Tharparker Telemedicine Network





Healthcare services provided at a Distance using Information Technology





US Agency for International Development (USAID) is strengthening Pakistan on behalf of American people in the fields like Energy education and economy. USAID is helping to increase to the provision of health care services and meet the critical infrastructure needs in remote areas. USAID is funding the Tharparker Telemedicine Network for initiating a sustainable quality health services in Pakistan.

ASK Development is a project management, capacity building and youth development organization. ASK have been involved in providing capacity building activities for Health & Nutrition Supervisors, Medical Officers, etc. under the umbrella of projects related to health. Under this project; ASK is responsible to manage the resources like project team, finance, hiring of required staff, facilities to the technical staff, capacity building, quality assurance, donor relations and reporting.



e-Health is the first company in Pakistan working in the areas of Telemedicine and e-Health. It is enhancing the reach of urban health care services to rural areas of Pakistan by the use of Information and Communication Technology. For this project, role of e-Health is to provide technical and operational support by establishing the Hub and Kiosk and facilitate the health care services. Main responsibilities include provision of the technical infrastructure, managing performance of the staff and project supervision.

Background – Problem

When compared to an HDI of .659 in urban Sindh with an HDI of .456 in rural Sindh areas: shows the urban rural disparity in the province. Within Sindh province the district Tharparker with a population of 914291 a large majority is deprived of basic facilities like health and education. With a population of more than 2361014; 71.1% of people are living in rural areas with insufficient and under quality medical healthcare facilities in the district Mirpur Khas.

The number of healthcare staff and health care facilities is very adverse in these districts. People had to travel long distance to reach hospitals located in Karachi and Hyderabad from Tharparker and Mirpur Khas. This involves a lot of transportation cost with addition to the fact that it is a time consuming activity. This issue has increased the vulnerability of communities and adversely affected the quality of their life.

Innovative Quality Health Services – Solution

Keeping in view the dismal health services situation in Sindh rural areas, there is a need of an innovative quality health service i.e. Use of **Telemedicine** technology to enhance outreach, effectiveness and productivity of health services in Sindh province by "moving information" rather than doctor or patient.

Project Objective

To provide health care services to 48,750 patients of districts Tharparker and Mirpur Khas by setting up a Telemedicine Network

How Telemedicine works

Telemedicine technology will consist of establishing a self-sustaining network in Tharparker and Mirpur Khas districts compromising of 1 Hub in Karachi and 15 Spokes/Kiosk Centres. The doctors in Hub and patients & paramedics in Kiosk centre would be connected though ICT. In Hub there would be 4 doctors and 2 staff members who would be responsible to carry out checkup of each patient for 7-10 minutes. Once done with the assessment, prescription would be made which would be available in printed form. Rs. 100/- per patient would be charges for every checkup.



Project Details

- 15 Kiosks and 1 Hub would be established; each kiosk would be operated by 2 franchisees.
- Franchisees would be selected on the basis of Franchise concept, there would be one male one female at each Kiosk who would be having blood relations with each other or must be husband and wife.
- Selected Franchisees would undergo a 3 months capacity building program to enable them to serve as paramedics/Physician Assistants (PA's).
- 15 Kiosks would be established in both districts; they would be renovated to accommodate patients and examining areas.
- Hub would be established in Karachi to facilitate the doctors and support staff with required technology and infrastructure.
- Once Hub and Kiosk established, the formal operations begin.
- To affirm an uninterrupted session and unraveling any technical error; a technical team would be formed.
- 2 ambulances available to handle any emergency level care
- Quality assurance team comprising of 2 doctors would be formed who will be responsible to monitor each activity through video recording and personal visits of team.

Project Highlights

- Provide quality health services to people in their close vicinity
- Availability of services like Ambulance, Pharmacy and Laboratory
- Outreach of more than 48,000 patients
- Thorough monitoring and evaluation of all activities through well devised tools
- Consultation with experienced doctors
- Save time of traveling
- Increased compliance to treatment
- Medical record is permanently available allowing continuity in treatment
- Empowerment is achieved where patients starts taking responsibility of his own health
- **Self-sustainability:** To ensure the Self-sustainability; nominal fees will be charged to patients.

Project Impact

- People will get proper treatment and medications in their own villages
- They do not have to travel long distances towards Hyderabad or Karachi
- Non-discriminatory provision of healthcare facility
- Modern technology will inspire local people towards educational change
- A sustained income base in form of monthly salary
- Overall improvement of healthcare facility



Course Contents of Paramedics Training:

The selected franchisees would undergo a capacity building program of 3 months to serve as a paramedic/PA.

The major course contents are:

- Use of Telemedicine Technology
- Anatomy, Pharmacology, Imaging and Laborites
- Para Medical Practice
- Personality Development
- General Training on Health dynamics
- Organizational and Financial Management

The paramedics/PA's would undergo an exam conducted by Riphah International to ensure their capabilities to carry out the Telemedicine activities.

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