Why Public Healthcare Systems Weren’t Prepared for the Pandemic

By Shantanu Bhattacharya , Singapore Management University and Sameer Hasija and Luk Van Wassenhove , INSEAD

Healthcare resource sharing can be the difference between life and death. And it can be done without sacrificing agencies’ autonomy.

The medical response to the Covid-19 disaster has imposed a staggering cost on global healthcare systems, and many are struggling to cope with the demand spikes on their limited resources. Healthcare systems are designed with buffers to tackle more than the average demand as the costs of resource shortages involve critically negative outcomes, such as loss of life. However, they are not designed to cope with pandemics, which suddenly require a much higher set of resources. An exorbitantly high investment in healthcare resources to deal with a pandemic does not make sense from a policy-making perspective because these are rare events. As such, the cost to taxpayers must be weighed against the low probability of utilisation of such investments. In this article, we share some insights about how public healthcare systems can improve their ability to serve citizens without imposing an excessive burden on public spending.

In the middle of the Covid-19 crisis, several ambulatory clinics run by the United States Federal Occupational Health agency (part of the US Department of Health and Human Services) had a surplus of personal protective equipment (PPE), like masks. These surplus PPE were urgently needed by hospitals on the frontline in the battle against the pandemic in various states, but the lack of coordination among multiple agencies hindered delivery of these resources among hospitals.

Independent government agencies, like state healthcare departments, are responsible for the planning and procurement of resources in their domains of administration. In the US, states have autonomy in managing their public healthcare operations, as is true of countries within the European Union. While such independent decision making is desirable for many reasons, it creates operational inefficiencies. As illustrated in the example above, in a completely decentralised system, one agency may be in desperate need of PPE, while another agency has excess availability.

However, removing the autonomy of agencies in managing their own affairs, especially during a public health crisis, goes against the grain of the American state/federal power and responsibility balance mandated in the Constitution. This is even more salient for member countries in the EU. So, how can governments and policy-makers plan to provide effective healthcare in the event of a pandemic without taking away the autonomy of regional administrations?

Our research suggests some solutions. We find that protocols for sharing transferrable healthcare resources like PPE among different agencies can yield significant cost savings and an increased availability of resources. This finding is hardly surprising, but what is unexpected is that careful orchestration of transferrable healthcare resources can unlock a huge additional benefit to the population, over and above the cost savings. Put simply, the incremental benefit from investing in fixed healthcare resources for a single agency increases when it is understood that necessary items are accessible from peer organisations. Individual agencies make higher investments in fixed resources like isolation rooms when they know they can access transferrable healthcare resources from others if the need arises.

Enter the middleman

An equally important insight from our research is that this additional benefit of transferrable resources requires careful design. For instance, an obvious possibility would be to allow agencies to barter or perform direct exchanges. This is actually a bad idea. Barters or direct exchanges can lead to adverse outcomes from the self-interested behaviours exhibited by agencies. The chaos created by different states trying to outbid each other for PPE during the Covid-19 crisis in the US speaks to this.

Relying upon autonomous agencies to haggle over the distribution of vital medical supplies cannot be the best option for public health. In fact, our research suggests that even when resource prices are fixed in advance, incentives for agencies to pursue their own interests are too strong, resulting in renegotiation or essential transactions being blocked.

Alternatively, a well-designed central entity can help agencies share equipment and achieve results by eliminating the adverse effects of self-interest. The role of this coordinating body would be to help in the needs assessment of each agency and the allocation of surplus resources from one agency to another. An example of such a “middleman” in the US, though not limited to the healthcare sphere, would be Federal Emergency Management Agency (**FEMA**). If all 50 US states were to enter into resource-sharing agreements for PPE, with FEMA overseeing the transfers, it is safe to assume that healthcare systems would be better equipped to tackle the next crisis.

Under this sharing mechanism, the intermediary’s role is confined to the sharing of resources, leaving each agency free to make its own procurement decisions. The allocation of healthcare resources across different autonomous agencies represents the next step toward regional cooperation. As the response to the Covid-19 pandemic has shown, healthcare resource sharing can be the difference between life and death for many patients.

Designing such sharing systems could effectively alleviate the issues without excessive costs, and the hope would be that regional cooperation might actually increase in response to pandemics of the future.

Find article at

https://knowledge.insead.edu/operations/why-public-healthcare-systems-werent-prepared-pandemic

About the author(s)

Shantanu Bhattacharya is a Professor of Operations Management and Associate Dean at the Lee Kong Chian School of Business, Singapore Management University.

Sameer Hasija is Dean of Executive Education and Professor of Technology and Operations Management at INSEAD.

Luk Van Wassenhove is an Emeritus Professor of Technology and Operations Management and the Henry Ford Chaired Professor of Manufacturing, Emeritus at INSEAD. He leads the **INSEAD Humanitarian Research Group** as the academic director.

About the series

Covid-19

Covid-19 is no longer a global health emergency but its impact on public health, the global economy and the future of work cannot be overstated. INSEAD's thought leaders — both faculty and their close collaborators in the practitioner and entrepreneurship communities — give their informed perspectives that could help us not just weather the crisis but emerge from it stronger than ever.

Healthcare Management

The **Healthcare Management Initiative** at INSEAD was founded on the belief that many of the systemic challenges of the healthcare industry globally can benefit from the application of principles that stem from rigorous, evidence-based thought leadership.