# FIRST NATIONAL TELEMEDICINE CONFERENCE A REPORT

September 9-10, 2016 NEPAL RESEARCH EDUCATION NETWORK (Prepared by Dr Puja Lama)

# Contents

BACKGROUND
INTRODUCTION
OBJECTIVE4
DAY 15
KEYNOTE ADDRESS:
SHARING FOR SYNERGY:
Current status of telemedicine - Local
Services provided
Continuing Medical Education7
Technology used
Identified areas for the enhancement of telemedicine services in Nepal
Current Status of Telemedicine – Regional10
Mobile Eye Care
Indian Telemedicine - An Institutional Perspective11
Telemedical Education – My experience11
Telemedicine in Bhutan12
DAY 213
BEYOND TELEMEDICINE
ANNEX A: Telemedicine network – individual institutions
ASK Foundation16
BP Koirala Institute of Health Sciences16
Dhulikhel Hospital
phect-NEPAL/Kathmandu Model Hospital17
Patan Academy of Health Sciences17
Ampipal Hospital, Gorkha17
ANNEX B: KATHMANDU DECLARATION
ANNEX C: LIST OF PARTICIPANTS

## BACKGROUND

TEIN is the largest R&E network in the world. It currently interconnects universities and research organizations from 23 member countries from Asia-pacific. It also connects to millions of researchers and academics of Europe served by GEANT Network. 34 countries are associated with GEANT network in Europe. TEIN supports collaborative programs with Europe in the field of – Earth and Ocean observation, climate research, food security, Future Internet and new Technology, delivery of e-health and e-learning etc.

TEIN Network has been used for:

- Continued Medical Education, like live surgery from developed countries
- Knowledge sharing like Disaster Nursing
- E-learning, Tele teaching/training. For example, TEIN has been participating in training and learning programs by means of video conference. Several programs are organized by different members from the globe and invite TEIN to make the participation from Nepal. TEIN also helps to find the participants from the related field and make them participate
- TEIN has been participating in the programs organized by Global Development Learning Network
- Exchanging bulk data related to climate and weather stations for research
- Medical consultation

We have the following members:

- Kathmandu University
- Tribhwan University
- Kathmandu Model Hospital
- Kirtipur Hospital
- IOM, TUTH
- Patan Academy of Health Sciences
- Prime College
- Kantipur City College
- Advance Engineering College
- Khwopa Engineering College

Regarding the collaboration with TEIN, various projects related to telemedicine have been identified that are important for social welfare and rural healthcare. If effectively approached, TEIN provides appropriate assistance for the projects.

### **INTRODUCTION**

Information Communication Technology for Health (ICT4H) is a slowly but surely evolving sector in Nepal. Developed countries like the USA, Japan and Korea rely on telemedicine to provide health care services to its citizens living in remote areas. This technology is more needed in a country like ours where the remoteness is not only in terms of distance but the lack of interconnecting roads or trails to be true, hard geographical terrain, difficult weather conditions make the nearest health posts inaccessible to the villagers. In addition to these factors natural disasters at times like landslides, floods and even earthquakes impose further difficulties in accessing the minimal available health care services usually situated may be hours or days of walk from the villages. Telemedicine is the best way to provide health care services to people residing in such areas and to provide continuing medical education to the health care workers stationed in remote areas.

#### **OBJECTIVE**

Understanding the need for ICT4H technology in Nepal, a large number of institutions are involved in providing telemedicine services. However, individual endeavors are not adequate to answer this major issue in our country. The need is enormous. Therefore, two of the major organizations involved in this sector, Nepal Research and Education Network (NREN) and Telemedicine Society of Nepal (TMSoN) jointly organized this workshop: **Telemedicine in Nepal- Sharing for Synergy** on September 09-10, 2016 in Nepal. The purpose of this workshop was to bring together all such individuals on a single platform where they can share their experiences and ideas for future work.

Members from various institutions involved in telemedicine both from the healthcare and the engineering sectors attended this workshop. This workshop turned out to be more fruitful due to the combined input from experts and grass root level healthcare workers who have been working in the field of telemedicine. This report summarizes the major issues and discussions put forth in the first day and excerpts from the group work which was focused on the problems identified and possible solutions for the improved implementation of telemedicine services and its expansion to provide health care services to a wider area and also to use it to increase the experience and education of the health care workers in the field.

## DAY 1

The workshop was inaugurated with a welcome speech by Dr. Saroj Dhital, President of Nepal Research and Education Network. He is also a senior consultant surgeon at phect-NEPAL/Kathmandu Model Hospital where he has been providing telemedicine services since the past 10 years. Introducing the theme of this workshop, "Sharing for Synergy" – Dr. Dhital highlighted on the need to collaborate and develop a standard of telemedicine services in Nepal. Although telemedicine has been present in our country for almost a decade now, there



has not been a single platform like this workshop in which we could share experiences and knowledge with each other not only in providing more and more effective and efficient health care services to the patients but also provide continuing medical education to the health care workers.

Key speakers for this workshop included Dr. Shuji Shimizu, who provided his remote presentation from Japan and Dr. Mahabir Pun, Chairman, Nepal Wireless.

#### **KEYNOTE ADDRESS:**

Dr. Shuji Shimizu, Chairman and Professor, Medical International Department, Department of Endoscopic Diagnostics & Therapeutic, Telemedicine Development Center of Asia, Kyushu University Hospital, Japan described telemedicine as a system that should be used effectively for two purposes - Doctors to patients (D2P) for patient examination and tele-surgery and Doctor to Doctor (D2D) for consultation and education. He described the evolution of telemedicine services in Japan and He further



stressed on the importance of the combined efforts of doctors and engineers in providing telemedicine services. He closed his presentation by this remark: "Engineers make it possible, and medical doctors make it meaningful".

Dr. Mahabir Pun, founder of Nepal Wireless Networking Project and winner of the Magsaysay award - 2007, was our other keynote speaker. Considering the rough geographical terrains and the difficult weather conditions in Nepal, he emphasized that the need of telemedicine services is even greater in our part of the world. He committed that after the establishment of his National Innovative Center, one of his projects will be providing the network necessary in taking telemedicine services to



all the remote and rural areas in Nepal. He informed us that although 200 villages in 15 districts already have internet connections, telemedicine services are not available to them: thus, showing us opportunities of expanding our services. One of his important announcements was a project of the National Innovative Center in developing a medical drone that will be used in dispensing medical supplies to patients living in remote and rural areas.

#### **SHARING FOR SYNERGY:**

Speakers – local as well as regional shared their experiences which were commendable as well as inspirational. Experiences in four important sectors were mainly discussed on this platform, namely - Services, Continuing Medical Education, Networking Technology and Beyond Telemedicine. Almost all the participating institutions have been using ICT either to provide services and/or to enhance education.

#### **Current status of telemedicine - Local**

#### **Services provided**

Understanding the need for telemedicine services in Nepal, most of the participating institutes have been involved in providing health care services through telemedicine. Other than surgical consultations the most popular tele-consultations are in specialties such as psychiatry and dermatology.

#### **Continuing Medical Education**

Health care workers are highly receptive in terms of continuing medical education. This is especially necessary to the dedicated health care workers stationed in the remote areas on our country. The need for continuing medical education through ICT was strongly felt by all the participating institutions. Various methods of developing our system of e-learning through networking and developing our own institutions for the improvement of technological skills and education of our health care workers as well as medical students was the main point of discussion here. Regional experiences were of great value in this regard and many areas of collaboration in terms of education were identified. Some of the existing institutions like Patan Academy of Health Sciences (PASH) and Tribhuwan University & Teaching Hospital (TUTH) offered regular CMEs that could be utilized by the other institutions. This will turn out to be more cost effective and beneficial to all the participating institutes.

Organization	Telemedicine Service Areas	Continuing Medical Education
ASK Foundation	Established telemedicine centers in the following areas: • Maidi,Dhading • Sipkhana,Kalikot • Gotri,Bajura • Nawalpur,Sindhupalchok • Barpak,Gorkha	None
BPKIHS, Dharan	<ul> <li>Provides telemedicine services in the following areas:</li> <li>Phikal Bazaar, Ilam</li> <li>Sidua Bazaar &amp; Patale, Dhankuta</li> <li>Roopnagar, Saptari</li> </ul>	Conducts online CME programs on a weekly basis for the following locations: • Bhadrapur, Jhapa • Dhankuta & Gaighat, Sunsari • Ilam, Ilam • Siraha, Siraha
Ammpipal Hospital, Gorkha	Providing telemedicine services in connection with Kathmandu Model Hospital, Department of General Surgery	
Kathmandu Model Hospital, Kathmandu	<ul> <li>Provides telemedicine consultations to</li> <li>Shikha, Histhan and Nangi, Myagdi</li> <li>Ammpipal Hospital, Gorkha</li> <li>Gaurishankar Hospital, Dolakha</li> <li>Pharping Hospital &amp; Kirtipur Hospital, Kathmandu</li> </ul>	<ul> <li>Member of Nepal Research and Education Network and Asia- Pacific Academic Network</li> <li>Various International Education Partners like         <ul> <li>Seoul National University, Korea</li> <li>Kyushu University, Japan</li> </ul> </li> </ul>
Dhulikhel Hospital, Kathmandu	Provides telemedicine services in dermatology and over the phone consultation Plans of establishing telemedicine services at Baluwa Outreach Center, Kathmandu	
Patan Academy of Health	None at present	For education, communication, supervision

Sciences, Lalitpur	and support of medical students placed at rural sites
	Gorkha
	Ampipal
	Nuwakot
	<ul> <li>Nawalparasi , hetauda</li> </ul>
	Part of the global health classroom with
	students from New Zealand

#### **Technology used**

It was evident that the technology being used is insufficient to support our works in the field of telemedicine – be it for medical services to the community or medical education to the health care workers. The lack of government support, financial restraints and power outages were the major factors in the use of modern technology in our country. However, this has not discouraged the use of telemedicine in Nepal.

#### Internet options

Although satellite communications is the best internet option for the uninterrupted telemedicine services, this is not possible due to lack of funds. The next option of fiber optic connections are ideal, the geography of our country poses a barrier in its establishment nationwide. So far we have been relying on wireless connections, which is affordable to all of us. However, weather – thunder storm, lightening and landslides play an important role in the interruption of smooth operation of wireless connections.

#### Hardware and Software

Proper telemedicine equipments and software are sophisticated and too expensive, almost unaffordable for us when we are trying to provide health care services at nominal cost. Still, health care workers and engineers have not been discouraged by this issue. Laptops are equally efficient while free messaging applications like skype, facebook, whatsapp, viber, IMO etc. are widely used by most of the health care workers.

In order to save energy, Ask foundation has been supplying an Intel Atom<sup>®</sup> based CPU or Green Computer that consumes 20 watts only.

## Identified areas for the enhancement of telemedicine services in Nepal

After various presentations, group works and discussions, various areas have been identified in telemedicine that needs more support in order to firmly establish and improve this sector.

#### Telemedicine center with closer referral centers

Voices from the frontline provided valuable information for the successful functioning of telemedicine services. Ms. Leela Pun, a community health care volunteer in Myagdi, who has been working for more than 2 decades with phect-NEPAL/KMH said that after tele-consultation when referral is required she

has been sending patients to KMH, Kathmandu. She expressed that having a tele-consultation and then sending patients to a nearby hospital like hospitals in Pokhara would be ideal for the patients.

#### **Government Level Policy**

More than 80% of the participating institutions who were providing telemedicine services were identified as Non-Governmental Organizations. The need for the involvement and support from the Government was also discussed on this platform. Having a proper government level policy would be highly effective in the implementation of telemedicine services and their interest and support would also help in its sustainability.

#### Interest at both ends

Telemedicine services require co-ordination, co-operation and interest from two different ends - consultants/specialists and attending doctors/health care workers. Very often this enthusiasm was seen only at the initial stages of the program implementation. The lack and/no response from the consultants/specialists end has been a major drawback in the continuation of such services. Live streaming was preferred to the store and forward methods of communication in telemedicine.

#### Trainings

Trainings to end-users are an essential part in providing telemedicine services. This is often over-looked and leads to the failure of these programs. Trainings should therefore be provided at the beginning of the program implementation and continued regularly thereafter to keep the users up-to-date with the technical changes.

#### Awareness programs

Unfortunately, a rigid bureaucracy was considered a major reason for the obstruction in smooth application of telemedicine program. The need of the senior level officials to adapt/ learn the fast growing ICT4H and implement them in their respective institutions or support those health care workers who want to introduce the program should be welcomed and encouraged. There were examples of failed telemedicine services due to lack of support from co-workers. Therefore, this is the time to bring a change in the attitude of the stake holders.

Also, we need to increase the level of awareness among our rural patients regarding this new technology in the field of ICT. Lack of co-operation from the patients and lack of proper counseling by the attending doctor may be a huge barrier in providing telemedicine services.

#### **Overall challenges**

#### Finances

Finances have always played a significant role in all aspects of life in our part of the world. Telemedicine services are also affected by the unavailability of sufficient funds. Government support as well as

collecting nominal service charge from the patients might pose some solution in this regard. Also the sharing of devices for telemedicine such as the neurosynaptic device designed for Dhulikhel Hospital will be cost-ffective.

#### Power Outage

Power outage is a major problem in our country. The need to move into energy saving era by using solar power and laptops like Intel Atom<sup>®</sup> based CPU or Green Computer that consumes 20 watts only was found to be the most efficient.

Generators are being used by some institutions but this is not a long term solution.

## **Current Status of Telemedicine – Regional**

#### **Mobile Eye Care**

Dr. Shiela John of Shankara Nethralaya, India gave a presentation on how they have been providing ophthalmology services to people living in the rural areas of South India using mobile comprehensive eye care units. The mobile eye care unit is a method they use to reach the unreached population. This is a very effective method to serve the rural population which make upto 80% of the total population because 70% of the health care resources as well as the health care personnel are concentrated in the urban areas. More over 80% of the blindness in India is curable and the aim of this mobile eye care service to provide this kind of blindness by providing trained manpower and modern technology. This comprehensive eye care on wheels includes four vehicles, each equipped for various purposes:

- Vehicle 1 Comprehensive Eye Examination
- Vehicle 2 Spectacle Dispensing
- Vehicle 3 Pre-operative preparation, storage and a chemical toilet
- Vehicle 4 Operation Theater and a sterilization room





Sankara Nethralaya base hospital provides tele-consultation with specialists for difficult cases at the camp sites. This hub is equipped with:

- 2 Mbps internet connectivity
- High Definition Web camera
- Screen sharing of the images
- Sound proofing room

These virtual camp visits have largely reduced the incidence of blindness in the rural population of Tamil Nadu, India.

#### **Indian Telemedicine - An Institutional Perspective**

In his presentation, Prof. Dr. S.K. Mishra, MS, FACS, Head, Department of Endocrine Surgery and faculty I/C, Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), India explained the extensive use of telemedicine services in his institute. SGPGIMS not only provides tele-consultation to patients in remote areas using mobile telemedicine system but has also been providing tele-mentoring for endocrine related surgeries and involved in tel -education that includes live surgery transmission as well as recorded lectures. The institute is a member of various international telemedicine networks like APAN, SAARC etc.

#### **Telemedical Education – My experience**

Prof. Mir Misbahuddin from Bangabandhu Shiekh Medical University, Bangladesh shared his experience of using telemedicine facilities in the field of education. Ancient classrooms that we visualize of a teacher in a room full of students have been replaced today by simulated classrooms via the internet that is shared by thousands of students living in different parts of the country/countries. He finally envisioned that the effective and efficient use of the internet will one day create home based medical education instead of medical school based.

#### **Telemedicine in Bhutan**

Dr. Gosar Pemba, Medical Superindentm Jigme Dorji Wangchuck National Referral Hospital, Bhutan elaborated the suitability of telemedicine in his country which were similar to Nepal. This included:

- Difficult terrain
- Acute shortage of doctors
- Increasing expenditure in patient referrals
- Inequitable distribution of health services
- Need for continuing medical education

Unlike in Nepal, where we lack government support in the implementation of telemedicine services, the fourth king of Bhutan himself had visualized the need of telemedicine services in the year 1997 and the Rural Telemedicine Project (RTP) was implemented in 2009 in 14 different sites. Although the number of tele consultations was increasing over the years, the project was unsuccessful due to the following reasons:

- Delayed or no response from experts discouraged the usage of Telemedicine system by the Teleusers of remote ends
- The web-based application was time consuming and took 15 min per form and currently not operational due to the introduction of HIS
- The web-based application developed on a closed based system.
- Insufficient time and human resource
- Tiresome work load
- Failure to recognize as responsibility
- Inability to manage or devote time
- Insufficient effort to utilize available facility
- Electricity and Internet connectivity problem in some of the remote sites

Thus the regional experiences included encouraging and motivating presentations that illustrated the successful implementation of telemedicine centers in a variety of ways:

- Tele consultation with mobile telemedicine units dispatched to rural areas
- E- learning activities
- Mobile eye care units
- Tele-mentoring for surgery
- Live surgery demonstrations

## **DAY 2**



On day 2, the participants were divided into five groups. We made sure that each group was comprised of at least one person from the various levels – local, regional and grass root level health care workers including one person from the IT. Enthusiastic participants actively participated in the group work and various problems and possible solutions were identified that has been summarized in the table below.

Problems	Possible Solutions
Lack of internet	200 villages already have internet services but no telemedicine services –
connections	National Innovative Center to extend services nationwide
Frequent Power outages	Solar Power/ Green Laptops
Late or no response in	Patient scheduling for consultation and live video chats
patient consultation	One hotline to be given to the duty doctor in the central hospitals
Centralization/	Regular CME's "certified"; Regular meetings with specialists
migration of health care	
workers	
Lack of support	Actively work for the involvement of the Government – develop national level
	policy; Develop a team within institutions
Change in attitude	Health Care workers – encourage and support this evolving ICT4H
	Patients – counseling to make them understand that telemedicine works
Lack of interest of health	At the center – award, appreciation for their time in telemedicine, an extra
care workers	work
	At the periphery – frequent and regular interactions, trainings
Sustainability	Dedicated team
	Financial – Cost sharing (Rs. 50 per consultation in case of Ask foundation and
	the amount is sufficient to pay for the internet services only)
High costs	ICT Is slowly becoming more and more affordable and tricks (jugaad) can
	always be used; Sharing of telemedicine equipments such as the neosynaptic
	device developed at Dhulikhel hospital is cost effective than producing
	individual devices.
Maintenance and	Allocating funds will make the same equipments last longer and work more
updates	efficiently.

## **BEYOND TELEMEDICINE**

Various points were discussed in this regard. Together, the participants have pledged to take telemedicine to a higher level by including the following:

• Legal aspects

Though discussed, no conclusions could be made regarding the legal implications when patients in the remote, rural areas get telemedicine services from international experts. It was however suggested that the attending health care worker should be responsible for the effects of the treatment. Furthermore, there were discussions as to how and when an informed consent could be taken from the patients regarding tele-consultation.

• Sharing patient data

Telemedicine requires patient information to be shared with doctors from different parts of Nepal as well as in the world. Participants discussed on issues related to patient privacy while sharing such data.

• Include humanity in ICT4H

Although technology seems to have almost replaced human contact, at the workshop, all the health care workers agreed that they should include humanity in telemedicine.



Speakers and Organizers - FIRST TELEMEDICINE WORKSHOP, NEPAL

## **ANNEX A: Telemedicine network – individual institutions**

The telemedicine network of individual institutions has been created according to the presentations on Day 1 of this workshop.

## **ASK Foundation**

The ASK foundation **Aspire for Service and Knowledge (ASK) was** founded in 2015 after the devastating earthquake in April. The foundation was previously known as **HTP Telehealth Innovation Foundation**, which was established in 2009 by pioneer Mr Muni Sakya, the first Computer Engineer along with four young doctors.

The team was approached by a Rural Welfare Council in Sipkhana VDC, Kalikot District. A pharmacist with an intention to help create solutions for healthcare in his village agreed to collaborate with Auxiliary Health Worker (AHW) to provide the services.

Ask foundation invest on a partnership with local health care workers by bearing 70-80% of the cost while the rest is covered by local community to ensure that the health care worker gets a feeling of ownership and an extra motivation to make his clinic successful.

## **BP Koirala Institute of Health Sciences**

The B.P Koirala Institute of Health Sciences (BPKIHS), Dharan is one of the leading medical institutions in Nepal. In terms of telemedicine services, the institute is involved in the following activities:

- Training Medical Students in Community based programs
- Supporting the health care workforce in underserved areas
- Continuing professional development and educational support of health care professionals in the Eastern region of Nepal

BPKISH conducts weekly online CME programs to enhance the knowledge and skills of the health care workers. The topics are decided as per the need of the community.

## **Dhulikhel Hospital**

Dhulikhel Hospital was established in 1996, based on the principle of social equity and quality health care. It is a not for profit, non-government institution and provides healthcare services to a population of approximately 1.9 million people from Kavrepalanchowk, Sindhu-palchowk, Dolakha, Sindhuli, Ramechhap, Bhaktapur and other surrounding districts. Dhulikhel Hospital is also a university hospital for all the medical programs run under the collaboration with Kathmandu University. In terms of providing services to its outreach centers, the hospital has the following services:

- Hotline telephone numbers (COG)
- Round the clock telephone consultation service

- Tele-dermatology consultation via Skype
- X-ray, ECG interpretation through pictures in viber, E-mail, Facebook messenger

## phect-NEPAL/Kathmandu Model Hospital

A nongovernmental, not-for-profit motive, social organization - Public Health Concern Trust, Nepal (phect-NEPAL) is one of the pioneers in the field of telemedicine in Nepal. Telemedicine was initiated at Kathmandu Model Hospital (KMH) run by phect-NEPAL, by Dr. Saroj Dhital, one of the founding members of the organization and a senior consultant surgeon at KMH in 2008 with support from Dr. Mahabir Pun, Founder of Nepal Wireless. The first telemedicine service was provided at Gaurishankar General Hospital, Dolakha. KMH has now been an active member of Nepal Research and Education Network and various other international institutions in Japan, Korea, and India to name a few. phect-NEPAL is in the process of establishing a Center for Rural Healthcare & Telemedicine and expand its services throughout the nation. Myagdi is one of the areas that the organization is focused on at the moment.

## **Patan Academy of Health Sciences**

Patan Academy of Health Sciences (PAHS) is dedicated to sustained improvement of the health of people in Nepal, especially those who are poor and living in rural areas, through innovation, equity, excellence and love in education, service and research. Although not directly involved in patient care, the academy is involved in improving the patient care by assisting in the knowledge of the student during their placement in rural areas by conducting virtual classrooms (VCR).

#### **Present VCR situation:**

- Runs regular activities with students posted at rural site
- Maintains continuous communication with students posted at rural sites
- Maintain continuous supervision on their activities.

#### Future VCR plan:

- To telecast common lectures online
- To use the system directly in patient care

## Ampipal Hospital, Gorkha

Ampipal Hospital is located in mid-western part of the country and south-western part of Gorkha District at an altitude of about 1100 meters (approx. 3300 feet) above sea level. Although a 46-bedded hospital, the capacity has been reduced to 30 beds since the earthquake in 2015.

The hospital potentially serves a catchment area of about 200,000 people. Most patient walk to the hospital, where walking distance ranges from ½ an hour to more than a day. The time is almost doubled when patients have to be carried to the hospital. After internet connection was established in the hospital in 2014 and Dr. Kshitiz, MDGP started tele-consultation with Dr René Kalisch, a German trauma surgeon. Now he is regularly connected with Kathmandu Model Hospital, Department of General Surgery.











#### Patan Academy Of Health Sciences



## **ANNEX B: KATHMANDU DECLARATION**

# **DECLARATION**

More than one hundred participants representing different parts of Nepal and countries from South Asia gathered in Kathmandu on 9<sup>th</sup> and 10<sup>th</sup> of September, 2016 for the First National Telemedicine Workshop, jointly organized by Nepal Research and Education Network and Telemedicine Society of Nepal.Extensive and elaborate sharing was done and the way ahead for effective, efficient and meaningful use of Information and Communication Technology for Health (ICT4H) was sought through this "Sharing for Synergy".

We, the participants appreciate that:

- Information and Communication Technology (ICT) is one of the few things that are getting more and more affordable, accessible and efficient; and that ICT must be effectively and efficiently used by less privileged countries and their people in order to catch up with rest of the world.
- In spite of the possibilities opened by advances in ICT, there are more stories of failure of e-health including telemedicine and e-learning than that of success
- Reluctance or inefficiency of the bureaucracy both at national and regional levels and among specialists and the rural healthcare workers have been some of the important hindrances in the practice of telemedicine
- The cost of franchised versions of telemedicine equipment is too costly for poor countries
- There is an appreciable lack of ways for effective communication among the remote end and telemedicine center
- There is no clearly defined law pertaining to telemedicine practice
- And that e-health can only compliment but not replace the human touch in healthcare

We feel the need for:

- High degree of commitment from the State to support and develop e-Health activities in respective countries and at the regional level
- Creating better non-governmental models of e-health activities including telemedicine and CME e-learning
- Better cooperation, communication and coordination among the telemedicine practitioners
- Exploration and use of more user-friendly technology including highly mobile devices and software.
- Development of communication infrastructure focused on telemedicine

- Having more engineers and technicians involved in the telemedicine
- Involvement of more health institutions in telemedicine
- Clearly defined regulations pertaining to telemedicine activities
- More tertiary level health institutions closer to periphery providing easy referral and telemedicine services providing prompt responses whenever needed

In order to achieve these goals, we the participants' jointly are committed to work together as advocates, actors, activists and facilitators.

We the participants agree to further strengthen Telemedicine Society of Nepal as our common forum.

We the participants also have the common feeling that this is a gathering guided by our social responsibilities. We therefore have taken this opportunity to discuss things that are important for making healthcare more widely available to the people – reach out to the people who cannot reach us. Our interactions 'beyond tele-medicine' have further led to our commitment to develop easy and free (or highly subsidized) referrals for the needy people from remote villages.

We commit to organize regular CME through e-learning and try to make it accredited.

We, all the participants from the South Asia region commit to achieve and maintain a highest degree of cooperation, coordination not only in telemedicine and e-learning but beyond telemedicine so as to achieve the goal of health-care for all.

## **ANNEX C: LIST OF PARTICIPANTS**

#### Registration Sheet of Telemedicine Workshop " Sharing for Synergy" 9th September 2016, Kathmandu Nepal

<u>S.N</u> 0	Name of Participants	Name of Hospital	Email address	Mobile number
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