



The power of education

Anne Marie Rafferty DBE



The power of education

Anne Marie Rafferty DBE

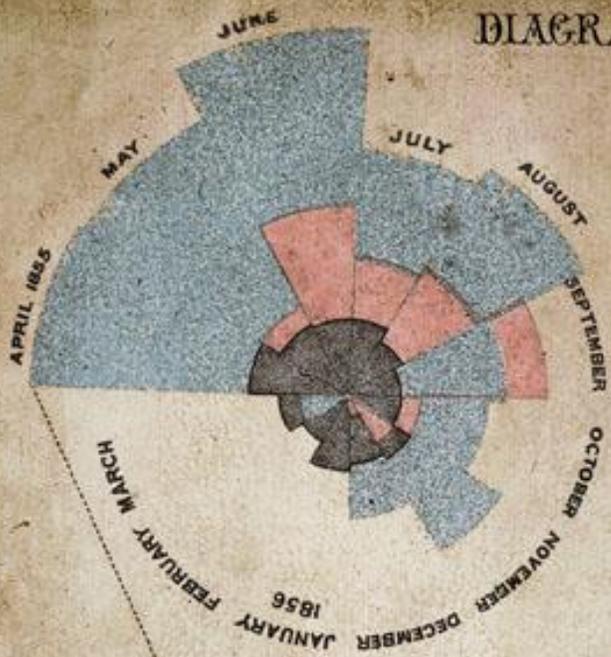
aims

- reflect upon our inspirational role models in education
- explore the concept of nursing as dark matter
- create a typology of education as nursing power & new narrative for the future

DIAGRAM OF THE CAUSES OF MORTALITY IN THE ARMY IN THE EAST.

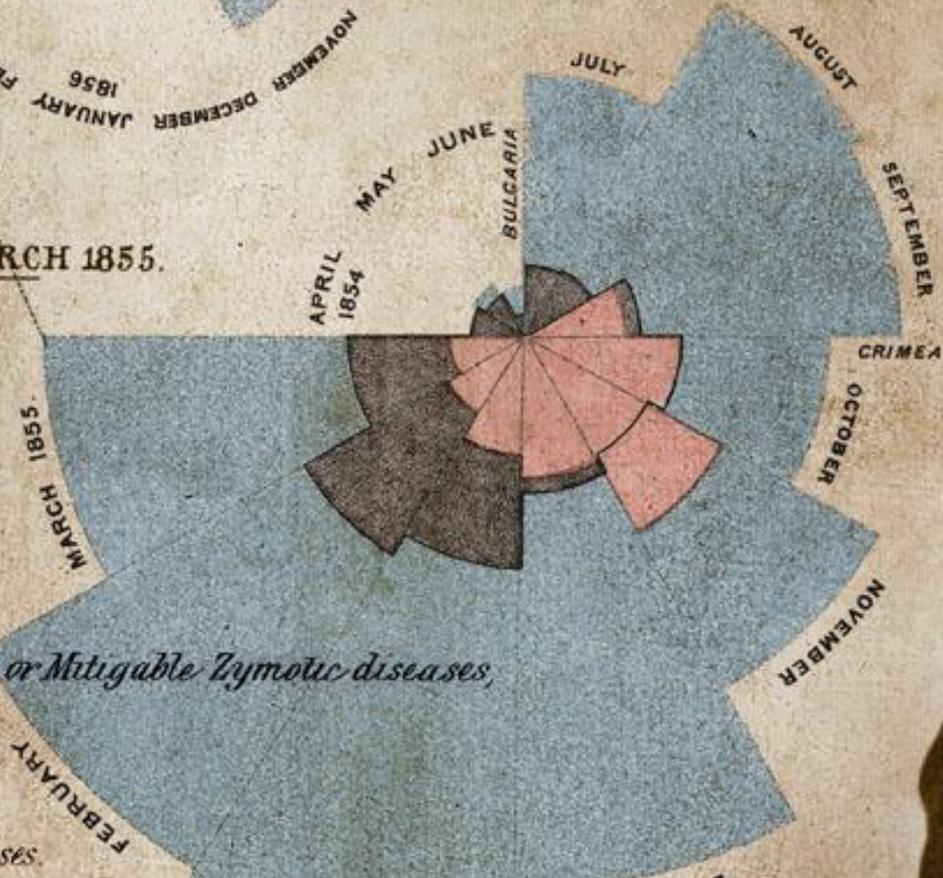
2.

APRIL 1855 TO MARCH 1856.



1.

APRIL 1854 TO MARCH 1855.



- deaths from Preventible or Mitigable Zymotic diseases,*
- deaths from wounds,*
- deaths from all other causes.*









מסתכלים
לכיבוש
בעיניים
שטר לאסתול באיסט
Leading the occupation in the eye

די למלחמה
أوقف الحرب
STOP THE WAR

הצטרפו אלינו
רק שלום
ועדו המייל
יביל צמחון
הצטרפו אלינו

די
אשכול
אגזון

BRING
THEM HOME
NOW!

חוזרים
אותם הביתה
עכשיו

ענו



IMAGINE
PEACE
from the river
to the sea

בין הנהר לים



اي حدا بحاجة لتتضيف، تعقيم او الاهتمام
بجرح، نحن موجودين بمار مخايل،
اذا مش قادرين توصلو،
في عنا متطوعين معون سيارات
بيجييوكون لعنا

CALL MERVAT 03043710

Quick Aid
العناية بالجروح
و تغيير الضمادات
مجانياً
9 AM
-
7 PM
Free Wound
Care



**ACTION
ADVOCACY AND
COMMITMENT
TO OUR NURSES**



embrace



يكافح العديد من الممرضات والممرضين في غضون الوباء والصعوبات الاقتصادية وأثار انفجار مرفأ بيروت. يمكن أن تؤثر هذه الضغوطات على صحتنا النفسية، كما يمكننا أن نجعلنا نشعر بالإرهاق، أو الحزن، أو الانفعال، أو عدم القدرة على التركيز.

Many nurses are struggling in the midst of the pandemic, economic difficulties, and aftermath of the Beirut blast. These stressors can impact our mental health, and can leave us feeling drained, sad, irritable, or unfocused.

تنظم نقابة الممرضات والممرضين بالتعاون مع خبراء من إمبرايس محاضرة افتراضية للعاملين في القطاع التمريضي لمعرفة المزيد عن الصحة النفسية والعقلية خلال أوقات الصعاب وكيفية معالجتها. كما تضع إمبرايس كافة خدماتها بتصرف الممرضات والممرضين لتقديم المشورة والدعم النفسي.

A team of experts from Embrace will be providing sessions to learn more about our mental health during these times, and what we can do to feel and think better. They will also share resources such as the hotline, access to psychotherapy and consultation.

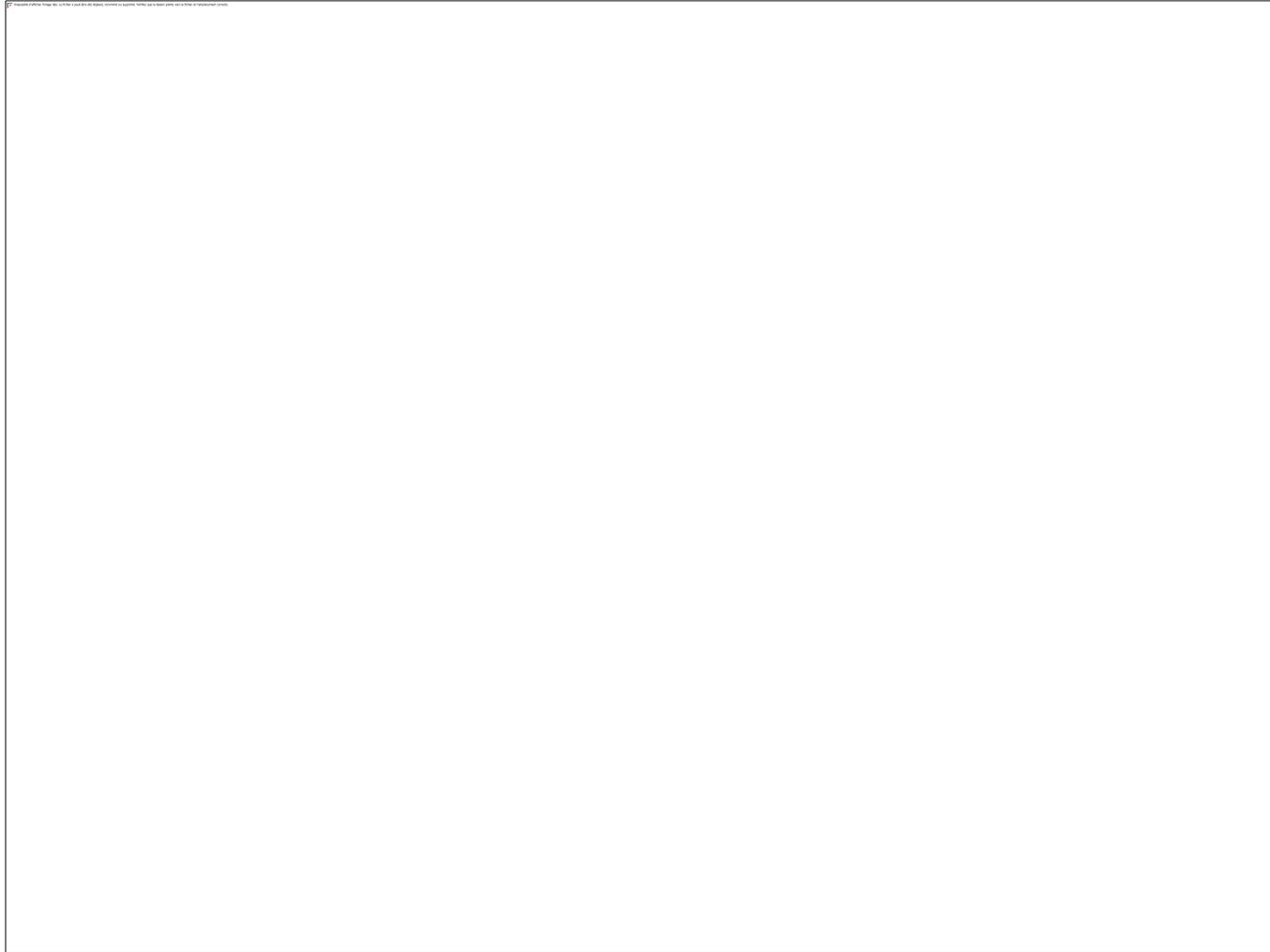
ستتم الجلسات في 24 تشرين الثاني 2020 و 25 تشرين الثاني 2020. يمكنك اختيار أي موعد.

Sessions will be delivered on 24 November, 2020, and 25 November 2020, and you can attend any one of them.

للتسجيل، اضغط على رابط الموقع الموجود أدناه.

To register, click on the link in the caption.

Prof. Roxanne Crosby-Nwaobi & Tendai Gwenhure





**Initiate
support
hospital-based
or community-
based support
programmes**



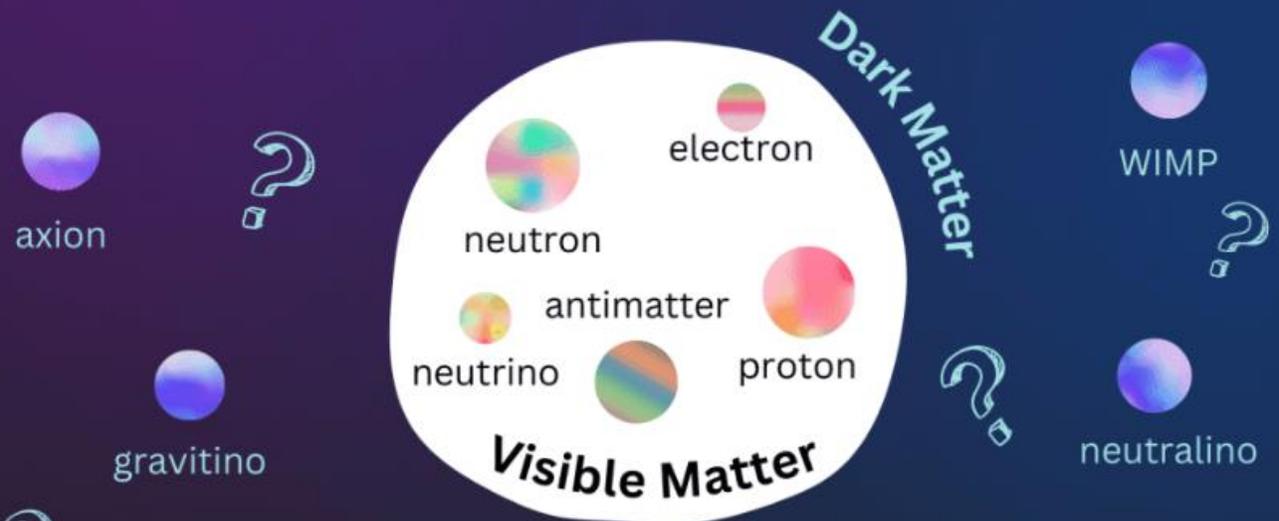
Who inspires
you?



Nursing as
dark matter!

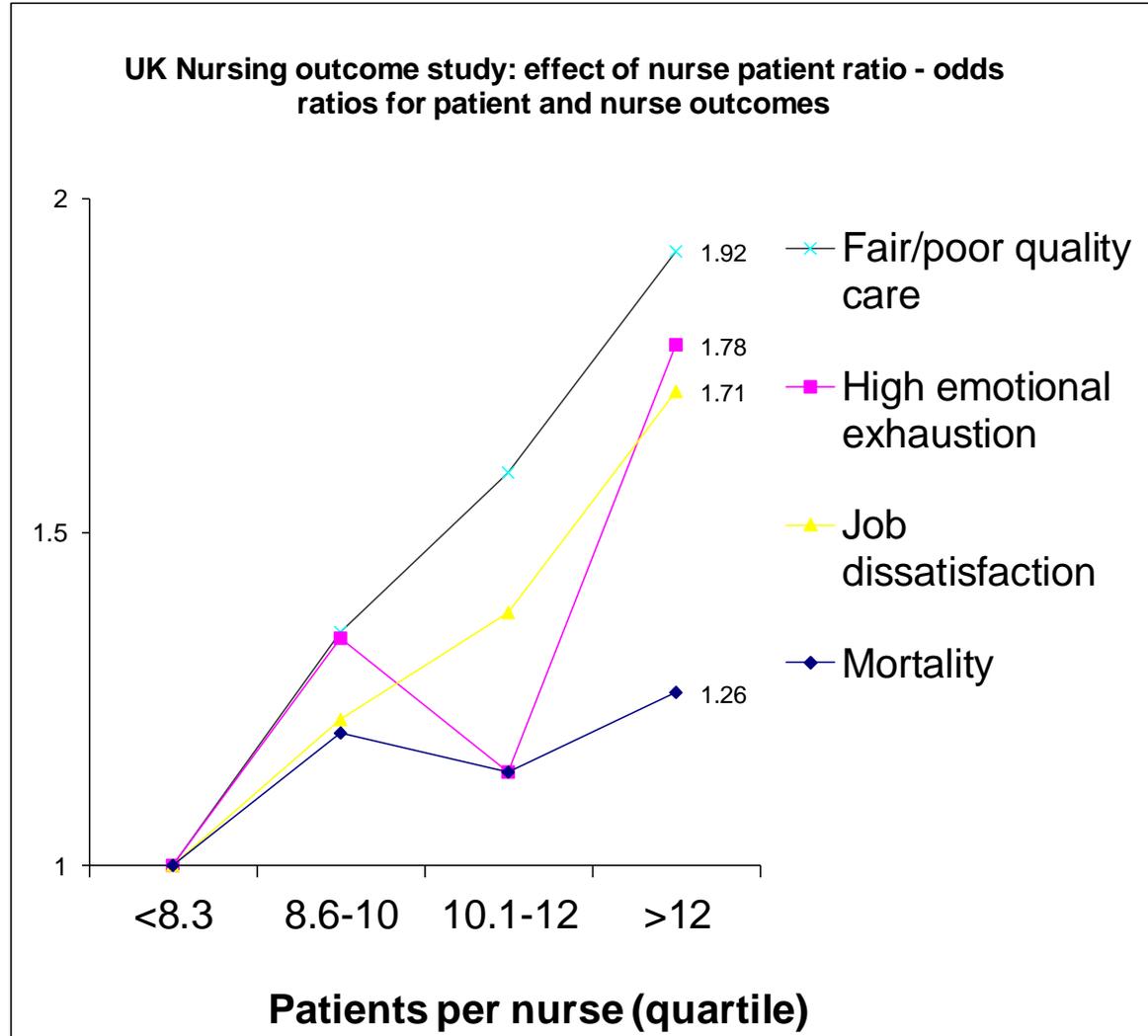
What Is Dark Matter?

Dark matter is a hypothetical form of invisible matter that exerts gravitational effects on light and ordinary matter.



The Universe consists of 5% matter, 27% dark matter, and 68% dark energy.

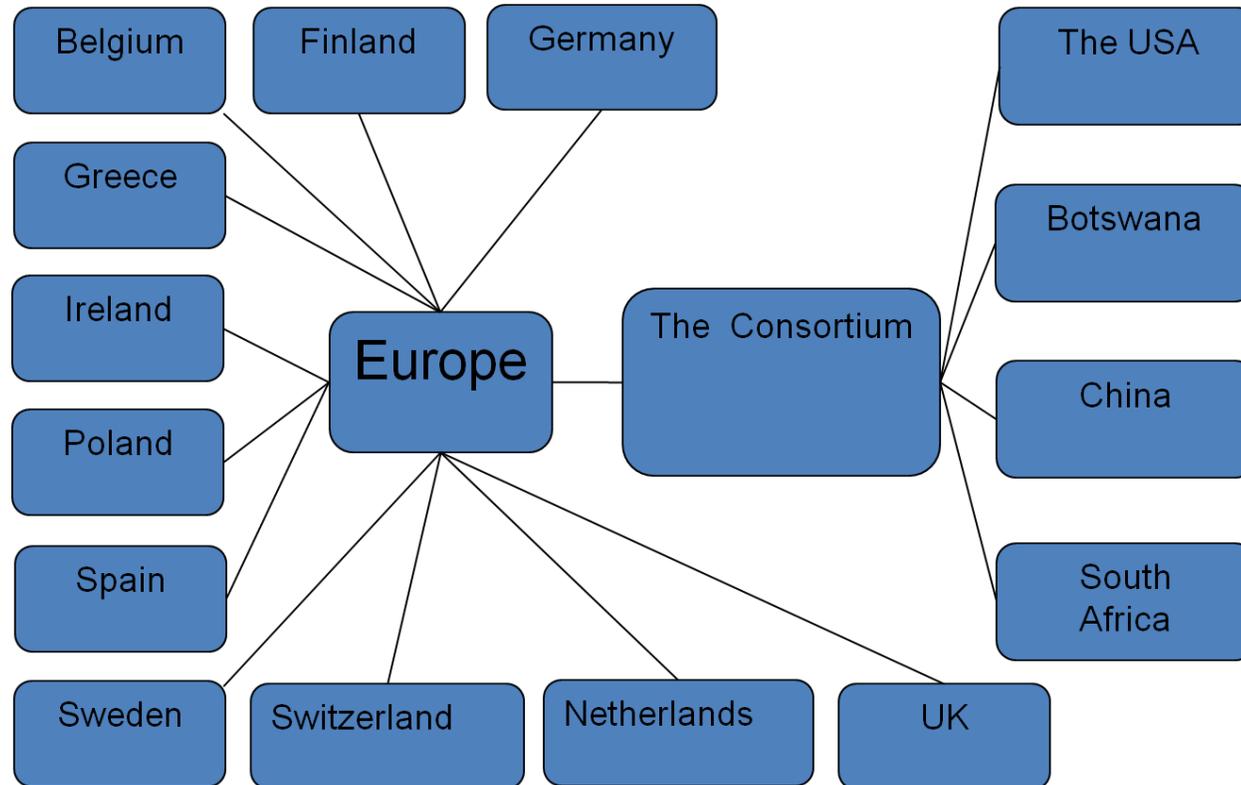
...the human factor



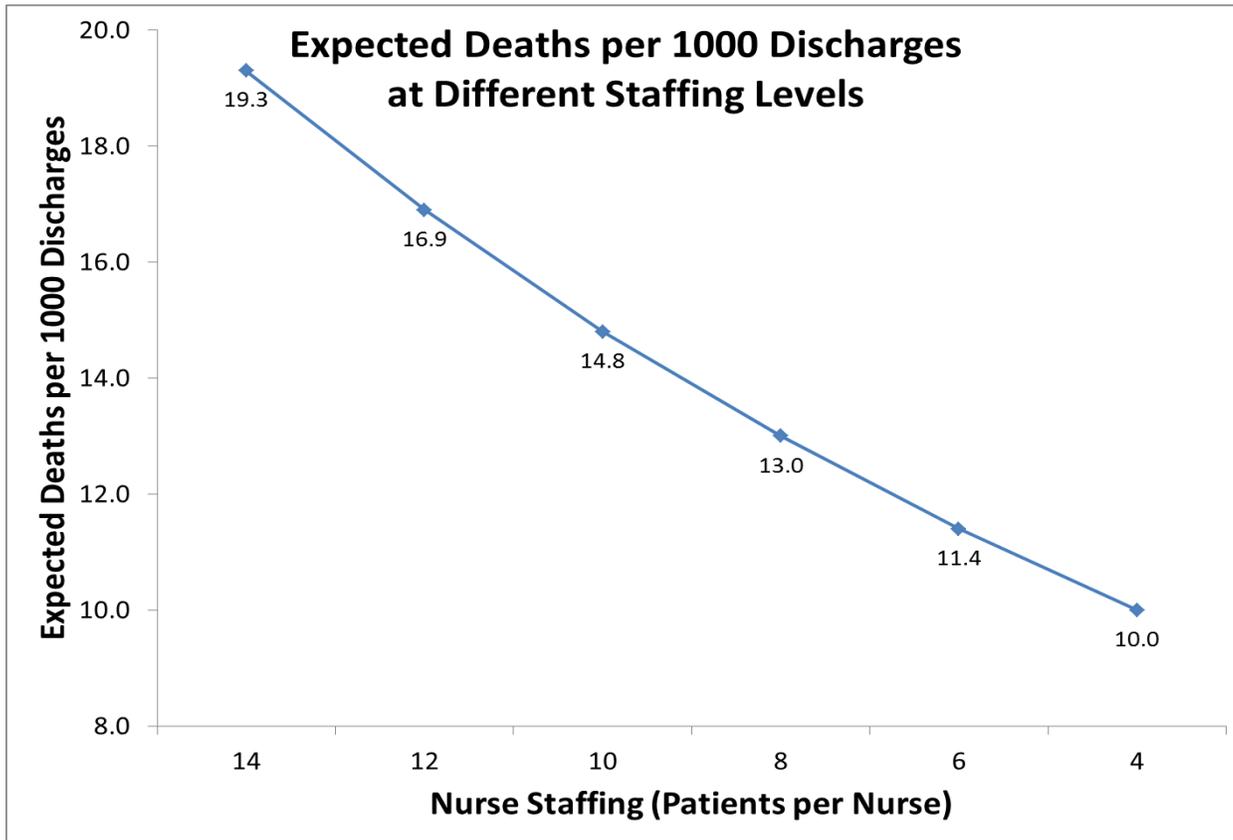
Source data: Rafferty, Clarke, et al. (2007).

Int J Nurs Stud. 44, 2

Possibly the largest nursing workforce study ever undertaken....



Sermeus, W., L. H. Aiken, et al. (2011). "Nurse Forecasting in Europe (RN4CAST): Rationale, design and methodology." BMC Nursing 10(6).



Aiken et al., Lancet, 2014

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

Nursing Standard, Aiken, Rafferty 2014

Zaranko, B., Sanford, N. J., Kelly, E., Rafferty, A. M., Bird, J., Mercuri, L., ... & Propper, C. (2022). Nurse staffing and inpatient mortality in the English National Health Service: a retrospective longitudinal study. *BMJ quality & safety*.

- **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



Nurse staffing and inpatient mortality in the English National Health Service: a retrospective longitudinal study

Ben Zaranko ¹, Natalie Jean Sanford ², Elaine Kelly,^{1,3} Anne Marie Rafferty,² James Bird,⁴ Luca Mercuri,⁵ Janice Sigsworth,⁴ Mary Wells ⁴, Carol Propper^{1,6}

¹Institute for Fiscal Studies, London, UK
²Florence Nightingale Faculty of Nursing Midwifery and Palliative Care, King's College London, London, UK
³The Health Foundation, London, UK
⁴Imperial College Healthcare NHS Trust, London, UK
⁵Research Informatics Team, Imperial College Healthcare NHS Trust, London, UK
⁶Department of Economics and Public Policy, Imperial College Business School, London, UK

Correspondence to Professor Carol Propper, Imperial College Business School, London, UK; c.propper@imperial.ac.uk

Received 20 June 2022
Accepted 15 September 2022



© Author(s) for their employer(s) 2022. Re-use permitted under CC BY. Published by BMJ.

To cite: Zaranko B, Sanford NJ, Kelly E, et al. *BMJ Qual Saf* Epub ahead of print: [please include Day Month Year], doi:10.1136/bmjqs-2022-015291

ABSTRACT
Objective To examine the impact of nursing team size and composition on inpatient hospital mortality.

Design A retrospective longitudinal study using linked nursing staff rostering and patient data. Multilevel conditional logistic regression models with adjustment for patient characteristics, day and time-invariant ward differences estimated the association between inpatient mortality and staffing at the ward-day level. Two staffing measures were constructed: the fraction of target hours worked (fill-rate) and the absolute difference from target hours.

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

Participants 19 287 ward-day observations with information on 4498 nurses and 66 923 hospital admissions in 53 inpatient hospital wards for acutely ill adult patients for calendar year 2017.

Main outcome measure In-hospital deaths.

Results A statistically significant association between the fill-rate for registered nurses (RNs) and inpatient mortality (OR 0.9883, 95% CI 0.9773 to 0.9996, $p=0.0416$) was found only for RNs hospital employees. There was no association for healthcare support workers (HCSWs) or agency workers. On average, an extra 12-hour shift by an RN was associated with a reduction in the odds of a patient death of 9.6% (OR 0.9044, 95% CI 0.8219 to 0.9966, $p=0.0416$). An additional senior RN (in NHS pay band 7 or 8) had 2.2 times the impact of an additional band 5 RN (fill-rate for bands 7 and 8: OR 0.9760, 95% CI 0.9551 to 0.9973, $p=0.0275$; band 5: OR 0.9893, 95% CI 0.9771 to 1.0017, $p=0.0007$).

Conclusions RN staffing and seniority levels were associated with patient mortality. The lack of association for HCSWs and agency nurses indicates they are not effective substitutes for RNs who regularly work on the ward.

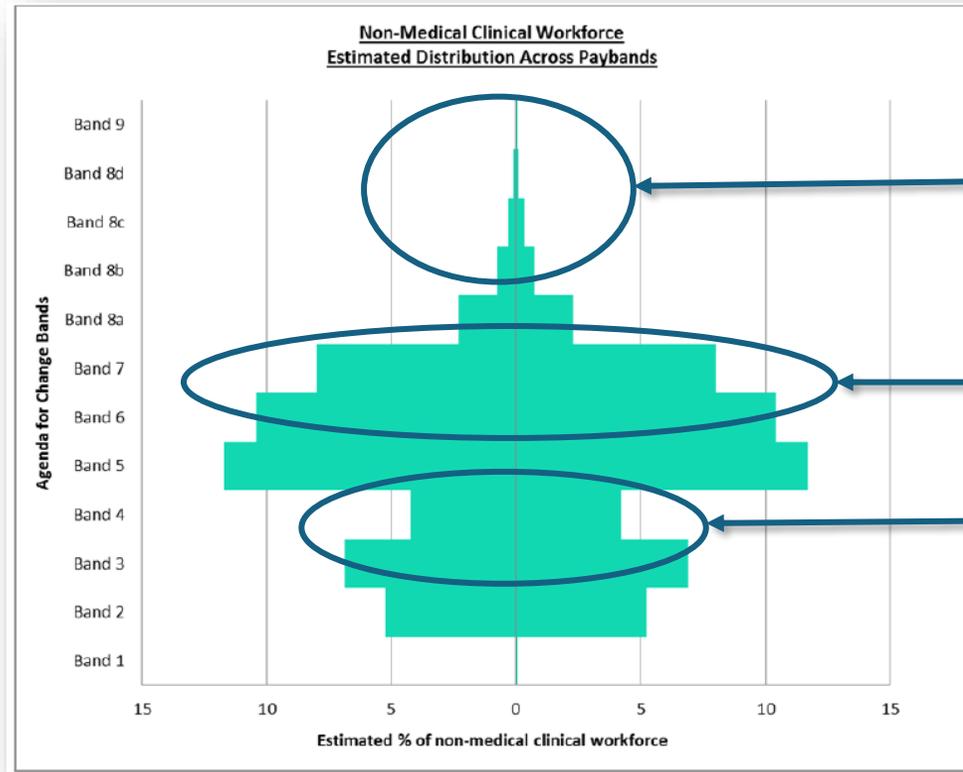
INTRODUCTION

Teams of nursing staff play a critical role in healthcare delivery. Identifying strategies to optimise the staffing of these teams is a priority for health service providers and policymakers. A growing body of research suggests that a richer nursing skill-mix,

greater education levels and higher nurse-to-patient ratios are associated with better patient outcomes, increased staff well-being, decreased healthcare spending and improved workforce retention.^{1–11} Patient outcomes that have been examined include mortality,^{8 11–17} missed care^{13 18 19} and nurse-driven outcomes like pressure injuries, falls and medication errors.^{14 17 20–22} While there is consensus that improving nurse staffing improves patient outcomes, the role of the nursing team and the impact of its size and composition on outcomes remains relatively unexplored. Human capital theory suggests that team composition, in addition to size, matters. Becker²³ distinguishes between general and firm-specific human capital. The former is derived from higher skills or qualifications. The latter is built up from the workers' familiarity with their physical environment and co-workers. Teams are composed of individuals with different levels of general and firm-specific human capital and these factors, in addition to team size, will influence outcomes.

Exploration of the role of different types of human capital has been undertaken in various settings outside^{24 25} and inside^{26–28} healthcare. Related research has examined skill-mix, an element of human capital, in the nursing context.^{27–32} This has typically been done by distinguishing between two groups: registered nurses (RNs) and healthcare support workers (HCSWs). RNs are fully qualified nurses on the Nursing and Midwifery Council register, who have completed formal training and typically hold a university diploma or degree-level qualification.

Important Opportunities At All Levels In The Nursing Workforce



Expand number of advanced roles

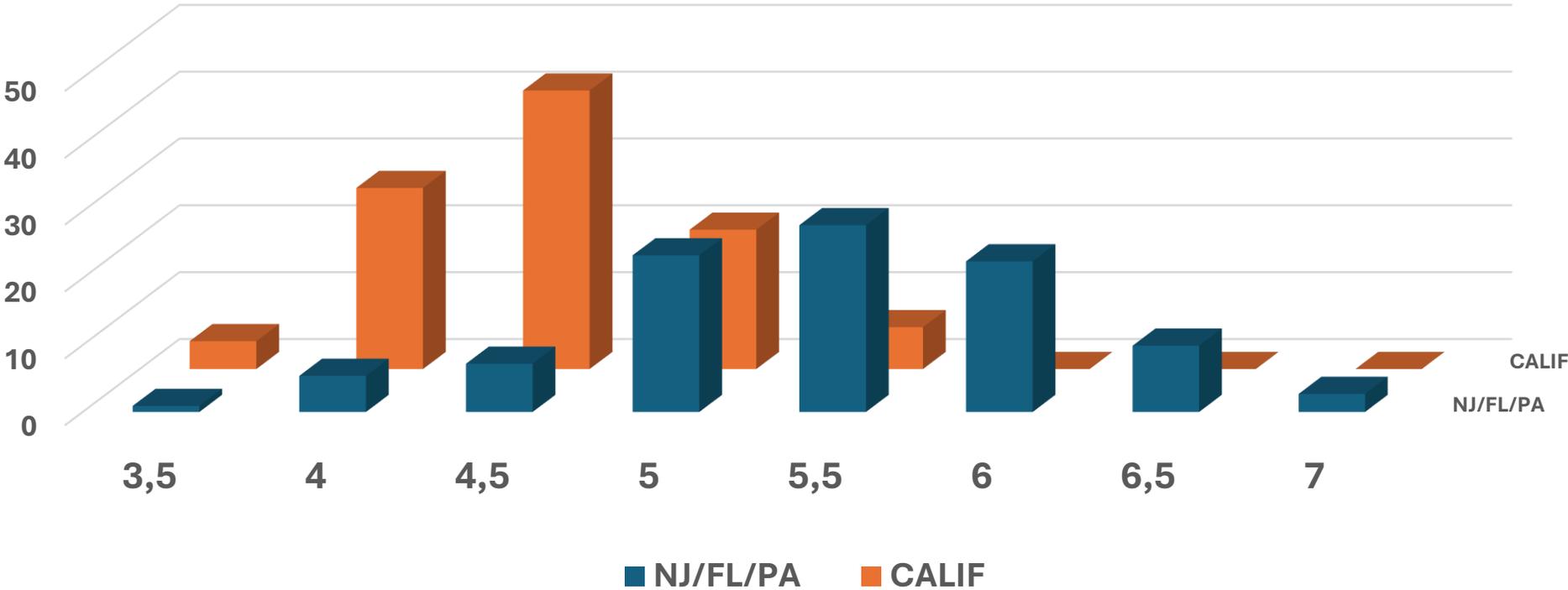
Extend skills – work to top of license

Develop and expand support workforce

15 years later **California hospitals** still have significantly better RN staffing and hospital outcomes than other states

Patient to RN ratios

Percentage of Hospitals



**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:**

**Data Source:
RN4CAST-Australia**

Mortality	12%
Failing grade on patient safety	35%
Failing grade on infection prevention	12%
Patients rating hospital less than excellent	8%
Patients would not recommend hospital	12%
Inadequate time to complete necessary care	16%
Inadequate time to detect patient changes	13%
Nurse job dissatisfaction	8%
Nurse burnout	7%

Monetizing Patient Outcomes: From Queensland Nurse Staffing Evaluation

255

Readmissions avoided annually

Estimated cost savings would be ~ **\$2.2 million** (USD)

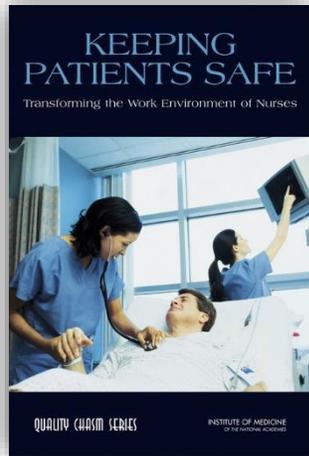
29,222

Hospital days avoided annually

Estimated cost savings would be ~ **\$20 million** (USD)

McHugh, Aiken, The Lancet, May 2021

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



Effects of Nurse Staffing and Nurse Education on Patient Deaths in Hospitals With Different Nurse Work Environments

Aiken, Linda H. PhD, RN¹; Cimiotti, Jeannie P. DNSc, RN²; Sloane, Douglas M. PhD³; Smith, Herbert L. PhD¹; Flynn, Linda PhD, RN²; Neff, Donna F. PhD, APRN⁵

Author Information[©]

Medical Care: December 2011 - Volume 49 - Issue 12 - p 1047-1053
doi: 10.1097/MLR.0b013e3182330b6e

“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)

Fair share for health and care:

gender and the undervaluation
of health and care work



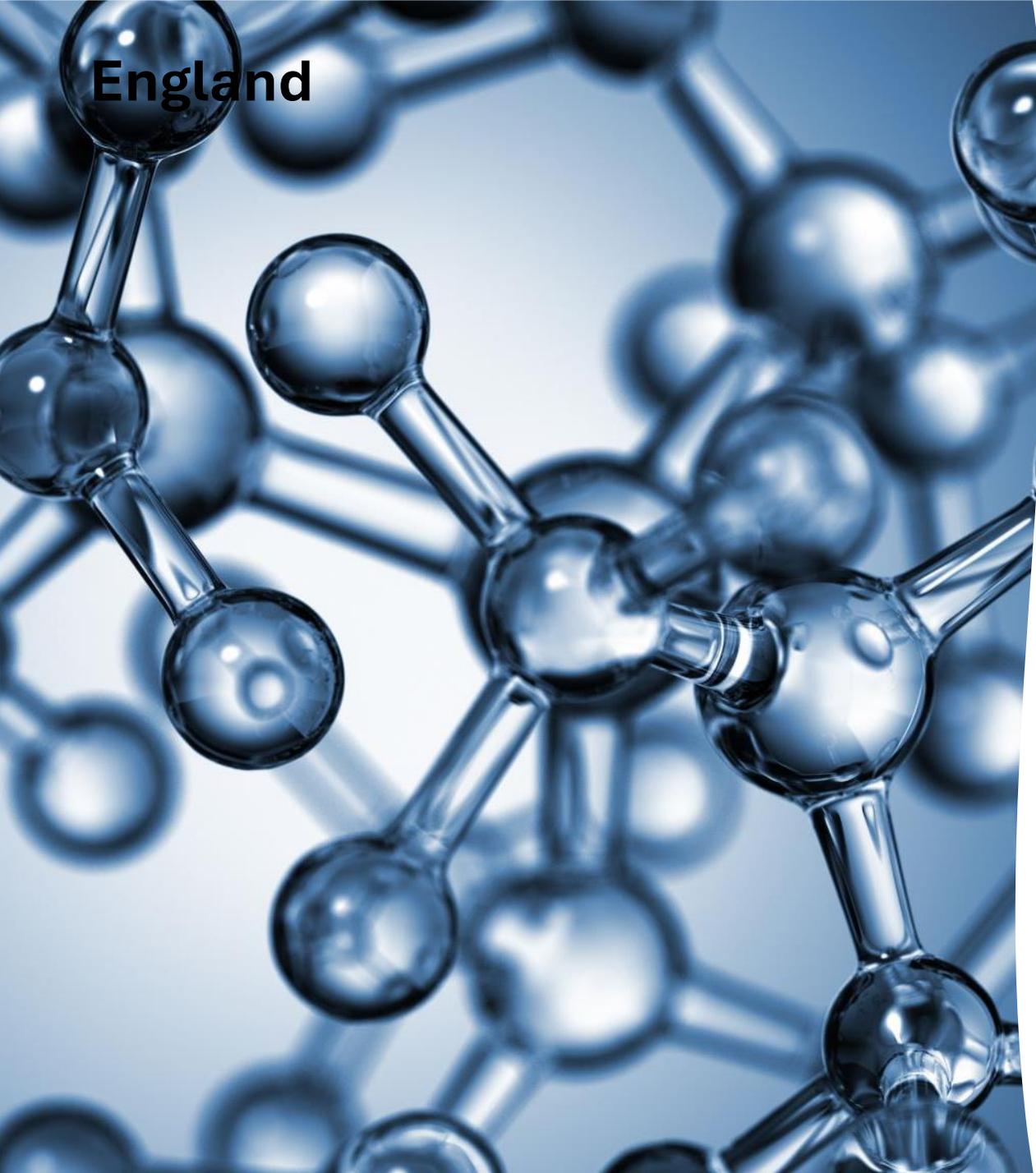
World Health
Organization

- **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



England

In England there is currently no law which gives clear roles, responsibilities or accountability for workforce planning and supply.



The RCN is campaigning for:

Legislation to guarantee safe and effective staffing levels across all sectors and settings.

Tuition fee support and maintenance grants which cover the true cost of living for all nursing students in England.

Pro-judge study aim: Inside the black box

Nurse staffing
systems are
complex
interventions

Previous studies are
blackbox
evaluations

Optimization
requires
understanding of
system components

Pro-Judge designed
to look inside this
blackbox



Magnet4Europe:

Improving Mental Health and Wellbeing in the Healthcare Workplace

Funded under: H2020-EU.3.1.2



October 2024

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).

Proposed intervention: Magnet[®] hospital intervention



Transformational Leadership



Structural Empowerment



Exemplary Professional Practice



New Knowledge



Empirical Quality Results



The UN Sustainable Development Goals 2030

The Atlantic

Why Nerds and Nurses Are Taking Over the U.S. Economy

A blockbuster report from government economists forecasts the workforce of 2026—a world of robot cashiers, well-paid math nerds, and so (so, so, so) many healthcare workers.

DEREK THOMPSON | OCT 26, 2017 | BUSINESS

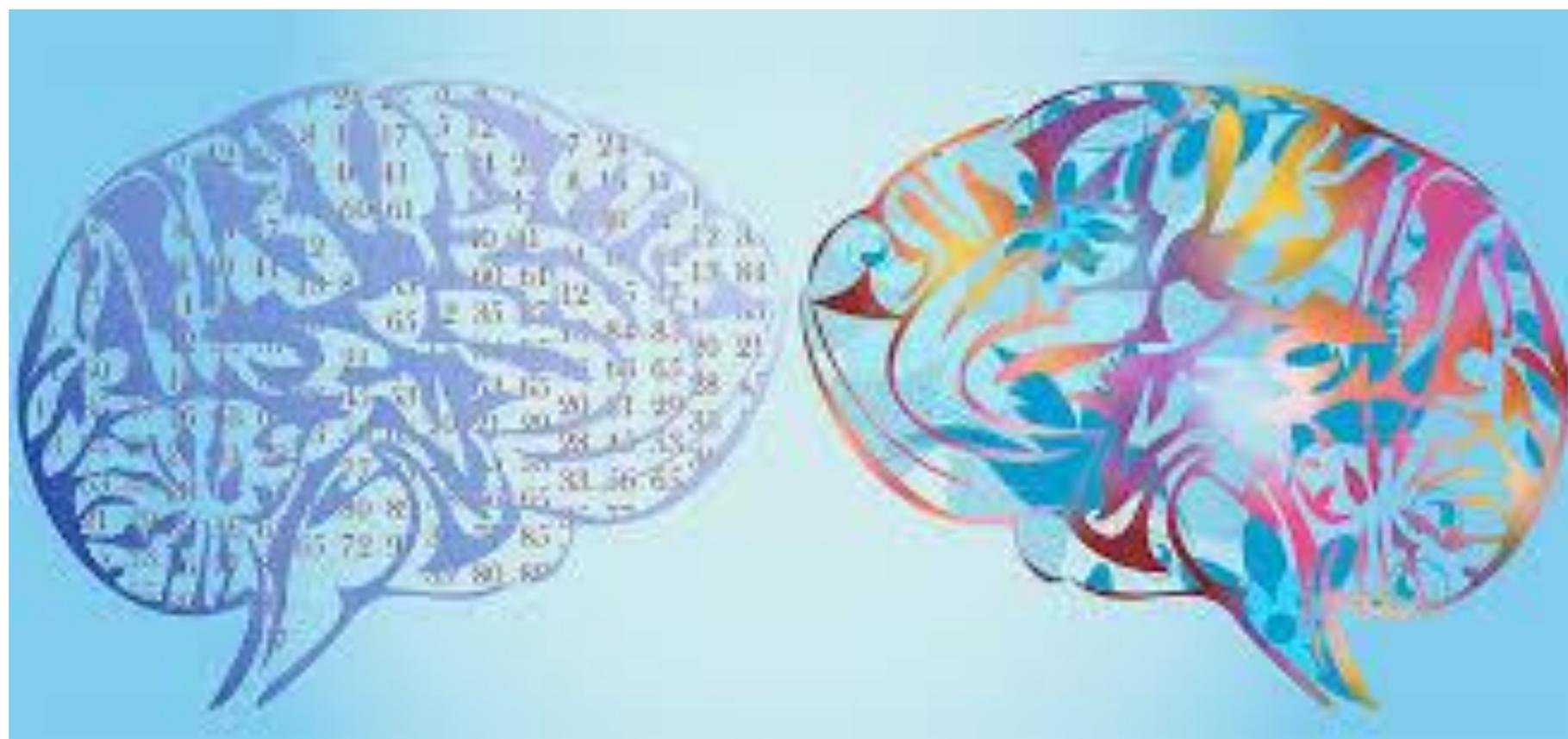


Digital Nursing



Global
leaders call
for scaling
APNs







THE FUTURE OF
POWER

“If your goal is to understand world affairs in
the twenty-first century, there could be no better guide....”

—MADELEINE K. ALBRIGHT

JOSEPH S. NYE, Jr.

Typology of power

Hard

Soft

Smart

Conclusion



NURSES ARE POWERFUL ACTORS
IN HEALTH SYSTEMS



WE HAVE MUCH TO CELEBRATE



ACT STRATEGICALLY TO UNLEASH
FULL POTENTIAL OF SOFT &
SMART POWER