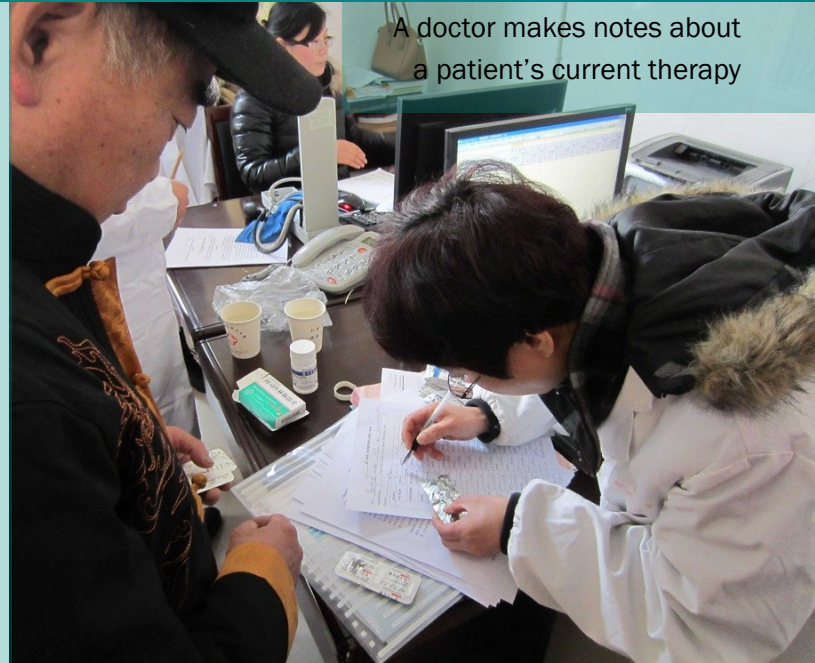


## RESEARCH BRIEF: INTERIM FINDINGS

Hypertension and diabetes are major risk factors for cardiovascular disease (CVD), but in rural areas management is poor. Our study assessed whether a standard package of CVD care interventions in rural China was being delivered effectively, and if it was associated improved lifestyle and biomedical indicators.



A doctor makes notes about a patient's current therapy

### Key findings



Better drug adherence in the intervention arm (66% vs. 47%);



Smoking rates were significantly reduced in the intervention arm (4% reduced vs. 2% increased);



More patients in the intervention arm took less salt (50% vs. 34%);



Patients in the intervention arm reported drinking less alcohol and had more exercise (32% vs. 15%, and 31% vs. 18%, respectively); and



Prescribing and taking of statins and aspirin, and prescribing (but not taking) of anti-hypertensives, were substantially higher.

### Key conclusions

- ★ Implementation of the package by family doctors was feasible and improved prescribing and some lifestyle changes.
- ★ Additional measures such as reducing medication costs and patient education are required.

## Method

We selected 3 counties in central Zhejiang province on the basis that their township hospitals had electronic health records and agreed to participate in the trial. At the time of delivery of the intervention (2014), all 67 eligible township hospitals were participating in the study.

## Intervention strategies

Case management guidelines, training and performance monitoring meetings and patient support activities were designed to fit within the job description of family doctors in the township hospitals. These intervention strategies comprised:

- 1) prescription of a standardised package of medicines targeted at those with hypertension or diabetes;
- 2) advice about specific lifestyle interventions; and
- 3) advice about medication adherence.



A township hospital in Zhejiang province

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## Implications

- ★ Raise coverage for essential medicines for hypertension and diabetes in primary care facilities;
- ★ More intensive training of doctors;
- ★ More innovative patient education; and
- ★ Improve health insurance cover for outpatients.

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This brief is informed by the following research:

1. Zou G, Wei X, Gong W, Yin J, Walley J, Yu Y, et al. (2014) Evaluation of a systematic cardiovascular disease risk reduction strategy in primary healthcare: an exploratory study from Zhejiang, China. *Journal of Public Health*. 3(2): 241-250. [doi.org/10.1093/pubmed/fdu013](https://doi.org/10.1093/pubmed/fdu013)
2. Wei X, Zou G, Gong W, Jia Y, Yu Y, Walley J, et al. (2013) Cardiovascular disease risk reduction in rural china: a clustered randomized controlled trial in Zhejiang. *Trials*. 14(1): 1-10. [doi.org/10.1186/1745-6215-14-354](https://doi.org/10.1186/1745-6215-14-354)
3. Wei X, Walley J, Zhang Z, Zou G, Gong W, Deng S, et al. (2017) Implementation of a comprehensive intervention for patients at high risk of cardiovascular disease in rural China: a pragmatic cluster randomized controlled trial. *PLoS One*. 12(8). [doi.org/10.1371/journal.pone.0183169](https://doi.org/10.1371/journal.pone.0183169)