

# Simulation: Enhancing Patient Care and Staff Wellbeing

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One of the main challenges facing global healthcare today is the shortage of qualified nursing staff, which is a problem prevalent in many countries<sup>1,2</sup>. The COVID-19 pandemic has exacerbated this issue, with professional fatigue, stress, and burnout causing many nurses to leave the profession. In Europe, an aging population and increased demand for healthcare services further worsen the situation, and the migration of nurses seeking better working conditions and salaries creates imbalances and gaps in the healthcare systems of their home countries<sup>1,3</sup>.

The shortage of staff, coupled with the need to ensure service coverage, forces organisations to find difficult balances between rapid recruitment and the development of adequate, specific skills. Continuous training and professional development have, therefore, become increasingly important, with the introduction of programs aimed at standardising clinical and decision-making skills, particularly in the field of healthcare technology. While Europe has made strides in harmonising basic nursing competencies, there remain significant differences between countries in terms of specialisation, access to technology, and soft skill training<sup>3</sup>. In 2023, the International College of Nursing published a report on this serious healthcare emergency, recommending investment in training to support the recruitment and retention of new nursing staff<sup>4</sup>.

Simulation is a highly effective educational strategy with numerous pieces of evidence supporting its use in undergraduate training<sup>5,6</sup>. Low- and medium-fidelity simulations (for specific techniques or processes) and high-fidelity simulations (HFS) focused on specific anatomical or procedural elements have been used to develop clinical skills and decision-making abilities in practitioners introducing new techniques into daily practice. In contrast, HFS, encompassing multiple aspects of patient

care, allows focus on team coordination and interaction between clinical teams. Methodological approaches such as *Sim Zones* help optimise interventions by making them targeted and focused, dynamically balancing training and clinical work, thus minimising the additional burden on services and staff<sup>7</sup>.

Simulations can offer several key contributions to address the healthcare workforce crisis.

**Practical training and skill enhancement:** Simulation enhances the education and training of healthcare professionals by providing opportunities to develop and refine practical skills in controlled, safe environments. This helps bridge skill gaps, especially in critical areas such as digital competencies and integrated care, which are essential for new models of healthcare delivery.

**Burnout prevention and reduction:** Simulations can be used to train healthcare professionals to manage crises and emergency situations more effectively, reducing the emotional stress that often leads to burnout. Improving preparedness for critical events could help reduce staff turnover, which is one of the central elements of the healthcare workforce crisis.

**Improvement of teamwork and interprofessional skills:** Simulation facilitates collaborative learning and the improvement of teamwork, both of which are crucial in addressing the increasing complexity of healthcare systems. Interprofessional simulations help doctors, nurses, and other healthcare professionals develop effective communication and coordination skills, improve the quality of care, and reduce errors.

**Adaptation to new healthcare models:** As healthcare systems evolve to integrate new models of care, including digitalisation and integrated primary care, simulation can support this transition through practical exercises that

replicate these new structures and processes<sup>1</sup>.

A systematic review conducted in 2015 by Edwards et al. identified simulation programs as a key strategy to facilitate the entry of newly graduated nurses into the workforce. Simulation has proven particularly effective in enhancing technical skills, decision-making, and confidence in new graduates while also alleviating the stress linked to early clinical experiences<sup>8</sup>.

The 2021 review by O'Rourke et al. examined evidence on HFS practices to improve nursing competencies in critical care. Current literature supports the use of HFS to improve patient safety. Although most evidence pertains to undergraduate nursing students, there is no consensus on the best practices for simulation techniques in the postgraduate context. HFS is widely used to improve the clinical skills of practising nurses, particularly in recognising and managing the early signs of patient deterioration<sup>9</sup>.

To our knowledge, gaps remain regarding the design and delivery of simulation programs, especially in postgraduate training, where outcomes are tied to specific contexts<sup>9,10</sup>. It is necessary to continue the international debate on specialist nurse training, address the current gaps in the literature, and provide practical tools to improve the transition to clinical practice in specialised settings. Efforts in this direction are supported by numerous positive experiences and a growing body of evidence that contributes to the science of simulation.

Simulation, when combined with reflective experiences, offers the great benefit of developing self-awareness and team awareness among health care professionals. It brings concepts to life, makes them tangible, and facilitates reasoning around interindividual dynamics aimed at clinical goals. This approach allows not only work on behavioural sequences but also for understanding the motivations underlying strategies, which can then be applied to a wide range of situations beyond the specific simulated scenario. Often, this fosters a more supportive climate within teams, participating in well-structured experiences and leading to greater resilience when facing challenges encountered in clinical practice.

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