

Covid-19 vaccines and the long road ahead to normalcy

While the exuberance about vaccines is understandable, a full return to pre-pandemic conditions will require much more work to be done, including establishing national and global frameworks and infrastructure for recording and verifying who has received an accredited vaccine.



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In the past four weeks, the world greeted the continual positive findings from several late-stage Covid-19 vaccine trials with loud cheers. Global stock markets rallied, and the surge in share prices of aviation and tourism counters revealed the widespread optimism of the world about a return to pre-Covid-19 normalcy.

This enthusiasm is reinforced whenever governments worldwide announce their plans to procure and deliver the vaccines, regardless of the important caveat to prioritise limited vaccine doses for front-line workers and high-risk groups before mass distribution to the rest of the population is possible.

What has been overlooked in this vaccine furore, however, is the distinction between protecting individuals from infection and mortality, and allowing societies and communities to return to pre-Covid-19 normalcy.

While the two objectives may appear to be aligned, there are

fundamental differences in the requirements to attain the desired outcomes.

Numerous reports have discussed how the availability and public acceptance of safe and effective vaccines make a powerful contribution to the existing public health toolkit in the fight against Covid-19 that includes mask wearing and social distancing to protect people against infection.

However, this narrative tends to focus on how the risk to individuals is lowered and, in return, the healthcare services are protected from being overwhelmed, but it does not actually address how societies can return to regular activities.

The latter can happen only when appropriate national and international infrastructure is established for recording and verifying who has received an accredited vaccine.

This sounds trivial, but the reality is far from so.

Logistical challenges

Let us start from the fact that, regardless of the supply of vaccines that is available to a country, it will be impossible to expect everyone to be vaccinated.

This may be due to the logistical challenges of vaccinating millions of people distributed over a vast geographical expanse, the inability to reach out to everyone in a

community, or simply imperfect knowledge of the vaccine leading to people being hesitant and reluctant to get vaccinated. After all, these are the reasons why the uptake of life-saving vaccines such as those for smallpox, influenza, and the human papillomavirus remains imperfect in most countries.

This means that at any one time, there will be groups of people within a community that have not been vaccinated. The question then is – how does society distinguish between those who have been vaccinated and those who have not? Following from that, there is the question of whether there should be different rules for these two broad categories of people.

For instance, should a pub owner be empowered to reject patrons who have not been vaccinated? Or a school principal mandated to block unvaccinated students from attending classes? These examples may sound extreme, but already some international airlines

So while there is certainly light at the end of the tunnel, it still remains a very long tunnel ahead. What each of us can do at this point in time is to make an effort to learn about the Covid-19 vaccines before they are ready for distribution. In doing so, we are playing our role as responsible citizens of the world as we start walking towards the light.

have announced the future requirement for proof of vaccination from passengers prior to embarkation.

Currently, the only vaccination mandated for international travel is for yellow fever, and even that is required only when one travels to and from an endemic country.

An International Certificate of Vaccination is awarded whenever one receives an approved yellow fever vaccine, and this framework is governed by the International Health Regulations (IHR) under the purview of the World Health Organisation (WHO).

As yellow fever is endemic only to a handful of countries in the tropics where total international traffic is comparatively light, vaccination certificates have remained in a paper form that is inspected by border control officials upon entry and exit.

It is safe to assume that Covid-19 will become endemic in most countries globally, and this implies that a vaccine certification system for the coronavirus must be scalable and adaptable for use by billions worldwide.

Will WHO then establish new guidelines under the IHR specifically to accredit Covid-19 vaccines, and to coordinate the establishment of a global certification system that is electronic instead of in paper form?

The accreditation process alone is fraught with massive political hazards, given the lack of transparency over the efficacy and safety of some vaccines that are already being distributed in some countries.

Health information systems

Beyond international considerations, proof of vaccination may soon be necessary within a country in order for individuals to move about and interact with others more freely in the community. This requires a national framework to record who has been vaccinated, and that these records be accessible to individuals or corporations.

The good news is that a national system to record and verify vaccinations already exists in many countries, including Singapore, and this can be modified and adapted to permit

the retrieval of Covid-19 vaccination records.

In Singapore, the national immunisation schedules for children and adults can be augmented to include the Covid-19 vaccine. The information can then be directly linked to a digital platform such as TraceTogether to allow for a straightforward verification of vaccination – certainly an important element to permit the resumption of mass activities and gatherings.

Even for those countries still in the process of establishing or improving their health information systems, the push to record and verify Covid-19 vaccinations properly means overseas development aid funding can be mobilised. This may actually improve their ability to deliver all forms of life-saving vaccination and not just that for Covid-19.

The bad news, however, is that when countries adopt their own national solutions for recording and verifying, converging towards a global consensus may be impossible without an overarching international framework.

Clearly, national records must be made interoperable with an international system to permit the recognition and use of such electronic certifications across borders.

These international coordination frameworks and infrastructure are necessary before the availability of safe and effective vaccines translates into the return to pre-Covid-19 normalcy.

As such, bilateral arrangements between a handful of countries to recognise mutual vaccination strategies will perhaps be necessary in the short term to restart international travel. Otherwise, I am less sanguine about that flight to any overseas holiday destination in the next 12 months.

In the above narrative, we have not even discussed the additional complexities of the vaccination roll-out, not least the fact that in most countries the process is likely to be patchy initially because of limited supplies. There is also the possibility that vaccines may confer only short-term protection, and repeated vaccinations are necessary for lifelong defence against Sars-CoV-2.

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