

# Surmang Foundation

## **Partnering for Rural Health:** *increasing rural health care capacity and access to services in partnership with the Chinese Government*

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# Surmang Foundation

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*Today the top three killers in most poor countries are maternal death around childbirth and pediatric respiratory and intestinal infections leading to death from pulmonary failure or uncontrolled diarrhea. But few women's rights groups put safe pregnancy near the top of their list of priorities, and there is no dysentery lobby or celebrity attention given to coughing babies.*

*Laurie Garrett, THE CHALLENGE OF GLOBAL HEALTH, Foreign Affairs*

## **1. Overview.**

It is difficult to see the reality of the lives of 40 million people in China who earn less than ¥1RMB/day, because they live in remote places like deserts where you can't have a shopping center, mountainous areas where you can't land a plane, along un-navigable rivers. For these people not only is there little access to health care, but the health care that is available is sub-standard, and not user-friendly. We want to change that.

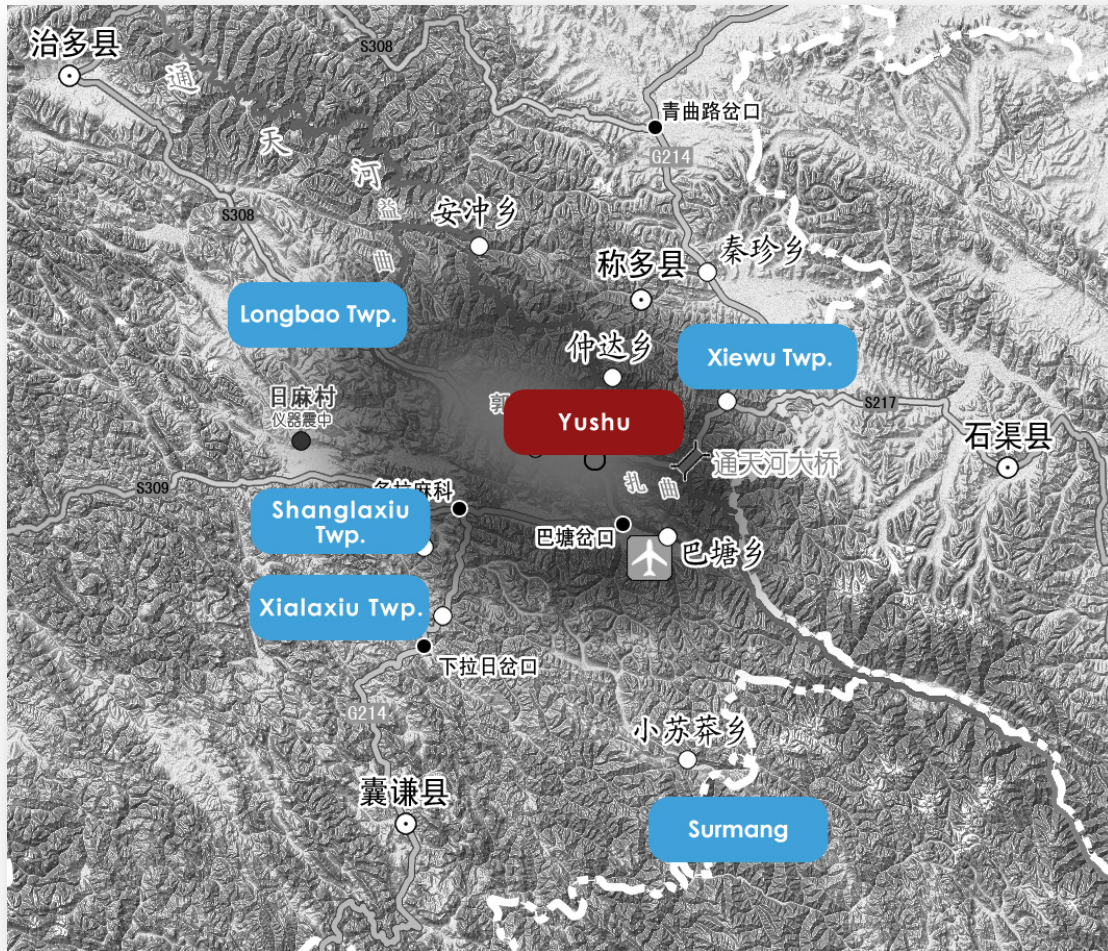
Since 1992, Surmang Foundation has run a private clinic in this ultra-poor region. Not only that, but it has developed a prototype out of that experience, one that can create access to quality health care, that can make available a user-friendly health care interface. This is what the Surmang experience has proven and it is what the Chinese government has signed on to. In 2010, The Surmang Prototype of rural health care was accepted by the Chinese Government, Yushu Prefecture Public Health Bureau, as the model that would be used to restore and improve health care delivery in the shadow of the devastating 2010 Yushu earthquake.

But for all our talk about access to quality services and user-interfaces, we must remember that the beating heart of our work is the protection of the lives of at-risk mothers and babies, people for whom a health crisis can mean the end of a family, or a decline into the spiral of poverty. In a catchment that has one of the highest infant and maternal mortality rates in the world, Surmang Foundation has reduced maternal mortality to zero in 2011. In the past 10 years over 150,000 patients have been treated for free, including meds.

Since the signing of that MOU, on December 9, 2010, Boston Consulting Group has developed a Strategic Plan and Fundraising deck, in order to clarify the obstacles and opportunities for implementing the MOU, and also fund the project among the MNCs and other funding sources.

The purpose of this document is to describe the project in simple terms and propose budgets for its implementation.

The four clinics that Surmang is partnered with are: Xiewu, Longbao, Xialaxu and Maozhuang.



Yushu Prefecture and the 5 clinics

In August and September of that year, two assessments were convened: One at Xiewu and another, the Rural Health Festival, at the Surmang Clinic. Drs. Yip and Factor were at Xiewu and the remaining PH professionals were at the Rural Health Festival.

This report contains the findings of both assessments and proposes a way forward.

## 2. Executive Summary:

The project basically consists of one major goal: creating one through public health train from the farming/nomadic/village level to the township level to the prefecture level, based on the Surmang Prototype.



The through train.

**A. Goals:**

- a. **increasing the capacity** of providers at the 4 township clinics and village clinics
- b. **increasing access to health services through Community Health Worker recruitment and training**
- c. **advancing the Surmang management model** with regard to record keeping and meds use. Both of these are to help the clinics meet the PH KPI's.
- d. An ancillary goal is the connection with the Yushu Prefecture MCH hospital for evacuation and other advanced services.

**B. Implementation:** occurs in two phases:

- a. **Phase One:** this year
  - i. **Township Provider Capacity Improvement:** At Xiewu Twp Clinic (Ray Yip's proposal) the first place to work because it is the most developed of the 4 clinics, and presents the greatest challenges. It is also the clinic most seriously defined by iron rice bowl/hardened work habits/no KPI relevance etc.
  - ii. **Assessing the availability** of village-level public health services.
  - iii. **Mobilizing rural communities for public health; Increasing the capacity of Village doctors and creating greater access to services through** Village Level Health Workers, including training of Twp docs., Village docs and Maternal Health Workers.
  - iv. **Management: Development of relevant logistics and infrastructure**
- b. **Phase Two.** The other 3 Clinics + Surmang
  - i. 2012 et seq: **Township Provider Capacity Improvement** Xialaxu, Longbao & Maozhuang Twp. Clinics
  - ii. increasing the availability of PH services and capacity of the Village doctors and Maternal Health Workers/CHWs Xialaxu, Longbao & Maozhuang Twp.
    1. via an assessment conducted by PKU
    2. training of Village docs and MHWs/CHWs
  - iii. increasing the availability of PH services and capacity of the Village doctors and 40 CHWs affiliated with the Surmang Clinic

## **B. A/increasing capacity and advancing the management model**

# Assessment & Recommendation for the Improvement of PHC & MCH Service at Township level – Yushu, Qinghai, PRC

Ray Yip, MD, MPH

### **Background**

The purpose of this assessment is to define the specific project content including plan of operation for the improvement of PHC-MCH service at 4 township health centers in Yushu prefecture based on an MOU signed on November 2010 between the Yushu Bureau of Health and the Surmang Foundation. This

Assessment took place at village post and township health center of Xiewu Township, and the Prefecture MCH center of Yushu Project design is building on the on-going health reform guidelines of Qinghai Province.

### **Assessment Findings**

#### *1. Financial access for medical care – demand side*

- Substantial increase in RCMS (rural cooperative medical scheme) coverage mainly for inpatient care also to a lesser extent for outpatient care
- Government input 300 RMB+ 30 RMB co-payment each year/person
- Inpatient care at township level covered at 80% level.
- Outpatient care can be paid with the 30 RMB self-paid portion.
- National program on Safe Motherhood provides up to 500 RMB for hospital-based delivery.
- The rapid expansion of RCMS has reached a level of sufficient coverage for essential care – ability to pay is no longer a barrier for access to care including hospital delivery.

#### *2. Financing the providers*

- As part of the rural health reform funding for health care workers have substantially improved in the past 2 years.
- Village Health workers are earmarked for 500 RMB/mo. with actual pay around 360 RMB – a big improvement from no salary previously.
- Township Health workers now receiving 100% of defined salary (3000-4000 RMB/mo.) plus sharing of surplus income from the operation which estimated to be 500-1000 RMB/mo. (previously township workers received 70% of the defined salary).
- Major source of the additional income beyond salary is the 15% mark-up of drugs and supplies dispensed which was supposed to be terminated with the new health reform measures. However Yushu still kept this practice – a major reason for over-prescription and inappropriate prescription

### 3. General Operation of the Township Center (I)

- Xiewu Health Center benefited from a post-earthquake new facility worth 300,000 RMB and 20% of the budget can be used to improve hardware such as lab or diagnostic equipment.
- Current state of operation is not up to the basic standard of clinical laboratory, X-ray, and delivery
- Pharmacy supposedly carries only approved drugs from the essential list but it clearly contains many items outside of approved list.
- Good basic record keeping for all cases requires reimbursement from the RCMS using computer for data entry – containing breakdown of cost (service, procedure, and drugs)

### 4. General Operation of the Township Center (II)

- Detailed records for drugs are kept by the pharmacy in the form of prescriptions.
- Xiewu Health center does keep a basic logbook of patients seen at clinic
- The three sources of records – RCMS, clinic log, and pharmacy, if can be unified into one record system, it will be a complete patient record management system for monitoring of practice and performance (a key measure for the project)
- Review of the prescriptions found 1/3 to 1/2 of the prescriptions are inappropriate mainly overuse of antibiotics or steroids, and overuse of IV). This is not a surprising finding given drugs has been and still a significant source of income.

### 5. Safe motherhood or hospital-based delivery

- According to the Director of Township Health Center about 70% of births now delivered at Center (interviews of village level health worker suggesting the rate is lower)
- The delivery room has one basic delivery bed, which is also used for family planning purpose, and there is no provision for any emergency measures – oxygen, oxytocin, plasma expander, neonatal resuscitation equipment – in short, totally unprepared for obstetric or neonatal emergency
- There is no special room for maternity except basic inpatient room with four beds in a room – not a mother or family friendly facility
- Review of past delivery bills and found more than half the charges are for drugs in order to push the billing to 500 RMB

### 6. Prefecture level MCH Center

- Yushu MCH Center performs delivery for nearby communities and handles referral of complicated cases from outline areas but C-section cannot be done at this facility
- Basic emergency obstetric equipment in place and can serve as the basic model of Township health centers to make it safer – the input for the basic system does not require major investment, the key is in management and supervision

*Prefecture MCH Director indicted her willingness to be the technical lead in assuring the build up in capacity and function for the 4 health centers to be supported by the project.*

-A chance meeting with provincial level MCH Center staff also found her to be very positive with the proposed model in making township level based delivery safer

#### 7. Village level health workers

Xiewu township deployed 12 new village level health workers about 2 years ago – all women, all completed 3 years of health school training, and all getting paid

-Only some of the village workers have delivery experience and most home delivery are done by older and unqualified village workers

-Selected interview of the new village health workers found they seem to be happy to promote hospital-based delivery and mainly perform antenatal care

-The new generation of village health workers per health reform presents an excellent chance to migrate the home-based delivery to hospital – the agent of change

#### Summary of Key Findings – PHC

The on-going health reform and RCMS has reached a meaningful level such meaningful improvement of the PHC quality is within reach, provided following measures can place:

- **Profit from drugs can not be used** as bonus for health workers
- **Adequate monitoring of work load and basic performance through proper record keeping** – combine clinic, pharmacy, and RCMS
- **Devise an incentive system to reward improving behavior** or practice to make up for the loss of income generation from inappropriate use or over use of drugs
- **On-site training** to improve the bad habits from years of inappropriate practice caused by perverse incentive mechanism – drugs as the primary source of income
- **Adequate management support and supervision** to assure the guidelines are observed

#### Summary of Key Findings – MCH

The National Safe Motherhood Program provided a major drive for facility-based delivery by providing 500 RMB per case, the Surmang project support will focus on accelerate this process and improve the quality or safety of the 4 township health centers as a model

- First priority is to **upgrade the basic set up for emergency care** for both mother and neonates using the prefecture MCH center as a model and enlist them as trainer and supervisor
- **Enlist village health workers for antenatal care and referral** for delivery at township or higher level
- **Provide an incentive scheme** to village and township level workers if there is an increase of hospital-based delivery

#### Recommendations (I)

- An agreed plan-of-operation with time line and funding be completed before end of October such fund transfer to Yushu Project management Office can occur by November – less than one year



from the signing of MOU (it would be embarrassing if this drags on much longer – risk of running out of good will)

- Complete the management and support structure
- Medical and system advisor at Beijing or Xining level – still needed
- Administrative manager at Beijing or Xining- Mr. Deng Haiping
- Project Director at Yushu – Dr. Xiao Ziugar and associate
- Record and data management consultant to set up both the paper and electronic record for the 4 township health centers building on the data collection form for RCMS

### **Recommendations (II)**

- **Define an in-service based training program** for village health workers and township health workers to learn about both the principle and specific procedures for the PHC and MCH improvement effort especially record keeping
- **Define a periodic clinical skill training program using resources similar to that for the little Surmang Clinic**, and use Yushu MCH staff for the Safe Motherhood component
- Define an **incentive scheme** for:
  1. **Proper record keeping** at Township center
  2. **Improved behavior** for appropriate use of drugs
  3. **Referral of women for delivery at hospital** by village level workers

### **Recommendations (III)**

- **Define a hardware support package for each Township Health Centers:**
  1. Outfit one room for mother friendly waiting and postpartum room – estimated 5,000 RMB
  2. Emergency OB set up - a supply of Oxytocin and albumin as plasma expander with a small refrigerator - estimated 5,000 RMB
  3. Suction pump – estimated 1,000 RMB
  4. Infant resuscitation table and warmer – estimated 15,000 RBM
  5. Two desk-top PCs – estimated 10,000 RMB
  6. Define a funding package for Supervision – based on a unit cost of one visit from Yushu to Township (detail consult Mr. Deng) 500 RMB per visit to cover gas, food, and service 1-2 visits per township per month based on actual activity
  7. See Budget for comprehensive cost breakdown

### **Comments**

This project design is building on the existing health reform effort of China in general and Qinghai specifically

- The goal of this project is to improve the efficiency and effectiveness of the PHC and MCH services in rural area – a goal will be appreciated by the local and possibly national health authorities.
- The main strategy of this project is to address the weakness of the current PHC and MCH service – lack of accountable management and supervision, including record keeping that can be used as a management tool
- The use of the Yushu Health Bureau as the Project management Office provided the critical link of assuring ownership of the results – planning for success which is adoption of the project measures across Qinghai and beyond

#### **4/--B/ Mobilizing rural communities for public health:**

**i. Assessment:** the findings of the Festival

### **Surmang Rural Health Festival**

*The Surmang Rural Health Festival was first-of-its-kind convocation of rural health workers in China. Its purpose was to get the participants to share, with each other, their local situations, the challenges to health, and to propose solutions. The participants were all 40 Surmang Foundation Community Health Workers (CHWs). They are the basic means by which the clinic is pro-active in rural nomadic and farming communities creating a communicative link between the Surmang Clinic and the communities the CHWs serve.*

*The CHWs are one of the three pillars of the Surmang Prototype, the other three being 1) increased capacity of providers, 2) providers from the local region, 3) close relationship between employees and management.*

*For the 5 PH experts<sup>1</sup> who attended as observers, it provided the ability to see the CHWs and assess the rural health problems in a way that would otherwise be unwieldy or just logistically impossible due to the vast distances environmental challenges of the region. So in this case one might say, "the mountain came to Mohammed."*

*This summary provides a snapshot of the region as garnered from the CHWs themselves, with the help of Festival Coordinators David Wangbo, Objen Tsering, and Drolma.*

#### **Summary.**

This document summarizes the information gathered directly from the participants in the Surmang Rural Health Festival held at Surmang Clinic September 6-12, 2011. Participants for the five days of intensive group discussions included 38 community health workers from the villages of Zatch, Mendo, Rongdou, Jereke/Modi and Tsokie/Kowu. The discussions were conducted in Tibetan and moderated by Tibetan speaking leaders. The information was then translated directly into English and is summarized below.

#### Villages Resources

- Transportation: Most households have a motorbike. 5-17 small cars and 1-2 large trucks per 60-household village, needed for transport of food from Yushu. Roads need improvement, especially to summer homes in nomadic areas. Costs 1000 RMB to rent a car to Yushu for emergency.
- Electricity limited in most villages. Most have community solar panels; Zatch has to purchase individual household panels. Most only have lights for several hours/day, can't use TV or fridge. Some have to pay, some get free electricity.
- No cell service to most villages
- Water mostly carried from river, dirty. Some have well or spring water, some have pump. In general, volume of river and spring water has

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<sup>1</sup> Dr. Dawn Factor, MPH, Dr. Mariette Wiebenga, MPH, Dr. Mary Wellhoner, MPH, Karen Deutsch RN, MPH, Dr. Amy Levi, Ph.D., MPH

decreased over last 20 years. Pumped water from river planned in Rongdou/Mendo.

### General Problems

- No primary school
- No doctor, no clinic
- No clean water
- No cell service
- Need more reliable and less expensive electricity
- Bridges needed in Modi, Mendo/Rongdou

### General Health Problems

- Lack of vaccination
- TB, many cases, some treated at home, a few in hospital in Xining
- In Zatch 70-80% of older people have goiter
- Appendicitis frequent, surgical treatment in Yushu successful/safe
- Diet low in fruits/vegetables, ability to grow limited, transport from Yushu expensive.  
Rongdou wants green house.
- Diarrhea/stomach problems related to water/hygiene/no toilets
- Hepatitis reported as B
- High blood pressure
- Dental problems in children

## **ii. The Recommendations**

### **Specific objectives and key action points**

- 1) Mobilizing communities: strengthening community based health care
- 2) Linking communities to services: improving the referral system
- 3) Training & capacity development: strengthening local capacity
- 4) Upgrading clinical services: ensuring skilled attendance and basic EMCOR
- 5) Monitoring and evaluation: enhancing accountability

#### **1) Mobilizing communities: strengthening community based health care**

The Surmang community health program deserves immediate strengthening based on the recommendations and plans made during the Rural Health Festival. More information is needed on the availability and functionality of village doctors, and the best way to organize this level of care.

#### *Surmang CHWs:*

- Expand training/group case review on quarterly basis in winter months
- Provide extra equipment and health education materials
- Explore options for starting cascade of HBLSS training for more robust community engagement

#### *Village doctors:*

- Organize an assessment of village doctors/community MCH providers:
- Assess the current availability and functionality of village doctors

- Compare the 'traditional' village doctors - typically elderly, male - with the Xiewu model of young literate female village doctors, and with the Jinpa model of trained community midwives.
- Compare job description, recruitment criteria and training requirements for Village Health Workers with criteria and training for CHWs in Xialaxu, Longbao, and Maozhuang.
- Train VHWs as CHWs
- Revise training plan for village doctors/community MCH providers based on the assessment.

## **2) Training & capacity development: strengthening local capacity**

Based on the results of the Rural Health Festival, a detailed action plan was developed for Surmang Clinic and its CHWs. This calls for follow up and implementation by SF starting this winter (2011-12).

*Surmang CHWs (see also point 1):*

- Quarterly training/case reviews for CHWs of Surmang/Zatch and Rongdou/Mendo
- Recruitment and training of new CHWs
- Provision of additional equipment
- Health education materials

Initial training at township clinic level should include skilled birth attendance and/or basic elements of BEmONC plus an element of data collection and record keeping. Problem oriented training with ample use of simulation and practical exercise is preferred over classroom theoretical training. Surmang doctors should attend these trainings if possible. In addition, selected doctors from each site should have a more advanced skills training in a high-volume setting (Xining or Beijing).

*Township clinics:*

- *Initial* training: skilled birth attendance and/or basic elements of BEmONC, plus an element of data collection and record keeping. Problem oriented training with ample use of simulation and practical exercise is preferred over classroom theoretical training.
- *Advanced* training: high volume obstetrics -in Xining or Beijing- for selected trainees.

<b>Timeline</b>	<b>Item</b>	<b>number</b>	<b>Cost in RMB ¥</b>
<b>Nov. 1, 2011 – Oct 31, '12</b>			
<b>Hardware</b>	Outfitting Waiting & Postpartum room	5	¥100,000
	Emergency OB setup	5	25,000
	Infant resuscitation table and warmer	5	75,000
	Desktop PCs	4	40,000
<b>Supervision/Mgt</b>			
	Project Director	1	60,000
	Yushu MCH Director & Consultant staff		100,000
	Assessment of Village clinics by PKU		60,000
	Training of village doctors, MHW/CHWs, including training materials in 5 locations		65,000
<b>Logistics</b>			
	Ground transport for supervision	One year	50,000
	Ground transport for assessments	3 months	50,000
	Misc. air transport & hotel: for supervision, assessments		75,000
	Sub total		700,000
	Overhead at 10%		70,000
<b>Total</b>			<b>¥770,000</b>
	<b>Recurrent total cost 1<sup>st</sup> quarter</b>		<b>¥192,500</b>