REPORT OF
MOBILE HEALTH CARE

For Dental, E.N.T, Eye Diseases, Expectant Mothers and Pediatric Services in the Remote Areas of:

Bounneua and Bountai districts
Phongsaly Province, Lao PDR.

September, 2010

Oudomxay and Phongsaly Hospitals
In Cooperation with
Lao Rehabilitation Foundation
Women for World Health Organization
Fred Hollows Foundation

(1)
− Refer to the agreement letter of Phongsaly Provincial Hospital and Provincial Public Health Department No. 007 of November 3rd 2009.
− Refer to the agreement letter of Phongsaly Provincial Governor No. 297 of Sept 09, 2010.
− Refer to the agreement letter of Administration Office and Therapy Department, Minister of Public Health No. 070 of January 28th 2010.
− Refer to agreement letter of Administration Office Department, Ministry of Foreign Affair No. 975 of Sept 20, 2010.

I. BACKGROUND INFORMATION

1. Phongsaly Province

Phongsaly Province is one of the remotest of the Lao PDR provinces. It is dominated by mountainous terrain covering 95% of the land with an abundance of forests. The province is divided into seven districts consisting of 542 villages. The roads to most villages are in very poor condition and driving is challenging which makes access to these villages difficult. 198 of the villages in Phongsaly province have no road access at all. 43% are far below poverty level.

The population of 166,635 consists of many ethnic groups such as Khmu, Yao, Phounoy Hor, Ekor, Akha, Tai Dum, Leu, Hmong and others, each with their own identity, culture, traditions, costumes and languages. The majority of people living in remote areas are poor. The struggling economy is mainly farming and agricultural; tea being the main export.

Map of Laos and Phongsaly Province:

The public healthcare system of the province is extremely underdeveloped. It consists of one provincial hospital, one military hospital, six district hospitals and 25 healthcare centers providing service to the entire population. The challenge of proper healthcare is further exasperated by the remoteness of villages as well as by the lack of medical personnel and diagnostic equipment.

Bounneue and Bountai Districts, Phongsaly Province:

Bounneua and Bountai districts are having extremely limited access to healthcare, including proper care for impaired vision, E.N.T, dental services, monitoring the health of expectant mothers and pediatric services. These districts are particularly limited in medical doctors, medicine, diagnostic equipment and treatment options. Primary treatment only is available and patients must often be referred to healthcare centers in other parts of the country.
LAO REHABILITATION FOUNDATION (LRF):

Headquartered in California, USA, Lao Rehabilitation Foundation, Inc. (LRF) is a non-profit, non-religious, non-political organization. Activities are conducted by its President, Dr. Luc Janssens. LRF also maintains an office at the Department of Public Health in Vientiane, Laos. The purpose of LRF is to provide medical services to Laotian citizens, with a greater focus on children. The foundation recognizes that the best guarantee for sound health is adequate nutrition, basic hygiene, decent shelter, education and reasonable access to medical facilities. The Foundation has conducted several missions in the remote areas of Laos providing medical services to the poor. The Foundation has also provided mobile medical equipment for dental, E.N.T and eye care.

WOMEN FOR WORLD HEALTH (WFWH):

Headquartered in California, USA, Women for World Health is a non-profit, non-religious, non-political organization. Activities are conducted by its President, Ms. Denise Cucurny. Through holistic programs that include educational and medical intervention, Women for World Health, Inc. is dedicated to creating an enduring philanthropic organization to improve the lives of those living in impoverished circumstances throughout the world.

FRED HOLLOWS FOUNDATION (FHF):

The Fred Hollows Foundation (FHF) headquartered in Sydney, Australia, is a non-profit, non-government organization (NGO). FHF maintains an office at the Oudomkham Hotel in Oudomxay province. The project goal is to reduce avoidable blindness in Lao PDR. FHF has a signed MoU with the Ministry of Health of Lao PDR (MoH), dated Sept, 2008. The project duration is approved for 3 years, continuing through August, 2011. Activities include research, human resource development, infrastructure development, disease control, and the strengthening of advocacy partnerships.

II. OBJECTIVE

1. General objective:
   - Decrease the prevalence of blindness, deafness, cavitas dentis and the maternal-infant mortality rate.
   - Broaden the coverage of health services for people in remote areas, ethnic minority groups and the urban poor.

2. Specific objective:
   - Treat the main cause of blindness by cataract surgery.
   - Treat otitis media, the main cause of deafness.
   - Provide treatment and prevention of cavitas dentis by calciferous cleaning.
   - Examine pregnant women by ultrasound scanning to evaluate fetal health and determine an estimated date of delivery.
   - Provide pediatric treatment and prevention of infectious disease in children.
   - Healthcare education for eye, dental, ENT and expectant mothers.
III. TARGET

- Service all patients with needs for ENT, dental, and eye care with no regard to gender, age, religion and ethnicity.
- Service expectant mothers and children with no regard to gender, age, religion and ethnicity.
- Service all patients free of charge.
- Provide service to a total target of 2,280 patients as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Treatment</th>
<th>Target No. Patient</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BN district</td>
<td>BT district</td>
</tr>
<tr>
<td>1</td>
<td>Dental</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>2</td>
<td>E.N.T</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>3</td>
<td>Eye</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>4</td>
<td>Pregnancy</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>Infant and child</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Grand total</td>
<td>1,090</td>
<td>1,190</td>
</tr>
</tbody>
</table>

IV. TECHNICAL ACTIVITY

1. Preparing

- 3 months to prepare (June 2010 to Sept 2010). LRF and Lao coordinator went to Bounneua and Bountai district hospitals to collect data about patients, needs and location where to service, inform local authorities of the purpose, plan activities and get agreement from the Therapy Department, Administrative Office of the Ministry of Health and Administration Office Department of the Ministry of Foreign Affairs.
- Appointed patients by advertising and by informing them from district hospitals to villages.
- Prepared equipment, supplies, medicines and budget and assembled a team.

1.1 Team work

The team included 22 people as follows:

- Lao team (18):
  - 1 Ophthalmologist
  - 3 Dentists
  - 1 Pediatrician
  - 1 ENT doctor
  - 2 Obstetric nurses
  - 3 Ophthalmic nurses
  - 6 Nurses assistants
  - 1 Echography doctor

- USA team (3):
  - 1 President of LRF
  - 1 General sponsor
  - 1 Coordinator (Lao)

- Volunteer (1):
  - 1 Japanese volunteer

(Name detail on attaches files)
1.2 Instrument and Medicine

This mission was performed using up to date medical equipment intended for mobile healthcare and medicine of good quality was provided for treatment. It included:

1. Instruments and medicine for ENT service.
2. Instruments and medicine for dental service.
3. Instruments and medicine for eye service.
4. Instruments and medicine for expectant mothers.
5. Instruments and medicine for pediatric services.

(Detail on attaches files)

2. Activities performed

The mission started first in Bounneua district for 3 days from Sept. 24-27, 2010 and continued in Bountai district for the next 2 days from Sept. 28-29, 2010. The team provided service to all patients, with no regard to gender, age, ethnicity or religion. Services were free of charge for all patients 3,056 cases.

Ekor ethnic meet the team for health check

Patient are waiting to be examined under heavy rain

Dr. Luc Janssens takes patient’s blood pressure

The medicine is provided patients by doctor’s order
Patients registered (3,395), examined and treated (3,056):

<table>
<thead>
<tr>
<th>Disease/Service</th>
<th>Registered Bounneua</th>
<th>Registered Bountai</th>
<th>Examined/Treated Bounneua</th>
<th>Examined/Treated Bountai</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT</td>
<td>720</td>
<td>370</td>
<td>498</td>
<td>351</td>
<td></td>
</tr>
<tr>
<td>Dental</td>
<td>542</td>
<td>283</td>
<td>458</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>332</td>
<td>180</td>
<td>326</td>
<td>174</td>
<td>Cat surgery 25, others 18</td>
</tr>
<tr>
<td>Expectant Mother</td>
<td>79</td>
<td>40</td>
<td>79</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td>559</td>
<td>290</td>
<td>557</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>2,232</td>
<td>1,163</td>
<td>1,918</td>
<td>1,138</td>
<td>Registered: 3,395 Examined/treated: 3,056</td>
</tr>
</tbody>
</table>

The team used modern manual and automated equipment to examine and treat the patients divided into 5 categories:

2.1 Examined and treated E.N.T disease:

The ENT team (1 otolaryngologist, 2 ENT nurses), activities performed:
- Audiology tests.
- Treat otitis media.
- Remove foreign body from E.N.T.
- Treat nose infections.
- Treat amygdalis.

For both districts, Bounneua and Bountai, the number of patient who registered (1,090 persons) was higher than examined and treated (849 persons). The main ENT cases were:

- Otitis Media acute and chronic: 302 cases
- Otalgia: 186 cases
- Otitis Externa acute and chronic: 123 cases
- Pharyngitis: 103 cases
- MXHL: 87 cases
- Rhinitis: 42 cases
- Other: 06 cases
2.2 Examined and treated dental disease:

Dental team (3 dentists, 4 dental nurses), activities performed:
- Tooth extraction (dentitis).
- Treatment of cavities.
- Calciferous cleaning.
- Save teeth. (No. 16)

Dental patients are examined and treated

Tooth extraction and calciferous cleaning by Dr. Korakan Keochantha, dentist

Tooth extraction by Dr. Phetlamphan Onnavong, dentist

For both districts, Bounneua and Bountai, the number of patient who registered (825 persons) was higher than examined and treated (741 persons). The main dental cases were:
- Extracted of dentitis 618 cases
- Calciferous cleaning 132 cases
- Treat cavities 151 cases

2.3 Examined and treated eye disease:

Eye team (1 ophthalmologist, 3 ophthalmic nurses), activities performed:
- Vision test by E-Chart or Snellen Chart.
- Diagnosis with medicinal treatment of some eye diseases.
- Eye disease surgery when needed.
- Cataract surgery with implant IOL.
- Health education of primary eye care and post-operative procedures.

Visual acuity test performed by ophthalmic nurse
For both districts, Bounneua and Bountai the number of patient registered (512 persons) and examined (500) was quite similar. Vision test with diagnostic examinations were provided to 500 patients. 43 patients were operated as follows:

- Cataract surgery 25 cases
- Pterygium excision 07 cases
- Eyelid correction 07 cases
- Other 04 cases

2.4 Examined expectant mothers:

Pregnancy team (1 echography doctor, 2 OB nurses), activities performed:

- General examination.
- Examination of the fetus by Echography.
- Health education including follow up hospital visits, especially for the cases deemed problematic.
For both districts, Bounneua and Bountai the number of patient registered (119 cases) and examined with echography (118 cases) was nearly identical. 9 cases were declared problematic:
- Breach presentation 07 cases
- Twins 01 case
- Placenta Previa 01 case

All problematic cases were advised to follow up at the provincial hospital.

2.5 Examined and treated infant/child:

Pediatric team (1 pediatrician, 2 assisting nurses), activities performed:
- General pediatric exam.
- Examine infectious disease and provide medicinal treatment.
- Health education.
For both districts, Bounneua and Bountai, the number of patients registered (849 persons) was equal to those examined and treated (847 persons). The main causes of children diseases were:

- Pneumonia 335 cases
- Cold fever 156 cases
- Parasites 134 cases
- Diarrhea 122 cases
- Tonsillitis 91 cases
- Other 11 cases

2.6 Other activity performed:
Dr. Luc Janssens, President of Lao Rehabilitation Foundation donated one Ultrasound machine (echography) with abdominal probe, video printer and related supplies to Phongsaly Provincial Hospital. LRF also donated ENT, dental and pediatric medical equipment and medicine to Bounneua and Bountai districts.

Dr. Luc Janssens donated ultrasound machine to Phongsaly provincial hospital
Received by Dr. Phonpadith Thipmanyvong, Chief of administrative office of Phongsaly PoH.

Dr. Luc Janssens donated medicine and some medical equipment to Bounneua District
Received by Mr. Bounxay, Director of Bounneua District Hospital
Lao Rehabilitation Foundation provided funds to treat infected Akha people at LuangNamtha Provincial Hospital (Sept 23, 2010 – Oct 14, 2010)

Mrs. YuaJeum, 44 years old  
Mrs. Yermy, 49 years old

VIII. BUDGET AND EXPENDITURE

A total budget of **45,440.00 USD**, mainly provided by Lao Rehabilitation Foundation with some support from Women for World Health Organization and Fred Hollows Foundation was developed prior to the mission.

The total expenditure was **44,544 USD** which included:

- Instruments and equipment $18,450
- Transportation of equipment (from US to Laos) $1,000
- Medicine (drugs) $9,582
- Transportation and accommodation of USA team $5,800
- Accommodation and per diem of Lao team $2,713
- Preparing mission $3,740
- Rented vehicles and fuel $1,460
- Medicine, instruments for eye service $1,027
- Care of Akha patients at Luang Namtha Hospital $272
- Other $500

**Note:** The medicine, instruments and supplies for eye service was provided by Fred Hollows Foundation, Australia.  
(Detail on attach files)

IX. OUTCOME

- It is positive that we have helped poor patients in remote areas of Bounneua and Bountai districts of Phongsaly province who had been waiting long for E.N.T., dental, ophthalmologic, obstetric and pediatric care.
- The actual number of patients significantly exceeded our target.
- We have impacted health care development for vision, E.N.T, dental and children care and advised expectant mother with risk factors in remote areas although much remains to be done.
- This is the first cooperation between Oudomxay and Phongsaly health care professionals and LRF to provide health care services in remote area.
- Some Medical equipment and medicine remaining at the end of the mission was donated to Phongsaly and Oudomxay Provincial Hospitals.
V. SOME PROBLEMS

− Access by road was difficult and transportation of the team and equipment took considerable amount of time.
− Given the rainy season, it was difficult for patients to arrive at the district hospitals.
− Insufficient time to cover the needs of all patients.
− Cooperation between the province and Bountai district could be improved in terms of informing patients of our arrival.
− The team stopped working one day earlier than planned because patients did not arrive on time at the facility.

Director of Phongsaly provincial Public Health Department

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Presenter