To achieve universal health insurance coverage, China has launched three phases of health care system reforms. The first round of reforms was embarked on in the mid-1980s with the introduction of market incentives. The second round began in 1997 with the introduction of the Urban Employee Basic Medical Insurance (UEBMI) scheme which provided health insurance coverage to all urban workers in addition to a long-term/historical scheme for government workers. Both the government and UEBMI schemes were limited to individual enrolment; however, dependents such as a spouse or child were not covered. The third phase of reforms began in 2003 with the launch of the New Rural Cooperative Medical Care System (NRCMS). This system covers rural residents at the household level. In 2007, the Urban Resident Basic Medical Insurance (URBMI) program was introduced that further expanded the insurance coverage to unemployed urban residents. UEBMI, URBMI, and NRCMS are acknowledged as basic medical insurance (BMI) and all schemes require payment of enrolment premiums.

Both the BMI and government payment systems employ co-payment rates that vary between plans and jurisdictions. In addition to co-payment, there are deductibles and annual ceilings in the BMI system. As of 2011, the government insurance scheme and the BMI system covered 95% of the Chinese population, up from 15% at the start of the third phase of reforms. The remaining 5% of the population were covered by commercial insurance or must fully self-fund their medical treatment.

Remarkable health outcomes have been achieved since the start of the health care reforms. The infant mortality rate has fallen from 34/1000 live births to 11/1000 live births between 1982 and 2013; while life expectancy has simultaneously increased from 68 years and 75 years. However, there are still some concerns. First, total health expenditures, and in turn, the proportion of the gross domestic product (GDP) spent on health has increased markedly since the early 1990s. However, second, health insurance only accounted for approximately one fifth of the total health expenditures due to deductibles, co-payment rates, and ceilings, the remaining was mostly paid by out-of-pocket (OOP). Finally, households spent a greater percentage of income on healthcare; From only 2% of their total spending on healthcare in 1990 to around 9% in 2009. The increasing health expenditure proportion of income has triggered a healthcare inequity issue with more households exposed to the risk of high payments when confronting catastrophic illness.

Normally, three main parties are involved in the healthcare system: healthcare users (patients), healthcare providers (such as hospitals), and the government. The government in particular plays an important role with its steering and stewardship function, because healthcare providers and users behave differently based on incentives in the healthcare system. The paper by Zhang and Hashimoto clearly addresses this phenomenon with three major findings: (1) Patients covered under the government health insurance scheme consumed significantly more medications than those who participate in the UEBMI or the NRCMS schemes in which a much higher co-payment rate is employed; (2) Patients subscribed to plans with annual ceilings are prescribed significantly more medications in the second half of the financial year than in the first half; (3) The length of hospital stay was shorter in patients covered by health insurance subject to government surveillance.

Co-payment is a potential means to control increasing healthcare expenditure in most health systems; however,
The original objective of healthcare reform is to ensure the quality of health services. The last main finding from the study is a good mirror of different behaviors in health resource use between health insurance with and without surveillance. China is attempting to explore the market mechanisms of purchasing and competition to improve the quality and efficiency of the healthcare system, but the key question is to find a prudent purchaser who represents the best interest of the general public. In the current mixed system of both government and market ingredients, surveillance of the healthcare providers is necessary to prevent inefficient resource use.

The limitations of the study were adequately addressed but need further expansion. First, a paucity of data on patients’ socioeconomic status (SES) is a substantial pitfall of this study. SES has been shown to be strongly related to health conditions, health financing, and health resource consumption. What will be of interest is how medication consumption differs between patients with different co-payment rates after controlling for SES, and whether patients with different SES under the same health insurance plan consume medications differently? The second limitation is about the generalizability of the results; all the study participants were recruited in an orthopedic ward from a tertiary hospital in Beijing. Further studies are recommended with participants from all levels of hospitals in different places with all levels of SES. In addition, all the analyses were based on inpatient service use. With larger policy disparity across different health insurance plans in outpatient service reimbursement, it is recommended to perform a future study of the patients’ and healthcare providers’ behaviors with outpatient service use comparing the different incentives in the Chinese health insurance systems.

The optimal objective of Chinese healthcare reform is to build an accessible, affordable, equitable and sustainable healthcare system with reasonably good quality healthcare. On the road to the goal it is recommended for China to take a stepwise approach with close surveillance of equity issues of healthcare financing, distribution, and consumption. The health insurance should be designed to benefit those who are most in need, protecting them from the risk of catastrophic payments. As the OOP payment is still a burden to beneficiaries of health insurance with high co-payment rates, future healthcare reforms are recommended to identify the high risk individuals and households facing poverty due to healthcare expenses, and more importantly, to protect them from economic catastrophes. In a recent study from Chen et al., they reported that the inequity issue still exists in China’s healthcare financing distribution system: OOP payment became proportional after China’s healthcare reform, which implied that the middle and especially, low-socioeconomic groups would bear increasing OOP payments. The good news from the study is that the progressivity of OOP payment has decreased after the introduction of the latest healthcare reform.

Furthermore, an evidence-based decision-making process is encouraged to be practiced for more efficient use of healthcare resources. Health technology assessment (HTA)
and pharmacoeconomics (PE) are typical evidence-based processes that have been accepted in China health policies, and the selection of essential medicines, drug pricing, and clinical pathway was encouraged to gradually incorporate HTA/PE evidence according to the healthcare reform requirements. PE is a branch of economics aimed at how to best use scarce healthcare resources, that is, to maximize health gains possible within the healthcare budget. The need of enhancing PE in China comes with two imperatives: (1) It is estimated that almost half (49%) of the total population in China will be 50 years or older by 2050. To minimize the effect of population ageing, new medications and disease prevention programs will continue to be introduced. (2) However, although generally the new medications and medical devices are more effective than those currently in the market, they incur higher opportunity costs. The challenge to the healthcare decision makers though is how to reimburse the technologies with the most health gain and with least possible money spent, that is, cost-effective. In different jurisdictions, acceptance of new drugs are based on different willingness-to-pay thresholds expressed as currency per quality-adjusted life years gained, such as $50,000 in the US, and approximately ≤30,000 in the UK. The recommendations from the WHO of three time the per capita GDP in developing countries was used for the Chinese PE guidelines. Although there is an increasing trend of more PE publications in China that indicates its popularity in academia, there is still a need to have legislation to promote HTA/PE evaluations in China.

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