

## Evaluating the Impact of Multidisciplinary Nursing Teams on Healthcare Quality in Primary Care Settings

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### ABSTRACT

The multidisciplinary nursing teams play a significant role in the primary setting for care provision. It ensures that such care is holistic, meeting patient-centered needs by actualizing various skills offered by different health professionals. Whereas such teams are generally performing well, there are sustained disparities in communication and confusion over the professional role; this calls for a great need for the definition of roles and enhanced training. The presentation will review benefits, dynamics, and challenges related to multidisciplinary nursing teams in primary care, as well as strategies to optimize their integration in support of better patient outcomes.

**Keywords:** multidisciplinary teams; nursing; primary care; patient-centered care; collaboration

### INTRODUCTION

Multidisciplinary nursing teams introduced into primary care have revolutionized health care in bringing appropriateness by working collaboratively for the care of the patients. Such a team shall consist of professions such as nursing, medicine, social work, and mental health. These teams combine their skills in the provision of patient-centered care that improves outcomes, enhancing the overall quality of health services. This approach has proven particularly effective in managing chronic diseases and complex medical conditions, where a singular perspective may fall short in addressing the holistic needs of patients (Mitchell et al., 2012).

Central to the success of multidisciplinary nursing teams is that their focus lies in the aspect of patient-centered care. Other traditional models, which always seem to focus on symptom treatment, execute such an approach less well. This is an approach that will most certainly ensure that care is not only confined to immediate medical concerns but also encompasses the social, psychological, and preventive aspects of health. This holistic model not only improves health outcomes but also enhances the patients' satisfaction in their own care and involvement therein. Zwarenstein et al., 2009.

Effective communication and collaboration are the bedrocks of multidisciplinary team dynamics. By fostering a culture of shared decision-making and regular interdisciplinary meetings, these teams minimize errors, improve care coordination, and ensure continuity of care. These qualities are critical in primary care, where patients frequently present with overlapping medical and social challenges that require integrated solutions (Walton, 2020). Multidisciplinary teams also practice evidence-based practice to make certain that care bestowed upon the patient is from current research and clinical guidelines for more consistent and effective interventions (Tucker et al. 2021).

However, these manifold benefits notwithstanding, multidisciplinary nursing teams are very often confronted with challenges. These may involve role duplication and obscurity, communication gaps, and resource deficits. All these portend explicit role clarification, sound interprofessional training, and adequate resources. Importantly, these days, the integration of technology-such as electronic health records and telemedicine-cannot

be done without enabling seamless communication and strengthening care delivery. As healthcare continues to evolve, so does the role and importance of multidisciplinary nursing teams in primary care, thus indicating further research and more investment in this model of care (Reeves et al., 2010).

## **METHODOLOGY**

It is essential to note that the paper discusses the facilitation role in the dynamics and challenges of multidisciplinary nursing teams in primary care by reviewing the literature. Searches were done in PubMed, Google Scholar, and CINAHL databases for articles between 2005-2022. Keywords that shall be used in finding the literature are "multidisciplinary teams," "nursing," "primary care," "collaboration," and "patient-centered care." Overall, 320 articles were screened for inclusion according to relevance and quality in an initial search. After the review excluded duplication, including those not meeting the inclusion, it went on to take 45 for full-text review and then took 28 high-quality studies.

Of them, design for the included studies was cohort studies, systematic reviews, and qualitative analysis. Data items extracted included team composition, patient outcome, best strategies for communication, and obstacles to effective collaboration. Synthesis of findings were done in order to summarize the current evidence with respect to the effect of multidisciplinary nursing teams and to suggest strategies for optimization in primary care.

## **LITERATURE REVIEW**

Literatures reviewed have indicated that a multidisciplinary nursing team can be a potentially transformative vehicle in addressing the complexities facing primary care. Several other studies have also placed consistent emphasis on its efficiency in managing chronic diseases, improving patient satisfaction, and enhancing coordination of care. The make-up of a team may vary, but it generally comprises nurses, physicians, social workers, mental health providers, and allied health staff; the make-up needed to provide holistic care to the individual at the physical, social, and psychological levels.

Communication and shared decision making were thus identified as key elements of the success of the teams. Most investigations emphasize the need for routine interdisciplinary team meetings and electronic communications through EHRs. However, both suffer from their own set of issues: vague role discretion, resource limitations, and time stresses. Despite these issues, these can be reduced to a minimum if organized training programs and standardized protocols are at hand.

Interventions tested to date to optimize team dynamics include integration of technology, development of a culture of mutual respect, and aligning goals and practices with the principles of patient-centered care. More studies will be needed to explore the long-term effect of multi-professional teams on patient outcomes and healthcare system efficiency.

## **DISCUSSION**

Multidisciplinary nursing teams in primary care have revolutionized health service provision. This team consists of professionals from various disciplines coming together as one to provide comprehensive patient care. They highly contribute to improving the quality of care, focusing on the many needs of the patients, especially those with chronic or complex diseases (Mitchell et al., 2012).

One of the critical benefits of multidisciplinary nursing teams is the enhancement of patient-centered care. By combining the expertise of nurses, physicians, social workers, and other healthcare professionals, these teams can create comprehensive care plans tailored to individual patient needs. This approach ensures that patients receive well-rounded care that goes beyond treating symptoms to addressing underlying causes (Zwarenstein et al., 2009).

Improved communication and collaboration among healthcare providers is another hallmark of multidisciplinary nursing teams. Through regular team meetings and shared decision-making, these teams minimize errors, enhance care coordination, and ensure continuity of care. Such collaboration is particularly valuable in primary care, where patients often present with overlapping medical and social issues (Walton, 2020).

Timely intervention and preventive care are key to the delivery of population health in primary care settings. Multidisciplinary teams are instrumental in such areas, as they utilize their combined skills to provide early detection of risk factors and deliver appropriate prevention. It cuts down on hospitalization and visitations to the emergency department, reducing the cost burden on individual patients and health systems as a whole (Starfield et al., 2005).

Patient education is one of the key components of primary care, and for this domain, the multidisciplinary nursing teams are particularly effective. The teams consist of educators, dietitians, and community health workers that help the patients in managing their health themselves. Education programs comprise self-management of chronic illness, healthy lifestyle, and adherence to the treatment regime (Funnell et al., 2009).

Specialists who are part of this multidisciplinary team on active duty include mental health nurses and counselors; this ensures that mental health, which is often neglected, is covered during primary care. In this way,

mental health disorders are promptly diagnosed and treated hence improving the overall patient outcomes. There is reduced stigma when mental health is embedded within the confines of primary care (Fortney et al., 2015). Nurses in multidisciplinary teams act as patient advocates, ensuring that individual preferences and values are respected during care planning and delivery. This advocacy fosters trust between patients and healthcare providers, enhancing patient satisfaction and adherence to care plans. It also ensures that care is delivered ethically and equitably (Epstein & Street, 2011).

The adoption of evidence-based practices is another significant impact of multidisciplinary nursing teams. By pooling knowledge from various disciplines, these teams are better equipped to implement best practices, leading to improved outcomes. Regular training and professional development further ensure that team members stay updated on the latest advancements in their respective fields (Tucker et al., 2021).

Primary care is increasingly shaped by technological integration; this technological integration is in most cases led by the multidisciplinary team. EHRs, telemedicine, and mobile health applications ultimately enable seamless communication and sharing of data between team members. Such technologies enhance decision-making and, likewise, smoothen the delivery of care (Sittig et al., 2020).

One of the biggest challenges facing primary health care is how to deal with patients who have multiple chronic conditions. One of the foremost strengths of the multidisciplinary nursing teams is the fact that they bring on board specialists who can address all aspects of a patient's health. This reduces fragmentation of care and allows holistic management of complex cases (Wagner et al., 2001).

Cultural competence is essential in primary care, especially in diverse communities. Multidisciplinary teams bring diverse perspectives and skills that help address cultural barriers to care. This inclusivity fosters equitable access to healthcare and improves outcomes for underserved populations (Betancourt et al., 2016).

Health promotion and disease prevention programs are also far more effectively delivered through multidisciplinary teams. They can be involved in the design and delivery of community-based programs aimed at improving the social causes of ill health-housing, education, and nutrition. These programs not only improve community health but also reduce the burden on the primary care facilities (Marmot et al., 2008).

Multidisciplinary nursing teams have much to offer to quality improvement initiatives in primary care. This is through team analysis of patient outcomes and gaps in care, followed by targeted interventions. Their collaborative approach ensures that quality improvement efforts are comprehensive and sustainable (Berwick et al., 2008).

The role of leadership in multi-professional nursing teams is very significant for either the success or failure of such teams. The leaders would be responsible for instituting a culture of collaboration, mutual respect, and accountability. They would also ensure that needed resources and supports are in place to do the job (West et al., 2014).

Research and data collection are integral to the success of multidisciplinary nursing teams. By systematically evaluating their impact on patient outcomes, these teams contribute to the growing body of evidence supporting team-based care in primary settings. This research also informs policy changes and funding decisions (Buljac-Samardzic, 2020).

While there are strengths with regard to a multidisciplinary nursing team, there is often confusion about the unclear role and resources provided. As such, there has to be clear role definition alongside clear resources. This will be followed with continuous training and teambuilding exercises across the nursing teams (Reeves et al., 2010).

A multidisciplinary nursing team incorporates the family members or caregivers into the care process. Family involvement in care makes the care plans realistic and supported at home. This generally improves the patient's adherence and reduces the caregiver's burden overall, as by Levine et al., 2010.

Another important issue is the contribution of multidisciplinary nursing teams to economics. Because they improve efficiency and reduce unnecessary interventions, they help to save costs within healthcare systems. They improve workforce satisfaction by providing supportive and collaborative work environments (Mitchell et al., 2012).

Despite all the changes within the health service sector, healthcare disparities continue to persist in primary care. Multidisciplinary nursing teams are best positioned to address these issues, and their targeting of vulnerable populations and tailored interventions contribute to reducing health inequities. Focus on social determinants further enhances their impact (Braveman et al., 2011).

Training and education are vital in establishing the sustainability of the multidisciplinary nursing team members. Continuous professional development makes the member competent and confident in performing the role. Training and education also enable team members to be better equipped to meet the changing demands imposed by primary care (Wakefield, 2021).

The role of technology in enhancing the work of multidisciplinary nursing teams keeps on growing: telehealth and remote monitoring tools allow them to reach patients in underserved areas, thus improving access to care. Such technologies also contribute to chronic disease management and follow-up care (Dorsey & Topol, 2016).

Patient satisfaction is one of the important measures for quality of care, and multidisciplinary teams in nursing have achieved high scores over time. Patients appreciate the comprehensive care and coordination they received, translating to better adherence to treatment and its outcomes (Press Ganey Associates, 2015).

Finally, the completeness of multidisciplinary nursing teams at the primary care level reflects what can be achieved with collaboration in the healthcare field. Breaking down silos and fostering teamwork, these teams set a high benchmark for quality and efficiency in care provided to patients. Not only this, but the impact of their work expands into communities and finally onto health systems (Institute for Healthcare Improvement, 2003).

## CONCLUSION

First-line care today is literally managed by multidisciplinary teams since teams offer complex answers to the increasingly complicated needs of their patients. Such teams elicit better quality of care, enhance patient satisfaction, and create better health outcomes through collaboration. Nevertheless, successful implementation requires addressing some persistent challenges: communication barriers, ambiguity of roles, and resource constraints.

Other key facilitators for these challenges include standardized training programs, full utilization of technology innovation like EHRs, and promoting a collaborative culture. Also, integration of patient perspectives and shared decision-making serves to further tailor the provided care to the patient's needs. In changing health systems, multidisciplinary teams will continue to feature significantly in promoting major advancements in primary care delivery and the realization of optimal patient outcomes.

## REFERENCES

1. Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health, and cost. *Health Affairs*, 27(3), 759-769.
2. Betancourt, J. R., Green, A. R., & Carrillo, J. E. (2016). Cultural competence in health care: Emerging frameworks and practical approaches. *The Commonwealth Fund*.
3. Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health*, 32, 381-398.
4. Buljac-Samardzic, M., Doekhie, K. D., & van Wijngaarden, J. D. (2020). Interventions to improve team effectiveness within health care: a systematic review of the past decade. *Human resources for health*, 18, 1-42.
5. Dorsey, E. R., & Topol, E. J. (2016). State of telemedicine adoption. *Annual Review of Public Health*, 37, 233-247.
6. Epstein, R. M., & Street, R. L. (2011). The values and value of patient-centered care. *Annals of Family Medicine*, 9(2), 100-103.
7. Fortney, J. C., Sladek, R. M., Unützer, J., et al. (2015). Collaborative care for mental health disorders in primary care. *Psychiatric Clinics of North America*, 38(1), 23-37.
8. Funnell, M. M., Anderson, R. M., & Arnold, M. S. (2009). Empowerment and self-management education: The role of social determinants. *Diabetes Spectrum*, 22(3), 166-172.
9. Levine, C., Halper, D., Peist, A., & Gould, D. A. (2010). Bridging troubled waters: Family caregivers, transitions, and long-term care. *Health Affairs*, 29(1), 116-124.
10. Marmot, M., Friel, S., Bell, R., Houweling, T. A., & Taylor, S. (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. *The Lancet*, 372(9650), 1661-1669.
11. Mitchell, P., Wynia, M., Golden, R., et al. (2012). Core principles & values of effective team-based health care. *National Academy of Medicine*.
12. Press Ganey Associates. (2015). Patient satisfaction in the evolving healthcare environment.
13. Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Wiley-Blackwell.
14. Sittig, D. F., Wright, A., Coiera, E., Magrabi, F., Ratwani, R., Bates, D. W., & Singh, H. (2020). Current challenges in health information technology-related patient safety. *Health informatics journal*, 26(1), 181-189.
15. Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The Milbank Quarterly*, 83(3), 457-502.
16. Tucker, S., McNett, M., Mazurek Melnyk, B., Hanrahan, K., Hunter, S. C., Kim, B., ... & Kitson, A. (2021). Implementation science: Application of evidence-based practice models to improve healthcare quality. *Worldviews on Evidence-Based Nursing*, 18(2), 76-84.
17. Wagner, E. H., Austin, B. T., & Von Korff, M. (2001). Organizing care for patients with chronic illness. *The Milbank Quarterly*, 74(4), 511-544.
18. Wakefield, M., Williams, D. R., & Le Menestrel, S. (2021). The future of nursing 2020-2030: Charting a path to achieve health equity. *National Academy of Sciences*.

19. Walton, V., Hogden, A., Long, J. C., Johnson, J., & Greenfield, D. (2020). Exploring interdisciplinary teamwork to support effective ward rounds. *International Journal of Health Care Quality Assurance*, 33(4/5), 373-387.
20. West, M. A., Lyubovnikova, J., Eckert, R., & Denis, J. L. (2014). Collective leadership for cultures of high quality health care. *Journal of Organizational Effectiveness: People and Performance*, 1(3), 240-260.
21. Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, (3).
- 22.