China’s rapid development came with impressive improvements in basic health indicators. Yet growing richer and older is now creating tremendous health challenges. Without swift action, China is heading for a public health crisis.

Five years ago I published a piece in Foreign Affairs entitled “Sick Man of Asia: China’s Health Crisis,” which was intended to alert Beijing to the numerous public health and healthcare challenges facing China. The article upset a Ministry of Health official so much that a university think-tank was ordered not to include it in a briefing to top leaders. I could understand why he was irritated. Just two years before, the same person had triumphantly declared: “We have thrown the label of ‘Sick Man of Asia’ into the Pacific Ocean.” He pointed to the increase between 1949 and 2008 in China’s average life expectancy at birth, from 35 to 73, and to the drop in infant mortality rate, from 200 deaths per 1000 live births to just 15.

Leaders are rightly proud of the enormous progress China has made in improving public health. But that does not alter the reality of the still-enormous challenges facing its health system, especially as the population ages and pollution takes its toll. These challenges have not been adequately addressed by the government, even taking into account an ambitious new reform plan. China’s pending health crisis threatens to undermine nearly four decades of economic development.

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Government health data, if they are accurate, suggest that Chinese people were no healthier at the founding of the People’s Republic of China in 1949 than they were in prehistoric times. They also suggest that more than 80% of the improvement in people’s health since then occurred in the pre-reform era, as Communist leaders established a basic healthcare system, built hospitals, trained doctors and introduced vaccination programs. By 1981, after three decades of Communist rule, life expectancy had nearly doubled to 68.

China made further strides in the first three decades of the reform era, despite the collapse of the Maoist health system. In 1988, fewer than half of births took place in hospital; a decade later almost all did. In part because of this high hospital delivery rate, China accounted for over one-quarter of the reduction in infant mortality worldwide in 1990-2012. Drawing lessons from the severe acute respiratory syndrome (SARS) epidemic in 2002-03, which killed 774 people, it built the world’s largest internet-based disease-reporting system and significantly beefed up its ability to handle major infectious disease outbreaks. By 2015 it had achieved most health targets in the UN Millennium Development Goals, which covered both maternal and child health, and the prevention and control of three major infectious diseases: HIV/AIDS, tuberculosis and malaria.

The latest round of reform began in 2009, with the focus on providing “safe, effective, convenient and affordable” healthcare services to everyone. Essentially, this means providing equal access to vaccinations, infectious disease prevention and control, and infant and maternal care in both urban and rural areas. By 2012, Beijing had put in place a system of basic medical insurance covering almost the entire population of nearly 1.4bn people—a creditable achievement. And its efforts are paying off: China’s average life expectancy at birth had increased to 76.1 by 2015, significantly higher than the world average of 71.4 and on a par with much of Eastern Europe.

Fat, wheezing and sad
Yet, for all these real improvements in the epidemiological and demographic data, the full picture of public health is much less rosy. Chinese people are certainly living longer, but the country is aging rapidly. The proportion of the population aged over 65 has risen from 5% in the early 1980s to over 10% today. This percentage is expected to increase to 25% in the middle of this century, making China one of the most elderly societies in the world. About half of chronic, non-infectious conditions—known by medical practitioners as non-communicable diseases (NCDs)—occur
among people aged over 65. This demographic shift has profound implications for China’s changing disease burden: NCDs today account for 85% of total deaths, compared with 74% in 1991.

Among all the NCDs, cardiovascular diseases are the biggest killer. Each year, 3.5mn Chinese people die from cardiovascular diseases, which account for 41% of all deaths. Diabetes is a major contributor. The proportion of Chinese adults with diabetes increased from 1% in 1980 to to 9.4% in 2014, higher than in the United States (9.1%). A little more than one-third of Chinese adults are overweight, according to the World Health Organization (WHO), roughly half the proportion in the US. But there are now nearly 100mn obese people in China, more than in America.

The second biggest killer is cancer. In the early 1970s, there were 900,000 cancer patients, and 700,000 cancer-caused deaths. In 2015, China had an estimated 4.3mn new cancer cases and 2.8mn deaths, accounting for 22% and 27% of the global total respectively—significantly higher than China’s 18% share of the global population. Between 1972 and 2015 the number of annual cancer deaths per 100,000 of the population more than doubled from 74 to 201. While cancer rates have fallen in many Western countries, they have steadily risen in China and will almost certainly continue to rise in the coming decade, led by lung cancer. China is the world’s largest tobacco consumer, with 350mn smokers and a further
750mn people exposed to secondhand smoke. If current trends continue, annual smoking-related deaths will double to 2mn by 2030.

In addition to bodily ailments, more Chinese are suffering from mental health problems. In 2003-08, recorded incidences of mental disorders jumped by over 50%. The number of mental health patients hospitalized grew by 15% annually in 2010-14. About 180mn people—one in eight of the population—suffer from some kind of mental illness. In spite of the huge demand for mental healthcare, both a lack of awareness of mental illness and the stigma attached to it prevent China from confronting the crisis. The country has only 228,000 hospital beds, or 1.7 beds per 10,000 population—just one-third of the global average. Environmental degradation appears to be a factor: studies show that poor air quality reduces short-term happiness and induces depression.

**Leading the world in indigenous infections**

Equally worrying is a convergence between non-communicable diseases and infectious diseases, which has not occurred in developed countries. Chronic infection is now the largest contributor to avoidable cancer deaths in China, predominantly stomach cancer (helicobacter pylori), liver cancer (hepatitis B and C) and cervical cancer (human papilloma virus—HPV). Poor hygiene is to blame, but the proliferation of infectious diseases also exposes the limits of the healthcare system. China accounts for one-quarter of the global population infected with hepatitis B and C viruses, and for half of the world’s liver cancer cases. But it was not until 2005 that hepatitis B vaccination of infants was fully integrated into the routine immunization program and provided free of charge. Meanwhile, the government did not approve the first HPV vaccine until last year, despite the high incidence of cervical cancer in China.

Immunization programs have expanded and sanitation has vastly improved, but infectious diseases remain a problem. China has the second-highest number of tuberculosis patients, after India. In a globalized world, China also faces the threat of newly emerging infectious diseases, such as Middle East respiratory syndrome (MERS), Ebola and Zika. Of the more than 40 newly emerging infectious diseases, about half have been found in China. Many novel and dangerous pathogens, including SARS and deadly forms of avian flu, originated there. Significant progress has been made in overall disease surveillance and response capacity building, but China’s ability to handle novel and acute infectious diseases remains weaker than that of developed countries.

Another growing concern is China’s environmental health crisis, which the WHO estimates is responsible for 21% of the total disease burden in
China. Air pollution is a serious health risk, not just in big cities but across vast swathes of rural China. The concentration of dangerous fine particulate matter, known as PM2.5, has at times surpassed 1,000 micrograms per cubic meter, 40 times the WHO standard level for good health. Based on a 2013 study, air pollution alone is associated with a reduction in life expectancy at birth of about 5.5 years in northern China. A 2015 study found that outdoor air pollution contributes to the deaths of an estimated 1.6mn people every year, or about 4,400 people a day. More recently, scientists found that smog in Beijing harbored bacterial genes that are resistant to powerful antibiotics.

Meanwhile, 70% of China’s rivers and lakes, and nearly 20% of its farmland, are contaminated. This has contributed to the emergence of close to 500 “cancer villages,” areas where cancer rates are unusually high. Widespread environmental pollution is probably responsible, too, for deteriorating sperm quality. Fewer than 20% of 30,000 sperm-donor applicants in central Hunan province had sufficiently healthy semen in 2015, compared with more than half in 2001. Anger over the impact of polluted crops and water on people’s health has provoked violent protests.

The economic and political implications are grave. There is a correlation between air quality and labor productivity: worker output drops rapidly with the rise of PM2.5 concentration over the first 200 micrograms per cubic meter. The World Bank estimates that indoor and outdoor pol-
lution cost China US$680bn—nearly 10% of its GDP—in 2013. Moreover, the number of environment-related petition letters to the government increased more than tenfold in 1995-2010, from 59,000 to 701,000. It is no exaggeration to say that an ecological catastrophe could provoke nationwide protests that would threaten the political regime itself.

**Time to quit smoking**

Chinese leaders are keenly aware that improving public health is a political necessity. At the National Health Conference held in August 2016, President Xi Jinping stressed that good healthcare is a prerequisite both for people’s all-round development and for economic and social development. Beijing unveiled an outline of its new “Healthy China 2030” plan, which aims to provide comprehensive healthcare for all by 2030, with targets of boosting average life expectancy to 79 years and matching rich-country health outcomes.

Yet the government is far from translating these lofty ideas into policy reality. In addressing new and acute infectious diseases, China needs to build a more integrated and sophisticated disease prevention and control system that can achieve early discovery, diagnosis and treatment. Most important, it needs to invest significantly more in reducing the huge NCD burden. This involves promoting healthier lifestyles, pursuing more serious tobacco control measures, and pushing for more effective and genuinely equal access to medical care.

To that end, policy makers need to withstand pressure from powerful special interest groups. Industry lobbying has diluted serious healthcare reforms and diminished the effectiveness of public health measures to reduce the country’s disease burden, such as persuading people to live more healthily. Take efforts to reduce smoking. In 2005, China ratified the Framework Convention on Tobacco Control, which obliges signatory nations to implement measures to protect citizens against exposure to smoke in public places. While research has suggested that the fiscal revenue drawn from the tobacco industry was far smaller than the total economic cost of smoking, tobacco control efforts have been strongly resisted by the China National Tobacco Corporation, which enjoys a virtual monopoly on cigarette production. Bizarrely, China Tobacco shares staff with the official tobacco regulator—so it is hardly surprising that the nation’s tobacco control measures are among the least effective worldwide.
The government’s policy autonomy is further curtailed by a byzantine regulatory system that is weakened by crisscrossing lines of authority. In addressing the environmental health crisis, for example, the Ministry of Environmental Protection is the lead agency, but it is not strong enough bureaucratically to coordinate with the health, agriculture and urban planning departments to enforce many environmental protection rules. The differing priorities of central and local government are a further challenge, as local officials frequently fail to implement central policies.

**Long march to a civil and healthy society**

Addressing complex health challenges requires a “whole of society” approach. This entails not only improving inter-agency coordination within government, but also boosting the participation of businesses and civil society. Unlike many other countries, China does not have robust independent organizations to offset weak bureaucratic capacity. In fact, tighter political controls under the current political leadership are squeezing the space for health-related civil society. Instead of embracing NGOs and other social actors as positive facilitators of policy change, the state continues to view them as potential troublemakers. The new Overseas NGO Law, which came into force on January 1, is expected to constrain the activities of international social organizations still further.

The government’s solution to China’s enormous healthcare challenges, as with so much else, has been to issue a state-led development plan with quantifiable targets. Targets have their value, as they incentivize officials to make concrete improvements. But this mode of governance, which leaves no room for civil society to play a role, is also part of the problem. If policy fails to take into account people’s actual wants and needs, it cannot be considered effective. Without a more open relationship between the state and society, China will struggle to address the public health problems associated with an aging population and a degraded environment.