

## EDITORIAL

## A clear path to endemic: An opportunity to increase healthcare professionals' system

Sumarno Adi Subrata<sup>1</sup>✉, Busra Sahin<sup>2</sup>

### Author information

<sup>1</sup> Department of Nursing, Universitas Muhammadiyah Magelang, Indonesia

<sup>2</sup> Department of Nursing, Aydin Adnan Menderes University, Turkey



adisubrata@ummgl.ac.id



<https://doi.org/10.31603/ihs.9469>

### Abstract

The COVID-19 pandemic brought to light some of the most severe flaws in the healthcare system, but it also sparked a flurry of ideas resulting in a significantly enhanced delivery system. These were innovations that were brought about as a direct result of a pressing need: telenursing for community services; telemedicine access and use skyrocketed; new hospital-at-home services emerged; ambulatory surgical centres expanded their menu of procedures; and a variety of novel therapeutics were introduced, including the widespread distribution of vaccines, new medical diagnostics, and innovative monoclonal antibodies. A new era of digital medicine during the endemic may be on the horizon due to the proliferation of new services that feature adaptable delivery methods. Therefore, healthcare professionals need to improve the system, including reevaluating and redeveloping it for a better quality of care in clinical settings and community.

**Keywords:** Quality care; COVID-19; telenursing; telemedicine; community services; innovation in health

The COVID-19 pandemic highlighted some of the most serious flaws in the healthcare system. However, it also sparked a flurry of ideas with the potential to significantly enhance the delivery system. These innovations were driven by urgent needs: telemedicine access and use skyrocketed; new hospital-at-home services emerged; ambulatory surgical centers expanded their procedures; and a variety of novel therapeutics were introduced, including the widespread distribution of vaccines, new medical diagnostics, and innovative monoclonal antibodies. The proliferation of new services featuring adaptable delivery methods may herald a new era of digital medicine (**Figure 1**), contrasting with the traditional and expensive brick-and-mortar system, potentially diminishing its scope. Now that the crisis is over, we are witnessing an attempt to retrench from the flurry of innovation seen during the pandemic (Elden et al., 2023). Some business leaders are now advocating a return to pre-pandemic delivery mechanisms, in stark contrast to their actions during the pandemic. The period of innovation was made feasible by emergency regulatory relaxations, targeted funding, Emergency Use Authorizations, flexible payment structures, and a Federal Retail Pharmacy Program that collaborated with more than 41,000 retail pharmacy sites nationwide. All these factors combined to foster creativity. Now, major sector interests are attempting— as they frequently do— to ensure that interim measures are allowed to lapse, that old funding channels regain prominence, and that regulatory relaxations end.

How do we ensure we don't lose the substantial and potentially game-changing innovations developed during the pandemic? To protect valuable innovations and resist the urge to discard them, it is crucial to evaluate the clinical quality and utility of these innovations. While established interests question the economic and quality benefits of innovations, their business models are not subject to the same rigorous examination. The public needs access to data to investigate and, where necessary, contest industry assertions. It is necessary to reimagine the healthcare data architecture to enable and preserve value-adding innovations. Take, for example, the shift towards virtual care—the most significant market change. The number of telehealth visits covered by Medicare increased from 840,000 in 2019 to 52.7 million in 2020. Patients receiving routine care, those in rural communities, working families, and patients with demanding diseases requiring daily clinical assistance all benefited from virtual care

during the COVID-19 waves (Patterson, Roddick, Pollack & Dutton, 2022). The advantages of telehealth continue to be an important discussion topic (Bouabida, Lebouché, & Pomey, 2022). Did it ease access for all demographic groups, or did it exacerbate existing health inequities? Did it provide care of sufficient quality to maintain or improve health outcomes? Finally, does telehealth save costs, or does it add another expensive layer atop the conventional care model? Evidence suggests that telehealth addresses all these questions (Stamenova et al., 2022).



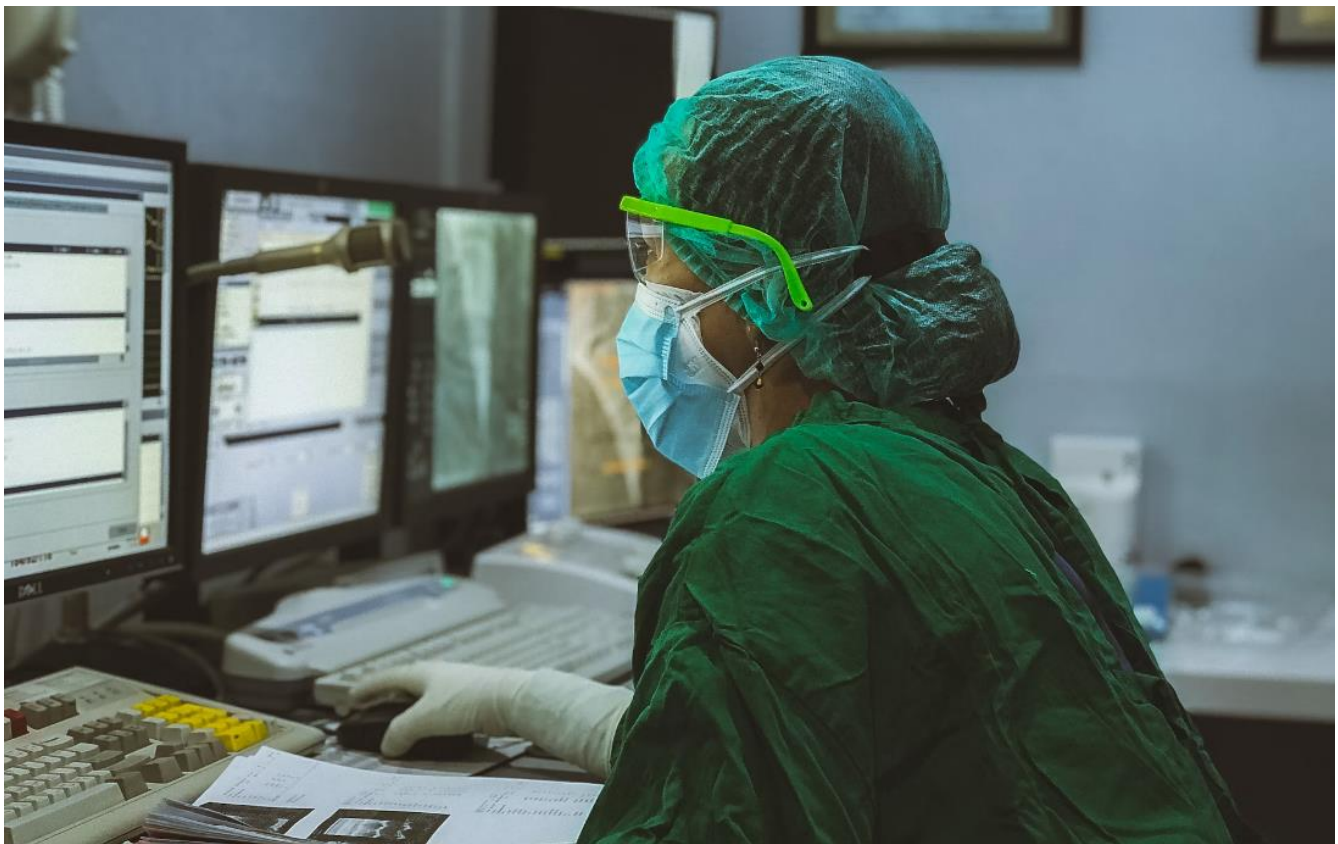
**Figure 1.** Illustration of innovation technology (Courtesy of unsplash.com).

The healthcare sector is on the cusp of a transformative era, driven by unprecedented opportunities to enhance the systems in which healthcare professionals operate. This transformation is being catalyzed by advancements in technology, data analytics, and integrated care models. By leveraging these innovations, healthcare systems can improve efficiency, accuracy, and patient outcomes. For instance, the adoption of electronic health records (EHRs) and telemedicine platforms allows for more seamless communication and coordination among healthcare providers, reducing errors and ensuring that patients receive timely and appropriate care. Additionally, artificial intelligence and machine learning can assist in diagnosing diseases, predicting patient outcomes, and personalizing treatment plans, thereby elevating the standard of care provided. Investing in the professional development of healthcare workers is crucial to maximizing these technological advancements. Continuous education and training programs can ensure that healthcare professionals are proficient in using new tools and systems, thereby enhancing their ability to deliver high-quality care. These programs can cover a range of topics, from the technical aspects of new medical devices to the application of data analytics in clinical decision-making. Furthermore, fostering a culture of innovation and collaboration within healthcare organizations can empower professionals to contribute to system improvements actively. By involving healthcare workers in the design and implementation of new technologies and processes, organizations can ensure that these solutions are practical, user-friendly, and effective in meeting the needs of both providers and patients.

Moreover, a holistic approach to system enhancement should also address the well-being and job satisfaction of healthcare professionals. Burnout and stress are prevalent issues in the healthcare industry, exacerbated by high workloads and administrative burdens. Implementing systems that streamline administrative tasks, improve work-life balance, and provide support for mental health can significantly impact the morale and

productivity of healthcare workers. Initiatives such as flexible scheduling, wellness programs, and access to mental health resources are essential components of a supportive work environment. By prioritizing the health and well-being of healthcare professionals, organizations not only improve job satisfaction and retention rates but also create a more resilient and effective healthcare system capable of adapting to future challenges and opportunities (Figure 2).

We risk letting hospitals, physicians who hospitals employ, and insurers dependent on hospitals for access to monopolized services answer these concerns (Rivers & Glover, 2008). Hospitals are concerned about losing money from lost office visits; hospitals employ physicians, and insurers depend on hospitals for access to monopolized services (Yang & Pan, 2017). These significant policy arguments may be settled not on the initiatives themselves but rather on the short-term financial demands imposed by these legacy business models. Patients, policymakers, and innovation-seeking payers will be unable to assess these innovations' economic or consumer benefits and, as a result, will be unable to counter anti-innovation arguments made by vested interests (Gale, 2015). Without definitive public data sources and support for an independent assessment of the COVID-19 response, these stakeholders will be unable to evaluate the benefits of these innovations. Allowing these policy debates to become focused on the early experiences and nearly certain failures of early pioneering enterprises is another risk that could be taken. When it comes to effective business innovation, generations of business model development are often required (Scarborough & Kyratsis, 2022). This is because first movers give way to followers who learn from the mistakes of early entrants (and do not bear the expense of establishing the market). Despite this, the failures of first-mover enterprises or models are frequently cited to criticize the innovation model in a more general sense (Liu, Shi, & Yang, 2022). It takes time and investment to build creative and lucrative business models, which may be swiftly reduced in an environment favouring the status quo (Flessa & Huebner, 2021). Building new and profitable company models takes time and investment (Huang, Ciari, Costa, & Chahine, 2022).



**Figure 1.** Illustration of healthcare systems (Courtesy of unsplash.com).



Healthcare professionals play a pivotal role in driving innovation within the health sector, serving as both the catalysts and implementers of transformative changes. Their first-hand experience with patient care provides invaluable insights into the practical challenges and unmet needs within the healthcare system. By identifying these gaps, healthcare professionals can inspire the development of new technologies, treatment protocols, and care delivery models. Their clinical expertise and intimate understanding of patient dynamics are crucial in ensuring that innovations are not only theoretically sound but also practically applicable and beneficial in real-world settings. Moreover, healthcare professionals are instrumental in the successful adoption and integration of new innovations. Their acceptance and utilization of new technologies, such as electronic health records (EHRs), telemedicine platforms, and advanced diagnostic tools, are essential for these innovations to achieve their full potential. Healthcare professionals also play a key role in educating patients about new treatments and technologies, thereby facilitating smoother transitions and higher rates of acceptance. Additionally, their feedback during the initial phases of implementation is critical for iterative improvements, ensuring that innovations are refined and optimized for maximum efficacy and user satisfaction. Beyond the implementation phase, healthcare professionals also contribute to the ongoing evolution of innovations through research and continuous quality improvement initiatives (**Figure 3**). Engaging in clinical research allows them to test the effectiveness of new interventions, gather data on outcomes, and identify areas for further improvement. Furthermore, healthcare professionals often participate in interdisciplinary collaborations, bringing together expertise from various fields to tackle complex health challenges. By fostering a culture of continuous learning and adaptation, they help create a dynamic and responsive healthcare environment where innovation thrives. This commitment to advancing healthcare through innovation ultimately leads to improved patient outcomes, greater efficiency in care delivery, and a more sustainable healthcare system.



**Figure 3.** Illustration of healthcare research (Courtesy of unsplash.com)

The role of healthcare professionals has evolved dramatically in the aftermath of the COVID-19 pandemic. As the world grappled with unprecedented health challenges, these professionals displayed remarkable resilience, adaptability, and innovation. They were at the forefront of combating the virus, ensuring that patients received timely and effective care despite overwhelming odds. The pandemic underscored the importance of their expertise, not only in treating COVID-19 patients but also in maintaining continuity of care for other health conditions. Now, as we transition to a post-pandemic era, healthcare professionals are poised to leverage the lessons learned to build a

more robust, responsive, and innovative healthcare system. One of the most significant changes has been the integration of telehealth into routine practice. The pandemic necessitated a rapid adoption of digital health technologies, enabling remote consultations, monitoring, and follow-ups. This shift has not only ensured patient safety during the pandemic but also expanded access to care, particularly for those in remote or underserved areas. Healthcare professionals have adapted to these new technologies, acquiring skills in digital health that will be invaluable moving forward. The continued use and development of telehealth are set to revolutionize patient care, making it more accessible and efficient, while also reducing the strain on traditional healthcare facilities.

Furthermore, the pandemic has highlighted the critical need for mental health support for healthcare professionals. The intense pressure, long hours, and emotional toll of treating COVID-19 patients have led to increased instances of burnout and mental health issues among healthcare workers. Recognizing this, healthcare institutions are now placing a greater emphasis on the well-being of their staff. Initiatives such as peer support programs, mental health resources, and organizational changes aimed at reducing workload and stress are being implemented. These efforts are essential in ensuring that healthcare professionals remain resilient and capable of providing high-quality care. As we move forward, maintaining the mental health and well-being of healthcare workers will be paramount in sustaining a robust healthcare system.

The COVID-19 pandemic has irrevocably transformed the landscape of scientific research, propelling unprecedented advancements and reshaping priorities across multiple disciplines. In the wake of the pandemic, research initiatives have expanded their focus, driven by the urgent need to understand, mitigate, and prevent future global health crises. This period has underscored the importance of collaborative, multidisciplinary approaches, and has catalyzed the integration of cutting-edge technologies into research methodologies. As we transition into a post-pandemic world, the lessons learned and innovations developed during this period are poised to accelerate scientific discovery and enhance public health resilience. One of the most significant shifts in research post-pandemic is the heightened emphasis on virology, epidemiology, and public health infrastructure. Researchers are delving deeper into the mechanisms of virus transmission, mutation, and the human immune response to develop more effective vaccines and therapeutic strategies. The rapid development and deployment of COVID-19 vaccines have set new benchmarks for scientific collaboration and regulatory agility. Future research is likely to build on these achievements, focusing on creating broad-spectrum antivirals and universal vaccines that can protect against multiple pathogens. Additionally, the pandemic has highlighted the critical role of robust public health surveillance systems in early detection and response to infectious diseases, prompting significant investment and innovation in this area.

The integration of digital technologies into research has been another transformative outcome of the pandemic. The necessity of remote work and virtual collaboration spurred the adoption of digital tools and platforms, enabling researchers to continue their work despite physical distancing constraints. Big data analytics, artificial intelligence, and machine learning have become indispensable in analyzing vast datasets, predicting disease trends, and optimizing clinical trials. The use of telemedicine and digital health platforms for data collection has expanded the scope of clinical research, allowing for more diverse and inclusive study populations. As we move forward, the continued evolution and application of these technologies will be crucial in driving forward scientific inquiry and improving health outcomes on a global scale. In summary, the post-COVID-19 research landscape is characterized by a renewed focus on infectious diseases, a commitment to collaborative and multidisciplinary approaches, and the integration of advanced digital technologies. These developments promise to enhance our ability to respond to future health crises, improve public health infrastructure, and accelerate the pace of scientific discovery. By building on the innovations and lessons of the pandemic, the research community is well-positioned to address the complex health challenges of the future and contribute to a more resilient and equitable global health system.

## References

- Bouabida, K., Lebouché, B., & Pomey, M. P. (2022). Telehealth and COVID-19 Pandemic: An Overview of the Telehealth Use, Advantages, Challenges, and Opportunities during COVID-19 Pandemic. *Healthcare (Basel, Switzerland)*, 10(11), 2293. <https://doi.org/10.3390/healthcare10112293>
- Elden, N. M. K., Mandil, A. M. A., Hegazy, A. A., Nagy, N., Mabry, R. M., & Khairy, W. A. (2023). Health innovations in response to the COVID-19 pandemic: perspectives from the Eastern Mediterranean Region. *Journal of public health (Oxford, England)*, 45(2), 470–480. <https://doi.org/10.1093/pubmed/fdac113>

- Flessa, S., & Huebner, C. (2021). Innovations in Health Care-A Conceptual Framework. *International journal of environmental research and public health*, 18(19), 10026. <https://doi.org/10.3390/ijerph181910026>
- Gale A. H. (2015). Bigger but not better: hospital mergers increase costs and do not improve quality. *Missouri medicine*, 112(1), 4–5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6170097/>
- Huang, T. T. K., Ciari, A., Costa, S. A., & Chahine, T. (2022). Advancing Public Health Entrepreneurship to Foster Innovation and Impact. *Frontiers in public health*, 10, 923764. <https://doi.org/10.3389/fpubh.2022.923764>
- Liu, Z., Shi, Y., & Yang, B. (2022). Open Innovation in Times of Crisis: An Overview of the Healthcare Sector in Response to the COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(1), 21. <https://doi.org/10.3390/joitmc8010021>
- Patterson, P. B., Roddick, J., Pollack, C. A., & Dutton, D. J. (2022). Virtual care and the influence of a pandemic: Necessary policy shifts to drive digital innovation in healthcare. *Healthcare management forum*, 35(5), 272–278. <https://doi.org/10.1177/08404704221110084>
- Rivers, P. A., & Glover, S. H. (2008). Health care competition, strategic mission, and patient satisfaction: research model and propositions. *Journal of health organization and management*, 22(6), 627–641. <https://doi.org/10.1108/14777260810916597>
- Scarborough, H., & Kyratsis, Y. (2022). From spreading to embedding innovation in health care: Implications for theory and practice. *Health care management review*, 47(3), 236–244. <https://doi.org/10.1097/HMR.0000000000000323>
- Stamenova, V., Chu, C., Pang, A., Fang, J., Shakeri, A., Cram, P., Bhattacharyya, O., Bhatia, R. S., & Tadrous, M. (2022). Virtual care use during the COVID-19 pandemic and its impact on healthcare utilization in patients with chronic disease: A population-based repeated cross-sectional study. *PloS one*, 17(4), e0267218. <https://doi.org/10.1371/journal.pone.0267218>
- Yang, Q., & Pan, J. (2017). Control under times of uncertainty: the relationship between hospital competition and physician-patient disputes. *International journal for equity in health*, 16(1), 205. <https://doi.org/10.1186/s12939-017-0701-0>

## Innovation perspective

### Key points

- Healthcare systems should be evaluated after the pandemic ends
- The role of healthcare professionals is significant in achieving better patient outcomes
- Collaboration with an expert in information technology will be the fundamental strategies

### Potential areas of interest

- What is the role of healthcare professionals in dealing with the healthcare changes?
- How is the government being involved in developing a better healthcare system?
- When must healthcare technology be evaluated for system optimization?

## How to cite this article (APA style)

Subrata, S., & Sahin, B. (2023). A clear path to endemic: An opportunity to increase healthcare professionals' system. *Innovation in health for society*, 3(1), 1-6. doi: <https://doi.org/10.31603/ihs.9469>