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The research-policy interface: 'safe-staffing' as an example

RCN International Research Conference Oxford

Jane Ball

6th April 2017

Research-policy interface...?

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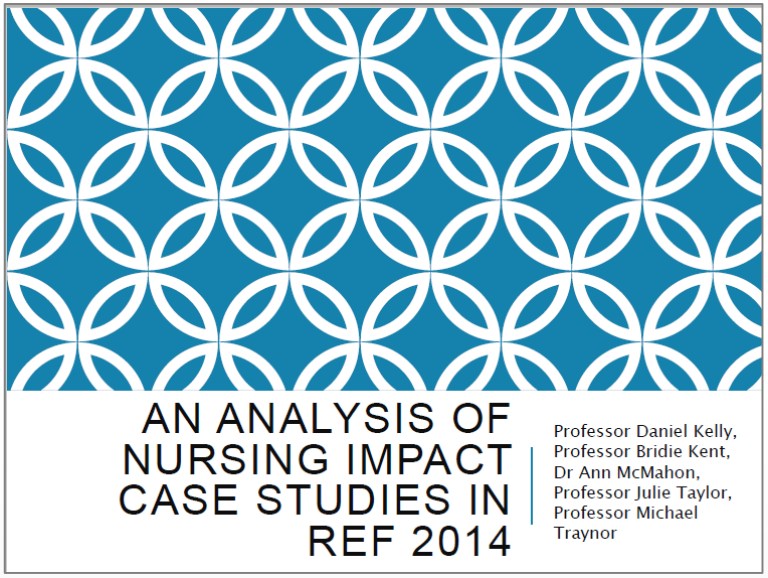

Research Excellence Framework – 'Impact'

*"an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond academia**" (HEFCE 2012)*

http://www.hefce.ac.uk/rsrch/REFimpact/

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"Incorporating relevant research findings into policy & practice decisions should be central"

WHITTY, C. J. 2015. What makes an academic paper useful for health policy? *BMC Medicine, 13, **1.***

What gets in the way of impact?

1. Wrong research
   - Not addressing key questions for policy makers
   - Right question, wrong design/poor execution
2. Right research – wrong output: potentially useful research but findings not presented in a way that is useful to policy
3. Policy makers 'unwilling or unable to take account of good existing evidence'

WHITTY, C. J. 2015. What makes an academic paper useful for health policy? *BMC Medicine, 13**, 1.***

"Real-world impact" Policy maker's perspective

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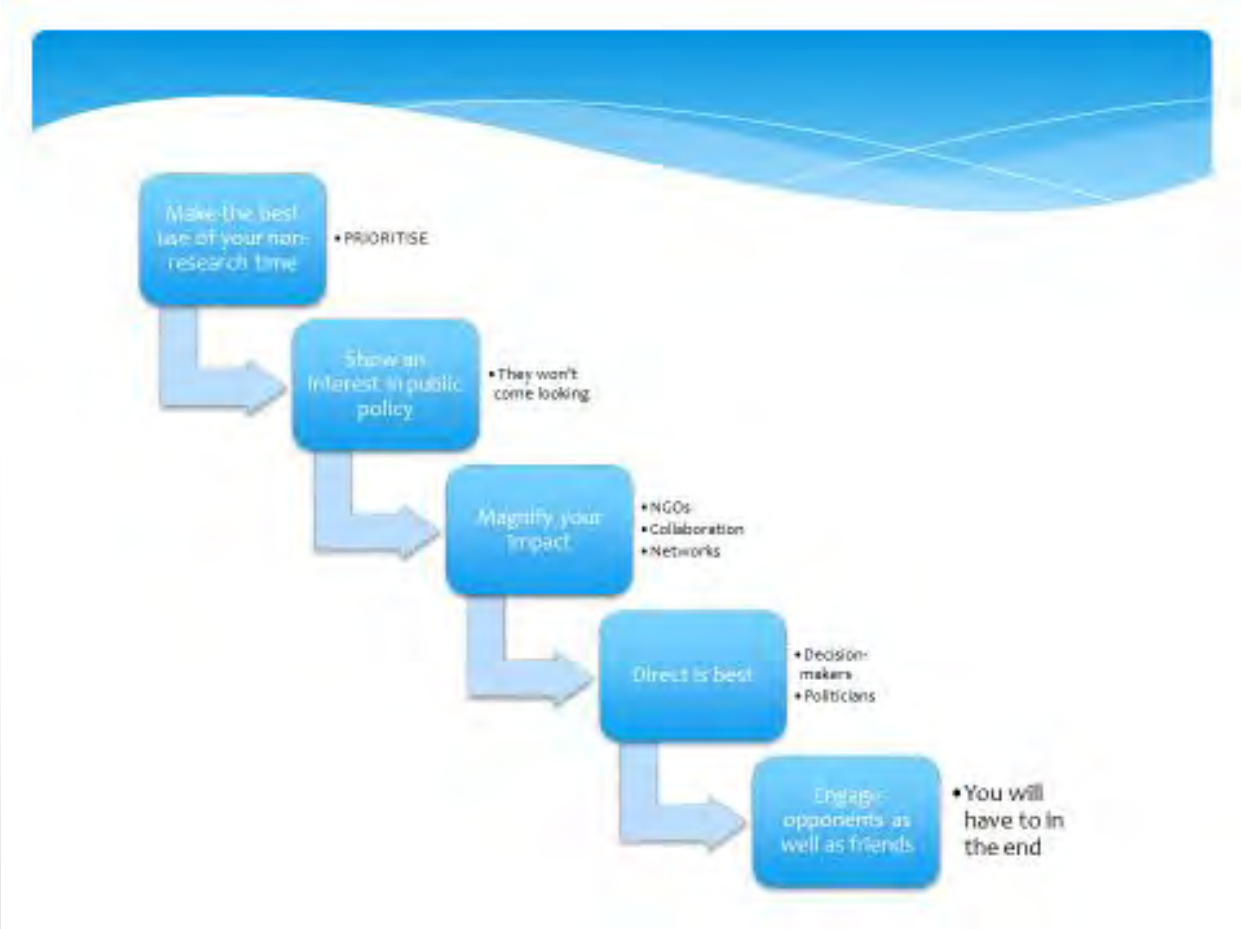


Policy master class with John Denham 'Real-world Impact' – a simple toolkit. Public Policy, University of Southampton. 2016.

“Real-world impact” Policy maker’s perspective

Policy master class with John Denham ‘Real-world Impact’ – a simple toolkit. Public Policy, University of Southampton. 2016.

Research-policy interface?

Research-policy interface?

Who makes & shapes nursing workforce policy in England?

- Secretary of State for Health
- Department of Health (Nursing advisory unit?)
- NHS England
- Chief Nursing officer
- NHS improvement
- Health Education England

Who reviews/scrutinises nursing workforce policy?

- National Audit Office (NAO)
- Migration Advisory Committee (MAC)
- Health Select committees
- Regulators: Care Quality Commission / (Monitor)
- Efficiency reviews: eg. Carter review

Research-policy interface: NICE - using evidence to develop guidelines

"We use the **best available evidence to develop recommendations that guide decisions** in health, public health and social care. As well as considering the **scientific value of evidence**, we also follow a **set of principles** for making social value judgements."

Research evidence base

- In the 1980's… eg.
  - Hinshaw et al (1981) 'Staff, patient and cost outcomes of all RN staffing'
  - Fagin (1982) 'Nursing as an alternative to high cost care' (review of 51 studies)
  - Hartz et al (1989). Hospital characteristics and mortality rates. *The New England Journal of Medicine*.
- Links to 'magnet' hospital research
  - Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower Medicare mortality among a set of hospitals known for good nursing care. *Medical care*.
  - Scott, J., Sochalski, J., & Aiken, L. (1999). "Review of magnet hospital research: findings and implications for professional nursing practice." *J. of Nursing Administration*
- International Hospital Outcomes Study (5 countries)
  - Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: cross-national findings. Nursing outlook, 50(5), 187-194.
- Thirty years later: RN4Cast (15 countries)
  - Aiken, L. H., Sloane, D. M., Bruyneel, L., et al (2014). Nurse staffing and education and hospital mortality in nine European countries. *The Lancet*

Kane et al's systematic review

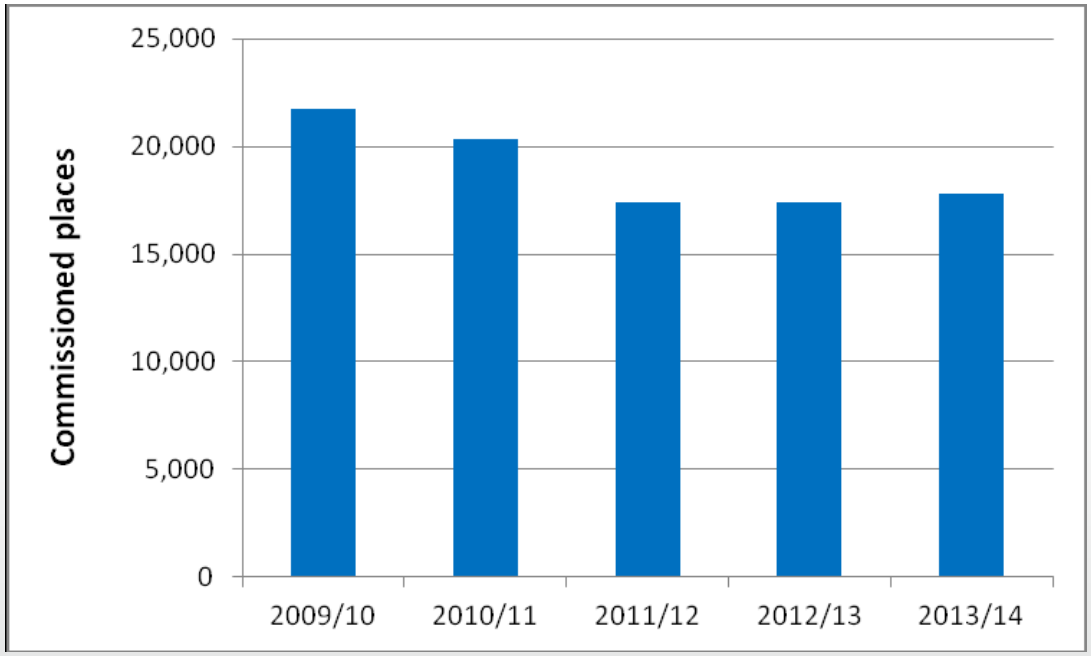
- 96 studies
- Meta-review of 28
- Increased RN staffing was associated with lower hospital related mortality
  - intensive care units (OR 0.91 CI 0.86–0.96)
  - surgical units (OR, 0.84; 95% CI, 0.80–0.89),
  - medical patients (OR, 0.94; 95% CI, 0.94–0.95)

Kane et al (2007) Medical Care 45: 12, 1195-1204

*Lack of staff is often an excuse for poor care…. there is **no direct correlation** between number of staff and good or bad care*

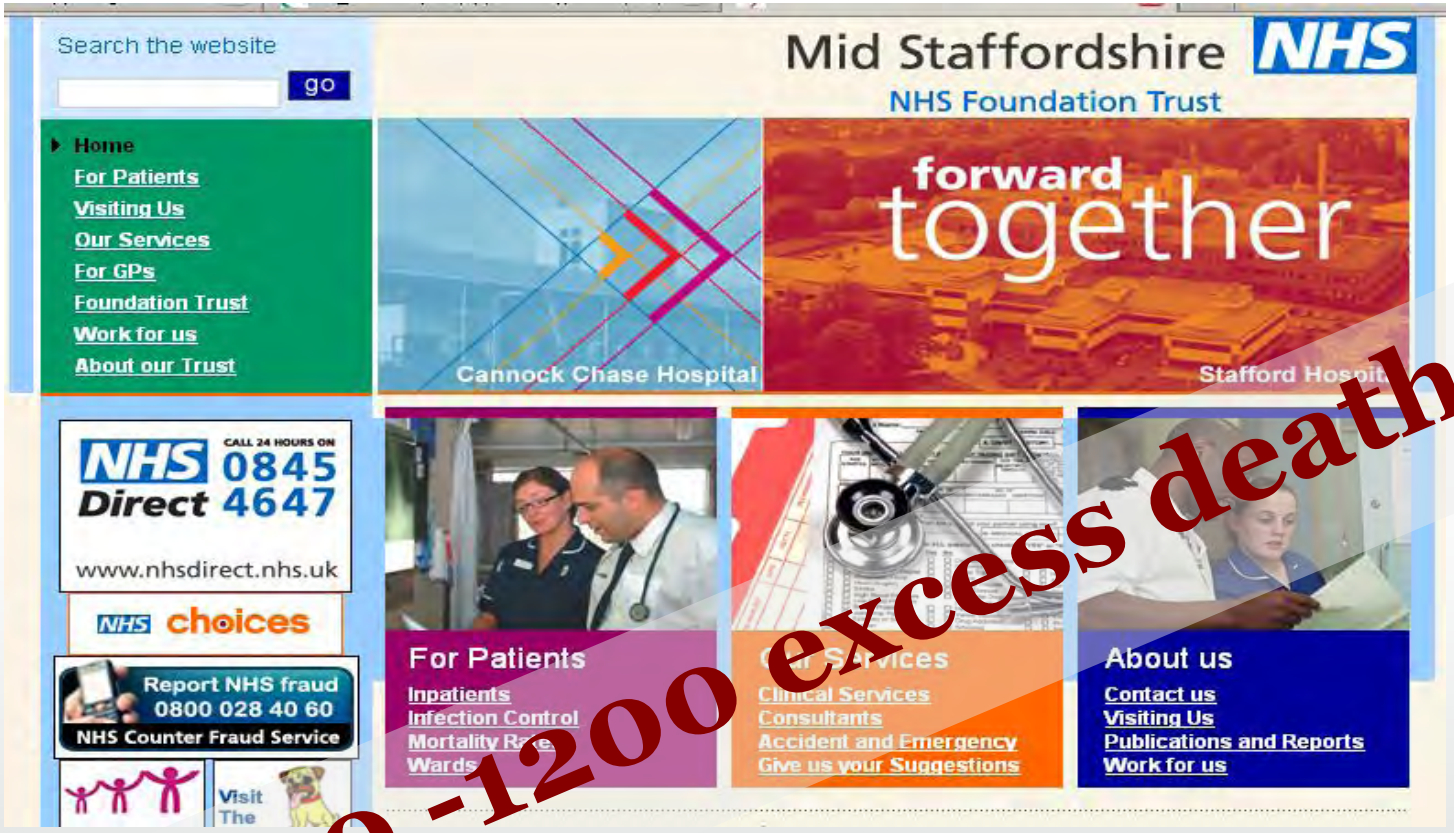
Harry Cayton, CHRE regulator, HSJ March 2012

Nursing student places commissioned England - 2009/10 to 2013/14



Source: Nursing Standard, vol. 27, no. 39, May 29 2013, p12-13

Crisis in nursing care



400 -1200 excess deaths?

Francis Inquiry found:

"There does not appear to have been an evidence base for the changes that were made.

The attraction of the advantages – the financial savings – discouraged proper attention being paid to the disadvantages"

Robert Francis:

*"So much of what goes **wrong in our hospitals is likely,** and indeed it was, in many regards, the case in Stafford, **due to there being inadequate numbers of staff,** either in terms of numbers or skills"*

Strengths & weaknesses of the evidence

International Journal of Nursing Studies 63 (2016) 213–225

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journal homepage: www.elsevier.com/ijns

Discussion

Nurse staffing and patient outcomes: Strengths and limitations of the evidence to inform policy and practice. A review and discussion paper based on evidence reviewed for the National Institute for Health and Care Excellence Safe Staffing guideline development

Peter Griffiths [a,*], Jane Ball [a], Jonathan Drennan [b], Chiara Dall'Ora [a], Jeremy Jones [b], Antonello Maruotti [b,c], Catherine Pope [b], Alejandra Recio Saucedo [a], Michael Simon [c,d]

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ABSTRACT

A large and increasing number of studies have reported a relationship between low nurse staffing levels and adverse outcomes, including higher mortality rates. Despite the evidence being extensive in size, and having been sometimes described as "compelling" and "overwhelming", there are limitations that existing studies have not yet been able to address. One result of these weaknesses can be observed in the guidelines on safe staffing in acute hospital wards issued by the influential body that sets standards for the National Health Service in England, the National Institute for Health and Care Excellence, which concluded there is insufficient good quality evidence available to fully inform practice.

In this paper we explore this apparent contradiction. After summarising the evidence review that informed the National Institute for Health and Care Excellence guideline on safe staffing and related evidence, we move on to discussing the complex challenges that arise when attempting to apply this evidence to practice. Among these, we introduce the concept of endogeneity, a form of bias in the estimation of causal effects. Although current evidence is broadly consistent with a cause and effect relationship, endogeneity means that estimates of the size of effect, essential for building an economic case, may be biased and in some cases qualitatively wrong. We expand on three limitations that are likely to lead to endogeneity in many previous studies: omitted variables, which refers to the absence of control for variables such as medical staffing and patient case mix; simultaneity, which occurs when the outcome can influence the level of staffing just as staffing influences outcome; and common-method variance, which may be present when both outcomes and

- Omitted variables
- Simultaneity
- Common-method variance

Griffiths P, Ball J, Drennan J, Dall'Ora C, et al. (2016) Nurse staffing and patient outcomes: strengths and limitations of the evidence to inform policy and practice. IJNS 63:213–25.

More research needed?

- Predominance of research from USA
- What about other staff? Possible confounding:
  - Medical staffing
  - Support worker staffing
- What 'dose' of RN staffing is associated with effects on safety, quality, outcomes?
- What difference does the context make?
- Correlation does not equal causation – what is the theoretical causal pathway?

RN4CAST nurse forecasting in Europe

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3 year EU-funded study: 2009-2011

Nurse Survey

31 Trusts (46 Hospitals)
101 med/surg wards
2,990 RNs

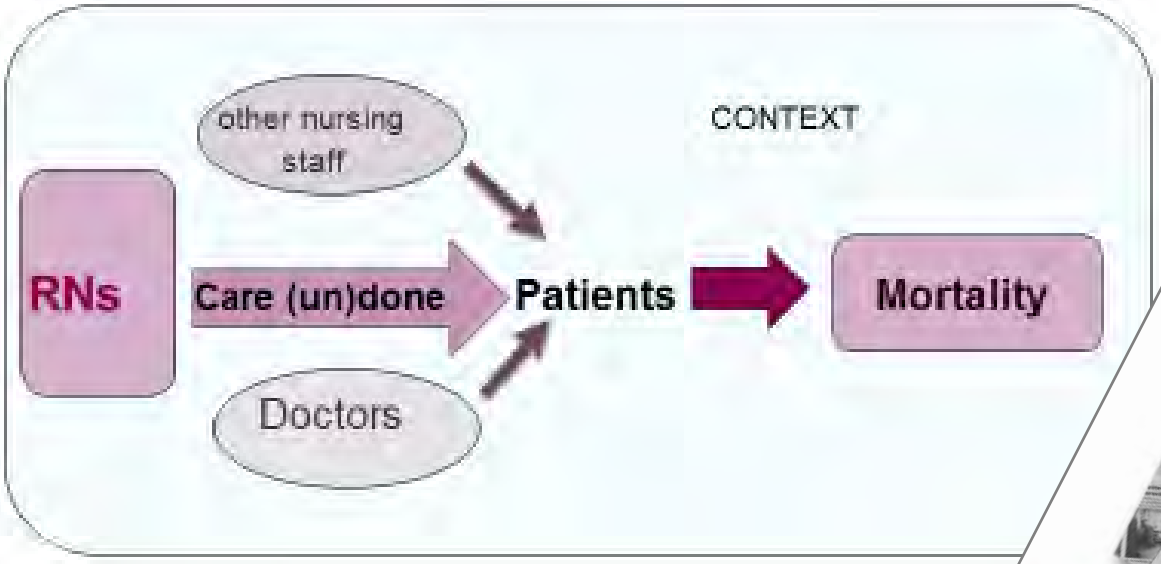
Patient Satisfaction
National data
(secondary)

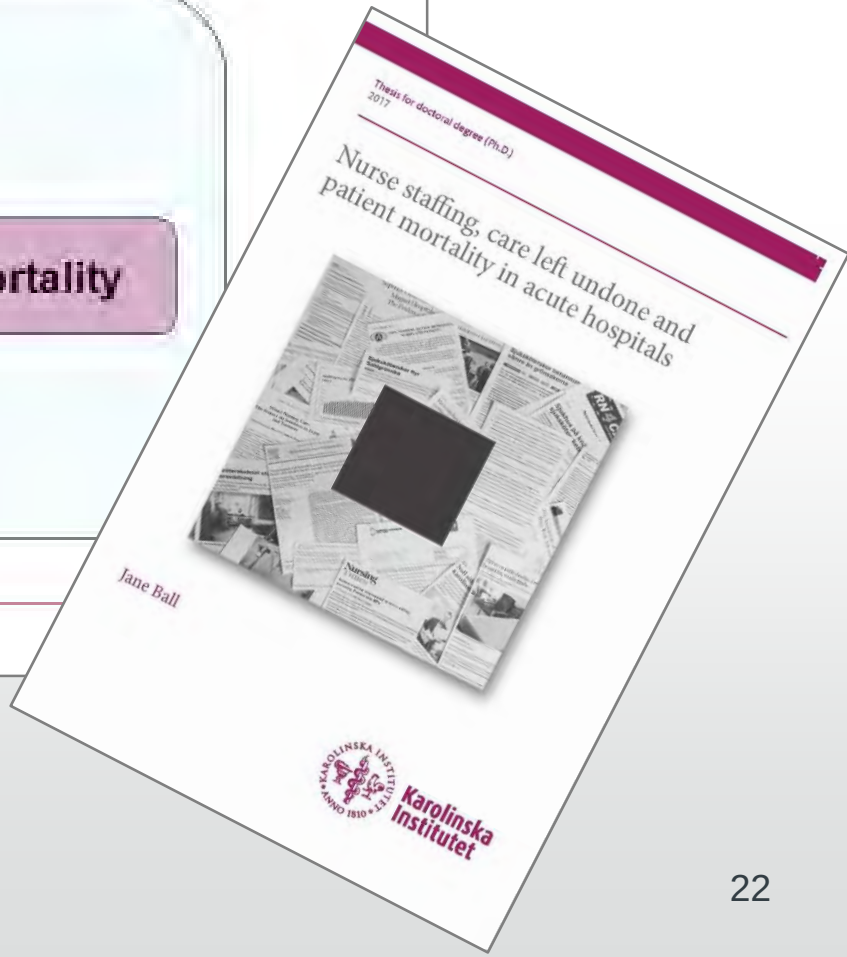
Patient discharge data
HES data – mortality rates

Hospital characteristics
Hospital/Trust survey

15 countries

Nurse staffing levels, care left undone & patient risk of death in hospital





Being proactive at the interface: presenting the evidence differently

SAFE STAFFING ALLIANCE

"A ratio of more than 8 patients per RN significantly increases the risk of harm and constitutes a breach in patient safety"

May 2013

Reaction to research findings

UNIVERSITY OF Southampton

July 2013

OPEN ACCESS

'Care left undone' during nursing shifts: associations with workload and perceived quality of care

Jane E Ball,[1] Trevor Murrells,[1] Anne Marie Rafferty,[2] Elizabeth Morrow,[1] Peter Griffiths[3]

► Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10.1136/bmjqs-2012-001763).

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ABSTRACT

Background There is strong evidence to show that lower nurse staffing levels in hospitals are associated with worse patient outcomes. One hypothesised mechanism is the omission of necessary nursing care caused by time pressure ('missed care').

Aim To examine the nature and prevalence of care left undone by nurses in English National Health Service hospitals and to assess whether the number of missed care episodes is associated with nurse staffing levels and nurse ratings of the quality of nursing care and patient safety environment.

Methods Cross-sectional survey of 2917 registered nurses working in 401 general medical/surgical wards in 46 general acute National Health Service hospitals in England.

Results Most nurses (96%) reported that one or more care activity had been left undone due to lack of time on their last shift. Most frequently left undone were, comforting or talking with patients (66%), educating patients (52%) and developing/updating nursing care plans (47%). The number of patients per registered nurse was significantly associated with the incidence of 'missed care' ($p<0.001$). A mean of 7.8 activities per shift were left undone on wards that are rated as 'failing' on patient safety, compared with 2.4 where patient safety was rated as 'excellent' ($p<0.001$).

Conclusions Nurses working in English hospitals report that care is frequently left undone. Care not being delivered may be the reason low nurse staffing levels adversely affects quality and safety. Hospitals could use a nurse-rated assessment of 'missed care' as an early warning measure to identify wards with inadequate nurse staffing.

To cite: Ball JE, Murrells T, Rafferty AM, *et al*. *BMJ Qual Saf* Published Online First: [please include Day Month Year] doi:10.1136/bmjqs-2012-001763

INTRODUCTION

The National Health Service (NHS) in England, like many healthcare systems in the world, is facing intense pressure to maintain the quality and safety of care provided in hospitals at the same or less cost than in previous years.[1] The quality of nursing care—and the potential for poor nursing care to do patients great harm—has been the focus of numerous recent reports in England.[2 3] Poor quality care is a source of significant increased cost internationally.[4] The Francis Inquiry[5] examined the reasons why hundreds of patients experienced poor care at The Mid Staffordshire NHS Foundation Trust between January 2005 and March 2009. The Inquiry was instigated when hospital standardised mortality ratios (case mix adjusted mortality rates) indicated that between 400 and 1200 more patients than expected had died over a 2 year period. Numerous patient accounts were heard by the Inquiry including negative experiences of fundamental aspects of nursing care including care such as communication, maintaining dignity, discharge planning and safety. Failure to ensure adequate nurse staffing was a central factor identified in the report.

There is clearly a need to understand the scale of potential problems in care delivery across the NHS and internationally. There is also a need to understand mechanisms which link nurse staffing to quality and safety outcomes—including our focus here—the nature and extent of care that might be being 'left undone'.[6] The purpose of this study is to describe the nature and prevalence of care left undone (as reported by nurses) and explore its association with nurse staffing levels and nurse ratings of the quality of care and patient safety environment.

BACKGROUND

The body of evidence demonstrating an association between patient outcomes and nurse staffing is substantial. A systematic

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Almost nine in ten nurses 'forced to ration care'

Monday 29 Jul 2013 11:30 pm

198 shares | Share on Facebook | Share on Twitter

Nurses say they are being forced to ration care (Picture: Getty)

Metro News Re

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theguardian

News | Sport | Comment | Culture | Business | Money | Life & sty

News > Society > NHS

Time-poor NHS nurses forced to ration care, study finds

Study from 76 hospitals and 3,000 nurses shows nine in 10 staff are too busy to fulfil all care duties

Press Association
theguardian.com, Tuesday 30 July 2013 08.58 BST
Jump to comments (27)

Nurses in NHS hospitals say they are often too busy to deliver all care duties

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Two-thirds of nurses are 'too busy to talk to patients' and 80% admit to rationing care

- 80% 'forced to ration their care because they are too pressed for time'
- Aspect of role most likely to disappear is comforting patients
- Study questions 3,000 nurses working in more than 400 wards

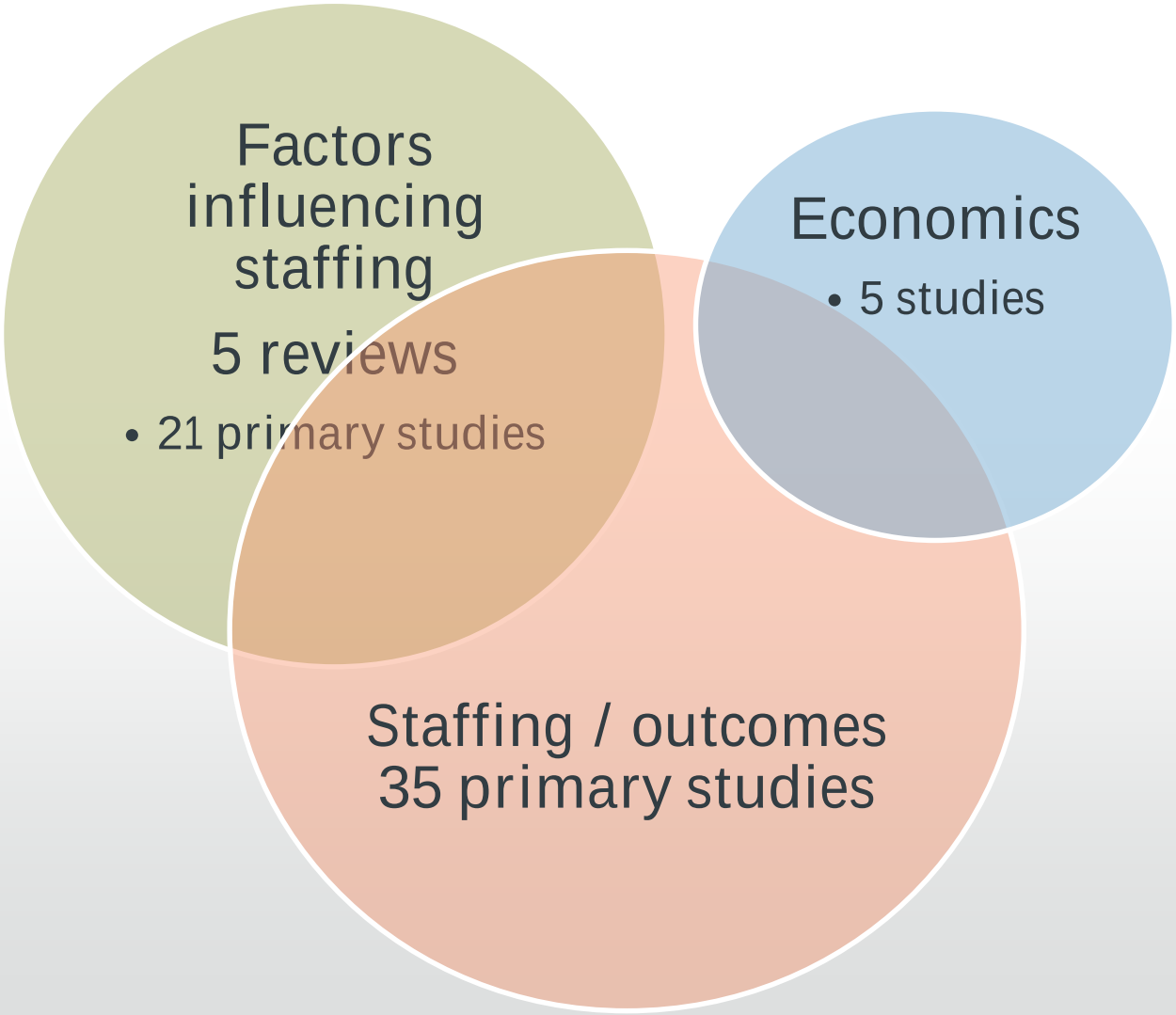
By JENNY HOPE

PUBLISHED: 00:59, 30 July 2013 | UPDATED: 09:26, 30 July 2013

Government response to Francis Report: Nov 2013

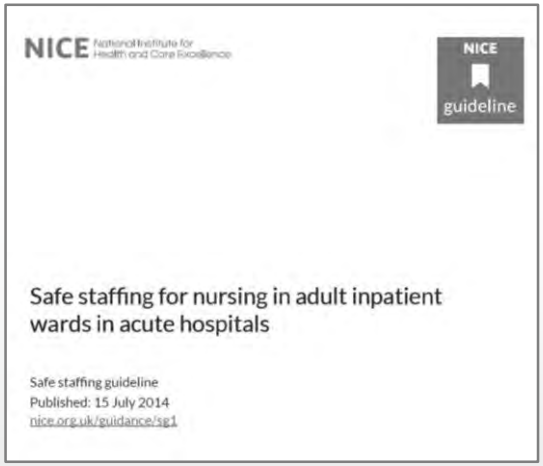
- NICE to undertake a review of the evidence and provide guidelines for safe staffing in each specialty (July 2014 – ‘’red flag’ triggers for review)
- Staffing levels in each Trust to be published
- Nurse staffing on each ward to be made visible

Review of Evidence for NICE



Safe staffing policy post Francis

- Policies refer to ‘Safe staffing’
- National Quality Board guidelines
- Trust ‘fill-rates’ published
- NICE Guidelines published (2014)
- DH-PRP Study to examine the implementation of safe staffing policies post Francis



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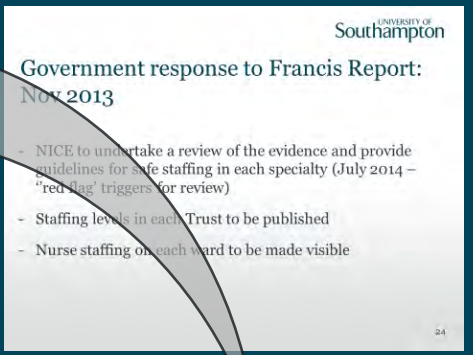
SAFE STAFFING ALLIANCE

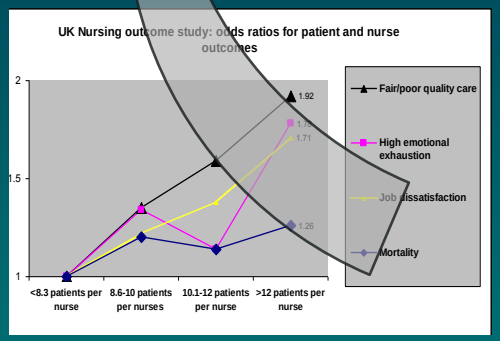
Profile of evidence

Media/public awareness



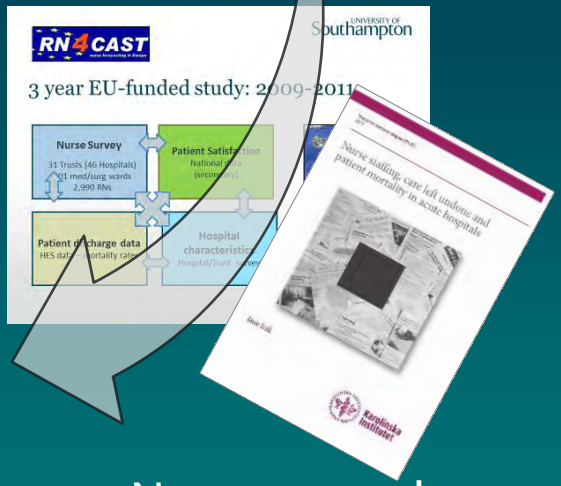
Public inquiry & Policy Response

Crisis



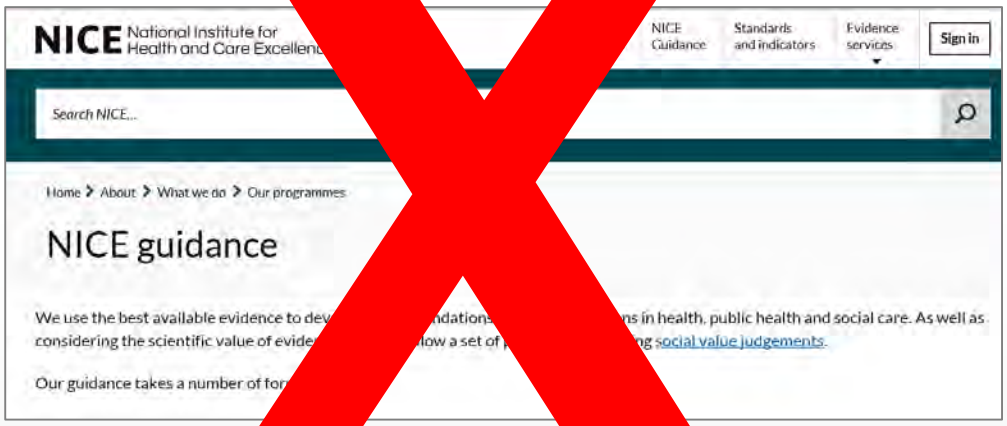
Existing evidence

Evidence based guidelines



New research

NICE evidence based guidelines on Safe Nurse staffing levels



"We use the best **available evidence to develop recommendations that guide decisions** in health, public health and social care. As well as considering the **scientific value of evidence**, we also follow a **set of principles** for making social value judgements."

Safe staffing in England – policy shifts?

- NICE guidance discontinued by NHS England (June 2015)
- Only fill 'essential' vacancies (Aug 2015)
- Trusts told to 'cap' the amount spent on temporary staffing (Aug 2015)
- Health Education England commission 300 of the 3,000 extra RN training places needed (Dec 2015)
- Nursing Associates to "bridge the gap" (Dec 2015)
- Migration Advisory Committee: shortage of nurses is NHS own making
- Care Hours per Patient Day - CHPPD (April 2016)
- NHS Improvement guidance: "Safe SUSTAINABLE staffing" (Dec 2016)
- Ban on nurses working agency (March 2017)

Decision making on nurse staffing levels – in the 'real' world

"Safety at all costs" ?

vs.

"Finance trumps quality" ?

Bigger messier picture

- Its not linear: Research -> “Evidence” -> Policy
- Other factors shape policy
- Context – the politics of policy development
- Direct and indirect lever for policy change (public, media)
- Active policy formation vs policy evolution
- Multiple interfaces

Conclusion:

Has research on nurse staffing impacted on Policy?

What's the role of research and researchers?

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Thank you!

Any questions?

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