

Impacts of Healthcare Innovations

Posted on November 26, 2024

Review of Healthcare Innovations

The industry of healthcare has tremendously evolved over the past 10 years between various innovations from mRNA technology to telemedicine. The outbreak of the pandemic across the globe has further enhanced the idea of implementing innovations in the care sector as researching and analyzing the Coronavirus pandemic has shaped and changed the way how care is delivered across the world, the United States in particular. Innovations in the healthcare sector related to technology are increasingly developed to offer the consumers of care an immersive and high-quality healthcare service with better patient outcomes. A recent innovation in the healthcare sector is the use of telemedicine which offers the remote delivery of care services to patients. This innovation in the healthcare industry can include everything from monitoring the vital signs of the patients remotely to setting an appointment over the phone or video call with the specialist (Bashshur et al., 2000). Another innovation has taken the speed over the last 5 years since the outbreak of deadly Covid-19 as many scientists developed mRNA vaccines in the 1900s but they were reluctant to research more about mRNA developments. The technology was proven responsive to combat the pandemic when the variant SARC-CoV-2 hit the majority of the world which renewed the scientists' interest to move forward with mRNA developments.

Throughout this article, it is discussed how innovations have shaped healthcare sector, the alignment of innovations in relation to the IHI [Quadruple Aim](#), and the implementation of an innovative change in the "Metropolitan Hospital Center" from the perspective of a public relation director in the facility.

Impacts of Healthcare Innovations

The innovative technologies of telemedicine and mRNA have significantly impacted the existing systems of the healthcare sector in a number of ways. The technology of mRNA vaccines has majorly shaped the fields of pharmacology and medical research such as the development of Moderna, BioNTech/Pfizer vaccines have revolutionized vaccine technology. This technological approach to vaccine development has made this field revolutionized to the great extent that scientists now have an efficient, effective, and faster way to develop vaccines for any viral outbreak than traditional vaccine-developing methods. This innovation not only has contributed to the fight against Coronavirus but has laid the groundwork for responding to emerging infectious diseases through mRNA-based treatments in the future (Pardi et al., 2020). On the other hand, the innovation of telemedicine has transformed the way care is provided in the healthcare systems by enabling patients from the comfort of their homes to access remote medical services (Bashshur et al., 2000). Both these

technologies have advanced, revolutionized, and transformed the healthcare sector a lot since the deadly Covid-19 hit the world and accelerated the pandemic response efforts. Thus, the innovations have resulted in a shift towards the development of mRNA-based treatment and vaccines as well as remote healthcare delivery for managing other diseases while achieving better organizational and patient outcomes in care facilities.

Alignment of the Innovations in Relation to the IHI Quadruple Aim

The two cutting-edge innovations of mRNA-based treatment and telemedicine over the last 10 years and since the outbreak of Coronavirus have gained significant momentum and represent a promising avenue for achieving IHI's Quadruple Aim. At the core of this Aim, the focus is mainly to put the patients at the center of care and improve their lives (*The Triple Aim or the Quadruple Aim?*, n.d.). The development of mRNA-based vaccines and remote care delivery is aligned with IHI's component "Better Care" for patients to enhance the patient experience of care and improve care outcomes. The field of mRNA-based vaccines is constantly evolving with new research and further developments and the innovations in medical practice through telemedicine aim to improve patient outcomes while reducing care costs. The IHI's Quadruple framework in this regard enhances the overall healthcare system that can lead to substantial improvements in patient satisfaction and outcomes.

Analysis – How an Implemented Innovative Change Impact the Identified IHI Quadruple Aim

The most tremendous innovative change that has had a significant impact on the selected care practice, healthcare sector, and the identified IHI Quadruple Aim is the adoption of telemedicine. As the term "telemedicine" refers to the remote delivery of care services to individuals who are in need through the medium of technology, all four elements of the IHI's Quadruple Aim have been impacted greatly. The access to remote care in relation to IHI's Quadruple Aim includes improvement of the patient experience, enhancement of the population's health outcomes, reduction of costs, and improving the work life of the care providers (*The Triple Aim or the Quadruple Aim?*, n.d.). One way telemedicine has improved the life and health of the US population is by extending services to individuals who live in rural, underdeveloped, or remote areas and have limited mobility. This has reduced the healthcare cost per capita as an important component of IHI's Quadruple Aim by increasing access to effective healthcare and reducing the cost barriers that prevent patients in rural areas from having quality care. Telemedicine, during the trying times of Coronavirus, has improved patient access to care and reduced the burden of healthcare visits on those who have had limited mobility. The technology also has alleviated clinician burnout and taken further developments to improve healthcare providers' work-life balance.

Innovative Change Implemented in the Care Practice

Implementing an innovative change in the healthcare sector can have a tremendous impact on reducing costs, enhancing the work experience of healthcare providers, achieving the IHI Quadruple Aim, and ultimately improving healthcare outcomes. Therefore, the healthcare organization “Metropolitan Hospital Center” selected for the analysis and implementation of the innovative change proposes the adaptation of the technology of telemedicine as this innovative change will increase patient engagement and satisfaction through improved communication with medical experts. The implementation of telemedicine services will help to connect the doctors of the care facility and the patients remotely. Moreover, the adoption of this innovative idea will be an effective solution to the challenges posed by Coronavirus to ensure continuity and convenient access to care services while ensuring the safety of staff and patients. The implementation of this innovation in the “Metropolitan Hospital Center” facility is necessary for ensuring that staff remains safe and patients continue to receive high-quality healthcare services while minimizing the risk of Coronavirus and other similar infectious diseases.

References

Bashshur, R. L., Reardon, T. G., & Shannon, G. W. (2000). Telemedicine: A new health care delivery system. *Annual Review of Public Health*, 21(1), 613-637.

Pardi, N., Hogan, M. J., & Weissman, D. (2020). Recent advances in mRNA vaccine technology. *Current Opinion in Immunology*, 65, 14-20.

The Triple Aim or the Quadruple Aim? Four Points to Help Set Your Strategy. (n.d.).

<https://www.ihl.org/communities/blogs/the-triple-aim-or-the-quadruple-aim-four-points-to-help-set-your-strategy>