



Tracking progress towards equitable maternal and child health in Yunnan: a systematic assessment for the Health Programme for Poverty Alleviation in China during 2015-2020

Huang Y¹, Xiao X¹, Wan Y², Ye QY¹, Yang ZT¹, Xu LL¹, Chen SQ¹, Li HF¹, Wang FF¹, Chen YY¹, Zhao DD¹, Zhang Q², Zheng JR², Guo GP²*, Li Y¹*

1.Kunming Medical University, 650500 China 2.Yunnan Maternal and Child Health Care Hospital, 650051 China

*Corresponding authors Contact: Yuan.Huang@hotmail.com

Background As an essential component of China's Targeted Poverty Alleviation Strategy, a series of health programmes has been implementing in poor rural areas since 2017 to break the vicious cycle of poverty and illness among vulnerable populations, such as poor pregnant women and children who are at high risk of severe illness and death.

Objectives To assess the impacts of health programmes which aimed at preventing women and children from being trapped in or returning to poverty because of illness, moreover improving health equity across Yunnan (hereinafter referred to as MCH-PA programmes).

Methods

- Policy Analysis: National and Yunnan policy documents during 2015-2020 were analysed based on health system building blocks conceptual framework.
- Impact Evaluation: Difference-in-difference technique was employed to examine the changes in disparities in maternal and child health system inputs, service coverage, and health outcomes between poor and non-poor areas before and after MCH-PA programmes in 2017.
- Geospatial Mapping: Levels and trends in maternal and child mortality rates from 2015 to 2020 across Yunnan were compared between areas with and without MCH-PA programmes.

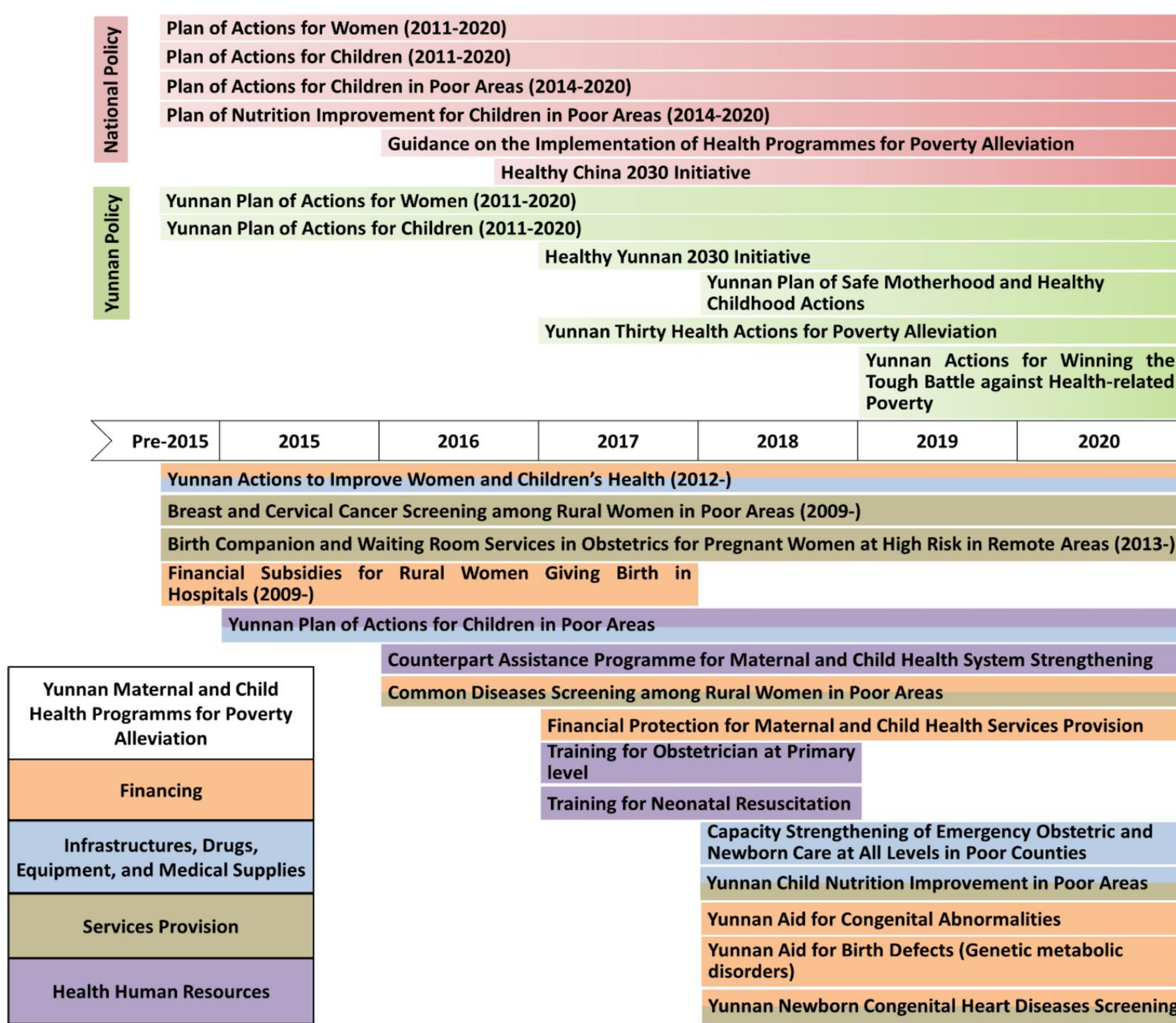


Figure 1 Timeline of Maternal and Child Health Policies and Programmes for Poverty Alleviation during 2015-2020 in Yunnan, China

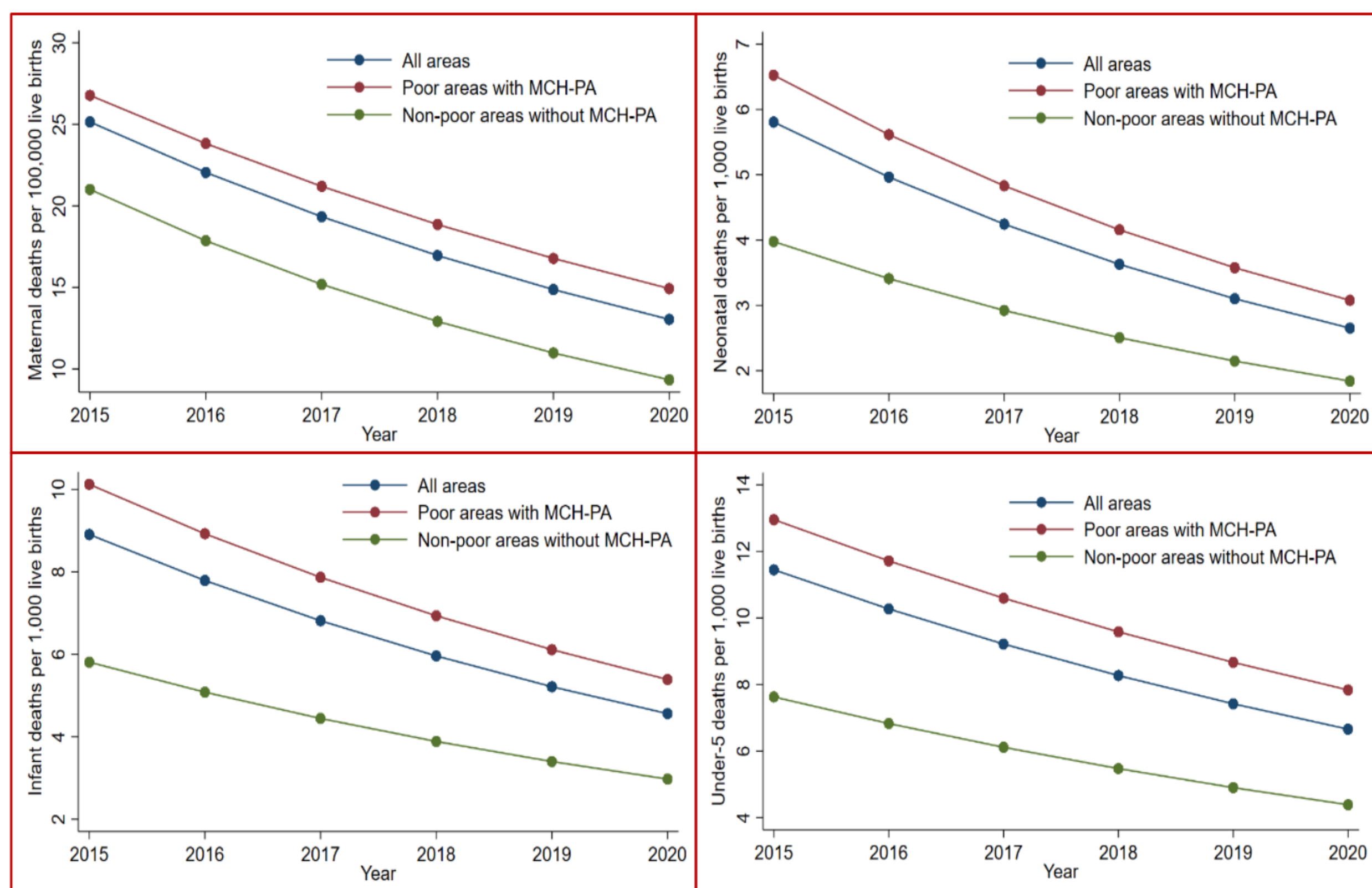


Figure 2 Estimated change trend of MMR (A), NMR (B), IMR (C), and U5MR (D) among all areas and areas with and without MCH-PA programmes from 2015 to 2020 in Yunnan, China

Results In total, 12 MCH policies and 15 programmes related to poverty alleviation for poor women and children in Yunnan were summarised to understand the Chinese Government's strong commitment to narrow the disparities in health and health care across regions and population groups (Fig.1). The densities of MCH personnel had been increased substantially in poor areas. The gaps in proportions of MCH service coverage between poor and non-poor areas had been narrowed. The impacts of MCH-PA programmes on closing the gaps in maternal and child survivals were significant (Fig.2).

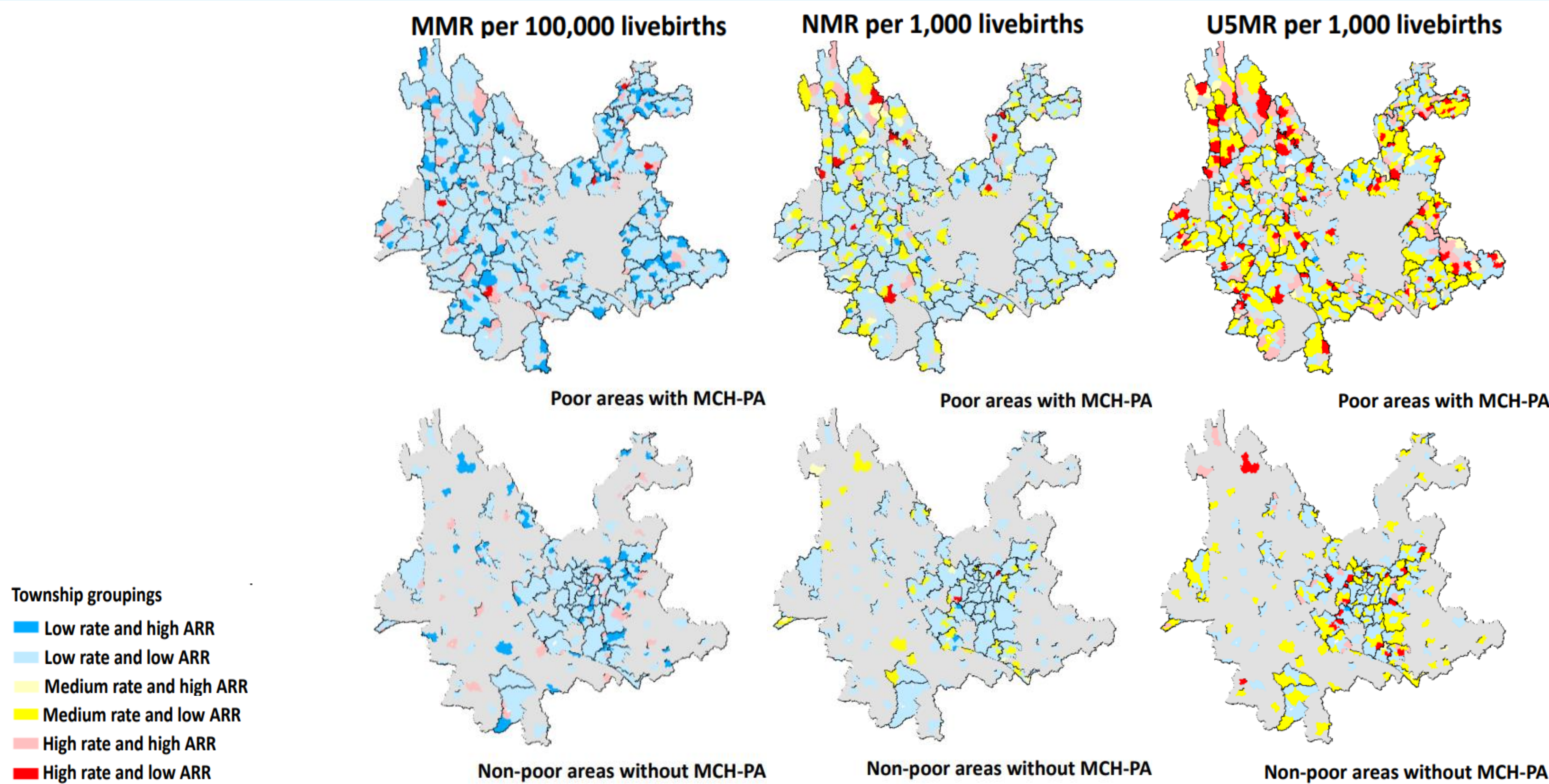


Figure 3 Mapping of MMR, NMR, and U5MR trends between 2015 and 2020 in Yunnan, China

In addition, the out-of-pocket payments for inpatient care for serious illnesses among women and children with poverty registration had been considerably decreased to 10.0% by the three-tiered financial protection strategy. Paralleling the universal coverage, maternal deaths per 100,000 livebirths and child deaths (including neonatal and under-5 deaths) per 1,000 livebirths had further declined between 2015 and 2020 in both poor and non-poor areas. The areas that need higher priority for maternal mortality reduction were very few and only located in poor areas. But the areas with high priority for child survival improvements were scattered around Yunnan (Fig.3).

Conclusion Remarkable progress in equitable maternal and child survival have been achieved in Yunnan, which is an essential component of great success in poverty alleviation in China. The practices in Yunnan have showed the Chinese model in ending poverty with firm commitment, determined leadership, health system strengthening, detailed blueprint, and social participation which might provide a new reference for other countries and regions.