Success Factors for Women’s and Children’s Health

CHINA
National Health and Family Planning Commission, China
“Success factors for women’s and children’s health: China” is a document of the National Health and Family Planning Commission (NHFPC), People’s Republic of China. This report is the result of a collaboration between the NHFPC and multisectoral stakeholders in China, supported by the Partnership for Maternal, Newborn and Child Health (PMNCH), the World Health Organization (WHO), other H4+ and health and development partners who provided input and review.

Success Factors for Women’s and Children’s Health is a three-year multidisciplinary, multi-country series of studies coordinated by PMNCH, WHO, World Bank and the Alliance for Health Policy and Systems Research (AHPSR), working closely with Ministries of Health, academic institutions and other partners. The objective is to understand how some countries accelerated progress to reduce preventable maternal and child deaths. The Success Factors studies include: statistical and econometric analyses of data from 144 low- and middle-income countries (LMICs) over 20 years; Boolean, qualitative comparative analysis (QCA); a literature review; and country-specific reviews in 10 fast-track countries for MDGs 4 and 5a.1, 2 For more details see the Success Factors for Women’s and Children’s health website: available at http://www.who.int/pmnch/successfactors/en/
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1. Executive Summary

Overview
China has met, or is on track to meet, all its Millennium Development Goals (MDGs), including achieving the MDG 4 target of reducing child mortality by two-thirds since 1990, and being on-track for MDG 5a to reduce maternal mortality by 75%. China has employed a number of strategies to help achieve this progress, including social mobilization, capacity building within the health system, and sectoral collaboration.

Under 5 child mortality
From 1991 to 2013, under 5 mortality (U5MR) in China decreased from 61/1000 to 12/1000 live births (LB). This is associated both with improved coverage of effective interventions to prevent or treat the most important causes of child mortality and with improvements in socioeconomic conditions.

Maternal mortality
From 1991 to 2013, the maternal mortality rate (MMR) in China decreased from 80/100 000 to 23.2/100 000 LB, a reduction of 71%. This is associated with extensive modernization of the health system, including provision of antenatal and delivery services at community level in rural areas.

Health sector initiatives and investments
Government health expenditure per capita increased at an annual rate of more than 13%, moving from US$ 53 in 1995 to US$ 480 in 2012. China has made intensive policy and planning efforts to improve health over the last two decades. Major efforts have been made in areas such as health workforce recruitment and training, health information systems and surveillance, and health insurance. Health system strengthening has resulted in a comprehensive three-tier medical and health service network extending from province to township and village level. This structure includes professional maternal and child health (MCH) institutions at province, prefecture and county levels, providing for women’s and children’s public health and basic medical services. The Law on Maternal and Infant Health Care and the National Programme for Women/Child’s Development provide the basis of a relatively complete policy and legal framework on MCH.
Initiatives and investments outside the health sector

Multiple non-health sectors and actors have contributed to improvements in women’s and children’s health in China over the last two decades. This has been achieved in the context of widespread poverty reduction, and increased wealth and socioeconomic improvements. The State Council issued the National Programme for Children’s Development in China and the National Programme for Women’s Development in China. These initiatives integrated children’s and women’s health care, including reproductive health, into the overall strategic plans for socioeconomic development.

Enhancements to health-sustaining infrastructure have included over 200,000 projects to supply safe drinking water to 220 million rural residents. Rural access to improved sanitation facilities improved from 40.3% in 2000 to 69.2% in 2011. China is on track to achieve 100% literacy among 15 to 24-year-olds due to advances in education, including the elimination of gender inequities in primary and secondary education. The government formulated the Outline for the Development of Food and Nutrition in China (2001–2010). This contributed to strong progress in reducing the percentage of underweight children under 5 (from 13% in 1990 to 4% in 2010), and the percentage of under 5 stunted children (from 32% in 1990 to 10% in 2008).

Key actors and political economy

Chinese national and local governments play important roles in maternal and child health policymaking, deciding on investments in essential interventions and monitoring and evaluating progress. Many international organisations support policies and monitor progress on maternal and child health. Academic and research institutions generate and disseminate evidence to inform policy decisions and provide technical support to monitor and evaluate the policy process. The role of civil society has also grown in China, particularly in promoting accountability for women’s and children’s health and in contributing to the planning and implementation of policies and programmes related to maternal and child health.

Governance and leadership

Policies for a favourable institutional environment have been developed through the promulgation of laws and MCH-related policies. The State Council is the highest executive organ of state power, as well as the highest organ of state administration, which includes 25 component ministries or commissions, including the National Health and Family Planning Commission. In order to fulfil its commitment to the MDGs, the State Council issued the National Programme for Children’s Development in China and the National Programme for Women’s Development in China, integrating children’s and women’s health care, including reproductive health, into the overall strategic plans for socioeconomic development.

Challenges and future priorities

While acknowledging the above successes, China still has challenges to address and future priorities, including:

1. Government financing and sustainable funding for health;
2. Socioeconomic inequities and gender barriers and inequities;
3. The capacity and distribution of the health workforce;
4. The health of migrant and remote rural populations;
5. Strengthening opportunities for South-South collaboration.
2. Introduction

China is one of 10 low-and middle-income countries (which also includes Bangladesh, Cambodia, Egypt, Ethiopia, the Lao People’s Democratic Republic, Nepal, Peru, Rwanda and Viet Nam) with a high maternal and child mortality burden that in 2012 were on the fast-track to achieve MDG 4 (to reduce child mortality) and 5a (to reduce maternal mortality). By 2012, China had achieved MDG 4 and was on track to achieve MDG 5a by 2015.2-4 This review provided an opportunity for the National Health and Family Planning Commission (NHFPC) and other stakeholders both within and outside the health sector to synthesize and document how the country achieved these health gains and to identify remaining challenges to inform programming and future priorities in the country.

The primary objective of the review was to identify factors both within and outside the health sector that have contributed to reductions in maternal and child mortality in China, focusing on how improvements were made and emphasizing policy and programme management best practices.

Methods used for the Success Factor review in China included:

- A literature review based on peer-reviewed and grey literature, policy documents, programme evaluations and sector strategies and plans;
- A review of quantitative data from population-based surveys, routine data systems, international databases and other sources;
- Interviews and meetings with key stakeholders to inform and help validate findings and to identify factors based on local knowledge and experience;
- A review of the draft document by stakeholders and local experts to finalize findings.

It was recognized that it can be difficult to establish causal links between policy and programme inputs and health impact. For this reason, plausibility criteria were used to identify key policy and programme inputs and other contributing factors that could be linked to potential mortality reductions. These criteria included, the potential impact of the policy or programme on mortality reduction, that it had been implemented long enough to have an influence on mortality, and it had reached a large enough target population to explain national-level reductions in mortality. Following this, stakeholders reviewed the identified policy and programmes to reach consensus on the key inputs that could have likely influenced mortality. Research is needed to better quantify how policies and programmes contribute to improved health outcomes. More data in this area would enable the analysis to be further refined.

The first draft was developed by local and international experts. Interviews and group meetings with stakeholders were conducted between March and April, 2014 to further review, revise and get consensus on findings, with the final draft approved by NHFPC.
3. Country Context

Overview

The People's Republic of China is the world's most populous country with 1.37 billion people. It is also the third largest country in geographical area (after Russia and Canada, and similar to the United States) covering around 9.6 million square km. China is divided into eastern, middle and western regions according to geographic location and economic development. The eastern region is the most developed, while the western region is the least. The Chinese population is as diverse as the vast landscape, with over 50 ethnic groups and hundreds of spoken languages.

Since the late 1970’s, China has witnessed significant demographic changes, including a decline in fertility, a reversal of the once high boy: girl sex ratio, and one of the greatest human migrations in history, as rural Chinese move to the cities for greater economic opportunity.

In 2010 China became the second largest economy in the world (in terms of gross domestic product). The gross domestic product per capita rose from (purchasing power parity, ppp, Int$) $1644 in 1990 to $38 420 in 2012 (see Table 1: Key country indicators). Further social and political reform led to higher living standards and increased life expectancy. As the overall Success Factors studies show, improvements in gross domestic product per capita, together with progress across health and other sectors, have contributed to improvements in health and development. The boom in economic growth has created a middle class in the country and hundreds of millions of Chinese have been lifted out of poverty. However, wealth has not been equally distributed and this has led to rising inequality in everything from income to education.
Table 1: Key country indicators*

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>1990-1999</th>
<th>2000-2009</th>
<th>2010-PRESENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Source: China Population Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL FERTILITY (births per woman)</td>
<td>NA</td>
<td>1.22 (2000)</td>
<td>1.18 (2010)</td>
</tr>
<tr>
<td>Data Source: China Population Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health Financing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(as % of total expenditure on health)</td>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economic Development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Source: China Statistical Yearbook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% of females age 15-64)</td>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GINI INDEX</td>
<td>32 (1990)</td>
<td>43 (2002)</td>
<td>N/A</td>
</tr>
<tr>
<td>(0 equality to 100 inequality income distribution)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health Workforce</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICIANS (per 1000 population)</td>
<td>1.56 (1990)</td>
<td>1.68 (2000)</td>
<td>1.82 (2011)</td>
</tr>
<tr>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURSES AND MIDWIVES (per 1000 population)</td>
<td>0.86 (1990)</td>
<td>1.02 (2000)</td>
<td>1.66 (2011)</td>
</tr>
<tr>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIRLS’ PRIMARY SCHOOL NET ENROLLMENT</td>
<td>94 (1992)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>(% of primary school age children)</td>
<td>Data Source: China Population Census</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADULT LITERACY RATE</td>
<td>87.02(M)</td>
<td>95.14(M)</td>
<td>97.48(M)</td>
</tr>
<tr>
<td>(% of males (M) and % females (F) aged 15 and above)</td>
<td>68.07(F) (1990)</td>
<td>86.53(F) (2000)</td>
<td>92.71(F) (2010)</td>
</tr>
<tr>
<td>Data Source: China Population Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCESS TO CLEAN WATER</td>
<td>86.7 (1995)</td>
<td>92.4 (2000)</td>
<td>94.2 (2011)</td>
</tr>
<tr>
<td>(% of rural population with access to improved source)</td>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCESS TO SANITATION FACILITIES</td>
<td>NA</td>
<td>40.3 (2000)</td>
<td>69.2 (2011)</td>
</tr>
<tr>
<td>(% of rural population with improved access)</td>
<td>Data Source: China Health Statistics Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urban Planning/Rural Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% of total population)</td>
<td>Data Source: China Statistical Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(kilowatt hours per capita)</td>
<td>Data Source: China Statistical Yearbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human Development Index</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Reported along a scale of 0 to 1. Values nearer to 1 correspond to higher human development)</td>
<td>Data Source: China Population Census</td>
<td>Country Rank (2012)</td>
<td>101</td>
</tr>
<tr>
<td><strong>Good Governance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL OF CORRUPTION</td>
<td>-0.25 (1996)</td>
<td>-0.24 (2000)</td>
<td>-0.48 (2012)</td>
</tr>
<tr>
<td>(extent that public power is used for private gain)</td>
<td>Data Source: China Population Census</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* See Table 2 for data on coverage of key RMNCH indicators.
4. Key Trends, Timelines and Challenges

China has seen major improvements in maternal and child health in the past 20 years due to intensive policy and planning efforts both inside and outside the formal health sector. Major efforts in areas such as health data collection and surveillance, health insurance and health system improvements, and coordinated efforts in areas such as education and women's education have allowed China to achieve its MDG 4 goal for reducing child mortality, and to progress on track towards its maternal mortality goal.

According to the Maternal and Child Mortality Surveillance in China, from 1991 to 2013 the U5MR decreased from 61/1000 LB to 12 LB and the neonatal mortality rate decreased from 33.1/1000 LB to 6.3 LB. According to the United Nations Interagency Group for Child Mortality Estimates, China has reduced the under-five child mortality rate by 74% from 54 to 13 per 1000 LB between 1990 and 2013. The maternal mortality rate decreased from 80/100 000 LB to 23.2 /100 000 LB. Global estimates show that maternal mortality decreased from 97 to 32 per 100 000 LB between 1990 and 2013. China achieved its MDG 4 in 2007 and is on track to achieve MDG 5a by 2015.

Even so, major regional inequities remain in regard to coverage and quality of services, with rural migrant workers at particular risk. For example:

**Socioeconomic disparities**

Significant disparities in access to health services exist between urban and rural populations, different population groups (e.g. migrant and resident and different ethnic groups), and different regions in the country (e.g. east and west). Such socioeconomic disparities are compounded by geographical barriers to health care: in China rural populations in remote areas may have to travel for a long time to access health services.

**Financial barriers**

Limited health insurance coverage, which is skewed towards people living in urban areas, has resulted in a significant emphasis on fee-for-service. China’s out-of-pocket expenditure (as a percentage of total expenditure on health) was 46% in 1995, although this reduced to 35% in 2011 (see Table 1: Key country indicators). High levels of out-of-pocket expenditure have resulted in many interventions (including immunization and safe delivery) being beyond the means of rural households.
### Table 2: CoIA indicators for maternal and child health

<table>
<thead>
<tr>
<th>CONTINUUM OF CARE STAGE</th>
<th>INDICATOR</th>
<th>MOST RECENT AVAILABLE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepregnancy</td>
<td>DEMAND FOR FAMILY PLANNING SATISFIED (% of women age 15-49 with met need for family planning)</td>
<td>N/A</td>
<td>National Health Services Survey (NHSS) 2008</td>
</tr>
<tr>
<td></td>
<td>ANTENATAL CARE (% of women attended at least 5 times during pregnancy by any provider)</td>
<td>50.5 (2008)</td>
<td>China Health Statistics Yearbook</td>
</tr>
<tr>
<td></td>
<td>SKILLED ATTENDANCE AT BIRTH (as % of total births)</td>
<td>99.7 (2011)</td>
<td>Mid-Term Review Report on the Achievement of Targets Set Out by 2011 United Nations General Assembly Political Declaration on HIV/AIDS in China</td>
</tr>
<tr>
<td></td>
<td>ANTIREtroVIRALS FOR WOMEN (HIV-Positive pregnant women to reduce mother-to-child transmission)</td>
<td>79.6 (2012)</td>
<td>China Health Statistics Yearbook</td>
</tr>
<tr>
<td></td>
<td>HOSPITAL DELIVERY (% of births in hospital)</td>
<td>98.7 (2011)</td>
<td>China Health Statistics Yearbook</td>
</tr>
<tr>
<td></td>
<td>POSTNATAL CARE FOR MOTHERS (% of mothers who received care within three days of childbirth)</td>
<td>91.0% (2011)</td>
<td>China Health Statistics Yearbook</td>
</tr>
<tr>
<td>Newborn to childhood</td>
<td>INFANT FEEDING (Exclusive breastfeeding for first six months)</td>
<td>27.6 (2008)</td>
<td>National Health Services Survey (NHSS) 2008, p. 85</td>
</tr>
<tr>
<td></td>
<td>IMMUNIZATION (children ages 12-59 months receiving DTP3)</td>
<td>90.7 (2008)</td>
<td>National Health Services Survey (NHSS) 2008</td>
</tr>
<tr>
<td></td>
<td>PNEUMONIA (antibiotic treatment for pneumonia)</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Timeline with key policy inputs**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>1992</td>
<td>2001-2010</td>
</tr>
<tr>
<td>Expanded Program on Immunization; One Child Policy</td>
<td>Outline Programme for Chinese Children's Development</td>
<td>National Programme for Women's Development in China; National Programme for Children's Development in China</td>
</tr>
<tr>
<td>1980s</td>
<td>1994</td>
<td>2002</td>
</tr>
<tr>
<td>Position of the MCH Clinician created</td>
<td>Law on Maternal and Infant Health Care</td>
<td>Law of Family Planning; Prevention of Mother-to-Child Transmission of HIV Programme</td>
</tr>
<tr>
<td>Diarrheal Disease Control Programme</td>
<td>Programme for Development of Chinese Women</td>
<td>New Cooperative Medical Scheme</td>
</tr>
<tr>
<td>1992</td>
<td>2000</td>
<td>2009</td>
</tr>
<tr>
<td>Programme to Reduce Maternal Mortality and Eliminate Neonatal Tetanus (i.e. Safe Motherhood Programme); Maternal death reviews initiated</td>
<td></td>
<td>Regulation on Provision of Family Planning Services to the Migrant Population</td>
</tr>
<tr>
<td>2001</td>
<td>2011</td>
<td>2009-2012</td>
</tr>
<tr>
<td>2012-2015</td>
<td>Plan for Further Strengthening the Health-Care System Reform</td>
<td></td>
</tr>
</tbody>
</table>
5. Health Sector Initiatives and Investments

Alongside a reduction in poverty, China has witnessed sustained declines in mortality and fertility rates over recent decades. While China met its MDG target for reducing the under 5 mortality rate (U5MR) in 2007, the share of under 5 deaths occurring in the first month of life have been steadily growing (see Figure 1). Sustained reductions have also been made to maternal mortality: China is on track to meet its MDG 5a by 2015, with the annual rate of decline slowing in recent years (see Figure 2). The total fertility rate (TFR) has also stabilized in recent years.7

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**Figure 1: Trends of U5MR/NMR, 1991-2012**

![Figure 1: Trends of U5MR/NMR, 1991-2012](image1.png)

**Figure 2: Trends in MMR / TFR, 1991-2012**

![Figure 2: Trends in MMR / TFR, 1991-2012](image2.png)
Health systems
Since the 1960s, the health system has modernized to address the complex health system challenges of an increasingly industrialized economy. China has a comprehensive three-tier medical and health service network, with province, prefecture and county hospitals providing basic health care services and response to emergencies. Township health centres and village clinics provide public health services and treatment of common diseases. The higher-level institutions also provide guidance to the lower ones.

MCH institutions are structured similarly. Professional maternal and child health institutions are available at province, prefecture and county levels, and provide public health and basic medical services to women and children. Township health centres and village clinics are under the instruction of the professional MCH institutions, providing services related to reproductive health and basic MCH data collection. Maternity hospitals, children's hospitals, and paediatric, obstetrics and gynaecology departments of general hospitals mainly provide medical care services.

Health policies
A relatively complete policy and legal framework on MCH has been established in China, centred on the Law on Maternal and Infant Health Care (1994) and the National Programme for Women/Child's Development.

The “Law on Maternal and Child Health Care” is the first law for maternal and child health, symbolizing that women’s and children’s health in China has entered a new stage of legalized administration. In August 2001, the State Council promulgated the “Implementation Guidelines of the Law on Maternal and Child Health,” making specific provisions on implementation of the Law on Maternal and Child Health Care.

In order to further promote development and protect the rights of children and women, and achieve the MDGs, the State Council formulated and implemented the National Programme for Women’s Development (1995-2000) and the National Programme for Women/Child’s Development (2000-2010), incorporating women’s and children’s health as one of the priorities in the national economic and social development plan. In 2010, the objectives and goals set in the “two programs” were mostly achieved. The latest National Program for Women/Children’s Development (2011-2020) was launched in 2011 to face the remaining and new challenges in MCH. Table 3 provides an overview of implementation of ten categories of national public health programmes in China.

Table 3: Ten Categories of National Public Health Programs

<table>
<thead>
<tr>
<th>MEGA NATIONAL PUBLIC HEALTH SERVICE PROGRAMMES BY JUNE, 2011</th>
<th>PEOPLE COVERED</th>
<th>COMPLETED RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCREENING FOR CERVICAL CANCER IN WOMEN</td>
<td>10Mn</td>
<td>100%</td>
</tr>
<tr>
<td>HEPATITIS B VACCINATION FOR UNDER-15S</td>
<td>63.57Mn</td>
<td>96%</td>
</tr>
<tr>
<td>SCREENING FOR BREAST CANCER IN WOMEN</td>
<td>1.09Mn</td>
<td>91%</td>
</tr>
<tr>
<td>ELIMINATION OF COAL-BURNING FLUOROSIS</td>
<td>1.63Mn household</td>
<td>91%</td>
</tr>
<tr>
<td>CONSTRUCTION OF SANITIZED TOILETS</td>
<td>11.28Mn</td>
<td>89%</td>
</tr>
<tr>
<td>FREE OPERATIONS FOR CATARACT PATIENTS IN RURAL AREAS</td>
<td>0.89</td>
<td>89%</td>
</tr>
<tr>
<td>SUBSIDY FOR IN-HOSPITAL DELIVERY IN RURAL AREAS</td>
<td>22Mn</td>
<td>94%</td>
</tr>
<tr>
<td>FOLIC ACID FORTIFICATION FOR RURAL WOMEN IN PRE-PREGNANCY AND EARLY PREGNANCY</td>
<td>–</td>
<td>59%</td>
</tr>
<tr>
<td>PREVENTION OF MOTHER-TO-CHILD TRANSMISSION</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Health financing

China's government health expenditure per capita increased at an annual rate of more than 13% from $53 in 1995 to $480 in 2012. The percentage of health expenditure of GDP increased from 4% in 1990 to 5.36% in 2012.

The Basic Medical Insurance System for Urban Employees, Basic Medical Insurance System for Urban Residents and the New Rural Cooperative Medical System (NRCMS) constitute China's basic medical insurance system, covering urban employees, the urban unemployed, and rural population, respectively. This health insurance covers 95% of the population. The basic medical insurance system provides important social security to mothers and children in China. National health insurance schemes have reduced out-of-pocket costs and have been associated with increases in institutional deliveries (see Figure 3). By 2011, out-of-pocket expenditure on health as a proportion of the total health expenditure had fallen to 35%, down from 46% in 1995 (see Figure 4).

**Figure 3: Total health expenditure increase 1978-2009**

**Figure 4: Achievements of Health Reform over the past years: The structural change of total health expenditure 2000-2010**
Health workforce

The Chinese government has focused on facilitating training of health personnel in modern, evidence-based medicine and on increasing staff levels. China created MCH clinician positions to provide antenatal services at the township level and strengthen delivery of basic services by village ‘barefoot doctors’, rural community members who receive minimum basic medical and paramedical training and work in rural villages. 10 000 medical students have been recruited by township hospitals, 30 000 grassroots health workers are trained as general practitioners (GPs), and national government has created the National System for GP Training.12

Health sector reforms initiated by the government in 2009 aim to establish a health care system that provides universal coverage.12 The reforms have five key areas of focus:
1. accelerating development of the basic health security system;
2. establishing an essential-medicines system;
3. improving the grass-roots health care system;
4. promoting equitable access to basic health services; and
5. advancing pilot projects in public hospitals.13

In 2009, the government initiated training of health sector personnel as a part of its health sector reforms. By the end of 2010, 72 000 health workers in township hospitals, 208 000 health workers in village hospitals, and 420 000 health workers in community health care facilities had received training.13 In addition, the 12th Five-Year Plan for Health Sector Development (2011–2015) aims to strengthen the health workforce at the primary level by training 150 000 GPs so that every 10 000 urban residents will have over two GPs, and every township hospital will have one GP. Improving the quality of health services is also a key aim of China’s health system reforms. Several efforts have been made: the national MoH Department of Supervision of Medical Services was established; and the MoH issued the Standards of Qualified Nursing Service in Hospitals in 2010, Clinical Nursing Practice Guidelines in 2011, and Plan to Enhance Qualified Nursing in 2012.14

In the 1990s, the “contract responsibility system” and “target responsibility agreements” were introduced to improve the quality of health care at all levels and monitor supply-side performance. The contract responsibility system primarily focuses on the Expanded Programme of Immunization and prenatal care. The target agreements are signed between the county health bureau, the township health centre, and the county MCH hospital to monitor their performance on delivery of services.15

Health information systems

There are four main information sources for MCH data in China that inform policy and programmes – MCH annual reports, MCH surveillance system, the National Health Service Survey (NHSS), and the national census. The MCH surveillance system in China is one of the largest centralized networks of its kind, and was formed by merging several MCH surveillance networks in 1996. The MCH annual reports provide rich information about many aspects of maternal, infant and child mortality. The NHSS complement both the surveillance system and MCH reports by providing data on service demand and supply, as well as health outcomes. And the national census mainly provides information on population and fertility.
Political prioritization of essential health interventions

The alignment of government and external partner efforts has helped drive momentum on maternal, newborn and child health (MNCH) in China. Since the 1990s, the Chinese government has implemented many international MCH programmes, services and interventions in cooperation with development partners, such as the Baby Friendly Hospital and the Baby-Friendly Initiative and Strengthening MCH and Family Planning Services at the grass-roots level (jointly implemented by the United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA) and the World Health Organization (WHO)).\(^\text{16}\) The Baby Friendly Hospital Initiative was launched to ensure that all maternity facilities become centres of breastfeeding support.

At present, China has more than 6000 Baby-Friendly Hospitals. Exclusive breastfeeding in rural areas rose from 29% in 1992 to 68% in 1994, and in urban areas increased from 10% to 48% over the same period.\(^\text{17}\)

In 2007 the Chinese government began to allocate central funds for the Expanded Program on Immunization. Since then, the central government has overseen the purchase of all vaccines and syringes, and the central and provincial governments have offered subsidies to health workers who conduct immunizations.\(^\text{9, 19}\) These efforts helped to increase immunization coverage, for example, for measles from around 84% in 2000 to 99% in 2011.\(^\text{3}\)

As a result of the implementation of other key interventions during the 11th five-year plan period, the percentage of under 5 children suffering from moderate to severe malnutrition was reduced by 49%; the rate of detection of newborn conditions reached 57%;\(^\text{13}\) and close to 98% of rural women gave birth in hospitals. The Programme to Reduce Maternal Mortality and Eliminate Neonatal Tetanus (2000–on-going) has been associated with a rise of 46% in the hospital delivery rate between 2001 and 2007 across the 1000 counties where the programme has been implemented (see Health Sector Spotlight).\(^\text{20}\)

Prioritization of interventions to facilitate safe deliveries has resulted in increased coverage of births attended by a skilled attendant. In China, subsidies are provided to primarily poor women to give birth in a health facility and incentives are given to health care providers to identify pregnant women and provide maternal health services. As part of China’s Health Sector Reforms, initiated in 2009, 8.85 million rural women were subsidized for hospital delivery in the first two years of Implementation.
Legal and financial entitlements, especially for underserved populations

The New Rural Co-operative Medical Scheme (NRCMS) was introduced in 2003. It was organized at the county level and included a maternal health care benefits package. Close to 95% of eligible people enrolled in the scheme and the establishment of the scheme in rural China is considered an important step towards universal coverage. The NRCMS progressed rapidly within the first ten years, with high-level political commitment critical for its nationwide scale-up. It is one of the top priorities on China’s social development agenda and the scheme was included in the country’s 11th (2006–2010) and 12th (2011–2015) national five-year development plans. While the NRCMS covers nearly the entire rural population, the next step will be to improve the benefit package in terms of the range of services covered and costs that are reimbursed to prevent catastrophic health expenditure.

The State Council also introduced regulation for family planning services for migrant populations in 2009. More recently, local family planning service delivery points under the National Population and Family Planning Commission have been promoting equal access to basic health care services and free family planning services for migrants.
The programme was jointly implemented by the National Working Committee for Children and Women, Ministry of Health, and the Ministry of Finance in 2000 in several West China counties, and was expanded to 1000 rural counties in Mid-west China by 2004. Three main measures were carried out to improve hospital delivery: health education, health infrastructure and social mobilization.

The programme had two main innovations:
1. A subsidy strategy where pregnant women could access direct subsidies from the local government or maternal care institutions managed by local governments to encourage hospital deliveries;
2. Obstetric experts from provincial tertiary hospitals supported primary maternal care centres to help reinforce local capacity in terms of initiating referral and training local staff.17

Obstetric service quality and techniques in local medical centres improved including through an express ‘green channel’ referral network,20 which is a network for high-risk pregnancies and pregnant women at three levels – village, township and county. Hospital delivery costs, which had previously been a heavy burden for poor women, were reduced and reimbursements increased. The hospital delivery rate increased by an average of 46% between 2001 and 2007, and evidence suggests that the increase in hospital delivery rate was associated with reductions in maternal mortality.23
6. Initiatives and Investments Outside the Health Sector

**Socioeconomic development**

A stable background and harmonised approach is important for social and economic development. The five balance development approach promoted in China focuses on: i) rural-urban, ii) West-East, iii) national-international, iv) economic-social, v) human development-natural development. The purpose of this approach is to promote a comprehensive plan for social and economic development. The approach has had a marked impact on promoting social undertakings, including in education, culture, science and technology, health care, social security and welfare, and population and family planning.

**Education**

China has achieved its MDG 2 target for universal primary education ahead of schedule; between 1990 and 2009, China’s net primary school enrolment rate increased from 97% to around 99%; over a similar period, literacy rates for adults aged 15 years and above also increased, for both males (from 87% to 97%) and females (from 68% to 91%). China is on track to achieve 100% literacy rate of 15–24-year-olds. The government had set itself a target to eliminate gender inequities in primary and secondary education by 2005 and this target has also been achieved, with the retention rate for boys and girls in primary schools at 99.4% and 99.3%, respectively.

A commitment to establishing and meeting national and international targets, including the MDGs for universal education and gender equality, has led to improvements in education in China.

The Chinese government has made education compulsory, ensuring at least nine years of education. Legislation and national programmes to introduce universal and free education have been introduced. Targeted initiatives have been used to improve access to education for underserved populations. There has been a particular focus on rural areas: the Nine-Year Compulsory Education in Rural Areas programme has concentrated on investments in infrastructure, including the provision of basic school facilities, the free distribution of textbooks and the training of teachers and principals. The prioritization of education has been an important part of China’s national development strategy.
Nutrition

The National Poverty Alleviation Office initiated nutrition and social protection programmes have targeted vulnerable, marginalized and key populations. The Chinese government formulated the Outline for the Development of Food and Nutrition in China (2001–2010), which focused on nutrition for children and teenagers, women and babies, and the elderly. Improving child nutrition, especially in underserved areas, has been a particular priority (see Spotlight of a Sector Outside of Health).

China has made strong progress in reducing the percentage of underweight children under 5 (from 13% in 1990 to 4% in 2010), and the percentage of under 5 stunted children (from 32% in 1990 to 9.4% in 2010) (see Figure 5). China succeeded in reducing its ratio of underweight children by more than 50 percent between 1990 and 2005.

Through the National Children’s Development Plan (2011–2020), the government has proposed further action to improve children’s nutritional status, such as strengthening the construction and management of baby-friendly hospitals, and improving and implementing relevant policies to support exclusive breastfeeding.

Figure 5: Trends in nutrition in children under five years of age

Note: Dashed line indicates missing data. Source: World Development Indicators
Infrastructure, water supply and sanitation

China has met its MDG 7 targets to increase the proportion of the population using improved drinking-sources and sanitation facilities. Over 200,000 water supply projects have been launched to provide access to safe drinking water for 220 million rural residents. The MoH and Ministry of Water Resources in China works with UNICEF to pilot a programme called the Water Safety Plan, which assists water treatment plants to analyse risks of contamination, and to develop plans for managing the risks and preventing pollutants from reaching end users. They also launched a pilot programme called WASH-in-Schools that supports the construction of drinking water fountains, hand washing facilities and toilets at participating schools. The programme also introduces hygiene practices into the school curriculum. Thus, access to improved water sources in rural areas has improved from 86.7% in 1995 to 94.2% in 2011 and access to improved sanitation facilities improved from 40.3% in 2000 to 69.2% in 2011.

Spotlight of a sector outside of health

CHILD NUTRITION IMPROVEMENT PILOT PROJECT IN POVERTY-STRICKEN AREAS

The national prevalence of malnutrition in children under 5 years was significantly decreased since the economic reforms and opening-up of the economy, but malnutrition and anaemia are still key issues that endanger children’s health in rural areas, especially in former revolutionary base territory, areas inhabited by minority nationalities, and remote and poorer regions.

To solve this problem, the China Development Research Foundation (CDRF) carried out the Program of Early Childhood Development in poor rural areas in two counties of Qinghai Province in 2009. Its purpose was to develop a low-cost, wide-coverage and quality intervention suitable to rural China to improve early child development.

The interventions included free nutrition tablets containing micronutrients; prenatal check-up for pregnant women; child nutrition training course provided by township and village health workers for pregnant women and mothers of infants and young children; soybean flour-based Ying Yang Bao (YYB) containing micronutrients for children aged 6-24 months; and regular medical examinations for infants.

On the basis of the successful pilot project, the MoH and the All-China Women’s Federation (ACWF) launched the Child Nutrition Improvement Pilot Project in Poverty-stricken Areas in 100 counties of Shanxi, Shaanxi, Hubei, Hunan, Chongqing, Guizhou, Yunnan, etc. in 2012. By 2013, the project had covered 300 counties and 822,000 children. Children aged between 6 months to 2 years old were provided with free nutritional supplements (ie YYB) to prevent malnutrition and anaemia. The central government provided a special grant for the project area.

Diverse activities conducted through the joint efforts of health, finance, women’s federation, poverty alleviation and other sectors included free YYB; training courses on infant and young child nutrition and feeding; health education methods; management of YYB distribution for health and women federation workers; various forms of health education activities; standardized procurement of YYB; and quality control and evaluation.
7. Key Actors and Political Economy

Successful adoption and implementation of MCH policies in China requires concerted action across sectors by government, international organisations, academia and civil society organisations, acting together to improve MCH. Chinese national and local governments play the most important roles in making MCH policies and investing in interventions related to MCH. Another responsibility of governments is to conduct policy measurement and evaluation. Secondly, many international organisations, including WHO and the World Bank, support policy setting on MCH and monitor progress on MCH in China. Furthermore, academic and research institutions generate and disseminate solid evidence on MCH to inform policy decisions and also provide technical support to monitor and evaluate the policy process. Besides, civil society has become more and more important in the adoption and implementation of MCH policy. They can bring political leaders to account by expressing their voice for women’s and children’s rights and they can also participate in policy-making and other planning and programmes related to MCH.

8. Governance and Leadership

Policies for a favourable institutional environment have been developed through the promulgation of laws and MCH-related policies. The State Council is the highest executive organ of state power, as well as the highest organ of state administration, which includes 25 component ministries or commissions, including the National Health and Family Planning Commission. In order to fulfil its commitment to the MDGs, the State Council issued the National Programme for Children’s Development in China and the National Programme for Women’s Development in China, integrating women’s health care, including reproductive health, into the overall strategic plans for socioeconomic development.
9. Challenges and Future Priorities

Although China has met its MDG 4 target and is on track for its MDG 5a target, it continues to face several challenges which, if addressed, could accelerate further progress in reducing maternal and child mortality.

**Address uneven socioeconomic development**
Mortality in the poorer Central and Western economic zones remains higher than that of the wealthier Eastern economic zone. In addition, gender disparities persist related to income, residential status and culture: most women still work in the agricultural sector. The Chinese government announced “China Western Development” in 1999 to address the unbalanced socioeconomic development between western and eastern areas. The main activities of the China western development include developing the economy, education, and health care in these poor economic zones.

**Strengthen health systems and health workforce capacities**
Investment is required to expand the skill base, size and equitable distribution of the health workforce. The number of doctors, nurses and midwives per 1000 population has increased over the last decade; however, there is unequal distribution of health workers in favour of urban and higher-income counties. The distribution and capacity of the health workforce (in particular the knowledge and skills of midwives and obstetric personnel) needs to be improved in a way that is equitable and benefits different population sub-groups.
Ensure sustainable financing
Reducing out-of-pocket expenditure and increasing public health financing is necessary to ensure universal health care coverage. Despite China’s progress in reducing out-of-pocket expenditure, it remains a barrier to access. There is a need to alleviate personal financial burdens through increasing public funding for health and strengthening existing insurance schemes to ensure progress is equitable.

Address unmet needs and new challenges
These include addressing the needs of migrant communities, promoting the new family planning policy, and moving beyond mortality to improving the quality of life and well-being across the life course. The quality of accessible health care services available to the rural population, migrant population, and children of ethnic minorities is also lower than for other groups.

Strengthen opportunities for international and south-south collaboration
Country leaders regularly meet at different events with opportunities to discuss shared problems and possible solutions. Further opportunities for shared learning could be created through site visits to different countries, through academic and civil society networks, and organizing multi-stakeholder policy dialogue in countries.
10. References


II. Acronyms

ACWF   All-China Women's Foundation
CDRF   China Development Resource Foundation
DP     Gross Domestic Product
GP     General Practitioner
HIV    Human Immunodeficiency Virus
MCH    Maternal and Child Health
MDG    Millennium Development Goals
MMR    Maternal Mortality Ration
MNCH   Maternal Newborn and Child Health
MOH    Ministry of Health
NHSS   National Health Services Survey
NRCMS  New Rural Cooperative Medical System
PPP    Purchasing Power Parity
TFR    Total Fertility Rate
UN     United Nations
UNFPA  United Nations Population Fund
UNICEF United Nations Children's Fund
U5MR   Under Five Mortality Rate
WASH   Water and Sanitation and Hygiene
YYB    Ying Yang Bao
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