REPORT OF Mobile Health Care

For Dental, Ear Nose and Throat, Eye Diseases, Adult Internal Medicine, Expectant Mothers and Pediatric Services in the Remote Area of

SaenJod Health Center
Nga District of Oudomxay Province, Lao PDR.

June 18-21, 2015

Supported by Lao Rehabilitation Foundation, Inc.
Dear / To: Director of Oudomxay Provincial Public Health Department
Director of Oudomxay Provincial Hospital
President of Lao Rehabilitation Foundation, Inc. USA.

Subject: The Result of Mobile Health Care For Dental, Ear Nose and Throat, Eye Diseases, Adult Internal Medicine, Expectant Mothers and Pediatric Services in the Remote Area.

- Refer to LRF 2015 planning of mobile health care in remote areas.
- Refer to LRF funding for this mission.
- Refer the approval document of Oudomxay provincial hospital.

This mission was a partnership between the Oudomxay Provincial Hospital with Nga district hospital and SaenJod Health Center teams to provide mobile health care for ENT, dental, eye disease; expectant mother, adult (internal medicine) and pediatric services in the remote areas of SaenJod health center of Nga district Oudomxay province for 4 days, June 18 to 21, 2015, funding supported by Lao Rehabilitation and some support provided by Fred Hollows Foundation, details as follows:

I. TITLE
Mobile Health Care For Dental, Ear Nose and Throat, Eye Diseases, Adult Internal Medicine, Expectant Mothers and Pediatric Services in the Remote Area of Nga district.

II. BACKGROUND INFORMATION

Nga district is one of 7 districts of ODX province. The district is located in high mountains. The population numbers 30,759 people (2014), it includes 57% LaoTheung (Khmou), 23% LaoLoum and 20 % LaoSoong (Kmong). The economy is mainly agricultural and farming.

Health care in Nga district is provided by 8 health centers covering 52 villages.

SaenChord is one of the 8 health center of Nga district, it covers 8 villages with a catchment population of 4,095. 100% of the land is in high mountains. The center is located at 42 Km from Nga city and is accessible by dirt road only (2.5 hours).

The main activities of the health centers are disease prevention, health education, vaccine injections, dispensing vitamin A and parasite medication, providing basic
treatment and referring difficult cases to the district hospitals. Unfortunately, doctors and diagnostic equipment are severely limited.

This was LRF’s third mobile health care mission in Nga district staffed by a team of doctors and nurses from Oudomxay provincial hospital and district hospitals.

III. OBJECTIVE

- Decrease the prevalence of blindness, deafness, dental cavities and the maternal-infant mortality rate.
- Broaden the coverage of health services for people in remote areas, ethnic minority groups and the urban poor.
- Provide human resource development for the health center staff by the donation of medical equipment and training.

IV. TARGET

Service all patients free of charge, with no regard to gender, age, ethnicity or religion for ENT, dental, eye, adult internal medicine, expectant mothers and pediatric health care. Provide service to a total target of 1,120 patients.

V. LOCATION AND DURATION

- At SaenJod Health Center, Nga district of Oudomxay province
- Serviced for 02 full days (June 19-20, 2015)

VI. TEAM WORK

The team work of 15 persons included:

**Oudomxay Hospital (7):**
- Dr. Phetsamone Indara Ophthalmologist
- Dr. Somxay Sithavong Ultrasound Doctor
- Dr. Soulimala VongPachit Dentist
- Dr. Malaithong Soukkaseum Dentist
- Mr. Phonethavy Inthavongs Ophthalmic Nurse
- Mr. Sith Sommalavong Dental Nurse Assistant
- Ms. Sonmany Lassavong Dental Nurse Assistant

**Nga District Hospital (2):**
- Dr. Sommake Fou Internal Medicine Doctor
- Mr. Kongphet Sorvungxay Internal Medicine Nurse Assistant

**SaenJod Health Center (4):**
- 4 Local Staffs 4 nurses of health center

**LRF Team (2):**
- Dr. Luc Janssens President of LRF
- Ms. Sasithone Sengchanh Coordinator
VII. INSTRUMENTS AND MEDICINE

This mission was performed with the use of quality manual and automated equipment intended for mobile healthcare and effective medicines for treatment. This included:

1. Instruments and medicine for dental services
2. Instruments and medicine for ENT services
3. Instruments and medicine for eye services
4. Instrument and medicine for adult internal medicine services
5. Instruments and medicine for expectant mothers services
6. Instruments and medicine for pediatric services
7. School supplies, toothpaste and toothbrushes for students

VIII. SUPPORT FOR FUNDING

- Mainly provided by: Lao Rehabilitation Foundation (LRF)
- Some support provided by Fred Hollows Foundation (FHF)

1. LAO REHABILITATION FOUNDATION (LRF):

The Lao Rehabilitation Foundation, Inc. (LRF) headquartered in Napa, California, USA, is a non-profit, non-religious, non-political organization. Activities are conducted by its President, Dr. Luc Janssens. LRF maintains an office in Vientiane, and in Oudomxay, 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, access to clean water, 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 and clean water access to the poor. The Foundation has also provided mobile medical equipment for dental, E.N.T, pediatric, obstetric and eye care.

2. FRED HOLLOWS FOUNDATION (FHF):

The Fred Hollows Foundation (FHF) headquartered in Sydney, Australia, is a non-profit, non-government organization. FHF maintains an office in Vientiane (Ophthalmology Center). The Foundation aims to reduce avoidable blindness in Lao PDR. FHF signed a MOU with the Ministry of Health of Lao PDR on Sept, 2008 for duration of 3 years. The agreement was extended for 2 years (2011-2013) and presently to 2018 with phase II of the Project. The activities include research, human resource development, infrastructure development, disease control, and the strengthening of advocacy partnerships for 7 Northern provinces of Laos (Phongsaly, Luang Namtha, Oudomxay, Bokeo, Luang Prabang, Xayabury and Vientiane provinces).

IX. ACTIVITES PERFORMED

- Registration of cases was completed by local staff.
- Examination and diagnosis was performed with manual or automated equipment, patients were treated with medicine or surgical procedures.

Services were provided in 8 main areas of health care as follows:

1. Examination and treatment of dental diseases:

The dental team (2 dentists from Oudomxay hospital assisted by 2 dental nurses) performed the following activities:
- Tooth extractions
- Treatment of cavities
- Calciferous cleaning
- Repair teeth
- Application of fluoride varnish
- Health education for children and distribution of toothbrushes and toothpaste

2. **Examination and treatment of E.N.T diseases:**
   Jointly with the eye team, the E.N.T. team performed the following activities:
   - Treat otitis media
   - Remove foreign body from E.N.T.
   - Treat E.N.T. infections

3. **Examination and treatment of eye diseases:**
   The eye team (1 ophthalmologist assisted by 1 ophthalmic nurse) performed the following activities:
   - Vision test by E-Chart or Snellen Chart
   - Diagnosis with medicinal treatment for some eye diseases
   - Eye disease surgery when needed (Pterygium and eyelid disease)
   - Cataract surgery with implant IOL
   - Refractive service with donation of glasses for refractive error and presbyopia

4. **Examination of adult for internal medicine diseases:**
   The internal medicine team (1 MD and 1 nurse assistant from Nga district hospital) performed the following activities:
   - General adult examination
   - Glycemia test and examination of internal organs by ultrasound echography.
   - Diagnosis of diseases and medicinal treatment
   - Health education

5. **Examination of expectant mothers:**
   Obstetric team (1 OB doctor from Xay district hospital) performed the following activities:
   - General examination
   - Examination of fetus by echography
   - Distribution of vitamin (iron and pre-natal)
   - Health education and advice for follow up hospital visits

6. **Examination of infants and children:**
   Jointly with internal medicine, the pediatric team performed the following activities:
   - General pediatric examination
   - Diagnosis of infectious disease and medicinal treatment
   - Health education

7. **Dental screening of children**
   President of LRF with dental team performed the following activities:
   - Dental examination
   - Fluoride varnish application
   - Donation of toothbrushes and toothpaste
   - Donation of school supplies
8. **Health Center Development Activities Performed**

Medical equipment was donated to health center. Training in the use and maintenance of the donated equipment was also provided.

9. **Rehabilitation Activities Performed**

Arrangements were made to provide care in Luang Prabang and in Vientiane for 2 children, one with congenital heart disease the other with anemia (splenomegaly) that could not be treated at Oudomxay provincial hospital.

X. **RESULTS**

A total of 1,297 cases (female: 631 or 48%) were treated free of charge with no regard to gender, age, ethnicity or religion. Services included:

<table>
<thead>
<tr>
<th>No</th>
<th>Examination &amp; Treatment</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dental</td>
<td>147</td>
</tr>
<tr>
<td>2</td>
<td>ENT</td>
<td>82</td>
</tr>
<tr>
<td>3</td>
<td>Eye</td>
<td>167</td>
</tr>
<tr>
<td>4</td>
<td>Expectant mother</td>
<td>23</td>
</tr>
<tr>
<td>5</td>
<td>Internal medicine (adult)</td>
<td>308</td>
</tr>
<tr>
<td>6</td>
<td>Pediatrics (infant and child)</td>
<td>312</td>
</tr>
<tr>
<td>7</td>
<td>Children at Primary School</td>
<td>258</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1,297</strong></td>
</tr>
</tbody>
</table>

1. **Dental Results**

147 (F 74) patients were examined and treated as follows:
- Cavitas dentitis with extraction 99
- Cavitas dentitis non extraction 20
- Dentitis simple and dental education 14
- Repair teeth 11
- Cleaning calciferous 04

2. **E.N.T. Results:**

82 (F 36) patients were examined and treated as follows:
- Otitis media (chronic) 34
- Otitis media (acute) 17
- Neuro sensorial hearing loss 09
- Ear FB 07
- Tonsillitis 06
- Pharyngitis 06
- Goiter/Hyper thyroid 02
- Polyps/sinusitis 01

3. **Eye Results**

167 (F 71) patients were examined and treated as follows:
- Vision test by E-Chart or Snellen Chart 133
- Diagnosis with medicinal treatment for eye diseases 64
- Cataract surgery with implant IOL 04
- Other eye disease surgery (Pterygim and eyelid disease) 02
- Refractive service with donation of eyeglasses for refractive error and presbyopia 56

(6)
4. **Obstetrics Results:**

23 pregnant patients were examined by echography. 3 cases (13%) were declared problematic:
- Placenta praevia 01
- Breech presentation 01
- Oligohydramnios 01

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

5. **Internal Medicine (adult) Results:**

312 (F 168) patients were examined and treated as follows:
- Gastritis 67
- Musculoskeletal/Flank pain 61
- Headache 36
- Cold fever 21
- Angina 15
- Pharyngitis/bronchitis 13
- Skin infection 13
- HTA 10
- Diarrhea 09
- Vaginitis/cyst ovary 07
- Anemia/ Vitamin deficiency 06
- Pneumonia 06
- Parasite 06
- Kidney stone 05
- Goiter 05
- Arthritis 05
- Other 27

6. **Pediatrics Results:**

308 (F 164) patients were examined and treated as follows:
- Parasites 69
- Cold fever 58
- Malnutrition 43
- Skin infection 42
- Diarrhea / dysentery 29
- Pharyngitis / Bronchitis 14
- Angina 06
- Allergy 06
- Gastritis 06
- Urine tract infection 05
- Pneumonia 04
- Tonsillitis 03
- Anemia (Thalassemia) 02
- Hernia / Inguinal 03
- Congenital heart disease 01
- Other 17
7. **Primary School Screening Results:**
258 children (F 95) were screened.
- All children received fluoride varnish application with distribution of toothbrushes and toothpaste.
- Educational supplies were also donated to students.

8. **District Hospital Development Activities Performed**
Medical equipment was provided to SaenJod health center, it included: Sphygmomanometer, small surgery set, delivery set, manual resuscitator, Ultrasonic Pocket doppler, oxymeter, nebulizer, other necessary medical equipment and some medicine. LRF also provided training in the use and maintenance of the donated equipment.

XI. **BUDGET AND EXPENDITURE**
Excluding travel from US, transportation of equipment, supplies, and related costs, the anticipated budget for this mission was 9,989 USD.
The actual expenditure for this mission was 9,659 USD, it included:

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medicine from USA</td>
<td>1,600</td>
</tr>
<tr>
<td>2</td>
<td>Equipment from USA</td>
<td>1,800</td>
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<tr>
<td>3</td>
<td>Medicine from Laos</td>
<td>1,941</td>
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<tr>
<td>4</td>
<td>Accommodation of LRF team</td>
<td>1,100</td>
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<td>5</td>
<td>Perdiem and accommodation of Lao team</td>
<td>740</td>
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<td>6</td>
<td>Preparing mission</td>
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<tr>
<td>7</td>
<td>Truck rental and fuel</td>
<td>1,200</td>
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<tr>
<td>8</td>
<td>Eye care</td>
<td>976</td>
</tr>
<tr>
<td>9</td>
<td>Student at PS care</td>
<td>180</td>
</tr>
<tr>
<td>10</td>
<td>Other</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>9,659</td>
</tr>
</tbody>
</table>

**Note:** The instruments, medicine and supplies for eye service were provided by Fred Hollows Foundation, Australia.

XII. **ACCOMPLISHMENTS AND WEAKNESSES**

1. **Accomplishments**
- Good cooperation with the Nga district public health department and SaenJod health center staff.
- Poor patients who otherwise would not have access to healthcare in remote areas have received treatment.
- We contributed to the prevention of ear and dental diseases; we restored or improved visual acuity and helped decreasing infant and maternal mortality.
- Provided some medicines to improve health care at SaenJod health center.
2. **Weaknesses**

- Limited specialized teamwork (pediatrics and internal medicine)
- Given the rainy season, access on dirt road was difficult and took time.
- The number of patients (adult internal medicine) was higher than expected, thus the internal medicine team could not provide service to all patients.

**XIII. NEXT MISSION PLANNING** *(under consideration)*

- Provide mobile health care for dental, ENT, eye, adult, expectant mother and infectious disease in children at one or two Health Center in Oudomxay before the end of 2015.
- Will increase teamwork and time for service.

**Director of Oudomxay Provincial Hospital**

**Presenter**

**Coordinator**

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Email: inda_oph@yahoo.com

**Director of Oudomxay Provincial Health Department**
ATTACHMENTS

1. Photo of Activities
2. Teamwork
3. Approval Letter from Public Health