

# **REPORT OF MOBILE HEALTH CARE**

**For Eye Diseases and Expectant Mother Services in  
the Remote Areas of:**

**4 Northern Provinces of Lao PDR  
(Phongsaly, LuangNamtha, Oudomxay, Bokeo)**

**June-July, 2011**

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**Oudomxay Hospital**

**In Cooperation with**

**Lao Rehabilitation Foundation (LRF)**

**Fred Hollows Foundation (FHF)**



**The Fred Hollows  
Foundation**

- Refer to the planning 2011 control disease activity of the Applied Interdisciplinary Research for Sustainable Livelihood Development in Rural Areas of Four Northern Provinces of Lao PDR.
- Refer to the agreement letter of Oudomxay Provincial Hospital No.354/PH of June 6<sup>th</sup> 2011.

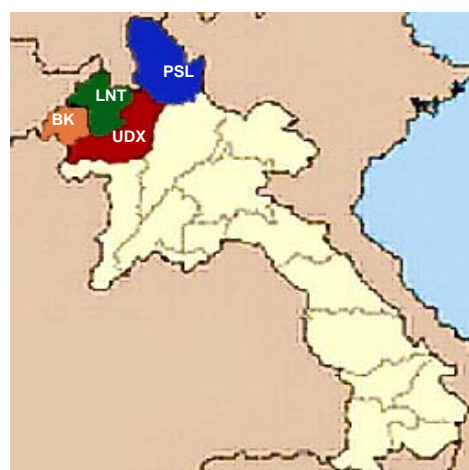
## I. **BACKGROUND INFORMATION**

### 1. **Four Northern Province**

The four Northern provinces of Phongsaly, Luang Namtha, Oudomxay and Bokeo are 85% high mountain regions. With a population of 735,119 (Female: 362,721), many people are poor and live in remote area. They subsist mainly on agriculture, and have only limited access to healthcare, particularly eye, E.N.T., dental, expectant mother and children care.



Map of Laos



Map of 4 Northern Provinces

The public health system consists of 4 provincial hospitals, 21 district hospitals, and 131 health centers as follows:

Provinces	Population	No. Provincial hospital	No. District hospital	No. Health center
Phongsaly	165,947	1	6	24
LuangNamtha	145,310	1	4	37
Oudomxay	265,179	1	6	39
Bokeo	158,683	1	5	31
Total	735,119	4	21	131

The mobile health care service in remote area, treating eye and expectant mother examination is a good cooperation between Oudomxay hospital, Lao Rehabilitation Foundation (LRF) and Fred Hollows Foundation (FHF). It includes expert doctors, nurses and assistants as well as modern equipment to examine patients while providing medicine of good quality for treatment.

## **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 which has also provided mobile medical equipment for dental, E.N.T and eye care operates with a MoU with the Prime Minister's Office – National Science Council (PMONSC) .

## **FRED HOLLOWS FOUNDATION (FHF):**



**The Fred Hollows Foundation**

The Fred Hollows Foundation (FHF) headquartered in Sydney, Australia, is a non-profit, non-government organization. FHF maintains an office at the Oudomkham Hotel in Oudomxay province. The project goal is to reduce avoidable blindness in Lao PDR. FHF operates with a MoU with the Ministry of Health of Lao PDR. The project's 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 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 and other eye diseases.
- Improve vision by refractive service.
- Examine pregnant women by ultrasound scanning to evaluate fetal health and determine an estimated date of delivery.
- Healthcare education for eye and expectant mothers.

## **III. TARGET**

- Service all patients with needs for eye care with no regard to gender, age, religion and ethnicity.
- Service expectant mothers with no regard to age, religion and ethnicity.
- Service all patients free of charge.
- Provide service to a total target of **2,930** patients as follows:

No	Treatment	Target
I	Eye Care	
	1. Eye examination and treatment	2,000
	2. Cataract surgery	300
	3. Other eye disease surgery	150
	4. Refractive service (by glasses)	400
II	Pregnancy care	80
	Grand total	<b>2,930</b>

**Remark:** pregnancy care to be performed in Bokeo province (2 districts)

#### IV. TECHNICAL ACTIVITY

##### 1. Preparing

- 2 months to prepare (April to May 2011). LRF, FHF and Lao coordinator collect data about patients, needs and location where to service, inform local authorities of the purpose, plan activities and get agreement from Department of Oudomxay provincial public health.
- Appointed patients by advertising and by informing them from district hospitals to villages and do screening house to house.
- Prepared equipment, supplies, medicines and budget and assembled a team.

##### 1.1 Team work

The team included 11 people as follows:

- **Lao team (9):**
  - 2 Ophthalmologist
  - 3 Ophthalmic nurses
  - 4 Nurse assistants (local staff)
- **USA team (2):**
  - 1 President of LRF (ultrasound technician)
  - 1 Coordinator (Lao)

(Details 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 eye service.
2. Instruments and medicine for expectant mothers.

(Details on attaches files)

##### 2. Activities performed

The mission started first in, Bokeo province (3 districts) for 8 days from June 8-15, 2011, the expectant mother service was done in Bokeo province, only eye service continued after that:

In LuangNamtha province (2 districts) for 5 days from June 17-21

In Phongsaly province (3 districts) for 8 days from June 23-29

In Oudomxay province (2 districts) for 25 days from July 01-25

The team provided service to all patients, with no regard to gender, age, ethnicity or religion. Services were free of charge for all patients (1,588 cases).

##### **Patients examined and treated (1,588):**

<b>Province</b>	<b>Expectant Mother</b>	<b>Eye</b>
Bokeo	49	514
LuangNamtha	0	295
Phongsaly	0	205
Oudomxay	0	525
<b>TOTAL</b>	<b>49</b>	<b>1,539</b>

2.1 Examined and treated eye disease:

1. Eye Examination, activities performed:
  - Vision test by E-Chart or Snellen Chart.
  - Diagnosis with medicinal treatment of some eye diseases.
2. Eye Surgery, performed : 349 cases that included:
  - Cataract surgery: 244 (female: 123)
  - Other (Pterygium, eyelid...): 105 (female: 63)
3. Refractive service to improve vision by glasses 178 cases (female:67)
  - Myopia: 69 cases.
  - Hyperopia: 109 cases.
4. Health education of primary eye care and post-operative procedures.



*Visual acuity test*



*Cataract pre-surgery*



*A man 64 years old, mature cataract both eyes*



*Keratometer test, cataract case*



*Cataract surgery by Dr. P. Indara, ophthalmologist*



*Cataract post-surgery 1<sup>st</sup> day*



*Cataract post-surgery 1<sup>st</sup> day  
In Huixay district, Bokeo province*



*Cataract post-surgery 1<sup>st</sup> day  
In Yord-U district, Phongsaly province*



*A man 17 years old and a woman 18 years old,  
Improvement of vision by glasses*

## 2.2 Examined expectant mothers:

Pregnancy, activities performed:

- General examination.
- Examination of the fetus by Echography.
- Determine an estimated date of delivery
- Health education including follow up hospital visits, especially for the cases deemed problematic.



*Expectant mother examined with ultrasound machine  
by Dr. Luc Janssens*

In Bokeo province, 49 expectant mothers were examined by echography (49 cases). 6 cases were declared problematic:

- Breach presentation      04 cases
- Twins                              02 cases

All problematic cases were advised to follow up at the provincial hospital for preventive healthcare to decrease maternal and infant mortality rate.

## V. OUTCOME

- It is positive that we have helped poor patients in remote areas of 4 Northern provinces who have been waiting long for eye care and expectant mother care.
- We have impacted health care development for vision to improve their livelihood.
- Expectant mothers in remote areas were advised of risk factors although much remains to be done.

## VI. 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.
- The actual number of patients was significantly lower than our target, because it was scheduled during rainy and farming season.
- Insufficient time to cover the needs of all patients.
- The expectant mother service could not join eye care team to service all 4 Northern provinces.

## VII. EXPENDITURE

A total expenditure of **17,926.00 USD**, was provided by:

Fred Hollows Foundation: 13,266 USD

Lao Rehabilitation Foundation: 4,660 USD

(Detail on attach files)

## VIII. INFORMATION AND RECOMMENDATION

- Ministry of Health and Ministry of Foreign Affairs to create a more comfortable environment for foreign teams and to facilitate health care mission by finding funds from Foundations, NGOs, inter-country or foreign based businesses who would like to help improving health care in remote areas, especially in Northern Laos.
- Lao Rehabilitation Foundation and other Foundations or NGOs to continue supporting mobile health care in remote areas with funds and provide medical equipment to district hospitals during the October 2011 mission in Bokeo province, Lao PDR.

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