



**SAPPHIRE study:** Strengthening China's rural public health services for hypertension and diabetes care – May 2019



The George Institute  
for Global Health

## Facts:

- Hypertension prevalence is estimated at 33% of adults between the ages of 35-74 in China.
- Of those with hypertension, only 31% are diagnosed, 46% treated and 30% controlled, resulting in an overall control rate of just 4%.
- Type 2 diabetes affected 113.9 million people in China in 2013.
- Type 2 diabetes prevalence has risen dramatically from 1% in 1980 to 10% today.

## Project cycle:

2019 – 2024

## Partners:

The George Institute for Global Health, Australia  
Chinese Center for Disease Control and Prevention  
The George Institute for Global Health, China  
UNSW Sydney, Australia  
University of Oxford, UK  
Anzhen Hospital, China  
Ningbo Center for Disease Control and Prevention, China  
Yichang Center for Disease Control and Prevention, China  
Wenchuan Health Bureau, China

## Supporters:

The George Institute for Global Health  
National Health and Medical Research Council (NHMRC), Australia  
Global Alliance for Chronic Diseases

## Background:

- Over the last few decades, the Chinese primary health care system has progressively weakened following economic liberalisation, rapid growth and changing consumer expectations.
- In 2009, the Chinese Government launched reforms to provide an 'essential public health service package' for primary care activities, including hypertension and type 2 diabetes. Uptake of services varies and large quality gaps exist.

## Aims:

- The overall goal of this five-year project is to strengthen primary health care systems to enhance uptake of the government's essential public health services package for hypertension and type 2 diabetes in three diverse regions in China.

## Methods:

- The SAPPHIRE study will be conducted in four phases, aligned with the Institute for Healthcare Improvement's 'Framework for Going to Full Scale'.
- Phase I (Understand): Rapid health system assessment to develop region-specific logic models.
- Phase II (Design): Develop a "change package" comprising of clinical decision support, auditing tools and a quality improvement program.
- Phase III (Test): Evaluate the "change package" in 60 village clinics over two years as part of a cluster randomised controlled trial.
- Phase IV (Scale): Conduct economic modelling and policy development to support implementation of the enhanced system at scale.

## Impact:

- The SAPPHIRE study will provide robust evidence on scalable strategies to strengthen the primary health care system in China for the management of hypertension and diabetes.
- Through close collaboration with government and service providers, there is potential to make major improvements to health care for millions of people across China.

## Contact:

To find out more about this study, its principal investigators Dr Maoyi Tian & Professor David Peiris or The George Institute for Global Health, please contact Julia Timms +61 410 411 983 or [jtimms@georgeinstitute.org.au](mailto:jtimms@georgeinstitute.org.au)

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