



Staff retention and mortality

The importance of continuity of care

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Previous research suggests that survival of patients may be associated with hospital organisational culture.¹ Organisational factors such as culture, staffing, and retention of staff are crucial to patient safety. In a linked study covering nine years of monthly data from all NHS acute trusts in England, Moscelli and colleagues showed that a high turnover of senior doctors (hospital consultants and specialty associated doctors) and nurses in hospitals is associated with increased mortality for patients admitted for emergencies.² For the 30 day mortality risk, a 1 standard deviation increase in the monthly turnover rate of nurses was associated with a 0.052 (0.037 to 0.067) percentage point increase and of senior doctors was a 0.019 (0.006 to 0.033) percentage point increase. Extensive robustness checks give credibility to the findings, although such associations cannot be taken as proof of causality.

Turnover rates among nurses showed a stronger association with mortality than turnover rates among doctors. One potential explanation is that while doctors usually meet patients one to one, nurses more often work in teams, which may be disrupted by high turnover rates.³

No significant association was reported between staff turnover and mortality for elective patients. As the authors suggest, this difference may be explained by the fact that elective patients have a lower mortality risk than patients in emergency departments. It should also be noted that well practiced processes are especially important in emergency settings where time is crucial.⁴ Decisions must be taken quickly and under stress. Therefore, patients in the emergency departments might be particularly susceptible to when the staff is less experienced or not well settled into their team.

Although not discussed in Moscelli and colleagues' article, staff turnover may be seen as a measure of continuity, especially in primary care. In general practice, continuity is usually defined as the personal relation between doctor and patient over time and might reduce mortality and the need for emergency admissions.⁵⁻⁷ Additionally, inpatients with high risk of death may benefit from personal continuity with a doctor during their hospital stay.⁸

Information continuity and management continuity are also affected by high turnover. Information continuity implies adequate access to all relevant information about the patient, such as medical history, current medications, allergies, and treatment plans. Comprehensive information reduces the risk of medical errors, adverse drug interactions, repeated unnecessary investigations, and inappropriate treatment. This type of continuity depends heavily

on robust electronic health record systems, which are now in place in most modern healthcare systems.⁹

Management continuity implies that different providers deliver timely and complementary services that patients experience as connected and coherent.¹⁰⁻¹¹ Such continuity depends on adherence to clinical guidelines, local adaptations and procedures, standardised care protocols, and an experienced staff. When management continuity is high, coordination and information sharing is improved with fewer misunderstandings and mistakes.

Retention of nurses can substantially benefit patient outcomes and quality of care.¹² Conversely, with high turnover, management continuity will be affected. New members of staff might need time to become acquainted in new surroundings and to develop trust among colleagues. Remaining staff may be overburdened because they must train new colleagues in addition to caring for patients. High turnover risks creating a vicious circle of understaffing, stress, dissatisfaction, burnout, and even higher turnover.

The turnover rate for nurses and doctors in England were almost similar,² whereas US studies have indicated that rates for nurses are generally much higher than those for physicians.¹³ Still, turnover among nurses likely represents a larger challenge than turnover among doctors, as indicated by Moscelli and colleagues.

Some level of turnover is unavoidable but should otherwise be as low as possible. Continuity is a major challenge for managers and policy makers who must find ways to increase retention of health personnel.¹⁴ To begin with, retention depends on a streamlined onboarding process for new nurses and doctors. Employers need to invest in personal and professional development and training programmes for their staff. Mentoring by experienced colleagues is necessary and novice nurses need collegial support.¹⁵ A supportive leadership and work environment may also help to identify issues before they become major problems. Appropriate financial compensation is also an issue that can lead to turnover and cannot be ignored.¹⁶

The message for hospital managers and policy makers is clear.² High turnover of nurses and doctors suggests a potential risk for patients. Therefore, retention of healthcare staff should be a priority to improve continuity and quality of care for patients.

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