HEALTH EQUITY AND FINANCIAL PROTECTION IN ASIA

POLICY BRIEF ALIGNING PROVIDER INCENTIVES WITH UNIVERSAL HEALTH COVERAGE GOALS IN CHINA



China's ambitious 2009 healthcare reform plan set the goal of achieving universal health coverage by 2020. A large part of the challenge involves extending and deepening coverage of the rural population through the New Cooperative Medical Scheme (NCMS). HEFPA research reveals how the NCMS benefit package and its means of paying providers can be designed to ensure delivery of more appropriate, cost-effective care and to better protect household finances from medical expenditure risks.

WHY IS INCREASED COVERAGE OF THE RURAL POPULATION NOT DELIVERING UHC GOALS?

Faced with a situation in which healthcare had become unaffordable to much of the rural population, or could only be accessed through high out-of-pocket payments that seriously threatened living standards, the Chinese Government began in 2003 to roll out the mainly tax-financed NCMS insurance. By 2011, NCMS coverage had reached 98 per cent and the government subsidy per person tripled between 2008 and 2012. In parallel, out-of-pocket (OOP) expenditure as a share of total health expenditure dropped by over 20 per cent between 2003 and 2011.



At the same time, the quality of care delivered in rural areas has shown little sign of improvement on average and has remained highly variable. Perverse provider incentives are suspected to be largely responsible.



INSURANCE COVERAGE OF POPULATION

Despite the rapid expansion of NCMS coverage and reimbursement rates, and the reduction in the OOP health expenditure share, household medical expenditures have continued to escalate in absolute terms and catastrophically high expenditures have not fallen. Shallow benefit packages and misaligned demand and supply side incentives are likely root causes.

Early NCMS plans covered only inpatient services with high deductibles, high co-insurance and low ceilings on reimbursed expenses. While this benefit package design improved access to previously least affordable care, it also

HEALTH FINANCING MIX, 1979-2011



The limited progress made towards the goal of access to appropriate treatment and financial protection against medical expenditure risk since the launch of the NCMS has motivated HEFPA studies in two provinces. Their aim is to identify changes to the design of the benefit package and provider payment mechanisms that can provide better incentives for patients and practitioners to use and deliver care that is both more cost-effective and imposes a lower burden on household finances. Given China's increasing prevalence of hypertension, diabetes, and other non-communicable diseases, the most cost-effective course of care is often ongoing disease management and treatment on an outpatient basis.

Q DOES THE NCMS BENEFIT PACKAGE IMPEDE USE OF PRIMARY CARE?

In Ningxia – a poor province in Northwest China – HEFPA conducted a quasi-experiment that involved re-designing the NCMS benefit package in some counties to increase coverage for outpatient services. The new benefit package used a tiered reimbursement structure that indemnified visits to primary care facilities (village posts and township health centre) more generously than those to upper level secondary and tertiary hospitals.¹ Compared to an inpatient-orientated benefit package in comparison counties, the intervention increased the probability of receiving outpatient care at a village clinic in the previous two weeks by 0.7 of a percentage point, equivalent to a 44 per cent increase, on average. The effect is larger for poorer and middle-income individuals, for those living closer to village clinics and migrant workers.

There was no evidence of a significant substitution from treatment at higher- to lower-level facilities. There was also no substitution from inpatient to outpatient treatment. This was partly because coverage for outpatient services increased but that for inpatient treatment was not reduced – the latter being a politically unattractive option for local officials.

The expansion in overall coverage was made possible by continuously increasing government subsidies for NCMS. Evidence from another HEFPA study conducted in Ningxia, and also Shandong – a much more developed province on the east coast – shows that a rise in the depth of coverage is not sufficient to reduce the medical spending of households. More generous coverage was found to increase the OOP spending on an inpatient stay but has no significant effect on the expenditures made for an outpatient visit.²

The Ningxia experiment demonstrates that changing the structure, as opposed to the depth of coverage, can be successful in reducing OOP payments. Shifting the benefit package toward relatively more generous reimbursement of primary care at lower level facilities reduced the incidence of catastrophically high medical expenditures. The percentage of households spending more than 10 per cent of their budget on medical care was reduced from 33 to 24 per cent.¹

PROBABILITY OF VISIT TO VILLAGE CLINIC BY WEALTH TERTILE



Q DO PROVIDER INCENTIVES IMPROVE EFFICIENCY AND QUALITY OF CARE?

Expansion of insurance coverage without appropriate supply-side incentives can fuel unnecessary spending and utilisation, with no improvement in quality. Over-prescription of drugs and excessive use of diagnostic tests is a major quality and cost concern in China. The causes are many, but fee-for-service (FFS) payment of providers combined with a fee schedule that ensures a profit margin on diagnostic tests and a 15 per cent mark-up on drugs is most likely critical. For primary healthcare providers, who have limited scope to perform diagnostic tests, maximising drug profits has become a central motivation. Prescription of antibiotics far exceeds rates recommended by the World Health Organization (WHO) and is often utilised for self-limiting illnesses, such as common colds.

Paying providers according to their performance in delivering appropriate care promises to raise quality and contain health spending. To test whether this potential can be realised, the HEFPA experiment in Ningxia included a second component that involved replacement of FFS with capitation and pay-for-performance (p4p) payment of providers in a randomly selected subset of the counties in which the NCMS benefit package was re-designed to promote the utilisation of primary care. The capitation rate was based on past spending with adjustments for inflation and the predicted impact of the change in the benefit package. The rate of antibiotic use was the core performance indicator of the p4p design. Performance was assessed from the directory of all visit records, collected through an electronic management information system.

EFFECT OF CHANGE FROM FFS TO CAPITATION & P4P ON PROBABILITY OF PRESCRIBING ANTIBIOTICS (IN PERCENTAGE POINTS)



*, **, *** indicate statistical significance on the 1, 5 and 10% levels, respectively.

The change from FFS to capitation with p4p led to a reduction in the probability of antibiotics being prescribed at township health centres and village clinics.³ However, the post-intervention antibiotic prescription rate remained higher than the internationally recommended level.

HOW THE FINDINGS WERE OBTAINED

The re-designed NCMS benefit package was introduced in selected counties of Ningxia. Other countries were purposefully selected to act as comparators. The effect was estimated by comparing the change in the utilisation rate in counties where the benefit package was restructured with the change in the counties in which it was not. This difference-in-differences approach reveals the effect of the intervention, provided that in its absence, the outcome of interest would have changed in the intervention sites to the same degree as it did in the comparison sites.

The impact of capitation with p4p was determined by comparing antibiotic prescription rates in randomly selected facilities paid in this way with rates in the facilities that continued to be paid by FFS. The benefit package was restructured in both the treatment and control facilities.



REGULATION AND INCENTIVES ARE NEEDED TO REACH UHC GOALS

In the breadth versus depth of coverage tradeoff, China chose to cover its entire population first with shallow coverage, and then to dig deeper as more resources become available. Ensuring that the additional resources reap returns of improved population health and reduced exposure to medical expenditure risks requires the provision of incentives that motivate patients to demand, and providers to deliver, more cost-effective, higher quality care. The HEFPA experiment in Ningxia shows that if properly implemented, appropriate design of the insurance benefit package and provider payment method can ameliorate problems of overuse of higher level, expensive facilities and over-prescription of drugs and diagnostic tests, both of which place a burden on household budgets while bringing little improvement in health.

In the latest Five Year Plan (2012-2016), the Chinese Government identifies provider payment reform as a top priority for advancing its health reform goal, with a particular focus on public hospitals – which account for over 70 per cent of current national health spending. Coupled with the continued increase in government subsidies for NCMS targeted at primary care and priority diseases through expansion of the benefit package, this is a step in the right direction.

However, improved governance and accountability of public health facilities is also required. Recent policy encourages entry of private hospitals and clinics in the belief that competition will force public facilities to improve quality and efficiency. With international experience demonstrating that market competition in healthcare is difficult to create and put to good effect without a carefully designed and enforceable regulatory system, this policy experiment needs to proceed with caution.



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FURTHER INFORMATION

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