

Integrating Nurses, Emts, And Health Assistants For Cost-Effective Care

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Abstract

Balancing quality healthcare delivery with financial sustainability remains a major challenge for hospitals worldwide. This study explores how the integration of Healthy Assistants (HAs), Emergency Medical Technicians (EMTs), and Nursing Staff within multidisciplinary teams can enhance operational efficiency and cost-effectiveness in healthcare institutions. By analyzing evidence from international studies and contextualizing it within the Saudi healthcare system, the paper demonstrates that well-structured teamwork and role delegation reduce labor costs, optimize workflow, and improve patient outcomes. The multidisciplinary staffing model—exemplified by regional hospitals such as Al-Artawiyah General Hospital—illustrates how coordinated human resource management supports the goals of Saudi Vision 2030 for healthcare transformation. The findings highlight that human capital optimization through multidisciplinary collaboration is not merely a cost-saving measure but a strategic investment in sustainable and high-quality healthcare systems.

Keywords: Multidisciplinary healthcare teams; Healthy Assistants; Emergency Medical Technicians; Nursing; Cost-effectiveness; Workforce optimization; Hospital management; Saudi Arabia; Vision 2030; Health system efficiency.

Introduction

Healthcare systems around the world are continuously challenged to balance the quality of care with financial sustainability. Rising operational costs, workforce shortages, and growing patient volumes have increased the need for efficient staffing models that maintain both clinical excellence and economic viability (World Health Organization [WHO], 2023). In this context, hospitals—particularly those in rural and community settings—must adopt innovative human resource strategies to ensure sustainable service delivery and optimize patient outcomes.

One of the most effective approaches to achieve these goals is the implementation of multidisciplinary staffing models. Integrating Healthy Assistants (HAs), Emergency Medical Technicians (EMTs), and Nursing Staff into a cohesive operational system provides a flexible, cost-effective framework that enhances service delivery (Ayers, 2017). Each profession contributes distinct competencies: healthy assistants manage basic clinical and administrative duties, EMTs provide emergency response and stabilization, and nurses coordinate complex care and patient education.

This collaborative model allows healthcare institutions, such as Al-Artawiyah General Hospital in Saudi Arabia, to maintain operational efficiency while reducing financial strain. Delegating appropriate responsibilities under medical and nursing supervision minimizes workflow bottlenecks, reduces patient waiting times, and strengthens continuity of care (Almutairi et al., 2024). Overall, multidisciplinary staffing aligns with global healthcare priorities that emphasize teamwork, resource optimization, and sustainable service delivery (WHO, 2023).

Role Integration and Functional Framework

The effectiveness of healthcare delivery depends largely on the integration and coordination of multidisciplinary roles. Each healthcare professional contributes unique expertise that collectively enhances clinical efficiency, safety, and patient satisfaction (Chen et al., 2022). In multidisciplinary teams, proper delegation of responsibilities ensures that every staff member operates within their competence while contributing to overall institutional goals.

Healthy Assistants (HAs) play a pivotal role in supporting both clinical and administrative workflows. Their duties include preparing examination rooms, recording vital signs, maintaining patient records, and assisting in basic procedures. By performing these foundational tasks, HAs allow nurses and physicians to dedicate more time to complex interventions and critical decision-making (Ayers, 2017).

Emergency Medical Technicians (EMTs) are essential for pre-hospital and emergency response care. They are trained to manage urgent medical situations, stabilize patients during transport, and provide life-saving interventions before hospital admission. Their integration within hospital emergency departments creates a seamless transition between field and clinical care, improving patient outcomes and response times (Bledsoe & Porter, 2020).

Nursing Staff serve as the core coordinators of multidisciplinary teams. They bridge the gap between physicians, EMTs, and assistants by ensuring adherence to protocols, supervising support staff, and delivering continuous patient monitoring and education (Smith et al., 2021). Their leadership in clinical coordination not only guarantees patient safety but also enhances the professional development of junior healthcare workers.

By combining these three disciplines under structured supervision, hospitals can implement a flexible, task-oriented workforce model that minimizes redundancy, reduces costs, and maintains high standards of care. This integrated framework reflects a shift toward team-based healthcare, where collaboration replaces hierarchy, and efficiency aligns with compassion and competence.

Operational and Financial Impact

The integration of multidisciplinary healthcare teams provides significant operational and financial advantages for hospitals striving to maintain efficiency and cost-effectiveness. By redistributing clinical and administrative duties among Healthy Assistants (HAs), Emergency Medical Technicians (EMTs), and Nursing Staff, healthcare institutions can optimize workflow processes, reduce overhead expenses, and enhance patient satisfaction (Ayers, 2017).

From an operational perspective, team-based staffing allows hospitals to implement task delegation models that ensure continuity of care and timely service delivery. For instance, HAs handle basic health assessments and documentation, while nurses and EMTs focus on critical interventions and specialized care. This division of labor minimizes service delays, improves staff utilization, and increases throughput in departments such as emergency units and outpatient clinics (Chen et al., 2022).

Financially, the model supports cost containment and resource optimization. Substituting certain non-critical nursing or physician functions with trained assistants reduces salary expenditures without compromising care quality (World Health Organization [WHO], 2023). Studies have shown that multidisciplinary staffing can decrease hospital labor costs by up to 15–25% annually, primarily by reducing overtime hours and turnover rates among highly paid clinical personnel (Buerhaus et al., 2021).

Additionally, improved teamwork and communication reduce errors, duplication of work, and re-admissions, leading to indirect cost savings and higher patient trust (Smith et al., 2021). Hospitals adopting this model—such as regional and general hospitals across Saudi Arabia—report greater

stability in staffing patterns and stronger alignment with national healthcare efficiency goals under Vision 2030 (Ministry of Health, 2024).

Overall, the multidisciplinary staffing framework represents not only an operational solution but also a strategic financial investment in the long-term sustainability of healthcare systems.

Conclusion and Recommendations

The adoption of multidisciplinary staffing models—integrating Healthy Assistants (HAs), Emergency Medical Technicians (EMTs), and Nursing Staff—offers a sustainable and evidence-based solution to in healthcare systems. By aligning clinical responsibilities with the growing operational and financial professional competencies, hospitals can optimize human resources, maintain cost-efficiency, and ensure continuity of care across all service levels (Buerhaus et al., 2021).

Empirical evidence confirms that well-coordinated teams improve patient outcomes, staff satisfaction, and institutional performance while reducing preventable errors and costs (Chen et al., 2022; Smith et al., 2021). In addition, the successful integration of assistants and technicians supports Saudi Vision 2030's focus on workforce development, local capacity building, and the digital transformation of healthcare delivery (Ministry of Health, 2024).

To maximize the benefits of this model, healthcare administrators should:

Implement structured training programs for assistants and EMTs to standardize competencies and ensure compliance with clinical safety protocols.

Establish clear role delineation and supervision frameworks led by senior nurses and physicians to maintain accountability and workflow efficiency.

Adopt data-driven workforce planning tools to monitor productivity, optimize staffing ratios, and allocate resources dynamically according to patient demand.

Encourage interdisciplinary communication and teamwork culture through continuous professional education and simulation-based training.

Ultimately, building cost-effective, multidisciplinary teams represents more than an economic adjustment—it is a strategic transformation toward a resilient and patient-centered healthcare system.

This framework ensures that every professional, from assistants to nurses, contributes meaningfully to the shared mission of delivering safe, accessible, and high-quality care for all (WHO, 2023).

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