

Digital Tools and Information Technology in Healthcare System during COVID-19 Pandemic

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DESCRIPTION

Many studies have documented significant changes in the usage of healthcare services as the COVID-19 pandemic persists as a result of such measures as lockdowns and stay-at-home orders. These adjustments include significant service cuts, particularly in areas severely affected by the pandemic, but they also include certain deliberate service expansions, such as telemedicine. Numerous people have been denied treatment that they desperately needed, such as cancer treatments that extended their lives or vaccinations. According to a WHO report, lower income nations see the most disruption to healthcare services, and it is estimated that cutting back on crucial maternal and child health measures may result in the death of more than a million extra children. Moreover, the epidemic may have prevented some individuals from receiving harmfully unnecessary or inappropriate care. The issue of having too much medicine is well known, and numerous international campaigns, such as Choosing Wisely, which is active in more than 20 countries, are attempting to address it. Learning from this "natural experiment" in reduced care may aid health systems in identifying and addressing unneeded treatment and moving towards better sustainability when some countries are compelled to do more with less during the postpandemic period.

Major methodological difficulties arise when examining how changes in healthcare utilization affect health outcomes and costs. First off, there are a variety of reasons why people have neglected to receive medical attention, such as a fear of contracting an infection while visiting a care facility, a lack of access to care because of lockdown regulations, and the suspension and cancellation of services like elective surgery. Second, it takes sophisticated and detailed analysis, with adjustments for numerous potentially confounding variables, to separate populations who have lost out on necessary care from those who have avoided unneeded care. Notwithstanding these obstacles, health systems may be able to maximize post-pandemic resource usage by quantifying and characterizing the unprecedented recent changes in utilization and their influence

on health outcomes and costs.

In order to achieve this, we carried out what is, to our knowledge, the first systematic analysis of papers reporting on changes in overall healthcare utilization brought on by pandemics. In conducting this analysis, we also aimed to improve and provide guidance for future research projects looking at both the ongoing changes in usage and the effects of this unplanned, natural experiment on costs and health consequences.

CONCLUSION

Long-term cohort studies for gathering patient-centered outcomes to assess consequences on health, costs, and equity, as well as high-quality time-trend analyses, are required to better understand the scope and nature of continuing changes in use. Consumer interviews conducted during the epidemic show how important it is to prioritize people who are most in need and comprehend how the pandemic may differentially affect the most vulnerable. It will also be crucial to do thorough qualitative study into professionals' reactions to changes in procedure and practice as well as peoples' experiences of avoiding or skipping out on care. More research is necessary because we were unable to locate any studies that specifically looked at how the use of low-value healthcare services has changed. Investigating the scope and results of substitution, such as with telemedicine or self-care, is also necessary.

The most afflicted districts experienced considerable declines in the use of healthcare services, and it took a while before some rates returned to baseline following the occurrence of severe acute respiratory syndrome approximately 20 years ago. If utilization rates of particular services do not return to prepandemic levels, it might be better for people and their health systems given the mounting evidence of wasteful care since that time. Realizing unmet needs and reducing harm and waste from unneeded care are not incompatible goals; rather, they are two facets of a comprehensive plan to effectively advance human health.

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