OPTIMIZING HEALTHCARE: MAXIMIZING THE IMPACT OF SPECIALTIES FOR PATIENT HEALTH AND WELL-BEING

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Abstract

Better person-centered care and improved patient and system outcomes are achieved by multidisciplinary healthcare teams. Many organizations have adopted the interprofessional frameworks that already exist and specify the competencies required of each health professional to meet practice standards and advance interprofessional goals. Healthcare facilities should benefit from leveraging team-based abilities for collaboration between professionals to support team members' collaborative efforts in delivering the best care possible in complex hospital settings. The way healthcare operates and does business has changed as a result of wearables, virtual reality, technological advancements, and the Internet of Things. These days, these technological advancements are a need in our daily existence. We are entering a new era of patient-centric healthcare, where patients may now make more thoughtful decisions from a bigger range of healthcare options. The impact of digital revolution on individual and institutional health care.

Aim: To know optimization of health care through Interdisciplinary Collaboration, Continuity and care coordination and Health Information Technology

Key words: Optimizing Healthcare, Patient Health, Interdisciplinary Collaboration, Care coordination

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Introduction

In the current day, healthcare optimization issues have drawn a lot of attention due to the need to offer more relevant services for less money. It is also vital and has piqued the interest of many scholars due to the high cost and shortage of resources (such as medical supplies, equipment, doctors, and workers) in hospitals. Healthcare scheduling is obviously challenging due to a variety of requirements and preferences, such as resource constraints and staffing requirements. Unlike all other institutions, the healthcare sector is open at all times. On the other hand, inconsistent working shifts and a lack of staffing can negatively impact patient satisfaction and cause worker unhappiness. Furthermore, as people live longer, there will be a greater need for medical services. Nonetheless, the rising cost of medical care and its lack or scarcity could endanger patient lives, result in overworked personnel, increase infection rates, and result in an overpopulation of patients (Abdalkareem et al., 2021).

A system for planning appointments might raise the bar for healthcare operations, reduce patient wait times, and increase accessibility to medical care. Finding the hard and soft restrictions is essential to creating a schedule that can be implemented in any system of healthcare. While soft limitations should be minimized and included as part of the cost function, hard limits could not be broken. Raising patient satisfaction and hospital benefit levels, therefore, requires streamlining, optimizing, and planning hospital resource processes. An enhanced scheduling system is required since it is essential to lowering costs and revenues as well as improving accessibility to the healthcare system (Abdalkareem et al., 2021).

Collaboration among professionals has gained widespread recognition as being important in both healthcare and education. There is mounting proof that multidisciplinary medical teams working together can enhance the provision of person-centered care, ultimately leading to better outcomes for patients and the health system. Healthcare Professionals (HCPs) are being trained, and many competency frameworks have been developed to promote interprofessional collaboration (McLaney et al., 2022).

Literature review

Healthcare facilities work hard to make the most of their limited resources while providing high-quality, cost-effective treatment to patients. The primary challenges are reducing expenses, distributing resources as effectively as feasible, and strategically scheduling staff, patients, and resources. Planning successfully is essential for medical facilities to improve patient care quality and operational efficiency. This requires careful assignment of people and resources. The administrative aspect of patient care in hospitals is becoming more and more important. In addition, a great deal of work is put into efficiently managing these resources by healthcare personnel in order to guarantee optimal operational efficiency and superior patient care. Patient outcomes can be enhanced by staff productivity gains and optimal resource utilization brought about by well-planned scheduling. Patient satisfaction is increased when people and resources are allocated more efficiently, which is known as patient care enhancement (Yinusa & Faezipour, 2023).

Optimizing Healthcare through Interdisciplinary Collaboration

Multidisciplinary teamwork, or IPC, is the process by which different health and social care professional groups work together to improve care. In addition to recognizing the expertise and contributions that various healthcare practitioners bring to patient care, IPC encourages regular, professional communication and negotiation. IPC, however, can be impacted by problems with power imbalances, a lack of understanding of others' roles and responsibilities, and conflict across professional boundaries when providing patient care. Incorporating a tool, routine, or activity to enhance interprofessional interaction (such as coordination and communication) into clinical practice could be the basis of a practice-based interprofessional communication intervention. Thus, this could enhance the collaboration and quality of treatment provided by medical experts, improving patient outcomes (Reeves et al., 2017).

Health professionals can transition from a sense of independence to interdependence and identify common values and rules of conduct through interprofessional education and training, enabling them to provide patient-centered, holistic healthcare. A change in educational philosophy highlights the vital connection between interprofessional education and practical interprofessional collaborative practice in a variety of healthcare contexts (Witt Sherman et al., 2020).

It is well recognized that a key component in other facets of the provision of healthcare is teamwork. Multidisciplinary cooperation, or IT, is crucial for all healthcare sectors to enable integrated healthcare delivery that focuses on citizens' needs for medical and social services. The strong aspects of interprofessional teamwork that are encouraging

interprofessional collaborative practice have, however, not received much attention from study. This paper aims to provide a framework associated with the problem. Two interprofessional teamwork components are suggested by the framework, along with items that alter healthcare workers' interprofessional collaboration practices (Kholed et al., 2017).

Teamwork has also been shown to benefit those who work in healthcare, as evidenced by lower overtime and more satisfaction with work. A large body of research indicates that interprofessional collaboration benefits patients by offering more thorough and efficient care, while also being more economical for healthcare organizations and health professionals. Providing equal opportunities for each profession within the interprofessional collaborative team to share knowledge and expertise in a courteous and trustworthy atmosphere is the goal of interprofessional cooperation in practice (Kholed et al., 2017)

Regardless of whether the environment is inpatient or outpatient, team-based care is crucial for providing care for older persons. In order to deliver team-based care at the institutional and team levels, geriatricians and other healthcare providers interact closely with nurse practitioners, physician assistants, registered nurses, social workers, and others. The Interprofessional Education Collaborative (IPEC) competences must be understood, mastered, and integrated into their many practice environments (Bakerjian & Wasserman, 2024).

In order to create inclusive, interprofessional teams that provide effective, efficient, and person-centered care, team role modeling might be helpful. The team and organizational culture are positively impacted by a clear grasp of and respect for the roles played by other health professionals as well as the capacity to successfully incorporate these professions into the team. In addition, geriatricians need to possess high-quality communication skills, intentional teamwork, and shared ethics and beliefs in order to function in the primary care practice setting. This creates a solid basis for effective care coordination, which can enhance the results for patients (Bakerjian & Wasserman, 2024).

Continuity and care coordination

Providing a spectrum of healthcare services from family to health facility throughout a person's life is known as continuity and coordination of care. Multilevel care coordination may be impacted by a number of factors, including those that are systemic (departments and sectors), organizational (providers), and individual (services or users). Prioritizing care coordination would ensure that a multidisciplinary team is able to give the right kind of treatment to patients at different stages of their diseases. This is something that health systems should strive for. Coordination between numerous technical and supporting players and sectors, both inside and beyond the health sector, is also necessary for the continuation of care delivery, especially in settings and systems with limited resources (Khatri et al., 2023).

By bringing and meeting patients' requirements, ensuring integrated care, and addressing each patient's healthcare experience as logical and relevant over time, managing care ensures patient-centered care. Furthermore, the definition of care coordination include interdisciplinary care, patient-centered care, assistance for self-care, screening, primary care, and medical treatment (Khatri et al., 2023).

In the past, care continuity has been closely associated with clinician trust, which is a crucial factor in determining the quality of patient care experiences. The relationship between clinician trust and continuity of care may have significant effects on the uptake of telehealth. Improved patient-clinician communication during a telemedicine encounter can be achieved by patients with poor English proficiency who have reliable members of their care team to assist with interpretation and/or provide care. In general, when new improvements in care delivery need to be implemented, having a high degree of trust in doctors can be especially helpful in the face of external shocks (Tierney et al., 2023).

Providing care for a long time requires a relationship built on trust, loyalty, and each patient's consistency; this is known as continuity of care. Cross-border care is objectively documented, and care coordination is based on relationships and contact continuity. Patients in the high continuity of care group showed a more noticeable improvement in the functional role of physical, general health, emotional, and mental health when compared to those in the low continuity of care group. This improvement was supported by preconditions, staff-related continuity, and care interactions. It was discovered that ongoing clinical therapy of chronic diseases (diabetes and chronic obstructive pulmonary disorders) was necessary to reduce long-term diabetic complication admissions as well as future hospital admissions. This involved

providing care at all levels and facilitating quick access and referrals (Khatri et al., 2023).

Optimizing Healthcare through Health Information Technology

Increased access to care is one of the many inadequacies and inefficiencies in managing chronic diseases that may be addressed by digital health and telemedicine solutions, which surged in popularity during the epidemic. These solutions do not, however, work like magic since they have a number of drawbacks, including low long-term use, low engagement, and low uptake (Seixas et al., 2021).

Healthcare delivery systems are updating their current health information technology (HIT) systems in an effort to raise income and improve quality in light of recent developments in HIT. The process of updating or replacing an antiquated HIT system that cannot continue to satisfy organizational, legal, or other criteria is known as HIT modernization. The phrase "modernization" is not the same as HIT adoption, which is the process of introducing an HIT system for the first time in a healthcare context and frequently supplanting manual or paper-based processes with technology ones. On the other hand, modernization involves replacing or improving an outdated HIT system, frequently with the goal of centralizing operations and boosting technological effectiveness (Amlung et al., 2020).

The field of artificial intelligence (AI)

Artificial intelligence (AI) has the power to fundamentally change both medical practice and the way that healthcare is delivered. AI is a powerful and cutting-edge area of technological advancement.

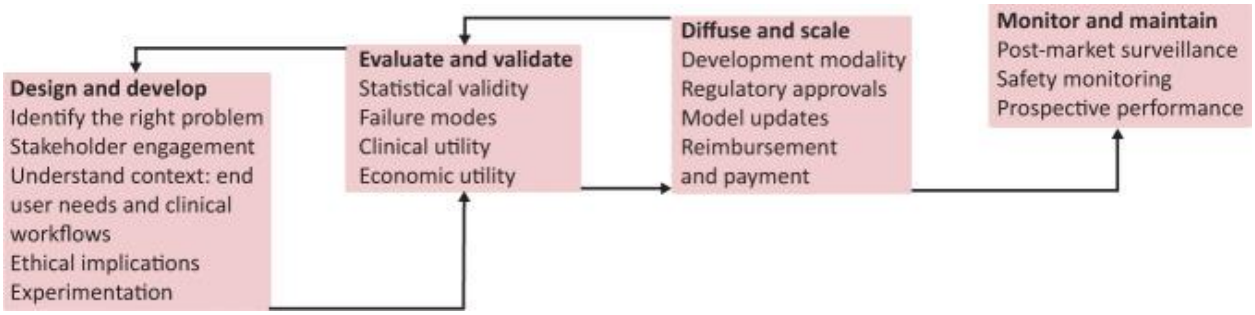

Fig 1. A methodical and progressive strategy to developing dependable and efficient AI-enhanced healthcare systems (Bajwa et al., 2021).

Artificial intelligence (AI) and healthcare technologies might be able to assist with some of these supply-and-demand problems. A moment of integration between healthcare and technology is being heralded by advancements in mobile devices, internet of things (IoT), computing power, and data security. This, along with the growing quantity of multi-modal data (economical, socioeconomic, clinical, and phenotypic), will fundamentally transform models of healthcare delivery through AI-augmented healthcare systems (Bajwa et al., 2021).

Optimizing Healthcare through Education and Training

Programs for healthcare education combine classroom instruction, which is taught in colleges or universities of applied sciences, with hands-on experience in clinical settings. In education for health professions, integrating classroom and practice learning is crucial for students' development of conceptual knowledge and learning transfer across settings. Furthermore, coordinating expectations across various learning environments can aid in creating training programs that are socially responsible and successful. There is a wealth of research on effective strategies for bridging the gap between clinical and educational settings, as well as any potential risks. The information about the advantages and disadvantages of using educational resources—such as tools, frameworks, and support—in clinical learning, which are connected to various learning outcomes, is still dispersed. The formulation and measurement of its intended results are made more difficult by the variety of learning opportunities seen in the clinical setting. In clinical practice, it might be challenging to consistently evaluate indicators of competence (Stoffels et al., 2023).

Learning that takes place in clinical settings allows for variety, in contrast to learning that happens in schools, which is increasingly regulated and standardized. Starting with real patient care, clinical learning procedures and results are contingent upon the environment, patient demographics, staff conduct, and their capacity and willingness to support learning opportunities. Every student's path to socialization in the

professional community is unique and influenced by personal traits like identity, preferences, and prior experience (Stoffels et al., 2023).

Conclusion

Optimizing healthcare will advance medicine and healthcare to realize its highest ideals, particularly for vulnerable and varied patients with chronic illnesses. Digital health products and telemedicine can help to rectify the existing US healthcare system's regrettable fragmentation and limited access to care. The demands of the growing chronic illness load in the United States are beyond the operational and financial capacity of this outdated system. An outdated "one-size-fits-all" medical system can be transformed by telemedicine and digital health solutions, offering everyone precise and individualized care. We contend that implementing optimum digital health solutions is the quickest and most efficient method to change this system and increase the adherence to care of patients with chronic illnesses.

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