



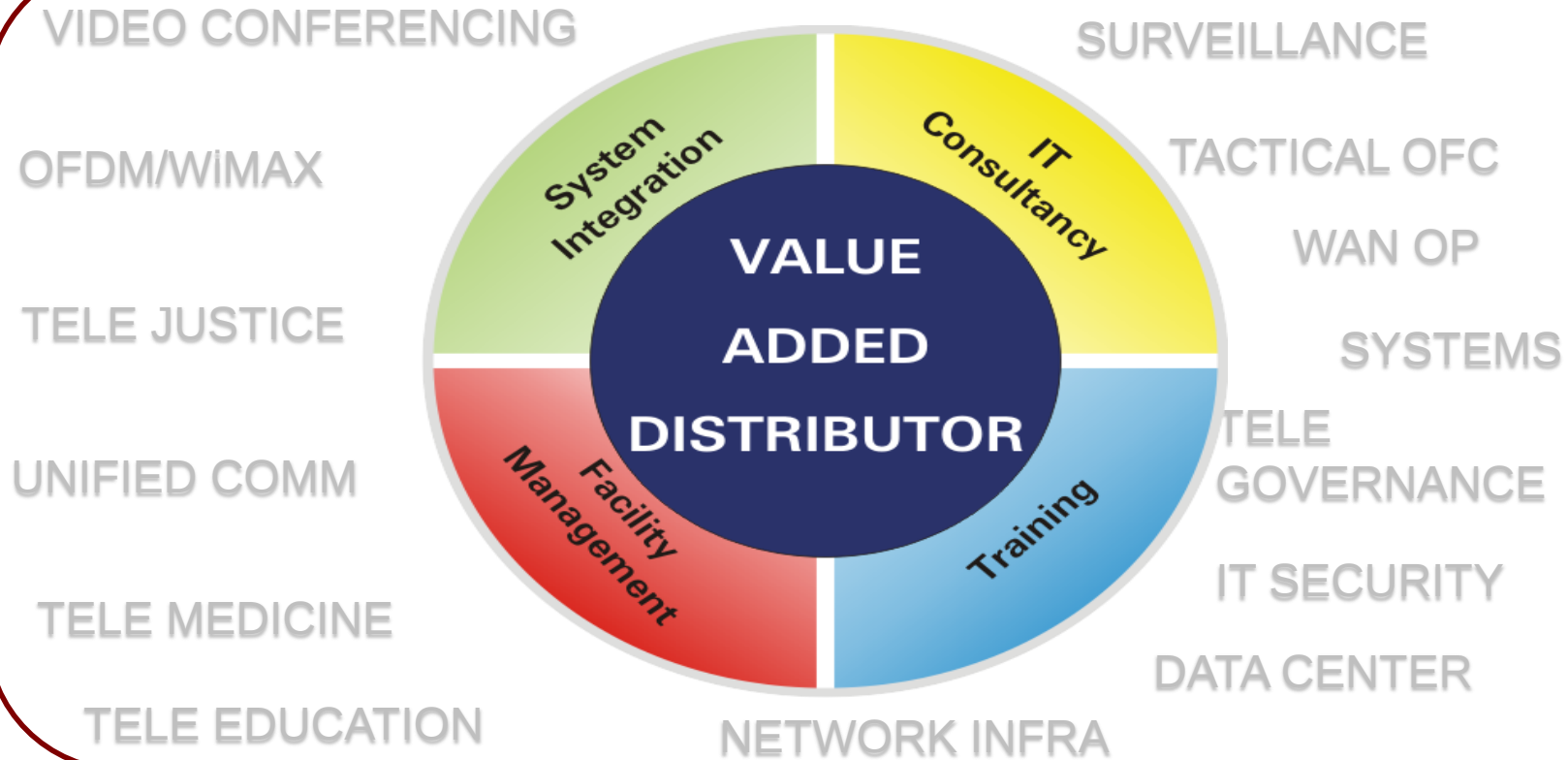
Delivering Telemedicine Solutions

By : Krishan Girdhar, Managing Director

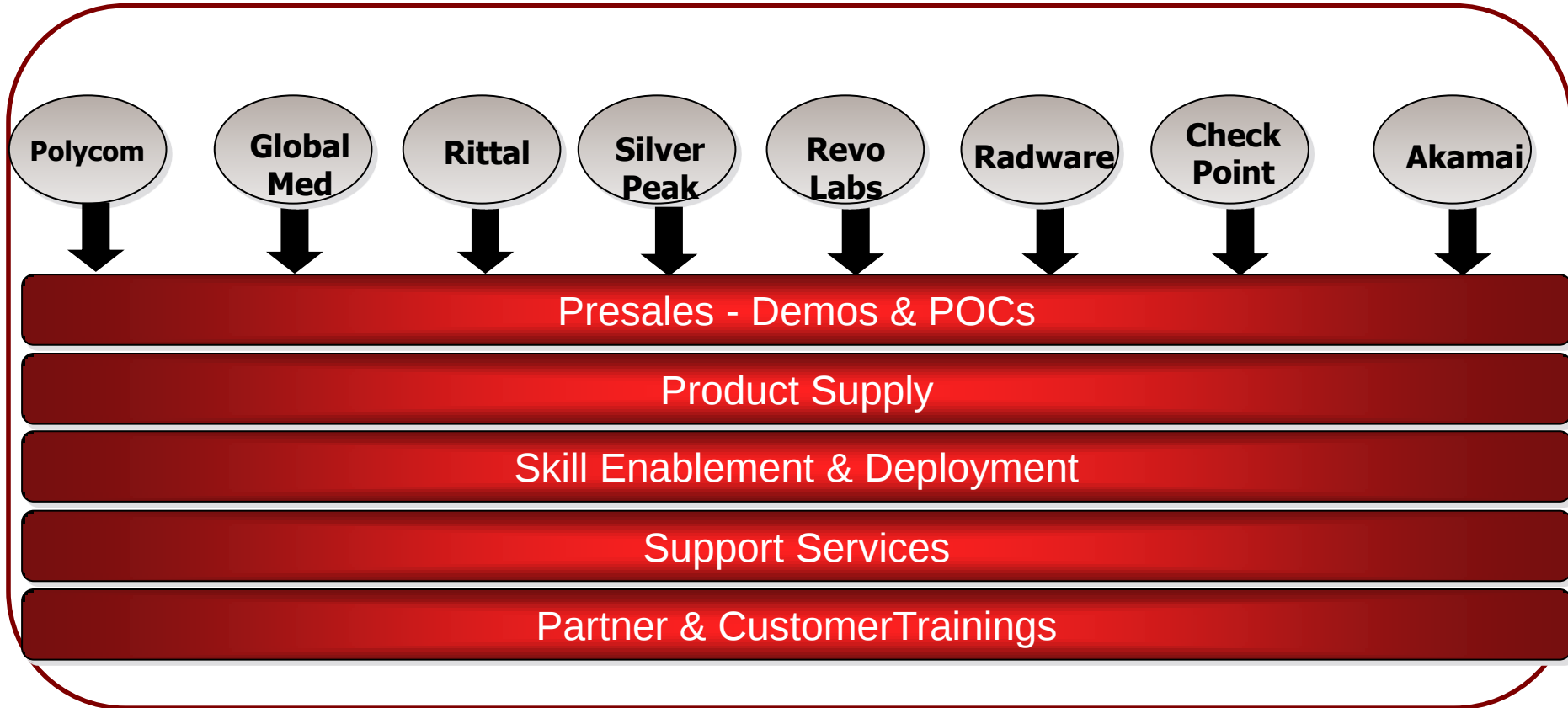
Overview

- ❑ “Value Added Distributors” with focus on Government & Defense Segment
- ❑ Our Motto : Customer Delight
- ❑ ISO 9001:2008, ISO 27001:2005 and ISO 20000 certified
- ❑ Awarded the “Fastest Growing Distributor - 2010” by VARINDIA
- ❑ Awarded the “Best Value Added Distributor – 2011, 2012 & 2013” by VARINDIA
- ❑ Awarded “Industry Excellence Award” for Asia Pacific region by Polycom for year 2012

What we do?



Value added distribution



Challenges in Providing Healthcare Today

- ❑ Access to Healthcare for patients across all demographics and geographies
- ❑ Overcoming limited financial resources
- ❑ Large travel distances to specialized healthcare facilities
- ❑ People who need this expertise are in other parts of the country.
- ❑ Managing Healthcare provider shortages
- ❑ Delay leads to deterioration in patient condition
- ❑ Financial setback/trauma
- ❑ **HUGE HEALTH DIVIDE**

Specialists & Experts have to say..

- ❑ 'Someone not well, first thing comes to mind for over 90% of the people – operation/surgery required'.
- ❑ Specialists say; 'Over 90% of the cases, [an early & accurate diagnosis](#)' can prevent complications and extended medications
- ❑ Ratio of Specialist v/s people who need him is very low
- ❑ Specialists can also travel extensively, but to a limit..
- ❑ Telemedicine in Medical Education
 - Students get to see very few live operations as OT space is limited.
 - Case studies far and few in between, no central repository of cases to study.
 - No exposure to national/international faculty.

India Statistics

- ❑ India Population – 1210 Million
 - ❑ 30% population in urban area
- ❑ Physician density - 6.5 per 10000 (Americas >20 Europe >33)
 - ❑ Psychiatrists - < 0.05
- ❑ Bed Population Ratio – 9: 10000
- ❑ # PHC – 23887 (1 Mar 2011)
- ❑ # CHC – 4809 (1 Mar 2011)
- ❑ Per capita expense – Health – \$ 126

Why Telemedicine?

By moving information rather than people, telemedicine promises to enhance health care while dismantling the barrier to where and when medical services are provided.

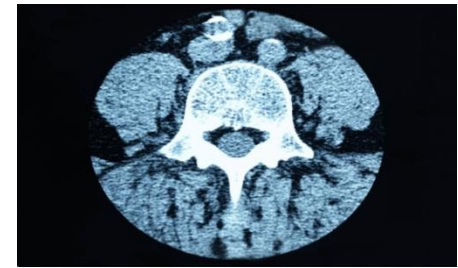
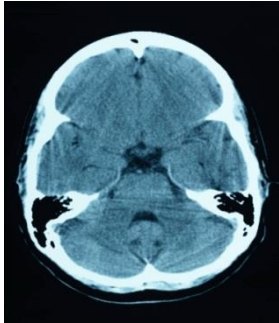


*Imagine people having
access to medical care
regardless of where
they live!*



Telemedicine “What is it?”

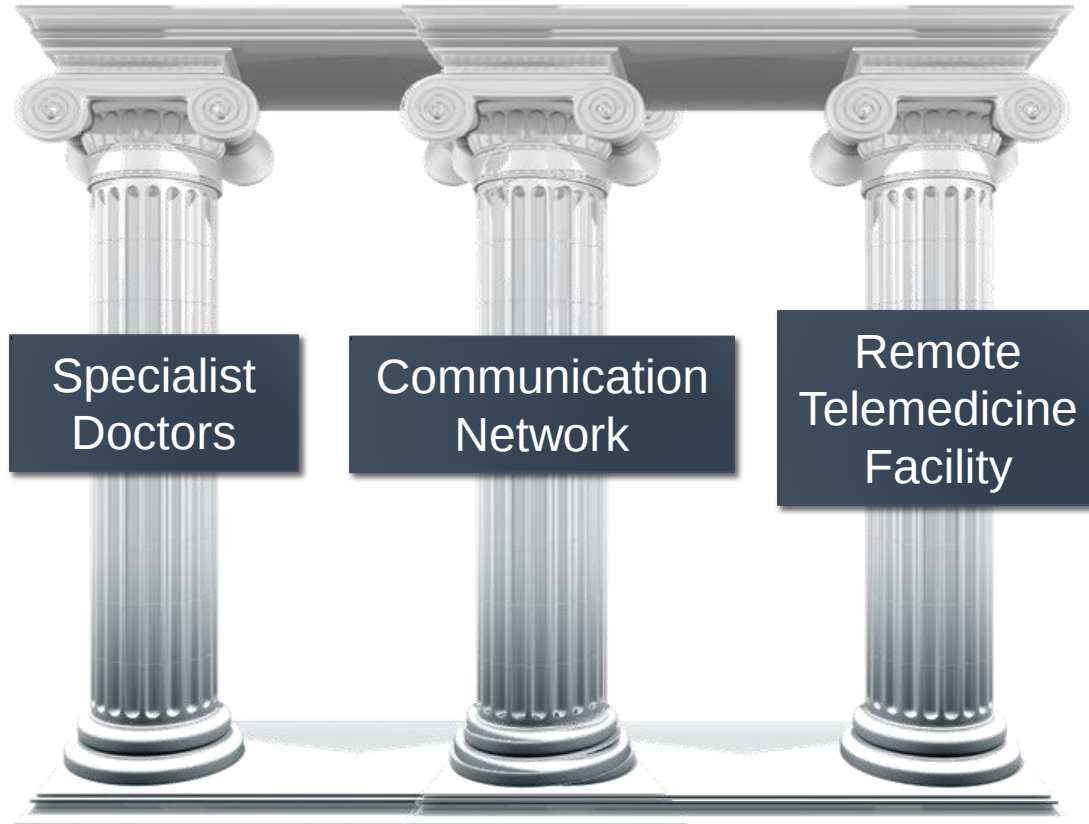
Broadly defined, telehealth / telemedicine is the transfer of electronic medical data (i.e. high resolution images, sounds, live video, and patient records) from one location to another.



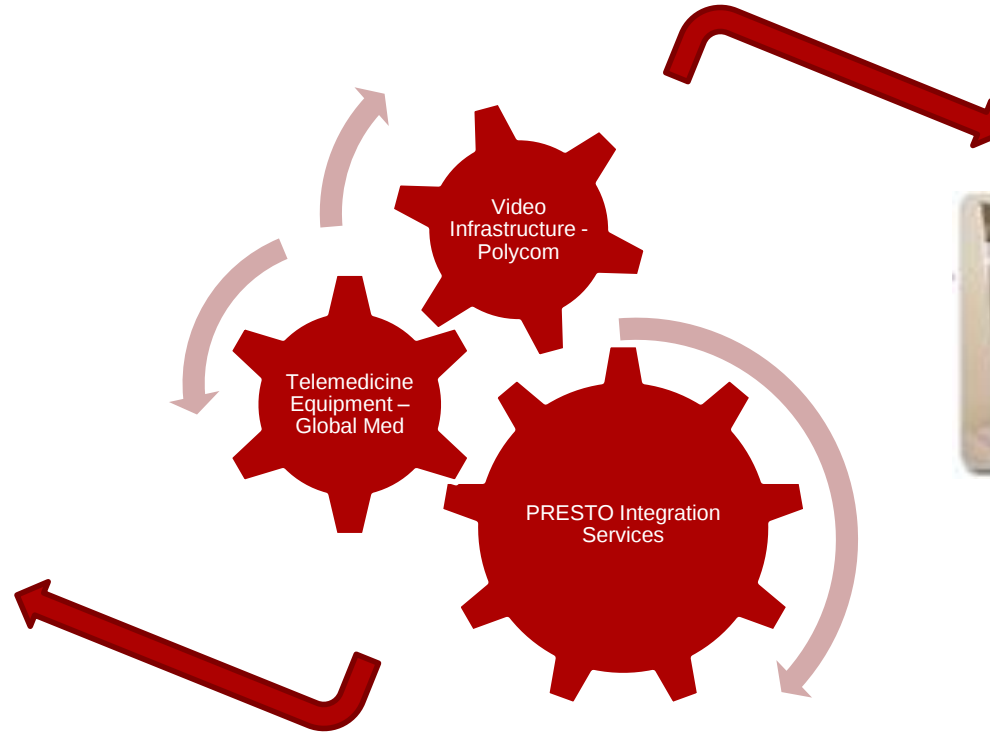
How Telemedicine can help

- ❑ Effectiveness in patient treatment
- ❑ Timely diagnostics and patient care
- ❑ Free movement of patient to any of the medical center irrespective of geography
- ❑ Collaboration among various specialists across hospitals
- ❑ Skill development among medical fraternity

Three Pillars for Telemedicine



Presto Offerings - An Effective Telemedicine Experience



Typical Use cases

Doctor to Patient

- Diagnostics
- Consultation
- Follow up treatment

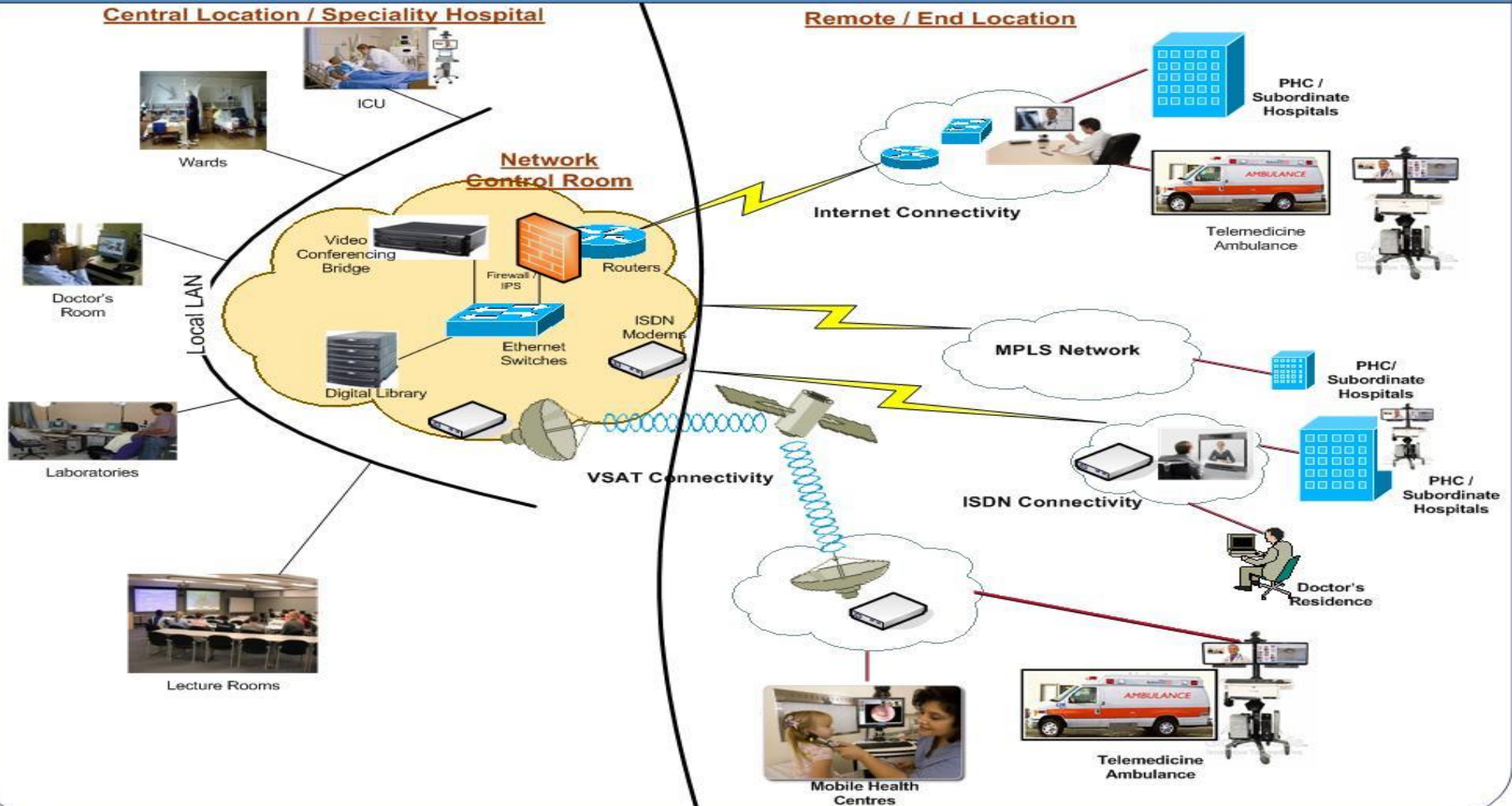
Doctor to Doctor

- Consultations
- Referrals
- Second Opinion

Trainings / Education

- Medical Lectures
- Live operations
- Recorded sessions

Schematic of Overall Connectivity of Telemedicine Infrastructure



The GLOBALMED Telehealth Ecosystem

GlobalMed offers, fully integrated, telemedicine solutions for all operating within its CapSure® Cloud and eNcounter™ framework

GlobalMed's solutions are highly customized from a base platform to cater to each specialty

GlobalMed products are also fully interoperable with existing hospital systems, EHR, and PACS servers

Proprietary Cloud Platform Solutions

CapSure®
CLOUD

eNcounter™



Integrated Telehealth Solutions

Mobile Exam Stations and Transportable Exam Station

- Primary point of data gathering and interaction between physicians and patients
- Multiple “specialty” stations that are scalable, used in commercial, government and clinical environments
- Carry-on unit weighs approximately 25 pounds
- Designed for in-home and mobile use with all essential functionality of mobile Exam Stations



Scalable

CAPSURE® CLOUD - Patient Image And Data Collaboration



GlobalMed's solutions allow for secure storage, review and sharing of images and data in the cloud across disparate health systems.

How Telemedicine can be Deployed - Indian Scenario

❑ Deployment at Primary Health Centre (PHC)

- Basic Medical facilities to the rural population
- Will reduce the referrals by 30-60%
- Bring in more effective treatment
- Shall be used for consultation with specialist
- The paramedic or Junior doctor can be trained on this facility to do the health checkup

How Telemedicine can be Deployed - Indian Scenario

❑ Deployment at District Hospitals

- Experiences Doctors can provide the Consultation to PHC's
- Most of the basic ailments can be diagnosed and treated
- Doctors can use this facility for consultations with Super Speciality Doctors around the globe.

❑ Deployment at Super Specialty Hospitals

- Super Specialty Consultation to cases that are beyond the technical skills of the doctors stationed at the district level.
- Provide online advise during operations
- Collaborate with Specialists around the globe for consultations.

Some Possible scenarios

- ❑ Establishing Patient care centers with Medical Cart
 - Linked with Specialty Centers/Hospitals
 - Allowing reach to the masses.
 - Patients need not travel all the way to specialty centers.
 - Enhance the level and quality of medical services across the rural areas which are devoid of best medical services.



Some Possible scenarios

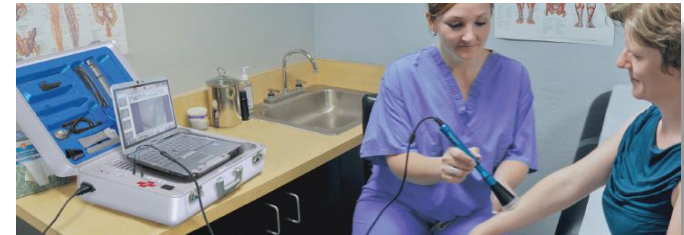
❑ State of the art Ambulance

- Cover Remote areas thereby extending the medical services reach.
- Allowing the doctors to administer the patient remotely while the patient is being transited to the hospital.
- Saving time and Precious lives



❑ Mobile kits –

- Allowing doctors the much needed mobility
- Can carry portable ECG/EKG kits, Ultrasound kits etc. for wider range of services at the door step enabling faster delivery of services



Some Possible scenarios

❑ Enhancing Medical Education –

- Can be leveraged by the medical students for education.
- Exposure to OTs to wider and larger number of students
- Offline viewing by virtue of archiving
- Collaboration with expert community can enhance the education standards immensely.



Some Possible scenarios

- ❑ Effective Tool for Doctor Consultation
 - Specialized medical advice anytime anywhere.
 - Enhanced medical services
 - Collaboration with expert community can enhance the knowledge base of Junior Doctors.



Solution Components

- ❑ Primary Health Centers / Sub District Hospitals / Dispensaries
 - Media Cart fitted with Video Conferencing and Medical equipment.
 - Video Conferencing End Point for conducting Video sessions with the Doctors for sharing examination data and real time tests.
 - Examination Camera for capturing and transmitting live video of the affected area. This can include Skin, Eye and Throat etc.
 - Otoscope for conducting clinical examination of ENT.
 - Examination Kit including ECG, Pulse Oximeter and Non-invasive Blood Pressure and screening Spirometer.
 - Digital Stethoscopes for conducting Heartbeat and Pulse examination of the patients
 - Store-And-Forward, Image Automation Software package

Solution Components

❑ Super Specialty Telemedicine Centers

○ Media Cart fitted with Video Conferencing and Medical equipment.

- Video Conferencing End Point
- Examination Camera
- Digital Stethoscopes
- ENT kit for conducting ENT examination of the patients.
- Examination Kit including ECG, Pulse Oximeter and Non-invasive Blood Pressure and screening Spirometer.
- USB Ultrasound Kits can provide an affordable and portable solution to the Examination needs of the patients in these centers.
- Super Megapixel Video Camera for pathology labs and applications.
- Store-And-Forward, Image Automation, Scientific module, includes Draw/DICOM output for Pathology, Dermatology and Life Sciences

Solution Components

- ❑ District / Specialty Hospitals Telemedicine Centers
 - Telemedicine infrastructure would consist mainly the Video and the general examination equipment.
 - Video Conferencing End Point for conducting Video sessions
 - Digital Stethoscope for listening the Heartbeat and Pulse of the patients being examined at the PHC by the Junior doctors of Paramedic staff.

Solution Components

- ❑ Central Video Conferencing Infrastructure
 - Designated Central location of the State, Video Conferencing infrastructure to control and manage all the Video Conferences would be installed.
 - Multipoint Control Unit (MCU) capable of conducting Video conference.
 - Conference Management and Scheduling Device for conference management and registration of various end points.
 - Recording and Streaming Solution for Recording and streaming of Video conferences. These can be used for later references and academic purposes.

Case Studies

REMOTE COMMERCIAL AREAS

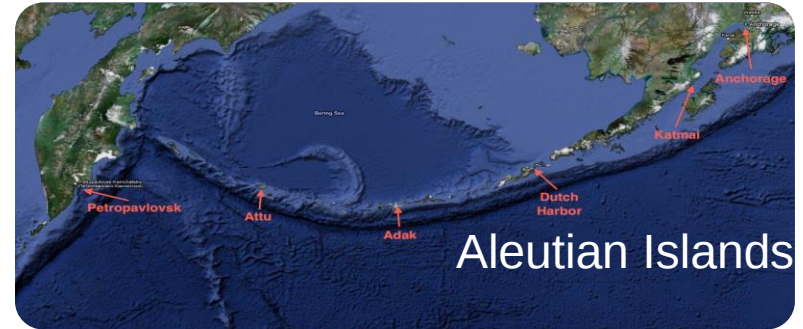


Ongoing assessment and monitoring of the general health profiles of remotely located workers improves long-term health and mental well-being, in addition to the overall quality of healthcare provided.

Patients are able to consult with specialists.

The costs and dangers associated with **unnecessary evacuations** are eliminated.

A single physician can support multiple rigs.



Case Studies

VETERANS ADMINISTRATION

Throughout 2012, nearly 500,000 US military veterans received 1.4 million telehealth consultations delivered from 150 VA Medical Centers and 750 Outpatient Clinics. GlobalMed's technology is deployed in nearly 1,000 VA locations (over 2,100 GlobalMed Telemedicine Stations).



Serving Those Who Serve

Case Studies

CLINICAL

2/3 of Quebec utilizes GlobalMed solutions for immediate access to care

100+ locations and clinics

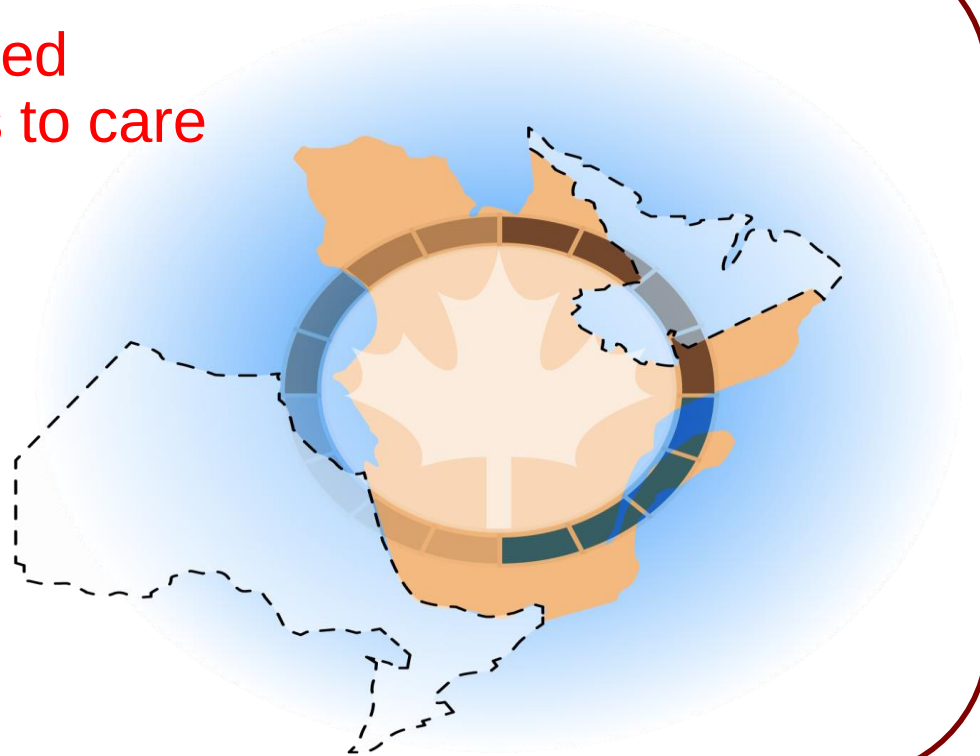
Centre universitaire
de santé McGill



McGill University
Health Centre

MCGILL
UNIVERSITY
MEDICAL CENTER

CANADA



Case Studies

SPORTS & ATHLETICS



Due to the successful deployment of this technology in the Pan-American Games in Guadalajara and the Olympic Games in London, Dr. Joao Grangeiro (CMO of the Olympic Games in Rio) and Dr. Antonio Marttos (MD & Consultant) have requested GlobalMed's technology for the Olympic Games in Rio de Janeiro in 2016.

The Telemedicine Project in 2016 includes:

- The Olympic Villa and all sports venues
- Selected Hospitals and Medical Centers in Rio
- Coverage for the Olympic Family (athletes, coaches, team members, staff, etc.)
- Plan is to extend Telemedicine to all foreign visitors arriving in Brazil for the Games

Not Just for the Corporate Athlete

Some Endorsements - Doctors

Dr. N.K Jindal, HoD ENT
ESIC Hospital, Basai Darapur, New Delhi

spot diagnosis like
Intussusception, perforation Ear drum
can be made through this system.
It will be very advantageous for the
patients as long travel can be avoided
for simple ailments. However where specialists
are not available this will be very helpful.
Responded

22/11/2013

(Dr. N.K. Jindal)
HoD ENT

Dr. Mehta, Eye Specialist
ESIC Hospital, Basai Darapur, New Delhi

This is an excellent method
of review of patients sitting in
the dispensaries.

Telemedicine would greatly
help in reducing the
OPD rush into hospitals.

1. Almost 30 to 40% of the could
be treated at dispensary level
itself & only the
problematic (complicated cases) could be referred
treated at hospital level. Sincerely 22/11/13

Some Endorsements - Patients

फीडबैक फार्म

टेलीमेडिसिन सुविधा

ईएसआईसी (ESIC) दवाखाना, सरोजिनी नगर, नई दिल्ली

रोगी के विवरण

नाम : *Aditi Thakur*
पता : *11-165, Naraina Vihar, New Delhi-28*
संपर्क विवरण : *9650382239*

* 5 के पैमाने पर निम्नलिखित के लिए अपनी संतुष्टि के स्तर का मूल्यांकन करें
(1 – कम से कम संतुष्ट और 5 – अत्यधिक संतुष्ट)

	1	2	3	4	5
1. चिकित्सक के साथ अपनी बातचीत कैसा था?	☐	☐	☐	☐	☒
2. आप परामर्श से संतुष्ट हैं?	☐	☐	☐	☐	☒
3. आप यही डॉक्टर से मिलने के लिए अस्पताल जाएँगे या इस सुविधा का प्रयोग करेंगे?	☐	☐	☐	☐	☒
4. क्या आप दूसरों को इस सुविधा का उपयोग करने के लिए सलाह देंगे?	☐	☐	☐	☐	☒
5. क्या इस सुविधा अस्पताल जाने के लिए आपका समय बचाने में मदद की है?	☐	☐	☐	☐	☒
6. क्या आप रात या छुट्टियों के दौरान इस सुविधा का उपयोग करना चाहेंगे?	☐	☐	☐	☐	☒

FEEDBACK FORM
TELEMEDICINE FACILITY

ESIC DISPENSARY SAROJINI NAGAR, NEW DELHI

PATIENT DETAILS

Name *Aditi Thakur*
Address *11-165, Naraina Vihar, New Delhi-28*
Contact Details *9650382239*

* Please rate your satisfaction level for the following on the scale of 5
(1 – least satisfied and 5 – highly satisfied)

	1	2	3	4	5
1. How was your interaction with the doctor?	☐	☐	☐	☐	☒
2. Were you satisfied with the consultation?	☐	☐	☐	☐	☒
3. Would you prefer this facility at the dispensary rather than visiting the hospital to meet the same doctor?	☐	☐	☐	☐	☒
4. Will you refer others for this facility?	☐	☐	☐	☐	☒
5. Has this facility helped in saving your time of visiting the hospital ?	☐	☐	☐	☐	☒
6. Would you like to use this facility during odd hours like night or holidays?	☐	☐	☐	☐	☒
Overall Satisfaction	☐	☐	☐	☐	☒

Thank you!