



CHINA



3G Mobile Medicine: Connecting Rural and Urban Doctors to Improve Patient Care in China

Access to health care resources is severely compromised in underserved, rural areas of China, which seriously undermines the quality of patient care. In an effort to address this situation, 3G Mobile Medicine demonstrates how 3G wireless technology can be used in rural health clinics to extend the reach of clinicians and improve patient care for marginalized communities.

2013 Statistics

- » **Life expectancy: 74.9 years**
- » **Population: 1.35 billion**
- » **GDP per capita: US\$9,300 (2012 est.)**
- » **Mobile penetration: 91.2% (est.)**

Sources: CIA World Factbook (<https://www.cia.gov/library/publications/the-world-factbook/index.html>); mobile penetration data provided by Paul Budde Communication Pty Ltd.

Challenge

- » According to the World Health Organization, the health workforce in China remains a constraint for equitable implementation of quality health services. There are disparities of human resources across different geographic regions and areas.¹
- » During implementation of 3G Mobile Medicine, the State Council issued a plan for health care reform. The overall goal of the reform is to establish and improve the basic health care system covering urban and rural residents, and to provide people with secure, efficient, convenient, and affordable health care services. 3G Mobile Medicine aims to support this policy objective.²
- » The Chinese government has prioritized improving the basic health care system covering urban and rural residents, and providing people with secure, efficient, convenient and affordable health care services.³

Solution

- » Urban and rural doctors have been given mobile devices, such as smartphones and 3G enabled PCs, to access an application with helpful health care information.
- » The application has the following features:
 - Electronic Health Records — Designated health care workers can locate and receive confidential access to a patient's medical chart via a computer or mobile phone anytime, anywhere using 3G Internet access. Participating clinics can also share the records, which ensures continuity of care even if patients visit different clinics.
 - Access to Rural Health Care Content — Clinicians use cell phones and 3G enabled PCs to access educational and treatment content designed to address the specific needs of rural doctors, including information on how to treat common medical problems, such as respiratory illnesses and broken bones, as well as information on preventative medicine. Access to this new information improves the ability of

The combination of a health care application specifically designed for rural doctors and high-speed wireless connectivity will help doctors in underdeveloped areas to benefit from access to the latest medical information and real-time connections with specialists in leading hospitals across China.

— Li Tao, Chairman of Xi'an Kingtone

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doctors to more efficiently diagnose and treat a broader range of illnesses than before the project was implemented.

- Remote Consultation — Rural doctors consult remotely with physicians in other participating clinics and with urban doctors, allowing each to benefit from the expertise of the others and further increasing the kinds of conditions they are able to treat effectively.

Technology

- » 3G mobile broadband connectivity via China Telecom's network.
- » 3G enabled smartphones powered by Qualcomm chipsets and Internet ready PCs.
- » Specialized mobile application synchronizes in real time with a customized web application, allowing easy access to other clinicians, educational information, and patient health records.

Impact

- » 3G Mobile Medicine has been expanded to 21 clinics in Xian County, Hebei Province.
- » Approximately 150 rural doctors have received instruction on how to use the application and accompanying devices as well as additional medical and technical training.
- » Participating clinics collectively serve 300,000 patients who have either directly or indirectly benefitted from the project.

Project Stakeholders

- » China Children and Teenagers' Fund aided in conducting a needs assessment, site selection, training and project implementation.
- » China Rural Doctors Training Center aided in doctor training, provided mobile content, and identified physicians and experts to offer remote medical consultations to rural doctors.
- » China Telecom provides 3G connectivity at a subsidized rate.
- » Xi'an Kingtone oversees project implementation and application development.
- » Qualcomm Wireless Reach is the main project funder.



¹ CHINA-WHO COUNTRY COOPERATION STRATEGY 2013-2015. [HTTP://WWW.WPRO.WHO.INT/CHINA/EN_CHINACCs13.PDF](http://www.wpro.who.int/china/en_chinaccs13.pdf)

² IBID

³ [HTTP://NEWS.XINHUANET.COM/ENGLISH/2009-04/06/CONTENT_11139417.HTM](http://news.xinhuanet.com/english/2009-04/06/content_11139417.htm)

Qualcomm Wireless Reach™

Qualcomm believes access to advanced wireless technologies can improve people's lives. Qualcomm Wireless Reach is a strategic program that brings wireless technology to underserved communities globally. Wireless Reach invests in projects that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve environmental sustainability. For more information, please visit www.qualcomm.com/wirelessreach.