REGISTERED NURSE STAFFING LEVELS AND PATIENT OUTCOMES

Overview of research evidence

- **Registered nurse staffing levels vary considerably in English hospitals.** In some National Health Service (NHS) hospitals registered nurses will provide care to an average of five named patients during a shift, whilst in other hospitals nurses have up to 11 patients to care for\(^1\). Whilst a degree of variation in staffing between units is expected and necessary because of differences in patient needs and the type of care provided\(^2, 3\), research has found considerable variation between and within hospitals even when speciality and patient dependency are controlled for.

- **Some wards can be well-staffed while other wards are dangerously understaffed.** When the numbers are added up across a hospital the overall staffing levels can appear to be adequate\(^4\). Planning safe nurse staffing levels is a recognised problem in many countries, including the US\(^5, 6\), Belgium\(^7, 8\), China\(^9, 10\), Korea\(^11\) and the UK\(^12, 13\). Care Quality Commission reports consistently warn that quality and staffing vary considerably within NHS hospitals.

- **Neglected care (or care not done because of time pressures) is correlated to low registered nurse staffing levels on a ward.** There are more errors in care\(^14, 15\), failure to rescue increases\(^16\), and care is more likely to be ‘left undone’ when there are fewer registered nurses on a ward\(^17, 18\).

- **Understaffing has cost implications for hospitals.** Emergency admissions are higher where there are fewer registered nurses\(^19, 21\) and nurses are likely to suffer more injuries and stress, exacerbating staffing problems and costs\(^22, 23\).

- **Some specialties – such as older people’s care – typically suffer lower staffing levels and more dilute skill-mix.** 50% of the nursing workforce caring for older people is made up of care assistants who are not trained nurses\(^24\).

- **Internationally the research evidence to show that nurse staffing levels have an impact on patient outcomes is substantial.** Staffing levels are associated with differences in patient length of stay, complication rates, failure to rescue and mortality rates\(^25-28\). A meta-analysis of 96 studies - each involving many hospitals and data from hundreds of thousands of patients - found consistent evidence of an association between the numbers of registered nurses in hospitals and patient outcomes\(^29\). Each additional Registered Nurse per patient per day was associated with a 4% decrease in the odds of death. The authors estimated that an increase by 1 registered nurse full time equivalent per patient day could save 5 lives per 1000 hospitalised intensive care patients, 5 lives per 1000 medical patients, and 6 per 1000 surgical patients.
References