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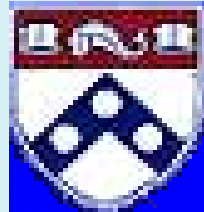
University of London

Nurse staffing and mortality in English hospitals

*Presented by Professor Anne Marie Rafferty
King's College London May, 2010*

coinvestigators

Linda Aiken



Sean Clarke

Jane Ball



Martin McKee



James Coles



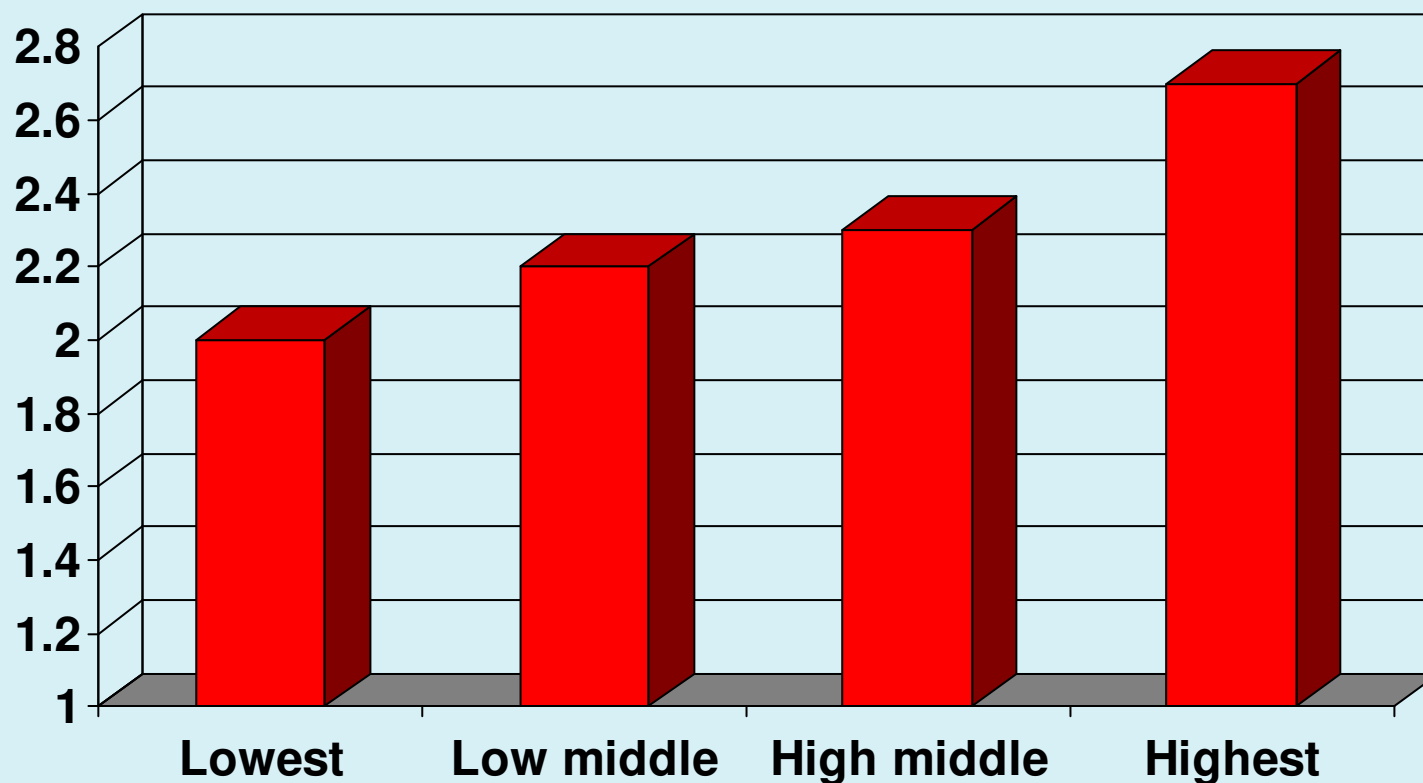
aims

- to use a cross-national study of hospital quality as a vehicle for examining the impact of nurse staffing on patient outcomes
- to test the transfer of a US to a UK research model
- to identify the relationship between nurse staffing and patient outcomes

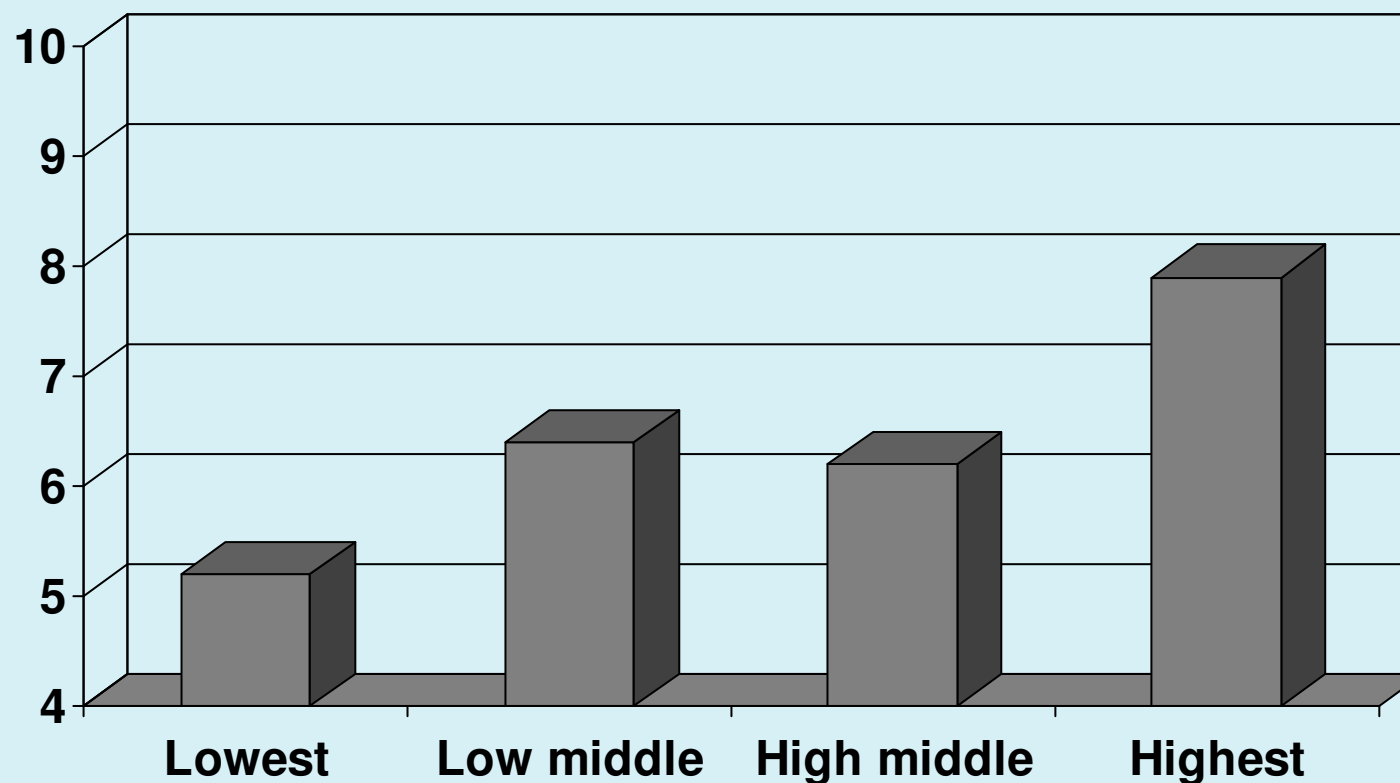
patient outcomes

- inpatient mortality for 118 752 general, orthopedic and vascular surgery patients (overall: 2.3%)
- controls for demographic, clinical characteristics (e.g. emergency surgery, co morbidities)
- expressed as the number of observed deaths per 1000 more (+) or fewer (-) than those expected on the basis of patient characteristics, etc.
- after control for clinical characteristics of patients and trust characteristics, risks expressed as percentages

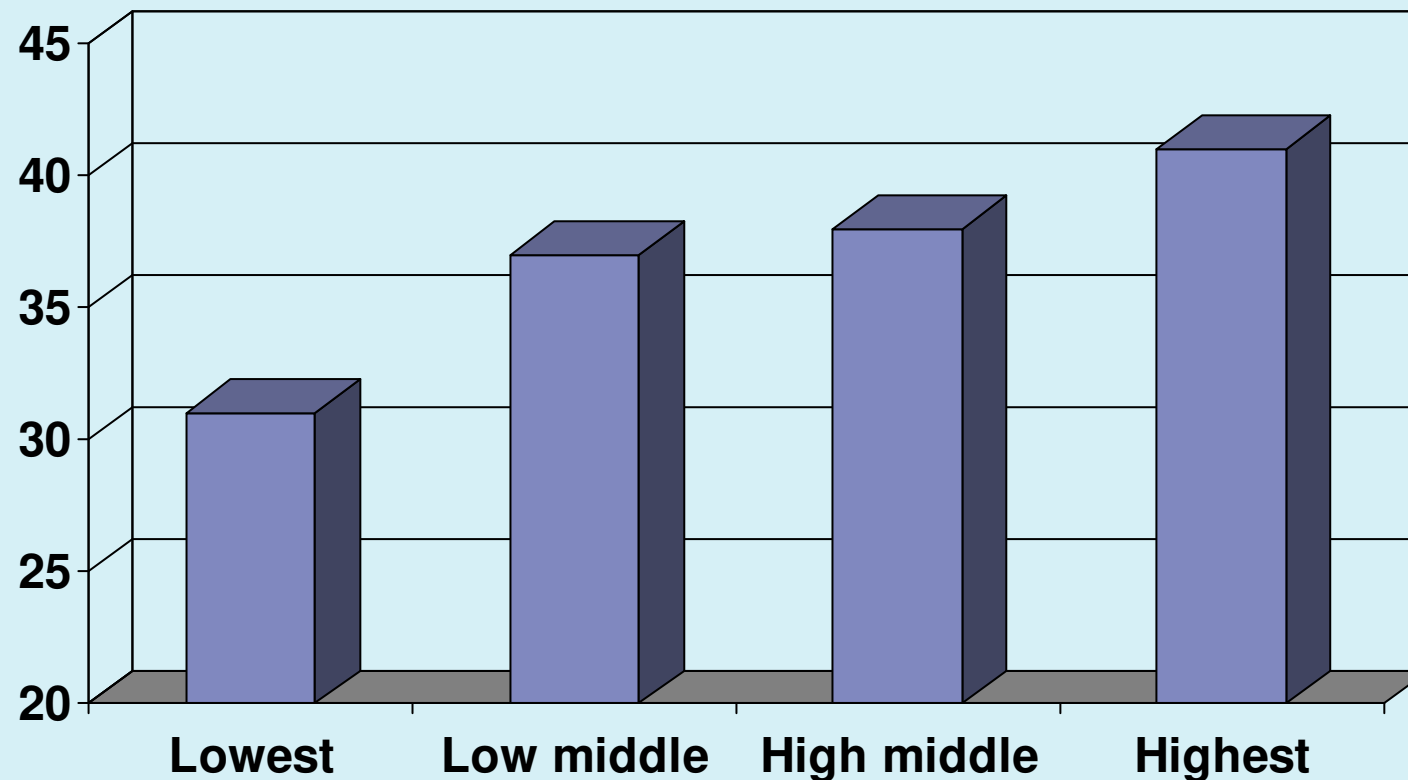
Observed mortality among 118,752 surgical patients by average patient:nurse ratio in 30 UK hospital trusts



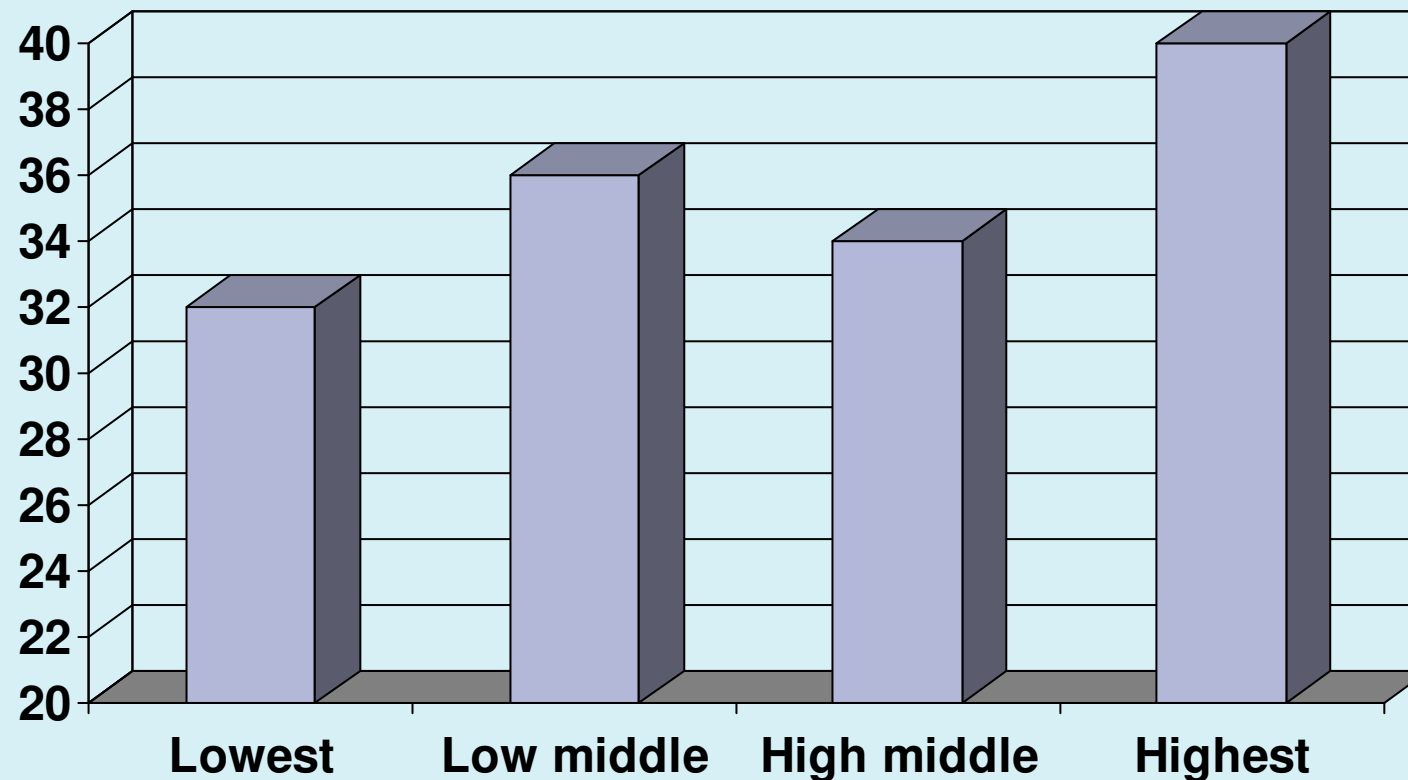
Observed mortality rates among patients with complications (failure to rescue) by average patient:nurse ratio in 30 UK hospital trusts



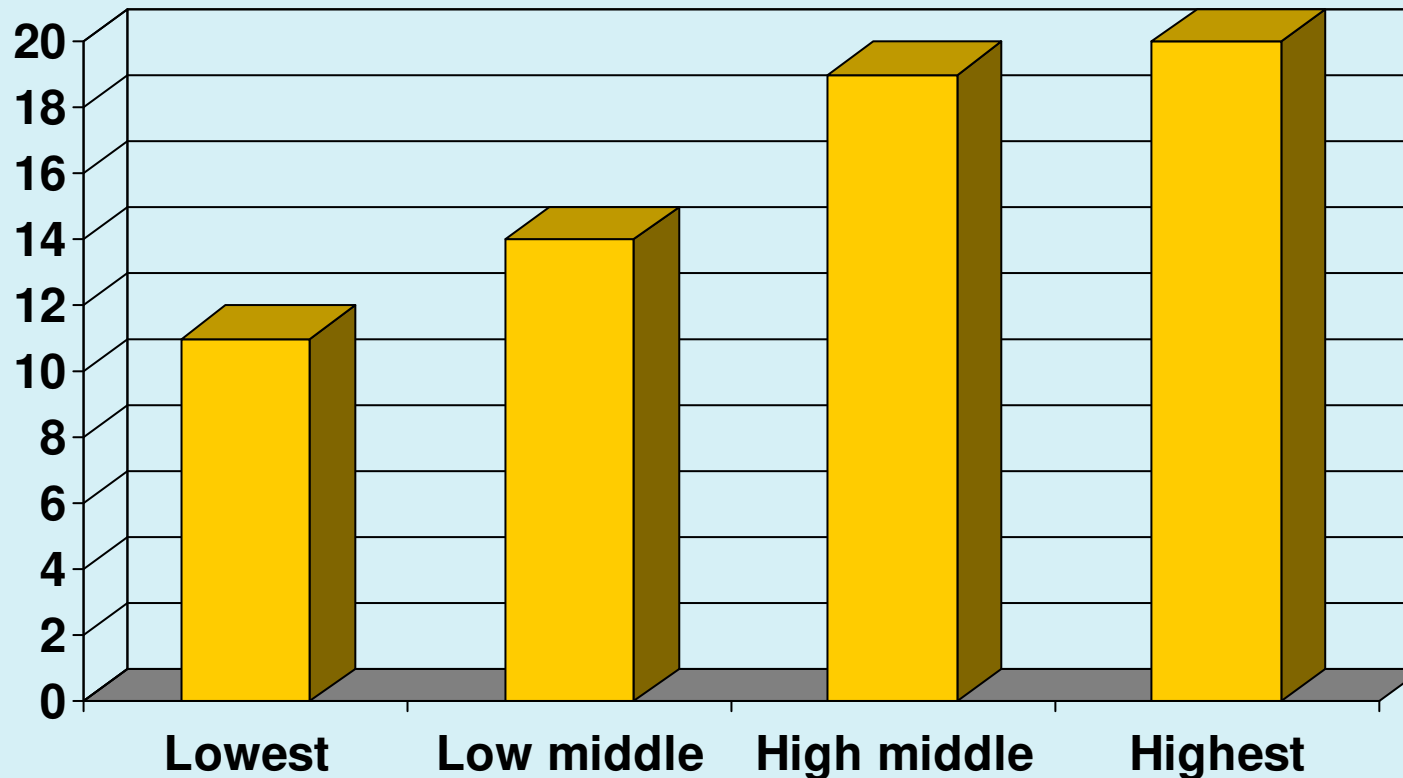
% of nurses somewhat or very dissatisfied with their jobs by average patient:nurse ratio in 30 UK hospital trusts



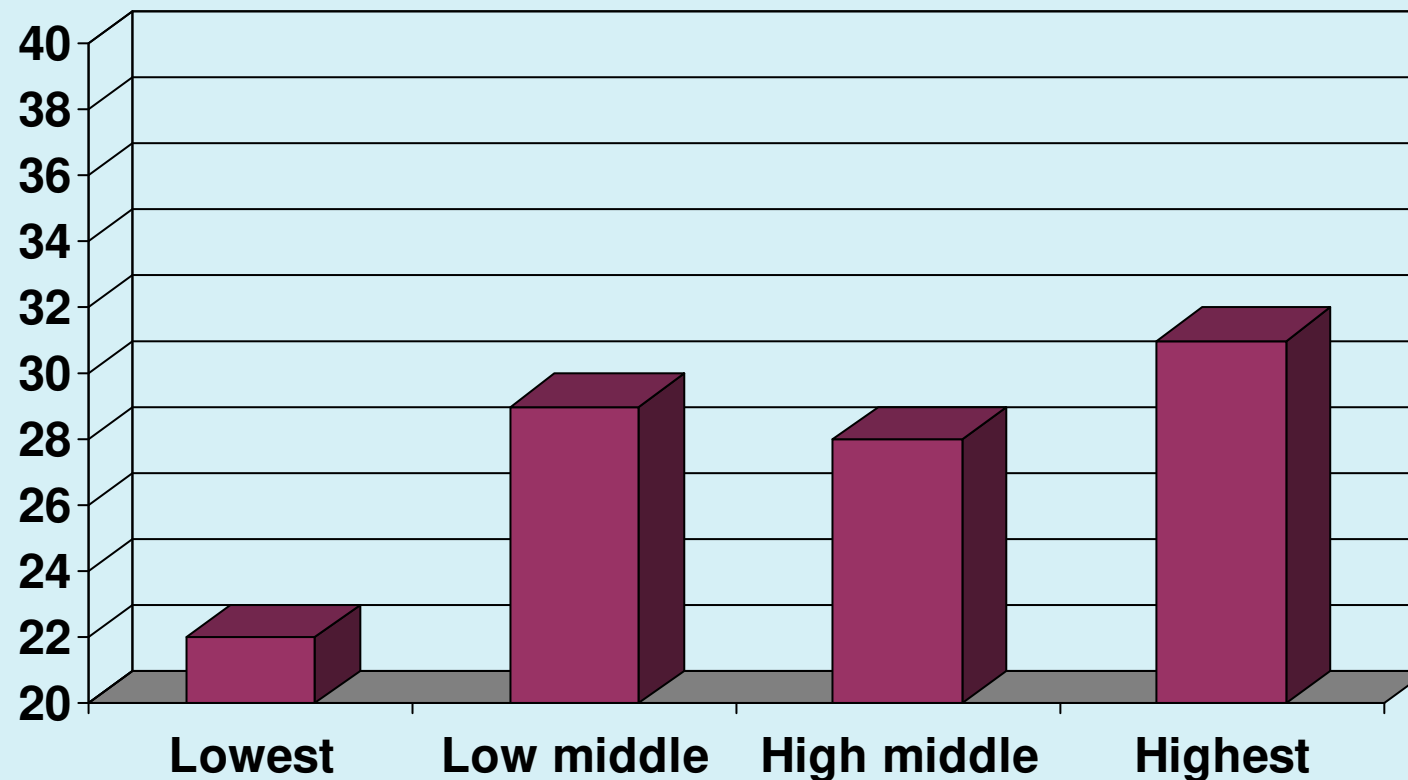
% of nurses with elevated burnout scores by average patient:nurse ratios in 30 UK hospital trusts



% of nurses rating of quality of care on hospital unit as poor/fair (vs. good/excellent) by average patient:nurse ratio in 30 UK hospital trusts



% of nurses reporting deteriorating quality of care in trust past year by average patient:nurse ratio in 30 UK hospital trusts



conclusion

- hospitals with more favourable staffing show best outcomes for patients
- quality of care and nurse retention would improve if staffing across the NHS were brought into line with the best staffed hospitals
- UK findings confirm wider international impacts