



An Impact Evaluation of China's New Rural Health Insurance Scheme

Adam Wagstaff

DECRG, World Bank

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Background to the intervention

- During 1980s, 'old' cooperative medical scheme (CMS) collapsed, budget support to health facilities faltered
- Facilities allowed to charge for their services. Prices set by government, with higher margins for high-tech care and drugs in the hope facilities would cross-subsidize 'basic' care
- Health care costs increased rapidly, esp. out-of-pocket spending
- High incidence of 'catastrophic' out-of-pocket payments and impoverishment due to health shocks
- Also evidence of cost deterring use of services

The intervention—new CMS (NCMS)

- An insurance scheme. The aims:
 - to reduce out-of-pocket payments
 - to encourage utilization of needed care
- Voluntary but extensive coercion
- Heavily subsidized: member 10 RMB; government 40 RMB
- Budget small compared to per capita rural total health spending (250 RMB). Reflected in high coinsurance rate, low ceilings, high deductibles, multiple exclusions
- This one reason to think impact could be limited
- Introduced from 2003 onwards; 3 counties per province initially; aim of 100% coverage by 2010



Background to the evaluation

- In 2002, Bank asked to undertake AAA on rural health. DfID provided generous financial support
- NCMS was a flagship reform at the time. So, made sense to try to undertake impact evaluation (IE) of NCMS as part of AAA
- Govt. initially cool to idea, in part because was undertaking its own evaluation
- Agreed that IE would be an input into govt. evaluation, and would be done collaboratively with MOH statisticians in Center for Health Statistics & Information (CHSI)

From decision to evaluation—i

- CHSI statisticians strong on survey data. Fielded national health survey (NHS) in 2003. Also strong on statistical techniques in general
- Previous involvement in M&E of Bank projects. But limited familiarity with modern IE methods:
 - Familiarity in Bank M&E work with before-and-after comparisons in areas where projects have been implemented
 - Preference in NCMS evaluation for comparisons between insured and uninsured in NCMS counties, using regression analysis to adjust for confounding observables
- Bank team favored:
 - differences-in-differences w/ matching, using 2003 NHS as baseline
 - comparing enrolled (and non-enrolled) in NCMS counties with people in non-NCMS counties. CHSI resisted collecting data in non-NCMS counties

From decision to evaluation—ii

- Compromise agreement on survey:
 - Households in 15 counties participating in 2003 NHS to be re-interviewed in 2005: 10 NCMS counties, and 5 non-NCMS
 - Households in further 17 NCMS counties to be surveyed as well
 - 2003 data for re-interviewed households to be made available to Bank team (NHS data not publicly available)
- Decided in addition to:
 - Collect information on program design and implementation from govt. officials—short questionnaire in 189 counties; long questionnaire in 17
 - Undertake focus group work in 17 counties; CHSI to commission
- Once agreement reached, questionnaire design and data collection proceeded quickly
- Beijing-based Bank consultant liaised with CHSI throughout, accompanied CHSI on quality-control trips

Data analysis



- CHSI core team (3 people) came to Washington for 2 weeks to learn IE methods and to work on NCMS evaluation together
- Non-NCMS counties proved very different from NCMS counties making matching difficult. So, focused mostly on matching enrolled and non-enrolled within NCMS counties
- CHSI also brought govt. health facility dataset:
 - Covers all township health centers (THCs) and higher-level facilities for 2003, 2004, 2005
 - A small random sample made available to Bank team to run Stata code, but final analysis run on CHSI computers
 - Facilities in NCMS counties matched with facilities in non-NCMS counties; comparison of changes before-and-after NCMS introduction



Findings

- Household data:
 - Positive impacts on outpatient visits (at THC level) and inpatient admissions (at county level)
 - No reduction in total out-of-pocket payments, *or in out-of-pocket payments per contact*
- Facility data:
 - Positive effects on outpatient visits at THC level and inpatient admissions at THC level (not at county-level)
 - Positive impact on THC revenues; in central THCs, % impact on revenues has exceeded % impact on utilization
- Conclusions:
 - NCMS encouraging utilization, but not reducing out-of-pocket payments
 - Is extra utilization medically necessary?
 - Are providers taking the opportunity to deliver a more sophisticated style of care? Is it medically necessary?

Subsequent activities



- The evaluation
 - CHSI released report on NCMS in Chinese, based on joint results and their own additional analysis
 - All co-authored a scientific journal article
 - Bank included NCMS evaluation results in AAA report. Govt. initially less than enthusiastic about the findings
- Beyond the evaluation
 - Govt. produced its own evaluation of NCMS, building on CHSI report
 - Realizing health sector problems go beyond NCMS and MOH, govt. set up inter-ministerial committee on health reform. Solicited input from Chinese universities, WHO, the Bank and McKinsey
 - Jan 2008 govt. announced reform measures, including extra resources for NCMS

Survey: Medical services top concern of Chinese

BEIJING, Jan. 8 (Xinhua) -- Rising medical costs have become the top concern of Chinese people, according to a new survey by the National Bureau of Statistics (NBS) released on Tuesday.

The survey of 101,029 families nationwide, the seventh by the NBS on "unsafe" factors upsetting the public, revealed 15.3 percent of those polled chose "medical and health services" as one of their concerns. Declining social morals, ticked by 14.3 percent of those polled, ranked second.

China to increase subsidies for rural co-op medical scheme

BEIJING, Jan. 7 (Xinhua) -- Central and local government subsidies for China's rural cooperative medical insurance system will be increased from 40 yuan (5.50 U.S. dollars) to 80 yuan per person, Health Minister Chen Zhu said here Monday.

Rural residents will also be required to raise their contributions to the scheme, from 10 yuan to possibly 20 yuan a year.

Impact of evaluation via capacity-building

- “Collaboration has been very good for CHSI. It allowed us not only to learn impact evaluation methods, but to practice them on a real evaluation
- Impact evaluation is now a tool that CHSI plans to use in other policy impact assessments to give policymakers more evidence
- Methods are being borne in mind in design of the 2008 NHS, which could be used for further evaluation of NCMS and of other policies
- CHSI is studying more about impact evaluation methods to better understand them, and possible further applications”

Gao Jun, Deputy Director
Center for Health Statistics & Information, MOH, Beijing

Impact of evaluation on policy

- “The report has attracted the attention of Chinese researchers.
- The impact of the report on NCMS has been very good. The results have been used in some important Chinese policy-related documents, including the Government’s assessment of NCMS pilots
- The report has given policymakers a clear understanding of the current NCMS. Most conclusions have been accepted by senior policymakers
- The report has made policymakers pay more attention to the impact of NCMS, and has made them think more about how NCMS’s impact on access and financial protection could be increased”

Gao Jun, Deputy Director
Center for Health Statistics & Information, MOH, Beijing

Two lessons



- Expanding insurance coverage will not of itself put downward pressure on out-of-pocket payments
 - Scheme needs sufficient resources
 - But provider incentives are crucial too—insurance could simply mean more expensive (and sometimes unnecessary?) care
- Impact of Bank impact evaluations may depend on the partner
 - Needs to be trusted by govt. and capable of delivering results in a way that policymakers understand
 - May mean taking the time to build capacity and a relationship