UNDERSTANDING THE IMPACT OF THE TELEHEALTH REVOLUTION

The use of telehealth has increased over the last several years. Can a doctor's visit really translate well in a digital medium?

Process virtualization, which is a shift from a physical to a virtual environment, is changing the way we do business in multiple sectors. The healthcare sector lagged behind this trend until the recent telehealth boom due to COVID-19. But what is the impact of telehealth on healthcare cost and utilization rates?

Sezgin Ayabakan and his colleagues studied telehealth's effectiveness in treatment and impact on healthcare utilization. They examined visit-level patient data of telehealth use with Maryland providers and surveyed 16 providers and residents at leading U.S. medical schools. They focused on three functions of telehealth: representation, monitoring and reach capabilities.

They found that, on average, a telehealth visit reduced future outpatient visits by 13.6%. However, this effect was not the same across all diseases. Telehealth was most effective in reducing healthcare utilization for high virtualizability diseases, or diseases that can be treated virtually (e.g. skin, metabolic and musculoskeletal diseases, mental health).

For low virtualizability diseases (e.g. cancer), telehealth complemented rather than replaced in-person care through monitoring in between in-person visits. Lastly, telehealth's reach was limited as it did not reduce the digital divide in rural areas.

Although telehealth is not a one-size fits all approach, it does have the potential to lower healthcare costs and utilization. These findings are valuable in making a case to support the shift toward outpatient and home-based care services.

MAJOR TAKEAWAYS:

● Telehealth use is associated with significant reductions in future outpatient visits and healthcare costs.

● A more nuanced approach to telehealth promotion is needed as it is not a one size fits all approach.

● Telehealth can substitute in-person visits depending if a disease has a high or low virtualizability.

WHO NEEDS TO KNOW:

● Policymakers
● Insurance companies
● Providers

CONTACT US:

● Sezgin Ayabakan, Professor of Management Information Systems, *ayabakan@temple.edu.*
● Impact of Telehealth and Process Virtualization on Healthcare Utilization. https://doi.org/10.1287/isre.2023.1220

Fox School of Business

Learn more about the Translational Research Center
fox.temple.edu/trc