for patients, communities and the population as a whole
• Let’s learn from workforce legislation successes internationally as we run the Safe Staffing campaigns and share ideas

• THANK YOU. ANY QUESTIONS?
empowerment

When I dare to be powerful, to use my strength in the service of my vision, then it becomes less important whether I am afraid’ (Audre Lord)