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Three ways to strengthen our health systems: lessons from COVID-19

Abstract

Improving health systems is a constant challenge. Today, the global pandemic highlights this as a challenge of the utmost importance that the public and private sectors must take on together. The slow progress in the modernization and strengthening of health systems hampers the fight against COVID-19 which continues to spread at high speed. It is now a matter of demonstrating our resolve for greater efficiency to guarantee better public health. Solutions exist to strengthen our health systems: reinforce focus on prevention and more effective management of chronic diseases, make greater use of digital technologies and data, and encourage multi-sector collaboration to seek innovative approaches and secure the needed investment and resources. A new age in global health is achievable. When all stakeholders actively work together behind a common goal, we can find solutions to even the most difficult challenges.

There is global consensus the COVID-19 crisis has been a wake-up call for all of us in public health: modernizing and strengthening our healthcare systems can no longer take the form of a long, winding road, bordered by good intentions. Rather, it is an urgent requisite and change must happen faster to avoid the full brunt of future catastrophic events like pandemics.

Of course, overhauling healthcare systems is an onerous undertaking – and requires many actors engaging in concert behind common or complementary objectives. But the COVID-19 crisis has shown us that it is possible to effect wide and large-scale change when certain hurdles are overcome through innovation and concerted coordination from all actors. I believe similar shifts in the post-pandemic world must come in the form of incentivizing and rewarding effective prevention.

In other words, we can do more to prevent and better manage our health issues in life before costly and sometimes irreversible damage occurs. That is good for individuals, systems, and entire societies.

Here are three ways we can do this: (1) doubling down on prevention and more effective management of diseases (2) accelerating the adoption of digital technologies and data integration and (3) building a cross-sector approach to encourage investment and resourcing behind innovation.

1. Doubling down on prevention and more effective management of diseases

Despite the recognized benefits of preventive health measures – take vaccination as an example – more can be done to ensure our healthcare systems are set up to encourage healthier lifestyles and reward better health outcomes. Most healthcare systems are set up as "sick-care" systems where interventions happen only when a person gets sick. This continues despite demonstrated improved value for healthcare investments with prevention.

Take chronic diseases for example, even before COVID-19 brought our hospitals to the brink, the burden of chronic conditions weighed heavily already: Diabetes affects 463 million adults worldwide and accounts for $760 billion. Left alone, these figures are expected to increase to 700 million people living with diabetes by 2045 and a cost of $845 billion.

These are largely evitable burdens of disease if we take a population health approach targeting effective prevention amongst those most at risk. These costs I have outlined are disproportionately weighted among people whose predispositions, characteristics and behaviors otherwise lead them down this difficult and costly road of chronic disease. Clearly, when well-controlled, these diseases will not take such a heavy toll as they do today. We know that when patients reach and maintain goals established through medical guidelines, they live healthier lives and encounter far fewer burdensome and costly complications. But from real-world experience, we also know those goals are not often met and patients and HCPs continue to struggle to effectively manage disease.

We need to tailor health interventions to this segment of the population before they progress into irreversible disease. And we need to do so with holistic lifestyle applications and engagement that can fill the gaps in the months between clinical check-ins. That is where digital comes in.

2.   Accelerating the adoption of digital technologies and data integration

Digital has already begun to make good inroads in helping the public health community better understand and implement optimal preventive health solutions. We can see applications thrive in the pandemic context when people need to find faster and more efficient ways to manage care. There are now smoothly working user-facing virtual apps like those for making and managing medical appointments. There are also sophisticated new digital diagnostic technologies using powerful computing and machine learning to pre-empt problems, like Google's retina scanner that can spot people at risk for cardiovascular disease just by "looking them straight in the eye," albeit very deeply![1]

We may be witnessing finally the beginning of a true integration of digital into health and wellness. But to fully reap the benefits smart technologies can offer both patients and the system, we'll need more. The World Heart Federation has raised several points in their recent white paper on how to accelerate digital's power in improving health for those suffering from chronic circulatory diseases, of which I believe one is of special importance and urgency.[2]

Large-scale upgrades to digital ecosystems in healthcare will make them more interoperable and secure. This is truly foundational as it may be the largest single inhibitor of optimal digital health today. As patients at one time or another, we have all seen how specialties of care work in silos and don't always exchange well. Interoperable digital health records between patients and their sometimes-multiple caregivers and wellness support systems could help health systems effectively identify the most at-risk populations and facilitate physicians' abilities to seamlessly connect and understand the unique case of each patient to provide truly optimal care.

If we can collectively continue to push for wider adoption and use of digital technologies, it could propel healthcare systems to a new model, centered around real-world data, evidence-based medicine, and better patient outcomes.

3.   Building a cross-sector approach to encourage investment and resourcing behind innovation

Increased partnerships will be essential to making this much-needed shift to prevention. This transformation can only happen if all parts of the system work together towards the same goal. We must build global, cross-sector collaborations if we seek to make change sustainable.

In the pandemic response, we saw exceptional partnerships rising up and bringing together expertise and resources from all stakeholders in public health. Take Sanofi's collaboration with GSK and the U.S. Biomedical Advanced Research and Development Authority (BARDA) for the development of a recombinant protein-based COVID-19 vaccine: rarely do two competitors come together to create a new vaccine, and in concert with a government agency, no less.

Another example is the COVAX Facility co-led by Gavi (The Vaccine Alliance), the Coalition for Epidemic Preparedness Innovations (CEPI) and the World Health Organization. In this Facility, any country can join with others to pool resources and reserve COVID-19 vaccine doses for their populations. And finally, we have seen a clear reinforcement of Europe's critical geopolitical collaborations in health with the

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[1] https://www.newsweek.com/google-retinal-scans-predict-heart-attack-812098
[2] https://www.world-heart-federation.org/wp-content/uploads/WHF-The-case-for-the-digital-transformation-of-circulatory-health-WEB-.pdf

recent announcement of a Health Emergency Response Authority (HERA), also referred to as a "European BARDA" (European Agency for Bio Preparedness).

Across these and other examples, we can see that policy makers, academia, civil society and industry colleagues are clearly now coming together, taking the learnings from COVID-19, and ensuring we are not caught off-guard by the next pandemic.

4. Questions we must answer together

As we rethink our healthcare systems in a post-pandemic world then, we must ensure that we can also apply learnings to other domains of systemic health care improvements. Most importantly perhaps, we must create the right governance that will allow us to earn the public's trust and unlock rapid and concrete change. Whether it is in prevention, digital health or innovation writ large, we need to create a better designed and governed healthcare ecosystem.

With this in mind, there are two key areas for us to consider in the immediate:

- Continue to explore and find more ways to facilitate coordination amongst all the players of healthcare systems, especially between public and private sectors;
- Forge greater alignment and coordination across countries and across the local, regional, and global dimensions of public health.

No one can do this alone, but if we undertake a concerted effort to work together, I believe a new age in global health is achievable. We have already seen how this kind of coordination can work in the pandemic response: when all stakeholders in public health actively work together behind a single critical goal, we can find solutions to even the most difficult challenges.