What Comes Next? The New Kishida Cabinet: A Formula That Balances Medical Care With Economic Activity

Ohtake Fumio, Specially Appointed Professor at the Center for Infectious Disease Education and Research (CiDER), Osaka University

How should the healthcare system be set up? How should the vaccination rate be increased still further? And how should a strategy to exit the pandemic be formed? Some thoughts from a leading expert in behavioral economics and member of the New Coronavirus Infectious Diseases Control Subcommittee.

(*Discuss Japan* note: This article was written in October 2021 and first appeared in the December 2021 edition of *Voice*. It is republished on the *Discuss Japan* website with the permission of the writer and publisher.)

Allocating specific roles to experts and non-experts is key

Although it seems there has been a lull in COVID-19 infections since September 2021, some think that a sixth wave will come this winter, so we cannot lay down our guard. At present (October 20, 2021), 75.8% of Japanese people have had their first vaccination, 68.0% a second (data from Official Website of the Prime Minister of Japan and His Cabinet), so the response to a sixth wave will be different to the five previous waves. But in any case, we need to upgrade the healthcare provision system while we can and further boost vaccination rates.

Prof. Ohtake Fumio

Although problems have been identified in the healthcare provision system, such as the present shortage of specialist doctors, much could be done

to solve these issues through cooperation between medical institutions and setting up systems of coordination. That's because the more people are vaccinated, the greater the proportion of low and medium-severity cases, so doctors with a certain amount of knowledge can handle those cases even without being specialists. If the shortage of doctors can be improved, then we will be able to narrow the focus on preparing facilities that have arranged infection control measures.

Of course, serious cases will continue to emerge, mainly in the unvaccinated. When that happens, securing wards for the seriously ill will become an issue. According to research simulating a worst case scenario, twice the current number of wards will be required. But of course, patients won't require those wards for the seriously ill for ever. If seriously ill patients start to recover and the affected are no longer infectious, it will be possible to move them to a non-COVID-19 hospital. In fact, a number of municipalities, such as Tokyo's Sumida Ward, have put in place this cooperation on transfers between hospitals in their area.

During the fourth wave that arrived spring 2021 (late March to June), Osaka Prefecture was unable to cope with an unexpectedly rapid spread of infection, and a shortage of wards for the seriously ill became a severe problem. It applied the lessons learned from this however, and before the summer fifth wave arrived (beginning of July to September 2021), it had improved its response by increasing the number of wards for the seriously ill and through local cross-sectional cooperation over patients with mild or moderate illness. If such systems can be set up, there is no need to increase the overall number of wards, and other municipalities can do the same too. If individual regions set up such systems of cooperation before the sixth wave comes, I believe they can handle it with ease.



Although at present the authorities are giving financial incentives to hospitals that have secured wards for COVID-19 patients, the way that this is run should be looked at again. So far, even when wards have been secured, there have been greater financial benefits to not admitting COVID-19 patients, and the incentives didn't effect an increase in admissions. Yet, the speed of vaccination dramatically increased as a result of significant financial benefits to medics. If incentives are properly set, there's no doubt they'll be effective. I am fully aware that there are funding issues, but there's a need to re-establish incentives to set up a strong healthcare provision system.

How can we improve vaccination rates?

I have conducted research into the other issue of improving vaccination rates. From the data, we can see a phenomenon in which the younger the age group, the fewer the number of people who want to get vaccinated. In other words, making young people want to get vaccinated more is a pressing issue. First of all, I'd like to introduce an effective method from behavioral economics.

First, we should consider sending prompt reminders. Depending on the municipality, quite a long period of time was required between sending vaccination vouchers and actual vaccination. During that time, there were probably quite a few people who forgot where they stored the vouchers or lost them. It's not easy to encourage those people to get vaccinated. If something like reminder postcards were sent and those made getting vaccinated possible, we could expect a significant effect. It's also important to let people who have lost their vaccination vouchers get vaccinated just by showing personal identification. Particularly effective for the elderly unvaccinated is to assign appointment dates and times in advance, and set up a booking system only for people who want to change their appointment or don't want to be vaccinated. In other words, to encourage behavior modification or to "nudge."

The way that information is issued also needs to be re-examined. For example-and this is something already happening on the Cabinet Office website-if current vaccination rates in municipalities are sent out, many people will think that they should also get vaccinated. One technique in particular is to send vaccination information for the same age group along with reminders. Individual municipalities need to update information on vaccination rates as frequently as they can. Komae City in Tokyo indicates exactly how many people must be vaccinated to reach the target of 75% of young people (aged between 12 and 39) and has called this the SAVE KOMAE PROJECT. As of October 18, the vaccination rate was 71% and 1,079 people need to be vaccinated to reach the target. It's a very ingenious method. There has been a move since November last year toward a "vaccine and test package," so now it would be good to share information on how having been vaccinated is a condition for entry to other countries. The provision of financial incentives is a topic that needs discussion, but one prerequisite is that we must acknowledge two sides to financial incentives. In actual practice, financial incentives might have a positive effect on people with a low desire to be vaccinated, but on the other hand, there might be a negative effect on those who have a high desire to be vaccinated but aren't able to make a reservation. Accordingly, the best time to introduce financial incentives is around when most people who want to be vaccinated have done so and the vaccination rate is leveling off. In that sense, Japan is at a point where it should consider incentives.

But in actual practice, what amount of financial incentive is appropriate? According to experimental results from Sweden published by *Science*, with a payment of \$24 the vaccination rate rose by 4.2% from 71.6%. There are different background factors in Japan and Sweden, such as people's attitudes and feelings. I conducted experiments on 25- to 49-year-olds with Sasaki Shusaku, an associate professor at Tohoku Gakuin University and Saito Tomoya, Director of the Center for Emergency Preparedness and

Response, National Institute of Infectious Diseases of Japan. Those results showed no great effect with 2,500 yen—a similar amount to in Sweden—just a 1–2% increase in vaccination rates. If we were to aim for a 4% increase, we should probably think about 5,000 yen.

Something else we need to think about, however, is ways to not reduce the motivation of those who want to be vaccinated but haven't been able to so far. Survey results showed that a gift of 5,000 yen would reduce by 9% the percentage of people who were willing to be vaccinated for free. You may be surprised and ask, "Why are people less keen to get vaccinated even when we give money?" but when I think about the reason for myself, I realize there's a strong tendency for many 25- to 49-year-olds to get vaccinated out of consideration for other people around them, rather than for themselves. So they are worried that others might think they are "getting vaccinated for money," and the incentive has an adverse effect. According to the research, there's a large drop in the vaccination rate among those that want to get vaccinated, irrespective of whether the amount is 1,000 yen or 30,000 yen. This is evidence that people are avoiding the financial incentive itself.

As I mentioned before, that's why financial incentives should be introduced after the vaccination rate has leveled off. And if incentives negate altruistic motivation, then incentives with some altruistic meaning should be introduced. A message that encourages participation in "Go To travel points" and help people who have suffered economic damage due to COVID-19 would probably be effective. Of course, unless we give incentives to everyone who has been vaccinated in the past too, that wouldn't be fair. A decision should be made about the amount by consulting the results of various research and considering cost vs effect.

One reason that Japan's vaccination policies progressed smoothly is that financial incentives weren't introduced at the start, so the "vaccination for the sake of others" desire of those who wanted to have the vaccine wasn't weakened. What's more, Japan used vaccination vouchers. Through our "nudge" research, we realized that the vouchers had the effect of stressing vaccination "ownership," i.e., that "your own vaccine has been secured."

There were also some very interesting research results from Yamamura Eiji, a professor at Seinan Gakuin University, and others. When the research analyzed whether people left their home or not after having the vaccine, it found there was a tendency for all age groups to show restraint. It was a particularly striking tendency in those over 40, namely that having been vaccinated they didn't want to waste that by being infected or infecting others. Although the vaccinated under 40 started going out, those who were not vaccinated continued to show restraint. These factors probably partly lie behind the rapid drop in infection rates after September.

Accelerate the discussion on vaccination passports

Going forward, we need a full examination of how to balance infection control measures with the resumption of economic activities. And we also need to debate the use of vaccine passports. For example, even if the lull in the pandemic continues, vaccine passports should be used when holding the kind of events where people raise their voices; and if infection spreads, they should be made obligatory even more widely.

I mentioned this earlier, but even if infection spreads again, as long as a system is set up, enough hospital wards can be secured. And if so, we need to stimulate even more socio-economic activity. Even if the vaccinated are infected, there is a high probability they will have only mild or moderate disease. That's what research results from overseas show. The core of future infections will be in the unvaccinated. Is it appropriate to continue pausing economic activity according to a single indicator, i.e., the number of infections? For example, if we vaccinated 80% of the population, the danger of severe illness will decrease to that extent. The 400,000 people that Nishiura Hiroshi, a professor at Kyoto University, once argued would die if no measures at all were taken would drop to 80,000. Infection will continue spreading until it has spread fully, mainly in the unvaccinated.

Although the speed of infection spread may be checked by holding back economic activity, it is not possible to lower the total number of fatalities from infection. Undoubtably, it's OK to gradually return economic activity to normal, as long we reach a situation where it's reasonably possible to deal with COVID-19, a minimum level of infection control measures continues, and vaccine passports are used.

When we discuss vaccine passports, the topic of human rights arises. As a general principle, we should consider ways to provide PCR tests at a fixed price or for free to those who cannot get vaccinated because they can't make a reservation, have financial issues, or have existing medical conditions. And then, how should we think about other groups' human rights? The problem in practice is the fact that there's a high risk of the unvaccinated becoming infected or infecting others. So, although the restrictions on infected people going out are set according to the Infectious Diseases Act (Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases), we have to bear in mind how this also removes people's economic freedom. In Japan today, people have lives that are not free in various ways.

For example, the running of restaurants has been restricted as part of infection control measures, so people working in those occupations have had their economic freedom taken away. We shouldn't pay special attention only to the human rights of the unvaccinated. At the very least, acknowledging the need for infected people to quarantine and restricting the activity of people at high risk of infection are logically the same.

We must give regional governors "excuses"

The Kishida administration was launched in October 2021. The Suga administration had been heavily criticized for its lack of ability to communicate. Certainly, there's no doubt about the importance of providing information in a time of crisis. When we talk about the COVID-19 pandemic, the strongest factor behind people changing their own behavior is not the declaration of a state of emergency but their assessment of the infection and healthcare system situation. That's why the information delivered by politicians is directly linked to the success or failure of COVID-19 countermeasures. I'd also like to address this point from the perspective of behavioral economics.

In the previous paragraph, I quoted Professor Nishiura's figure of 400,000 deaths, and the fact is that stirring up fear is an extremely effective way to prompt people to change their behavior. But it doesn't last long and can only be used once, so there are also downsides. Unless there is considerable fear, people quickly get used to it. Rather, the "gain-framed message" that "if we take anti-infection measures, we will protect the lives of those around us" is better suited to repeated use. In actual fact, the government and regional authorities have messaged in that way. What's more, it is pragmatic to issue a message that prompts fear on important points, for example as happened in Kyoto during the summer of 2021 when infection was rapidly spreading and the authorities stressed the danger of the healthcare system collapsing; and it was actually effective in that case. Fundamentally, the Kishida administration must now make an appeal to the people that is based on gain-framed messaging. The problem, however, is the division of roles between national and regional governments. For example, the responsibility and authority to improve the medical care system lies with regional governors. If governors get into a head-on battle with healthcare workers and fall into communication failure, they won't be able to implement COVID-19 measures with unity, and they will have got their priorities wrong. And bearing in mind elections and other factors, it is inevitably difficult for governors to use strong authority.

So, for example, we might need to re-design systems of authority and responsivity, such as by giving the national government some responsibility for coordinating with healthcare workers. Of course, each region has its unique circumstances, so it would be a problem if the government dealt with matters in a one-size-fits-all way. But if everything is left up to municipalities, governors will have to take care of both the healthcare front line and business, and won't be able to do anything. How can we improve the relationship between national government and the regions so that governors can focus on COVID-19 measures? Considering this issue will also be a task for the Kishida administration. In a sense, if governors are given an "excuse" in the form of an "official instruction" from the national government, that could be an effective card for them to play when pressuring industry groups and setting up health care provision systems.

One more thing: if I were to make a suggestion regarding government information dissemination, I'd say it should arrange a system for testing in advance what kind of message to send. In an emergency, we have to make judgments in a short span of time, but if we can test in advance which messages are effective using online surveys and various data, and use that fully, efficiency will improve. After the message is sent, it is adjusted according to the situation. It's the same method used in marketing by private-sector businesses.

What I reconfirmed by taking part in the New Coronavirus Infectious Diseases Control Subcommittee

So far in this article, I have made various suggestions from the perspective of behavioral economics. But through the New Coronavirus Infectious Diseases Control Subcommittee I reconfirmed the importance of thinking about policy in a comprehensive way, using a variety of knowledge and perspectives, and having repeated discussions to that end. A variety of experts, from both humanities and sciences, participate in the subcommittee. Health care providers aim to minimize the number of infected people or the burden on medical institutions and health centers, while economists take the position of considering policies that take into account the impact of things such as non-COVID-19 economic losses, suicide, education, and poverty.

For example, there was a big discussion about when to announce the post-vaccination exit strategy. The medical side feared that at present, if a policy of loosening restrictions on behavior was announced after vaccinations had reached everyone, people would immediately relax their own infection control measures. Meanwhile, economists took the completely opposite view, that because restrictions would be loosened in the near future, people would try to endure for now, there would be an "intertemporal substitution" effect, and people would actually strengthen their infection control measures.

In the subcommittee, experts differed in their views on many points of discussion. But in a sense, when it comes to infection control, unless there is an understanding of actual human beings it is all castles in the air. In my case, I am trying to help by making suggestions from the perspective of behavioral economics. Discussions based on a wide variety of knowledge may be the only way to overcome this crisis.

Translated from "Donaru! Kishida shin-naikaku: Iryo to keizaikatsudo, ryoritsu eno hoteishiki (What Comes Next? The New Kishida Cabinet: A Formula That Balances Medical Care With Economic Activity)," Voice, December 2021, pp. 70-77 (Courtesy of PHP Institute) [February 2022]

OHTAKE Fumio, Ph.D. Specially Appointed Professor at the Center for Infectious Disease Education and Research (CiDER), Osaka University

Born 1961. Graduated from Kyoto University in 1983 and earned his M.A. and a Ph.D. from Osaka University in 1985 and 1996. His specializations are behavioral economics, labor economics, income distribution, and household behavior. Took up his current post in April 2021 after roles as a lecturer at Osaka Prefectural University, as an associate professor, then professor, at the Institute of Social and Economic Research of Osaka University, and as a professor at the Graduate School of Economics, Osaka University. From August 2013 to August 2015 was an Executive Vice President of Osaka University. His publications include Nihon no fubyodo (Inequality in Japan, winner of the 2005 Nikkei Prize for Excellent Books in Economic Science; the 2005 Suntory Prize for Social Science and Humanities; the 2005 Economist Prize; the 2006 Ishikawa Prize of the Japanese Economic Association; and the 2008

Japan Academy Prize), Keizaigakuteki shiko no sensu (A Sense for economic thinking), Iryo genba no kodo keizaigaku (Behavioral Economics on the Ground in Health Care) (co-authored), and Kodo keizaigaku no tsukaikata (How to Use Behavioral Economics)

