



## The primary health-care system in China

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China has made remarkable progress in strengthening its primary health-care system. Nevertheless, the system still faces challenges in structural characteristics, incentives and policies, and quality of care, all of which diminish its preparedness to care for a fifth of the world's population, which is ageing and which has a growing prevalence of chronic non-communicable disease. These challenges include inadequate education and qualifications of its workforce, ageing and turnover of village doctors, fragmented health information technology systems, a paucity of digital data on everyday clinical practice, financial subsidies and incentives that do not encourage cost savings and good performance, insurance policies that hamper the efficiency of care delivery, an insufficient quality measurement and improvement system, and poor performance in the control of risk factors (such as hypertension and diabetes). As China deepens its health-care reform, it has the opportunity to build an integrated, cooperative primary health-care system, generating knowledge from practice that can support improvements, and bolstered by evidence-based performance indicators and incentives.

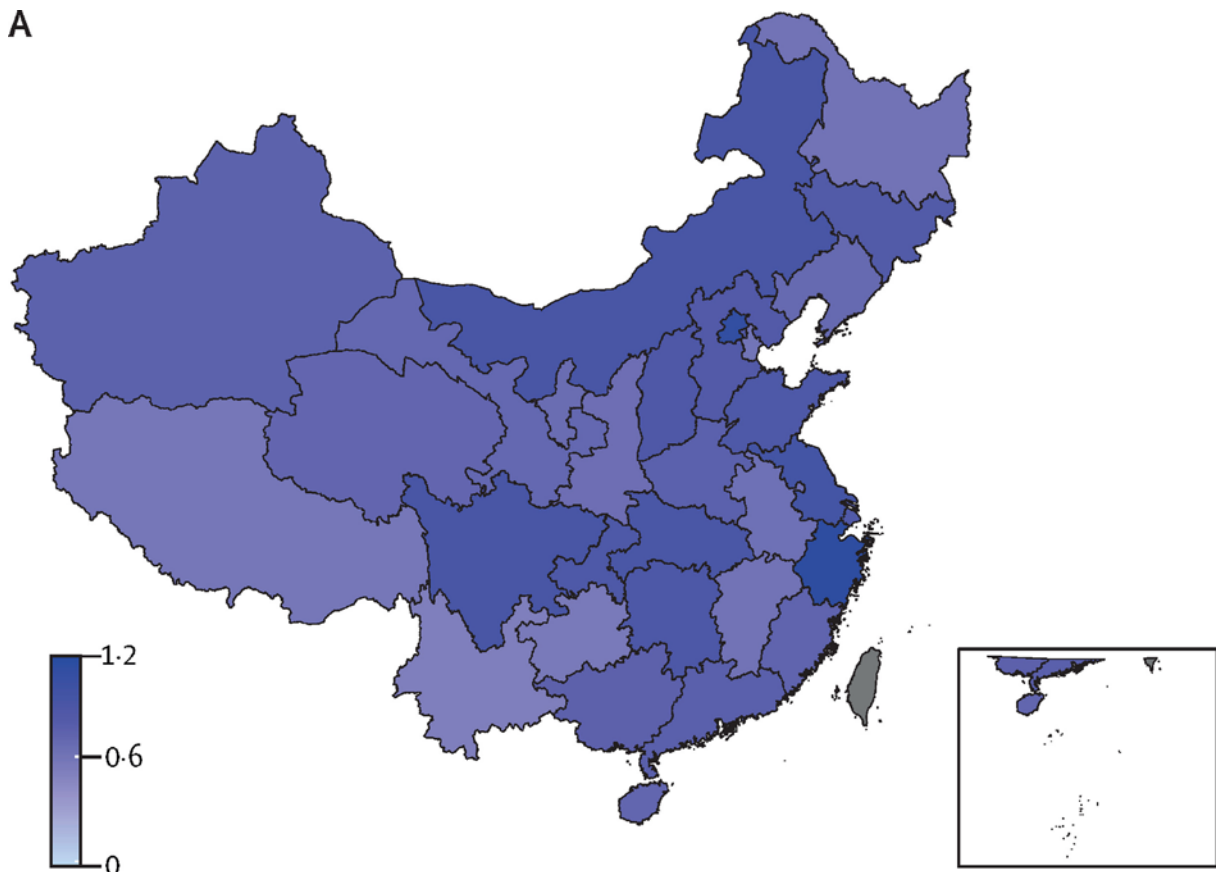
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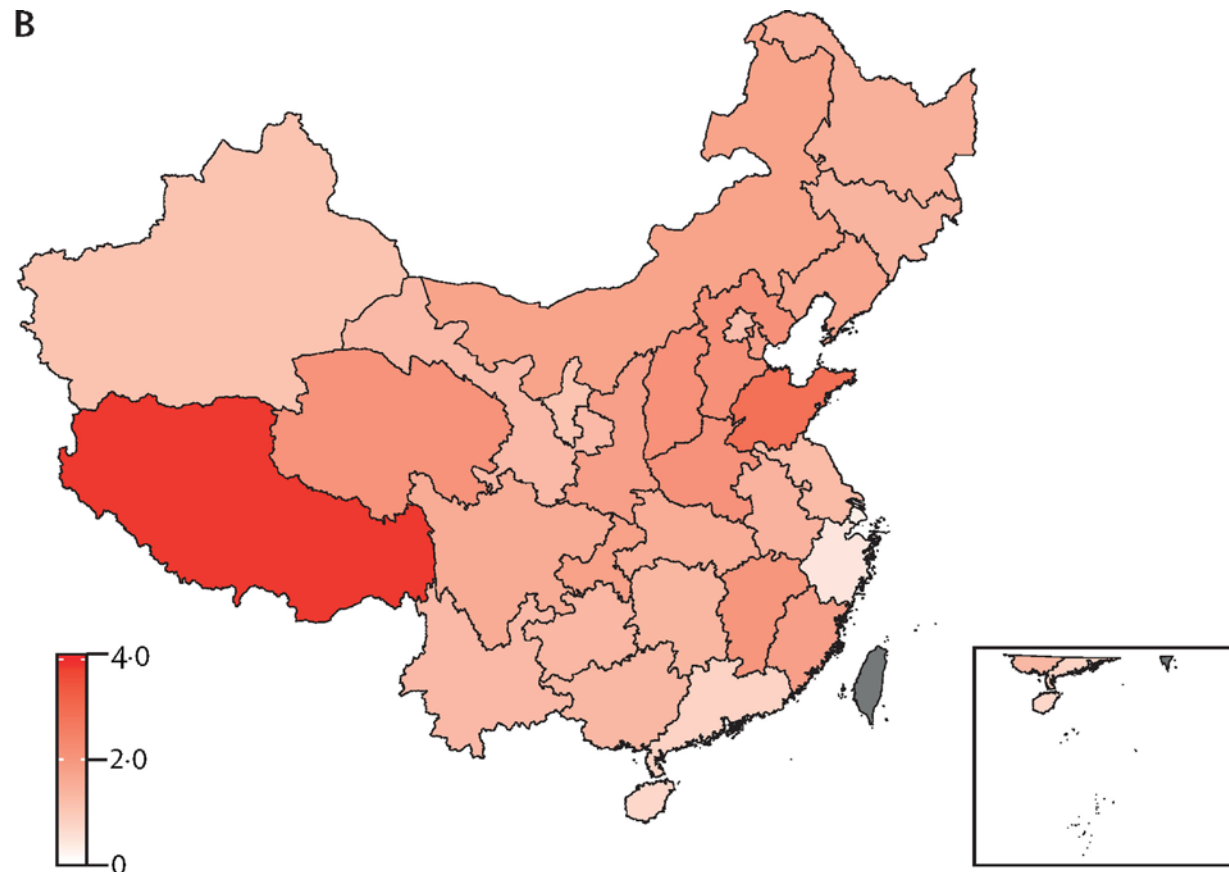
# Abstract

- China has made remarkable progress in strengthening its primary health-care system. Nevertheless, the system still faces challenges in structural characteristics, incentives and policies, and quality of care, all of which diminish its preparedness to care for a fifth of the world's population, which is ageing and which has a growing prevalence of chronic non-communicable disease.
- These challenges include inadequate education and qualifications of its workforce, ageing and turnover of village doctors, fragmented health information technology systems, a paucity of digital data on everyday clinical practice, financial subsidies and incentives that do not encourage cost savings and good performance, insurance policies that hamper the efficiency of care delivery, an insufficient quality measurement and improvement system, and poor performance in the control of risk factors (such as hypertension and diabetes).
- As China deepens its health-care reform, it has the opportunity to build an integrated, cooperative primary health-care system, generating knowledge from practice that can support improvements, and bolstered by evidence-based performance indicators and incentives.

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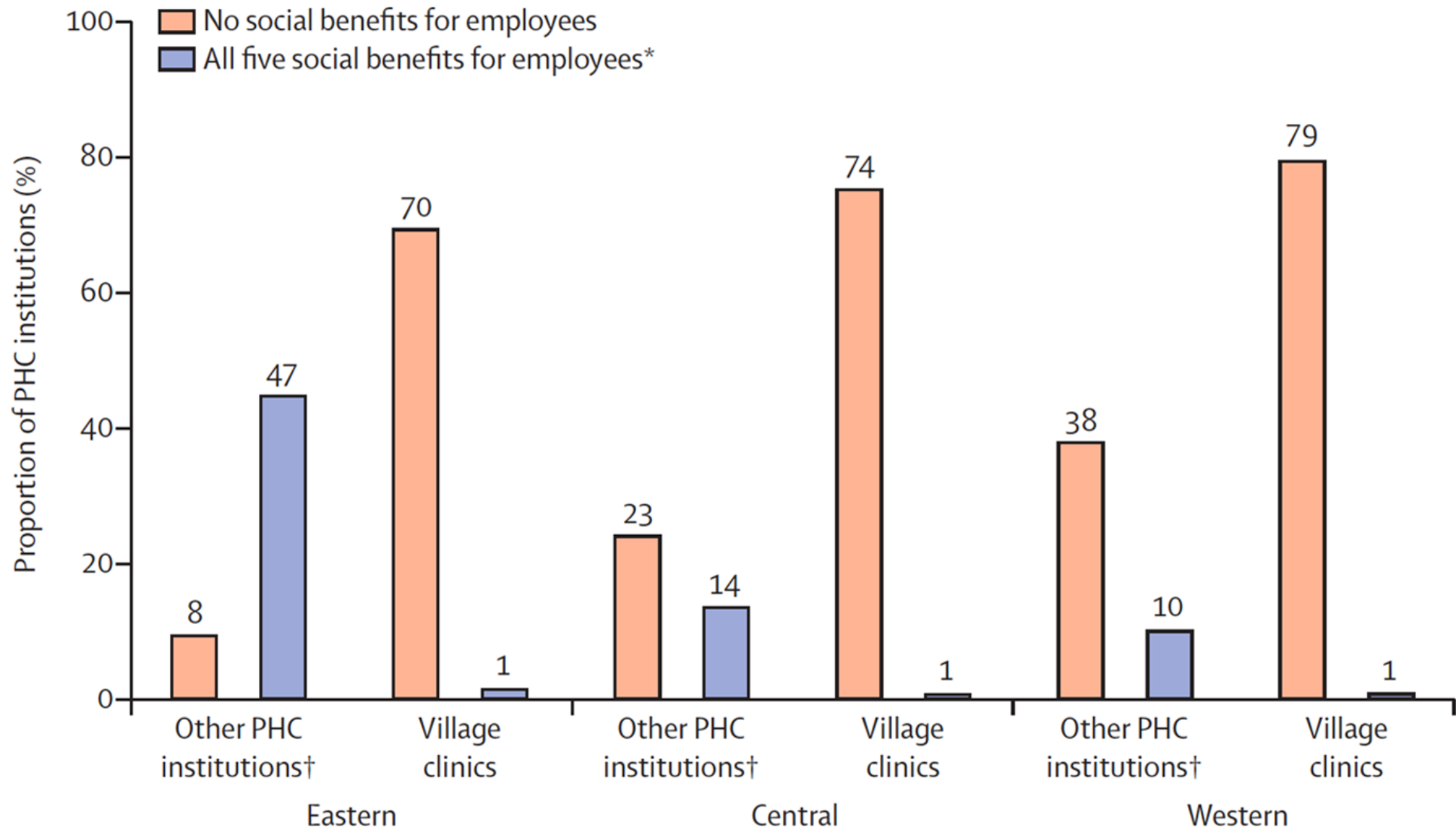


B



**Figure 1.** Number of primary health-care doctors in China in 2015

(A) Number of licensed or assistant licensed doctors per 1000 population. (B) Number of village doctors per 1000 rural population.



**Figure 2.** Social benefits for employees in PHC institutions

The three economic–geographical regions of China—eastern (13 provinces), central (6 provinces), and western (12 provinces)—are categorized according to the official definition.<sup>1</sup> PHC=primary health-care. \*Including pension, health insurance, unemployment insurance, occupational injury insurance, and housing fund. †Including township health centres, community health centres, and community health stations.

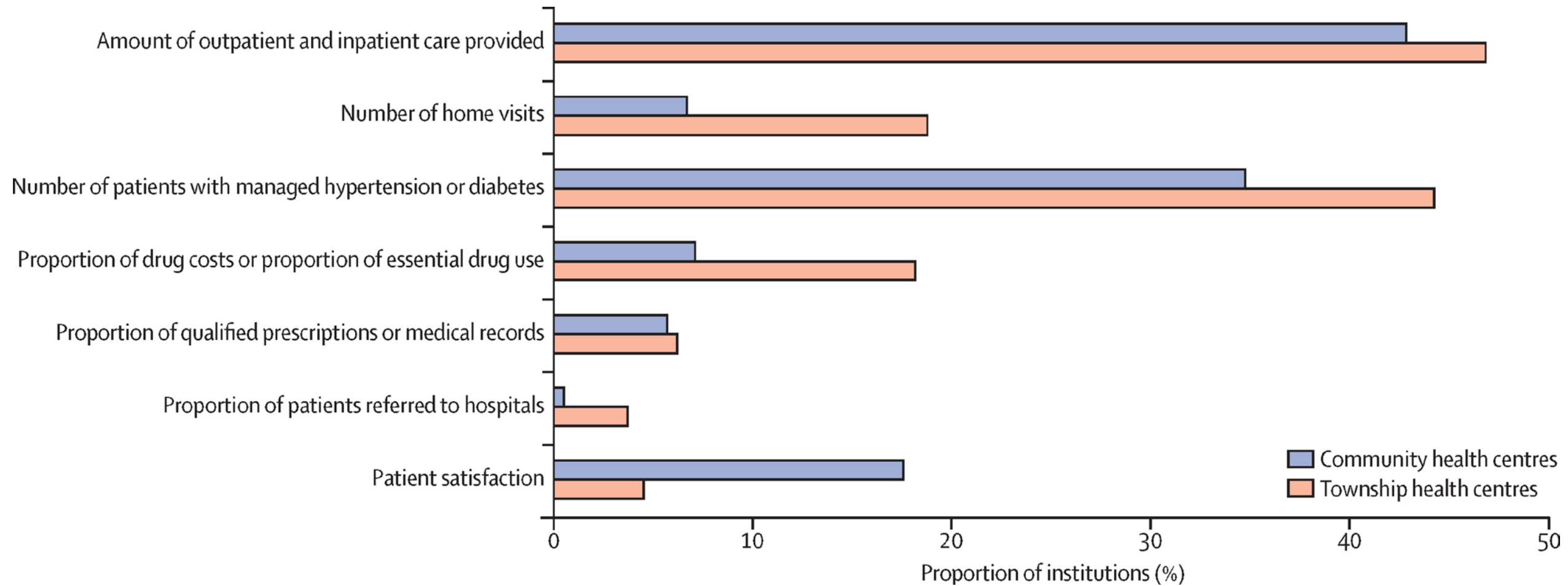


Figure 3. Proportion of institutions reporting each factor that influences doctors' bonuses

**Table 1.** 2016 reimbursement deductibles, rates, and annual caps of the New Cooperative Medical Scheme

|                                 | Outpatient care | Inpatient care           |
|---------------------------------|-----------------|--------------------------|
| <b>Deductible (US\$)</b>        |                 |                          |
| Primary health-care institution | \$0 (0–0)       | \$22 (7–29)              |
| Secondary hospital              | \$0 (0–44)      | \$58 (44–73)             |
| Tertiary hospital               | \$0 (0–73)      | \$116 (87–145)           |
| <b>Rate (%)*</b>                |                 |                          |
| Primary health-care institution | 85% (75–90)     | 85% (75–90)              |
| Secondary hospital              | 70% (65–80)     | 70% (65–80)              |
| Tertiary hospital               | 55% (50–62)     | 55% (50–62)              |
| <b>Annual cap (US\$)</b>        |                 |                          |
| Primary health-care institution | \$39 (15–58)    | \$21 777 (14 518–29 036) |
| Secondary hospital              | \$48 (22–218)   | \$21 777 (14 518–29 036) |
| Tertiary hospital               | \$58 (48–218)   | \$21 777 (14 518–29 036) |

Data are median (IQR). Data are from 67 rural sites. \*Percentages of total expenditure that are reimbursed by insurance (ie, actual reimbursement rates) are typically lower because of the annual caps and because not all services are covered by insurance.<sup>73</sup>

## Conclusion

- The primary health-care system in China has contributed substantially to reductions in the burden of diseases. With the 2009 health-care reform, access to and affordability of primary health care has substantially improved through increased government funding, universal health insurance coverage, the basic public health service programme, and an essential drug system. However, challenges remain.
- Primary health-care doctors in China have low levels of training, commonly do not have certifications, and experience high rates of burnout. Primary health-care professionals are paid low wages and minimal benefits. Moreover, payment policies do not reward high-quality care. Many younger doctors are considering leaving the profession, and a large proportion of doctors in village clinics are past retirement age.
- Application of information technology (IT) is fragmented. IT systems for clinical care are often unavailable; when available, they are not interoperable. IT systems for public health services are more widespread, but they are not integrated with clinical practice. The resulting lack of linked digital data impedes the implementation of decision support as well as the timely generation of evidence from everyday primary health-care practice.



- In China's new health-care reform, government subsidies are not enough to offset the decline in revenue from drug prescriptions at primary health-care institutions, since charging mark-ups above the cost of drugs is no longer allowed, which might have diminished the incentive to deliver appropriate clinical care.
- Many health insurance policies provide more generous reimbursement for inpatient care, which incentivises patients to use the hospital for even minor health conditions and inhibits primary health-care providers from being gatekeepers.
- The quality of primary health care in China is not well characterised. However, available data suggest that only a minority of primary care patients with hypertension and diabetes in China are diagnosed, and few among them achieve optimal control. Furthermore, inappropriate prescribing is common.
- The wide range of challenges for primary health care in China requires a strategy. The Healthy China 2030 plan, a government blueprint, highlights the important role of primary health care and is committed to strengthening the primary health-care system. Nevertheless, recommendations linked to resources and evidence-based indicators are needed for the implementation