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More than 2 years after China ended its unprecedented lockdown in Wuhan as the first COVID-19 outbreak paralysed the central Chinese city, the Chinese Government remains adamant on sticking with its zero-COVID strategy, raising serious questions of exactly how China is going to exit this pandemic.

Starting in March this year, China’s biggest city, Shanghai, has been hit with its worst outbreak, with hundreds of thousands of cases logged. Subsequent strict lockdowns in the city have caused havoc among residents, separating families and straining food and medical resources.

Initially only certain districts were put under lockdown, prohibiting cross-district travel, and as the case numbers began to spike, the lockdown spread to the entire city: residents were only allowed to leave the house once every few days, depending on the risk level of the neighbourhood, and those who tested positive would be transported to quarantine centres or hospitals, and their neighbours would then also be prohibited movement.

The goal of this round of lockdown remains the same: to adhere with the dynamic zero-COVID strategy that essentially is aimed at stamping out outbreaks with mass testing and lockdowns to achieve zero cases, also dubbed defeating the virus, as put by the Government.

The zero-COVID strategy has been the pillar of China’s anti-epidemic policies for over 2 years. Government officials have long touted China’s success in keeping the virus at bay, in stark contrast with other countries where the virus has killed more than 6 million people. According to the official statistics, the virus has so far killed around 5,000 people in mainland China, although many have questioned the reliability of the number and attributed it to China’s method of counting COVID deaths. President Xi Jinping has repeatedly said that “people’s lives are of utmost importance”, to justify border closures and strict domestic control policies. “The dynamic zero COVID strategy has protected most of mainland China from the health and health system impacts of COVID transmission in the community”, said Ben Cowling, Head of the Division of Epidemiology and Biostatistics at the University of Hong Kong. However, during the latest round of lockdown in Shanghai, as the adverse effects of the lockdown including food supply shortage and disruptions to the economy and access to medical care, are growing more visible and sometimes more detrimental than COVID-19 itself, many begin to seriously doubt how effective the country’s lockdown policies are in curbing the virus’ spreading.

One Shanghai resident who spoke with The Lancet described his father’s unsuccessful attempt to receive dialysis due to hospitals’ strict policy of no admission without a negative PCR test for COVID-19, and another complained about his dwindling supply of essentials, including food. Many people in Shanghai have written on social media about the collateral damage of confinement rules, including many patients with chronic and non-COVID-19-related diseases losing their access to medical care. “The Government is trying to clear all the COVID-19 cases, so they focused all of their attention on this virus, but they undercounted other diseases, and they tend to ignore or neglect the non-COVID-19 deaths”, said Xi Chen, an Associate Professor at Yale University School of Public Health who focuses on health policy and economics.

Two officials from China’s provincial-level health commissions who spoke with The Lancet on condition of anonymity also voiced doubt towards the policy. “COVID-19 has become a highly politicised disease in China, and any voice advocating for the deviation from the current zero-COVID path will be punished”, one official said. “No one from the top really listens to expert opinions anymore, and it’s honestly humiliating to us medical experts.” Another official also expressed similar sentiments, saying that the damage the policy has caused has outweighed the benefits it brings. “This is not cost-effective, and we all know it”, the official said.

Closely tied to China’s strict implementation of non-pharmaceutical measures to control COVID-19 is its vaccination campaign, which according to Yanzhong Huang, a Senior Fellow at the Council on Foreign Relations, is seemingly unrelated to the intensity of the lockdown measures put in place. After an initially sluggish vaccination campaign, China stepped up inoculations with its domestically manufactured vaccines, most notably those by Sinopharm and Sinovac, but vulnerable groups were not prioritized. By late February, 2021, the vaccination rate in mainland China only reached 3.56%, compared with 53% by August last year and 87% by now. Drawing data from the most recent wave of
two doses of the Sinovac vaccine were 72% effective against severe or fatal disease for people older than 60 years in a non-peer-reviewed study looking at infections between December 31, 2021 and March 8, 2022. With a booster dose, the effectiveness reaches 98%. However, the vaccination rate in mainland China among older people remains low: even though more than 87% of the population have received two doses of the vaccine, among those older than 80 years, just over half have had two doses and less than 20% have received a booster, according to Zeng Yixin, a Vice Minister of the National Health Commission.

This lack of protection in the groups most susceptible to severe disease makes it difficult for China to change its policy safely. “It’s mind boggling that for the most part of the last 2 years, China has had very few cases but has failed to fully vaccinate the elderly, who are at the most risk of getting infected and developing severe symptoms from the virus”, said Huang. “Experience in Singapore demonstrates that a safe exit from zero COVID is possible if vaccine coverage in older adults can reach a very high level”, said Cowling.

Huang and Chen said that vaccine hesitancy has been fostered by the lack of urgency to get vaccinated in China. China’s control of COVID-19 gives citizens fewer reasons to get vaccinated, especially when there was widespread misinformation on the side-effects of vaccines such as frequent heart attacks and severe allergies. The logic goes: there is no need to get vaccinated when there is no virus in the first place.

The Government in Beijing remains committed to the zero-COVID strategy. “It’s imperative that we keep a clear head and unwaveringly adhere to the general policy of dynamic zero COVID, and resolutely fight against all words and deeds that distort, doubt, and deny our country’s anti-epidemic policies”, President Xi said during a meeting on May 5, while lockdown continues in Shanghai and case numbers increase in Beijing.

“a safe exit from zero COVID is possible if vaccine coverage in older adults can reach a very high level”

Health experts say that several conditions will have to be met before China will consider a change in policy, barring the possibility of China losing full control of the virus, which would essentially force the Government to live with the virus—much like what happened in New Zealand.

Stepping up vaccination among older people while strengthening the health-care sector is an absolute “prerequisite”, according to Chen. Informing the public about the changing nature of infection—the decreased severity of the B.1.1.529 (omicron) variant and the reduced risks following vaccination—will also be needed. One argument frequently used by the Government and those who stand by the zero-COVID strategy is that once the policy is relaxed, the health-care system will soon be overloaded and there will be an unmanageable increase in deaths. To tackle this issue, experts have proposed solutions that are aligned with international practice. Chen said that the Government should start drafting regulations or guidelines on the treatment of patients with varying degrees of severity, with the aim of not admitting everyone infected with the virus to hospital (as previously required) by asking for home quarantine, and leaving hospital and intensive care unit beds for those who need them most. “If you can prohibit millions of people from stepping out of home during a lockdown, then there really is no merit to the argument that you can’t ask people with mild symptoms to not visit hospitals”, Huang said.

Even with updated medical guidelines, however, China’s political landscape will also play a pivotal role. Huang says that, with the party Congress approaching when President Xi is poised to secure an unprecedented third term of presidency, the Government will strive to maintain the stability that has been the foundation of Xi’s political ambition. With the influenza season due to begin soon after the party Congress, the timeline for China’s reopening is murky at the best. “The earliest possible time for China to drop the current measures is early next year, and even that has no guarantee whatsoever”, Chen said.