Building a strong pharmaceutical system for China

by Elias Mossialos, Yanfeng Ge, Jia Hu and Liejun Wang

The world’s most populous country is facing a double healthcare crunch with a rapidly aging population and an explosion in the rate of non-communicable diseases such as diabetes, heart disease, and lung disease. Addressing these diseases will require a robust pharmaceutical system that is able to produce quality, effective, and affordable medicines.

China is already or will soon be the world’s second largest pharmaceutical market by value, behind only the United States. Spending on drugs was over 1186 billion RMB in 2012, representing close to 40% of all healthcare spending. As blistering as China’s overall economic growth has been, drug expenditures have risen even more quickly, averaging 14.1% a year between 2005 and 2012.

The government recognizes how crucial a strong domestic pharmaceutical industry is in order to meet the country’s growing healthcare needs. This involves having a robust generics industry that manufactures high-quality medicines that are affordable for the masses, as well as having an innovation sector capable of developing innovative new medicines, something that has thus far largely been done in more developed jurisdictions like the United States, the European Union, and Japan.

Fragmented market and weak innovation

Unfortunately, China faces significant challenges in both domains. Market fragmentation is a major problem. In China, there are close to 5000 different drug manufacturers. The top five have less than 15% of total market share, far smaller than developed country markets. Many of these companies are not capable of abiding by Good Manufacturing Practices that are essential to ensuring drug quality and safety. Meanwhile, the primary regulator – the Chinese Food and Drug Administration – does not have the capacity to provide effective oversight for so many companies. This, in combination with a relatively weak regulatory framework, means that generics quality is often poor. In response, patients will pay prices ten to twenty times higher for what should be identical off-patent originators.

Meanwhile, China’s innovation sector is also relatively weak. R&D accounts for only around 2% of sales, far lower than the 14-18% of leading global pharmaceutical companies. In recent years, China has done a good job of publishing more life sciences papers and in having more clinical trials is done domestically. However, it is not clear that higher-level R&D activities are being moved to China. Advanced research is often done in close association with multinational corporations rather than by domestic players.

Market fragmentation contributes to weakness in both the generic and domestic sectors. Efforts to increase market concentration are stymied by local political interests, as these firms employ local workers and pay local taxes.

Developing a comprehensive industrial policy framework

Ultimately, the government needs to develop a comprehensive industrial policy framework for its pharmaceutical system. Such a framework would prioritize both increased quality in generic medicines as well as fostering an innovative industry. It would also take into account other important pharmaceutical system factors such as the intellectual property rights regime, the processes through which drugs are approved, and the ways in which drugs are priced and listed for reimbursement.
Further information:


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