



सत्यमेव जयते
Ministry of Health and Family Welfare
Government of India

Annual Report Regional Resource Centre, Department of Telemedicine, PGIMER.

1st April 2017 to 31st March 2018

Department of Telemedicine, PGIMER

Prof. & Head Dr. Meenu Singh MD, FIAP, FCCP, FCAAI (Pediatrics)

Staff under RRC, NMCN, MoHFW, Govt. of India

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Background:

The Telemedicine Centre at the institute is a pioneer in providing both basic telemedicine facilities as well as a highly specialized quality service to the people of this region i.e. Chandigarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Uttar Pradesh, Uttaranchal and Rajasthan. This Centre is connected to 24 district hospitals and 3 medical colleges of Punjab for Tele consultations through and to the Post Graduate Institute of Rohtak, SGPGI Lucknow, AIIMS Delhi, AIIMS Bhubneshwar, Jaslok Hospital Mumbai, DMC Ludhiana, Fortis hospital Mohali, PIMS Jalandhar, GMC Trivandrum, IGMC Shimla, Dr. RPGMC Tanda and many others for interactive sessions through Video Conferencing.

Regional Resource Centre (under National Knowledge Network)

Our Centre had been designated as Regional Resource Centre (under NKN) of North India in 2013. PGIMER is the Nodal centre of the North zone for the national knowledge network and is connected to the medical colleges of J&K, Himachal Pradesh, Chandigarh, Punjab and Haryana. Following hospitals are coming under RRC, PGIMER, Chandigarh.

Sr .No	State / UT	Medical College / Institutions Connected over National Knowledge Network (NKN)	Name of the Principal & Contact Number	Name of the Nodal Officer	NKN Status	Funtional Status of the Organization
1.	UT	PGIMER, Chandigarh	Dr. Jagat Ram Director dpgichd@hotmail.com	Dr. Meenu Singh	Working	Central
2.	Himachal Pradesh	Dr.RPGMC-Tanda	Dr. Ramesh Bharti Principal, Dr. RPGMC, Tanda H.P- 176001 Ph. 01892-267115, 2678640	Dr. Vivek Sood	Working	State
3.	Himachal Pradesh	IGMC Shimla	Dr. Ashok Sharma Principal, Indira Gandhi Medical College Shimla-171001 INDIA Phone : (0177) 2804251	Dr. Piyush Kapila	Working	State
4.	J & K	GMC Jammu	Dr Sunanda Raina Principal/Dean 9419195926		Working	State
5.	J & K	GMC Srinagar	Dr Samia Rashid Principal/Dean 9419000746	Dr Muneer	Working	State
6.	Punjab	GMC Faridkot	Dr. Deepak J. Bhatti Principal: Guru Gobind Singh Medical College Ph. No. 01639-251111	Dr. Shailekh Mittal	Working	State
7.	Punjab	GMC Amritsar	Dr. Tejbir Singh Telephone: +91- 183-2426918	Dr. Gaurav Agnihotri	Not Working	State
8.	Haryana	PGIMS, Rohtak	Dr M C Gupta Director 01262-281307 (Fax) 01262 - 281308	Dr Sukhdev Chandla	Working	State

National Medical College Network (NMCN)

Department of Telemedicine, PGIMER is on the radar of becoming part of the NMCN and it will be facilitating tele-services in medical education and consultancy. We are working on the same and already in touch with the concerned medical colleges for their requirement.

Site Visit of concerned medical colleges for up gradation of existing Tele Medicine Centre and Tele evidence facility:

1. Dr Rajendra Prasad Government Medical College, Tanda, Himachal Pradesh (21.12.2017) (**Annexure 1**)
2. Indira Gandhi Medical College, Shimla, Himachal Pradesh (28-31 March, 2018) (**Annexure 2**)

We have visited GMC, Faridkot and GMC, Amritsar in the previous financial year 2017-18. Reports are attached as (**Annexure 3**).

GMC, Jammu, GMC, Srinagar and PGIMS, Rohtak have sent there report regarding their needs for the development of e class room already (**Annexure-4**)

Main Activities of RRC:

➤ Through NKN connectivity

- I. Tele education
- II. Tele consultation
- III. Tele evidence

➤ Through ISRO connectivity

- I. Tele education
- II. Tele consultation

➤ Evidence Based Health Informatics & Health Technology Assessment Unit

Tele-education through NKN connectivity:

S.NO.	Sessions Name	No of sessions in the year 2017-2018
1.	Clinic pathological conferences (CPC's)	30 (Every Wednesday)
2.	Pediatrics sessions with AIIMS, New Delhi	32 (Alternate Monday)
3.	Genetics Sessions with SGPGI, Lucknow	10 (Alternate Monday)
4.	Hepatology Sessions	6 (Alternate Thursday)
5.	General Surgery Session	8 (Started from February 2018)
	TOTAL:	86

All the sessions are being webcast and recorded through NMCN portal: www.nmcn.in

Tele education session:

- We conducted a live Telemedicine session between PGIMER, Chandigarh and Dr. RPGMC, Tanda, Kangra to demonstrate the feasibility and technicality of such sessions.

Tele consultations through NKN connectivity via eSanjeevani Software:

Department of Telemedicine is providing the on line consultation through **e-sanjeevani** programme developed by the C-DAC Mohali to the 24 District hospitals and 3 Govt. medical colleges of Punjab

Details of Tele Consultations (e-Sanjeevani)

Under the project the department has given break up wise consultation to the various specialties and super-specialties during the year 2017-2018 under Punjab Project, e-Sanjeevani.

Department	e Sanjeevani	Percentage
Pediatrics	230	17.81
Medicine	237	18.35
Obs. & Gynaecology	128	9.91
Dermatology	118	9.14
Orthopedics	114	8.83
Dental	86	6.66
ENT	41	3.17
Ophthalmology	59	4.57
Pathology	51	3.95
Anaesthesia	62	4.80
Surgery	39	3.02
Pulmonary Medicine	36	2.79
Hepatology	10	0.77
Neurology	11	0.85
Psychiatry	22	1.70
Cardiology	6	0.46
Endocrinology	4	0.31
Urology	3	0.23
Gastroenterology	10	0.77
Paed.surgery	1	0.077
Neurosurgery	2	0.15
Nephrology	7	0.54
Haematology	2	0.15
Transfusion Medicine	2	0.15
Plastic Surgery	2	0.15
Forensic Medicine	1	0.077
Cytology	7	0.54
Total	1291	100

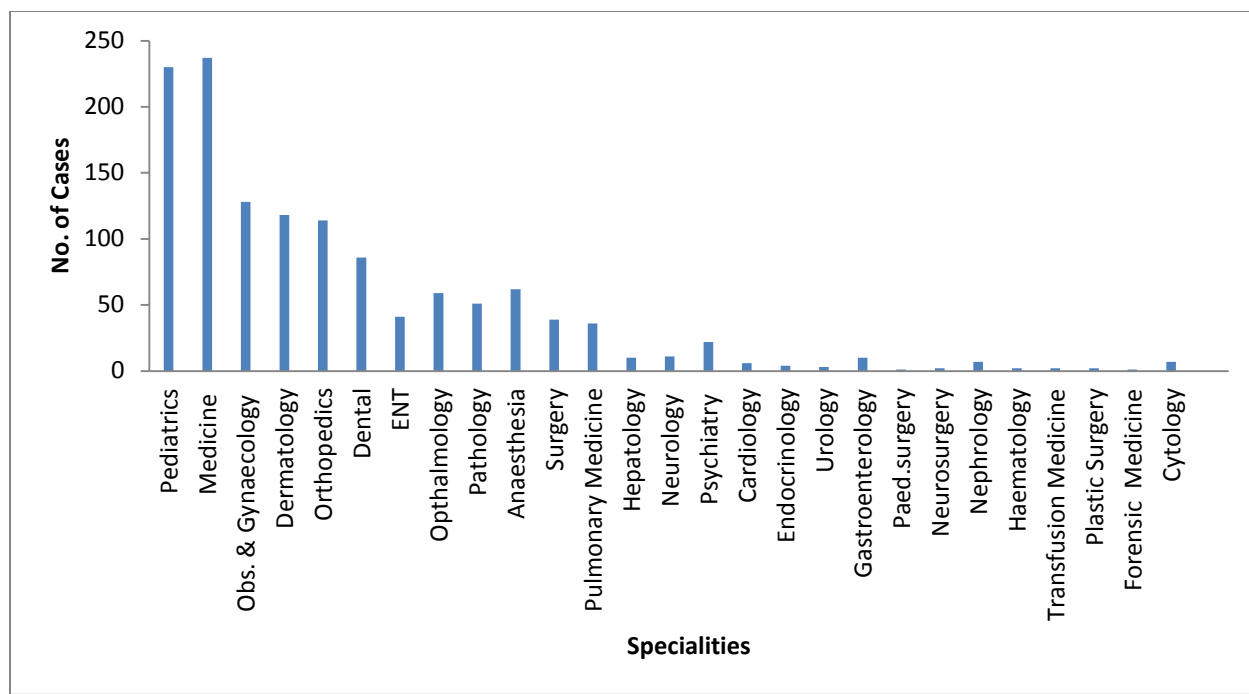


Figure 1: Bar Chart representation of Tele consultations (e –Sanjeevani)

Civil Hospital, Mohali	46
Civil Hospital, Ropar	11
Civil Hospital, Kapurthala	52
Civil Hospital, Hoshiarpur	4
Civil Hospital, Ferozpur	38
Civil Hospital, Bathinda	112
Civil Hospital, Mansa	59
Civil Hospital, Moga	0
Civil Hospital, Sangrur	38
Civil Hospital, Ludhiana	91
Civil Hospital, Gurdaspur	82
Civil Hospital, Nawasahar	103
Civil Hospital, Muktsar	0
Civil Hospital, Jalandhar	258
Civil Hospital, Fatehgarh Sahib	100
Civil Hospital, Patiala	50
Civil Hospital, Ajnala	123
Civil Hospital, Dasua	35
Civil Hospital, Pathankot	0
Civil Hospital, Amritsar	5
Civil Hospital, Barnala	76
Civil Hospital, Tarantaran	8
Total	1291

Tele evidence through Video conferencing

Telemedicine centre is continuing providing video Conferencing facilities for the doctors of PGIMER, for giving evidence in District Courts of Punjab and Haryana and this is proving very useful in saving valuable time of the doctors. Already **1520 sessions** have been conducted successfully during the year.

PGIMER ISRO LINKAGE

PGI is having telemedicine facility with 111 medical institutes all over India via satellite connectivity provided by ISRO, Bangalore. Regular transmissions on specialized clinical topics from ISRO Ahmadabad are being held and are being attended by the faculty of PGIMER.

We have started teaching session with ISRO network.

- CME through Student software: 29
- We also conducted **Five** teaching session through Teacher's software

PGIMER-ISRO Link-

CME Sessions attended through student's software- 29

CME Sessions through Teacher's Software- 5

S. No.	Name of Speaker	No. of participants attended*	Topic
1.	Prof. Meenu Singh (10 th August 201)	10	"Facts in Asthma"
2.	Prof. Meenu Singh (11 th September 2017)	47	"Asthma in Children"
3.	Dr. S.M. Bose (18 th January 2018)	41	Facts about Cancer
4.	Dr. Nipun Verma (9 th February 2018)	29	Novel therapies in cirrhosis
5.	Dr. Gita Mehta (15 th February 2018)	18	"Professionalism in Medical Practice"

*No of participants attended these sessions from different hospital who have joined the sessions and gave their feedback to us by email.

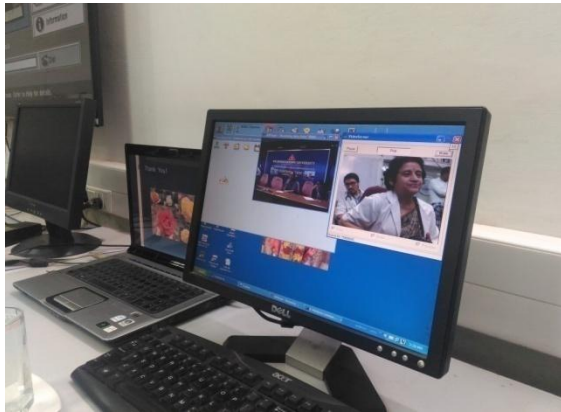


Figure 1: Dr Meenu Singh conducting teachers session entitled “**Facts in Asthma**” through ISRO connectivity

Tele Consultation through ISRO connectivity

- PGIMER is recently been connected with 3 remote areas :

1. Pooh (Kinnaur, Himachal Pradesh) - 3
2. Aayapa Temple (Sabarimala, Kerala) – Nil (Reason: There is no nodal officer to be contacted for the connectivity of this centre)
3. Sheshnag (Amarnath, J&K) - 4

Departmental Highlights:

The use of telemedicine is strengthening the rural health services and providing medical education by specialists through Video conferencing. Telemedicine provides high quality clinically relevant medical updates and access to modern technology in diagnosis and treatment through educational programmes.

1. We have started online web streaming.(www.nmcn.in) streaming ID 165550.
2. We collaborated with CSR in the establishment of e Health Centre at Dhanas, U.T Chandigarh.

Transmission of Clinical Lectures

We are continuing with the transmission of clinical lectures on Monday, Tuesday and Thursday from 8 A.M to 9 A.M to all the three medical colleges of Punjab which started on 20 January 2014, and it is benefitting the faculty there. A total of **29** clinical lectures were transmitted during the year 2017-18.

Live webcasting of sessions

This Centre is also facilitating the live transmission of various sessions being held in our institute. We have successfully live web casted **52** sessions to all over the India. We have successfully web casted the lecture on "Food Allergy in Clinical Practice" by Dr. S. Lavasa (Child and Allergy Specialist) held at Department of Telemedicine, PGIMER, Chandigarh.

Interactive Sessions

Interactive session between Department of Pediatric medicine of PGIMER and AIIMS, New Delhi has been transmitted every Monday and Interaction between the Pediatric Genetics of PGIMER and SGPGI, Lucknow on every Tuesday. Teaching sessions regarding Hepatitis C awareness have been transmitted through Zoom software with district hospitals of Punjab by Department of Hepatology twice in a month.



Figure 2: Case discussions and teaching sessions

Tele-General Surgery Session:

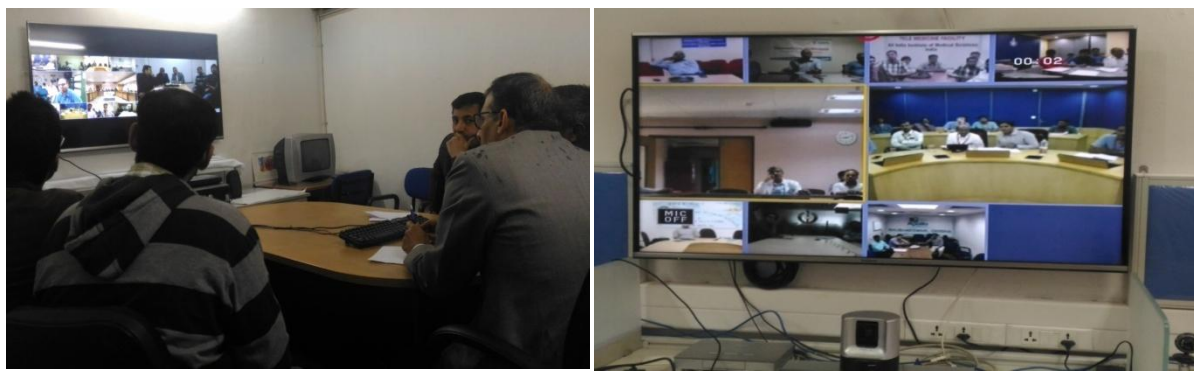


Figure 3- Tele General surgery sessions

Figure-4- Visit of foreign delegates (Ghana, Namibia, Nigeria, Japan, Korea, Phillipines, Egypt, USA) to Regional Resource Centre PGIMER, Chandigarh.





Clinical-Pathological Conferences

Telemedicine Centre is transmitting the educational CPCs to the various medical colleges connected. A total number of 30 **CPCs** were transmitted from April 2017 to March 2018. Different educational sessions of various departments have also been transmitted to the connected centers (**Annexure 5**).



Figure 5: Clinico- Pathological Conferences at PGIMER, Chandigarh

Inauguration of e Health Centre at Dhanas village, Chandigarh, UT by Hon'ble Governor of Punjab:

An e Health Centre has been setup under the Department of Telemedicine, PGIMER and Secretary, Directorate of Health Services at Dhanas, Chandigarh. e-Health Centre is designed as a standard shipping container retrofitted to work with the pre-existing clinic. Hon'ble Governor of Punjab His Excellency Sh. VP Singh Badnore inaugurated the centre on 21st November 2017. The inaugural function was also facilitated by Home Secretary, UT administration, Director, PGIMER, Chandigarh and other officials of UT administration. This e-health centre has been supported by Hawlett Packard enterprise as their corporate social responsibility (CSR) and RMS INDIA have installed the lab equipments. It is the first centre of its kind in Punjab and Chandigarh.

It is fully equipped with workstation, Electronic medical record (EMR) system, biometric patient identification and integrated diagnostic devices. The HP cloud enabled technology allows for data both clinical and administrative, to be monitored across sites via an admin dashboard. The electronic medical records are being maintained here and all the basic tests including the pulse-oximetry, ECG and blood sugars etc. are performed and communicated to the concerned consultant using the e Health facility facility.

This type of facility will definitely help in reducing the burden of patients on tertiary care hospitals.

धनास में खुला रीजन का पहला ई-हेल्थ सेंटर, डैंगू समेत कई टेस्ट होंगे फ्री

पीजीआई, जीएमएसएच-16, जीएमसीएच-32 में मरीजों का बोझ कम करने के लिए शुरू किया सेंटर, बदनौर और किरण खेर ने किया उद्घाटन

चंडीगढ़। पीजीआई और जीएमएसएच-16 में मरीजों के बोझ को कम करने के लिए धनास में इस रीजन का पहला ई-हेल्थ सेंटर शुरू किया गया है। मंगलवार को पंजाब के गवर्नर और चंडीगढ़ के प्रशासक वीपी सिंह बदनौर और एमपी किरण खेर ने इसका शुभारंभ किया। आईटी कंपनी एचसी ने अपनी क्लॉउड मोशिनो रिस्पॉन्सिबिलिटी के तहत इस सेंटर को शुरू करने में मदद की है। ई-हेल्थ सेंटर को चंडीगढ़ प्रशासन का स्वास्थ्य विभाग पीजीआई के टेलीमेडिसिन डिपार्टमेंट के सहयोग से मरीजों का उपचार करेगा।

केंद्र की शीप में बने इसे हेल्थ सेंटर में कई तरह के टेस्ट किए जाएंगे। यहां पर पेशेंट आएगा तो उसका रजिस्ट्रेशन बीपी, टेम्परेचर, ब्लड शुगर, वॉटिंग में ऑक्सीजन आदि चेक किया जाएगा। यह डाटा डॉक्टर के पास जाएगा। अगर पेशेंट को हालत क्रिटिकल है तो उसे सीधे उम्मी डिपार्टमेंट में भेजा जाएगा, जहां से उसका इलाज किया जाना है। यहां पर रीनल फंक्शन टेस्ट, लीवर फंक्शन टेस्ट, डैंगू, हीमोग्लोबिन आदि ब्लड टेस्ट फ्री में किए जाएंगे। यहां पर ईसीजी की भी सुविधा है। अगर ईसीजी

रिपोर्ट में कोई गड़बड़ी है तो वीडियो कॉन्फ्रेंसिंग के जरिए डॉक्टर को ईसीजी दिखाई जाएगी। डॉक्टर बीसी के जरिए मरीज की प्लस रेट, वीपी, ईसीजी में क्या गड़बड़ी है, उसे चेक करेगा। इसके बाद अगर रिपोर्ट गड़बड़ी है तो उसे तुरंत एंबुलेंस से जीएमएसएच-16 में संबंधित डॉक्टर के पास ले जाया जाएगा। इस सुविधा से मरीज का रिवांड देश से बाहर बैठे डॉक्टर भी देख सकेगा।

प्रशासक वीपी बदनौर ने कहा कि मलोया और भनास में 50-50 बेड के हॉस्पिटल तैयार हैं। सेक्टर-48 में भी 100 बेड्स हॉस्पिटल तैयार है। अगले साल तक यह अस्पताल शुरू हो जाएगा। इसका सबसे ज्यादा फायदा यह होगा कि पीजीआई और जीएमएसएच-16, जीएमसीएच-32 में मरीजों की रश कम होगा। बदनौर ने कहा कि उनका लक्ष्य यह है कि पीजीआई में उन लोगों को बेहतर इलाज मिले, जिन्हें ज्यादा जरूरत है। इससे पीजीआई और बेहतर काम कर सकेगा। आसपास के अस्पतालों को और बेहतर बनाने के लिए वे प्रयासत हैं। हिमाचल में इस तरह के ई-हेल्थ सेंटर काफी कारगर सिद्ध हो सकते हैं।



• शहर के तीन अस्पतालों में मरीजों का प्रेशर ज्यादा, सही इलाज का नहीं मिलता मौका

शहर में पीजीआई की ओर से हेल्थ सेंटरों में टेलीमेडिसिन सेंटर के विभिन्न रोगों के विशेषज्ञों की मदद से मरीजों के गंभीर रोगों का उपचार करने की पहल की है, तबकि इससे पीजीआई, जीएमसीएच-32 व जीएमएसएच-16 की ओपेडी में मरीजों के प्रेशर को कम किया जा सके। इन तीनों अस्पतालों में मरीजों का इतना प्रेशर है कि थिकिस्को को स्ली तरीके से इलाज देने का मौका नहीं मिलता। इस समस्या के समाधान के लिए पीजीआई प्रबंधन हेल्थ डिपार्टमेंट की मदद के लिए आगे आया। इस ई-हेल्थ सेंटर के आज शुरू होने पर एमपी किरण खेर ने स्वास्थ्य विभाग की ओर से किए गए इस प्रयास की सराहना की और कहा कि ऐसा करने ही पीजीआई व जीएमसीएच में मरीजों के प्रेशर को कम किया जा सकेगा। मरीजों को भी घर के पास ही बेहतर उपचार की सुविधा मिलेगी से उन्हें प्रेशर रहने से निजात मिलेगी। इस कंसेंट को शहर में दूसरे हेल्थ सेंटरों में भी शुरू करने पर काम होगा, ताकि मरीजों को डिस्पेंसरी व स्थित अस्पताल में ही अच्छे उपचार मिलना शुरू हो। इस मौके पर हेम कस हेल्थ सेक्टर की अनुलग अवगत, पीजीआई के डायरेक्टर पी. जगत राव, डीएमएस. डा. जी. श्रीवास्तव, पीजीआई के टेलीमेडिसिन सेंटर की प्रमोटी ड. मीनू सिंह आदि मौजूद थीं।

• मरीजों को वापस लौटाना

धनास की डिस्पेंसरी में प्रशासक बदनौर और एमपी किरण खेर ई-हेल्थ सेंटर का उद्घाटन करने में जुटे थे, तो दूसरी ओर डिस्पेंसरी में इलाज के लिए आ रहे मरीजों को डॉक्टर वापस लौटा रहे थे। करीब 10 से अधिक मरीजों को लौटा दिया गया।

• वर्यो जरूरत महसूस हुई

पीजीआई में रोजाना 10 हजार मरीज चंडीगढ़ और आसपास के राज्यों से आते हैं, ऐसे में लोगों को लंबी कतारों का सामना करना पड़ता है। इन तरह के सेंटर खुलने से मरीजों को सीधे वहीं भेजा जाएगा जहां उनका इलाज होना है। यहीं हलत जीएमएसएच-16, जीएमसीएच-32 का है।

सब डिस्पेंसरी में टेलीमेडिसिन से होगा इलाज

अमर उजाला व्यूरो

चंडीगढ़।

जल्द ही शहर की सभी 35 डिस्पेंसरी में टेलीमेडिसिन से इलाज संभव होगा। ताकि पीजीआई चंडीगढ़, जीएमएसएच-16 और गवर्नमेंट मेडिकल कॉलेज एंड हॉस्पिटल (जीएमसीएच-32) के इमरजेंसी व ओपीडी में चेकअप कराने के लिए आने वाले मरीजों के बोझ को कम किया जा सके। टेलीमेडिसिन तकनीक के जरिए डिस्पेंसरी में मरीजों को पीजीआई और जीएमएसएच-16 के डॉक्टरों के जरिए बेहतर इलाज उपलब्ध कराया जाएगा। मंगलवार को पंजाब के गवर्नर एवं चंडीगढ़ के प्रशासक वीपी सिंह बदनौर और शहर की सांसद किरण खेर ने धनास की डिस्पेंसरी में शहर के पहले ई-हेल्थ कियोस्क का उद्घाटन किया।

दो साल पहले सांसद ने धनास की डिस्पेंसरी में टेलीमेडिसिन से इलाज और ई-हेल्थ कियोस्क शुरू करने की प्लानिंग की थी। ई-हेल्थ कियोस्क की मदद से लोग

शहर की सभी 35 डिस्पेंसरी में खोला जाएगा पॉलीक्लीनिक

प्रशासक वीपी सिंह बदनौर ने धनास में पहले ई-हेल्थ का किया उद्घाटन

ई-हेल्थ कियोस्क ऐसे करेगा काम

- चेकअप कराने के लिए पेशेंट को पहले ई-हेल्थ कियोस्क पर अपना रजिस्ट्रेशन कराना होगा
- इसके बाद मरीज का हार्ट रेट, ब्लड प्रेशर आदि की प्राथमिक जांच की जाएगी
- ई-हेल्थ कियोस्क के माध्यम से जांच रिपोर्ट तैयार कर आगे डॉक्टर को भेजी जाएगी
- मरीज को टेस्ट रिपोर्ट पीजीआई और जीएमएसएच-16 के टेलीमेडिसिन में बैठे अनुभववा डॉक्टरों को भेजी जाएगी। जोकि मरीज का वहाँ से बैठे-बैठे ही इलाज करेंगे।

अब अपने घर की नजदीकी डिस्पेंसरी पर बेहतर इलाज करा सकेगा। उन्हें पीजीआई, जीएमएसएच-16 और जीएमसीएच-32 जैसे बड़े अस्पतालों में इलाज के लिए रजिस्ट्रेशन कराने से लेकर चेकअप के लिए एक जगह से दूसरी जगह धक्के नहीं खाने पड़ेंगे। पीजीआई में रोजाना ओपीडी में 10 हजार मरीज चेकअप के लिए आते हैं। इसी तरह जीएमएसएच-16 और जीएमसीएच-32 में रोजाना 4 से 5 हजार लोग ओपीडी

में चेकअप कराने आते हैं। बदनौर ने स्वास्थ्य सचिव से जल्द ही शहर की सभी डिस्पेंसरीयों में पीपीपी मोड के तहत पॉलीक्लीनिक सेवाएं शुरू करने के लिए कहा है। ताकि लोगों को उनके घर के नजदीकी ही स्वास्थ्य जांच संबंधी सेवाएं उपलब्ध कराई जा सकें। सांसद किरण खेर ने धनास डिस्पेंसरी में शुरू की गई ई-हेल्थ सेवा के दौरान कहा कि जल्द ही यहाँ 50 बेड का अस्पताल बनेगा।



धनास की डिस्पेंसरी में शहर के पहले ई-हेल्थ कियोस्क का उद्घाटन करते प्रशासक बदनौर।

UT's 1st e-health kiosk to be data bank for PGI

Shilona Kanwar
@timesgroup.com

Chandigarh: Patients were seen walking inside a shipment container in Dhanas Colony on Monday. This container was no ordinary box, it was a health kiosk equipped with all basic diagnostic tools, ranging from ECG and basic blood tests to spirometry (lung test) and liver-function test.

The kiosk, inaugurated by administrator V P Singh Badnore, has been linked with the PGIMER and Government Multi-specialty Hospital (GMSH), Sector 16. Apart from collecting data vital to health care in the UT, the health kiosk is going to lessen the burden on the OPD at PGIMER. The kiosk will also provide all the data it collects to the premier health institute in Sector 12.

Kiosk has a facility to Skype with doctors at PGIMER and GMSH-16. Even the ECG's soft copy need not to be carried, as it will be transmitted electronically to the PGIMER and GMSH. If this model succeeds in Chandigarh, it can be emulated elsewhere in Punjab and Haryana to decrease patients' rush. "Under the corporate social responsibility, Hewlett-Packard and Parulika based Recorders and Medicare Systems have helped us in setting up this centre. There are patients coming to the kiosk, as it has all basic investigations offered by us free of cost. The idea is to screen patients and forward only those cases which need the expertise available at PGIMER," said Dr. Meenu Singh, in charge of telemedicine department, PGIMER.

For three months now, diagnostic facilities are being run at dispensaries in Dhanas, Sector 35, Dadumajra and Behiana,



A woman gets checked at the new e-health kiosk in Dhanas on Monday

HOW THE E-HEALTH SYSTEM WORKS?

- A patient gets registered at the kiosk
- After this, a technician carries out vital tests, like blood-oxygen saturation levels, body temperature, blood pressure and pulse rate
- Data is sent to a medical officer on duty, who examines the patient
- Accordingly, the doctor writes required investigations which are conducted in the kiosk and the report is given after few hours
- All this data is automatically sent to the PGIMER's telemedicine department and to the GMSH in Sector 16
- If the case is complex, the doctor on duty can Skype with the doctors at PGIMER and GMSH-16

FIND DIAGNOSTIC KITS AT

The dispensary in **Dhanas** is the only one which has been equipped with an e-health kiosk, while diagnostic kits are available at the dispensaries located in **Sector 35, Dadumajra and Behiana**

3-MONTH REGISTRATIONS

Dhanas	2,480
Behiana	437
Sector 35	627
Dadumajra	669

Checks available at e-Kiosk: Blood pressure, blood sugar, lipid profile, liver function, pulmonary function, ECG, platelet count

where 4,211 patients have been registered to date. "Dhanas has the kiosk, while the other centres have diagnostic kits. There are many places in Andhra Pradesh where these kiosks are being run in public-private partnership mode," said Dr. Amit, department of telemedicine, PGIMER.

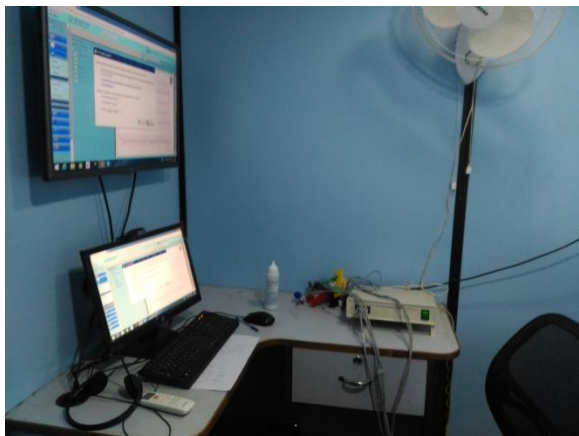


Figure 6: Inauguration of EHC at Dhanas village, Chandigarh

Evidence Based Health Informatics & Health Technology Assessment Unit

File no. T-21016/16/2011-TM Dated-3rd May 2017, officially started in RRC from August 2017.

➤ Main activities

- 1. Online course:** Online course in the field of evidence based medicine has been developed for which modules has been recorded. Content has been developed for which lectures has been recorded. (www.acebch.org). We will link this website with nmc portal.
- 2. Health Technology assessment:**
 - a.** Evaluation of Mukhyamantri Aarogaya Kendrum initiated by Department of Health and family welfare, Government of Andhra Pradesh.) (Report Attached) **Annexure 6**
 - b.** Evaluation of Thalli bidda (102 service for maternal health care) initiated by Department of Health and family welfare, Government of Andhra Pradesh.) (Report Attached)**Annexure 7**
 - c.** Evaluation of 108 ambulance services initiated by Department of Health and family welfare, Government of Andhra Pradesh) (Report Attached)**Annexure 8**

Assessment of different projects in Government of Andhra Pradesh

Andhra Pradesh Ministry of Health and Family Welfare has started different public health programmes in partnership with Private companies. The health care providers like Apollo, GVK and e-Vaidya have been outsourced to provide services in different schemes. To evaluate these services and advise on improving them, Andhra Pradesh Ministry of Health and Family Welfare sought the services from Postgraduate Institute of Medical Education and Research, Chandigarh. Being an eminent institute and a leader in the sector of healthcare PGIMER was invited to be Knowledge Partner for the three programmes namely Mukhyamantri Aarogaya Kendrum, 108 Ambulance services and Thalli bidda express.

The first meeting was held on 3rd April, 2017 organized by the Health and family welfare, Andhra Pradesh. The main aim of this meeting was interaction between Service Providers, Knowledge Partners and Nodal Officers in the presence of Health Advisor, Principal Health

Secretary and Hon'ble Health Minister of Andhra Pradesh Shri Kaminini Srinivas and Hon'ble Chief Minister of Andhra Pradesh Shri N Chandrababu Naidu. All the participants showed their presentation in front of the Hon'ble Chief Minister Shri N Chandrababu Naidu.

3. Conduct of systematic reviews

- a. Safety and tolerability of Chikungunya vaccines: A systematic review (Completed).
- b. Association of childhood obesity with non-alcoholic fatty liver disease: A systematic review (Ongoing)

4. Workshops

- a. Workshop on Professionalism in Research Dated 16/08/17. Venue: Department of Telemedicine, Nehru Hospital, PGIMER, Chandigarh.
- b. Workshop on “ Professionalism in Medical Practice” Dated 1st -3rd December 2017 at Kairon Block, PGIMER, Chandigarh funded by Medical Council of India.

Consultants invited as resource faculty for following workshops:

- c. How to practice Evidence Based Medicine, AIIMS Rishikesh Dated 12/09/2017 - 16/09/2017 Venue: AIIMS, Rishikesh
- d. Workshop on “Principles of Evidence Based Medicine” 3rd January 2018 Venue: Seminar Hall, Dept. of Pediatrics, Indira Gandhi Govt. Medical College & Hospital, Nagpur
- e. How to practice Evidence Based Medicine, AIIMS Rishikesh Dated 23/03/2018 - 24/03/2018 Venue: AIIMS, Rishikesh

5. Making and disseminating disease guidelines:

1. Guidelines for Non Communicable Diseases in 1st world NCD Congress, PGIMER, Chandigarh.
2. Working on development of electronic health records of Asthma Clinic patients in PGIMER, Chandigarh.

6. Surveys Conducted:

- a) Global Asthma Network India survey
- b) Survey for Assessment of Telemedicine Session on Staff Clinical Pathological Cases (CPCs)

c) Survey on Physician burnout at PGIMER Chandigarh.

1. Safety and tolerability of Chikungunya vaccines: A systematic review

Name(s) of the author(s): Anil Chauhan¹, Ph.D; Manu Goyal², Ph.D; Shreya Singh³, MD
Nishant Jaiswal¹, MBBS; Meenu Singh^{1,2,3}, MD.

Affiliations: 1Health Informatics Unit, Regional Resource Centre, PGIMER, Chandigarh. 2 ICMR Advanced Centre for Evidence Based Child Health, Advanced Pediatrics Centre, PGIMER Chandigarh 160012. 3Deptt. of Pediatrics, Advanced Pediatrics Centre, PGIMER, Chandigarh, 160012. Deptt. Of Microbiology, PGIMER, Chandigarh, 160012.

Background:

Chikungunya is an emerging arthropod borne disease manifested by Chikungunya virus (CHIKV) under alphavirus genus of the Togaviridae family. The transmission of this viruses done by the arthropod vector, female *Aedes aegyptica* or *Aedes albopictus* mosquitoes. When evaluating human protection from CHIKV infections, both humoral and cellular immunity have been assessed. However, the humoral immune response shows an important role in regulating CHIKV infection compared to Cell Mediated Immunity (CMI). There are neutralizing antibodies produced through humoral immune mechanism against glycoproteins on the outer surfaces of viral envelope. (The IgM antibodies are measured after 2 days of fever and persist nearly over 3-months and IgG antibodies can be detected from day 4-10th day of fever and persist for years. (5)Due to frequent epidemics worldwide and the high disease associated morbidity, CHIKV control efforts must be augmented by an effective vaccine. The present review assesses the CHIK vaccines developed or in development for their beneficial and adverse effects in human populations.

OBJECTIVES: To determine the safety, efficacy, tolerability and immunogenicity of Chikungunya vaccines in human population.

METHODS:

Types of studies: The present systematic review included randomized clinical trials (phase 1, 2 or 3 trial)

Types of participants: Healthy children and adults with negative history of Chikungunya virus infection.

Intervention: Chikungunya virus vaccines

Comparison/control: Placebo.

Types of outcome measures:

Primary:

- 1) Efficacy of Chikungunya virus vaccines
- 2) Safety and tolerability of Chikungunya virus vaccines.
- 3) Sero conversion rate

Secondary:

- 1) Geometric mean titers of antibodies

RESULTS:

We identified 244 records through PUBMED, OVID and EMBASE searches and further 3 from other sources. Out of the total 247 studies screened by titles and abstracts, 3 studies met the inclusion criteria. (10-12) All the included studies were randomized, placebo-controlled clinical trials. Of the three included studies, there were 153 adult participants with no children participant. Two studies discussed the primary doses and one study discussed the effect of booster doses. All the included studies were from high income countries and no study was from low and middle income countries. Mc Clain, 1998 and Edelman, 2000 were the phase 1 and phase 2 clinical trials respectively of the live attenuated chikungunya vaccine (TSI-GSD-218 manufactured at the Salk institute-government services division). (10,11) Whereas, Ramsauer, 2015 is a phase 1 trial of live recombinant measles-virus based chikungunya vaccine. (12)

The present review gives an insight into the present scenario of CHIKV vaccines and puts into perspective, the finding of all randomized controlled trails currently available. Although no vaccine is licensed at present, an effective vaccine for chikungunya will not only deter the rising trend of this infection but also contribute in limiting the disease associated morbidity and health care costs involved in its management. Presently, we were unable to perform meta-analysis of the studies due to methodological and clinical heterogeneity. Clinical trials in low income countries are also required as most studies so far are from high income countries. The efficacy of

these vaccines in an endemic setting with low resources would be valuable as a significant burden of chikungunya lies in such regions.

This study will be helpful in suggesting which type of vaccine is clinically relevant and can be adopted for future clinical trials for estimation of efficacy, immunogenicity, safety and tolerability. This will help government/ private agencies to save a lot of resource in conducting a clinical trial. It will also give an understanding of which CHIKV vaccines are likely to be available soon as encouraging results are seen in the studies included herein.

Conflict of Interest: None to disclose.

2. Association of childhood obesity with non-alcoholic fatty liver disease: A systematic review (Ongoing)

Review question. Is pediatric obesity associated with the development of non-alcoholic fatty liver disease in later life and its correlation with cardiovascular and metabolic risk factors?

Searches: PubMed, Embase, Cochrane Library, OvidSP and Web of Science

Condition or domain being studied. Non-Alcoholic Fatty Liver Disease (NAFLD)

Participant/Population---- Pediatric population

Intervention----Obesity

Comparator/Control---- non-exposed control group (for case control studies) No control group (for cohort studies)

Types of study to be included.: Case Control studies & Cohort studies

Primary outcome(s).

a) Development of NAFLD Timing and effect measures

Secondary outcome(s)

Development of metabolic and cardiovascular risk factors Deranged liver function tests

Development of Cirrhosis Development of HCC Timing and effect measures

Risk of bias (quality) assessment. New Castle Ottawa scale will be used

Strategy for data synthesis: Aggregate data will be extracted from the studies and descriptive analysis will be performed. Quantitative analysis will be done wherever possible

Analysis of subgroups or subsets: Age, sex, ethnicity and metabolic risk factors will form the basis of sub group analysis when possible.

Online Course

Content development has been started for Design and development of the Evidence Based Medicine modules for online courses is based on an educationally sound methodology including the following domains:

- Identification of EBM needs
- Formulation of the aims, objectives and learning outcomes of the curriculum
- Development and organization of the content of the curriculum
- Development of the teaching methods
- Definition of the educational strategy and educational environment
- Definition of the assessment strategy.
- Communication of the curriculum to learners
- The overall management of the process.

Aim: To familiarize course participants with evidence based medicine (EBM) basics to help incorporate evidence from systematic reviews into practice.

Learning objectives:

Upon the completion of the course, participants should be competently able to:

- generate structured questions arising from clinical problems in practice
- search relevant literature, identifying systematic reviews wherever possible
- assess the quality (validity) of systematic reviews and primary research included within them
- assess the applicability of research findings in clinical practice
- effectively implement the output from above activities into clinical practice

Reading/Learning Resource:

1. A study guide outlining the course and providing learning exercises/assignments.
2. E-learning modules

Learning/teaching methods:

1. Participant initiated (tutor facilitated) small group work and one-to-one teaching and learning in a clinical setting.
2. Clinical tutor will guide participants in a clinical setting:
 - Identifying learning opportunities in a clinical setting
 - Directing appropriate use of learning resources
 - Providing feedback on learning exercises/assignments
3. Participants will pursue independent study using the study guide and e-learning modules directed/facilitated by the clinical tutor and will undertake summative assessments
4. Formative: Feedback on assignments recorded in the study guide
5. Summative: Multiple choice questions to test knowledge; Questionnaire to test attitudes

Organization of the content and teaching methods:

At the beginning of the course, learners and facilitators receive a handbook with the overall aims and objectives of the curriculum and modules, relevant additional methodological and clinical papers, an outline of the teaching, learning and assessment strategy, and its timetable. Order and sequence of the teaching session ensure that the prerequisites and the basic content appear first while more advanced content appears later.

E- Learning course for EBM :

- Teaching of EBM steps exploiting educational opportunities in six different clinical settings.
- Video clips demonstrating EBM teaching in everyday clinical practice.
- Each module is formally assessed.
- E-learning sessions designed to allow learning in the workplace during short breaks
- Option to interrupt and restart learning flexibly.
- Self-directed, independent e-learning via the Internet or CD-ROM.

- The e-learning materials consist of slides and written scripts; a talking head ; video
- The e-curriculum will be developed for access by website, Video Podcasts, CD ROM.



Figure 7- Online course with North East region

What is the target audience?

- Physician
- Clinical practitioners
- Healthcare workers
- Researchers
- Paramedics
- Physiotherapists

- Dentist
- Policy makers

Enrollment Date: Anytime during the year

Case Date: 15th June 2017 to no end date

Enrolment: Physician, clinical practitioners, healthcare workers, researchers, paramedics, physiotherapists, dentist, policy makers, life science students, hospital administrators.

Language: English/Hindi

Includes: e- certificate will be provided at the end of course after completion of post test.

Class size: 35-40

Module description:

Introduction to evidence based medicine includes lectures and course materials regarding the EBM history, evolution and 5 As of EBM. In this module, registered participants will be taught about how to frame an answerable question through PICO. It will also include the methodological techniques in searching different databases such as Pubmed and other databases. At last the module will have lecture on basic statistics.

Interactive section: Laptop/I-pad/Smartphone with good internet connectivity will be required to interact at the end of session.

What am I going to get from this module?

- Insight about the knowledge of EBM.
- How to make an answerable research question.
- How to make a specific and comprehensive search strategy.
- Understanding basic statistics.

What is the target audience?

- Physician
- Clinical practitioners
- Healthcare workers
- Researchers
- Paramedics
- Physiotherapists
- Dentist
- Policy makers
- Life science students
- Hospital administrators

Session on Professionalism in Research

Dated 16/08/17

VENUE: Telemedicine Centre, Nehru Hospital, PGIMER, Chandigarh

The session on Professionalism in Research was started at 9:00 AM in Telemedicine Centre. The session was attended by scientists, Ph.D students and project Staff. Prof. Gita Mehta, Clinical Professor of Medicine, UC San Diego School of Medicine was the visiting Professor. Principal Investigator Dr. Meenu Singh introduced Prof. Gita Mehta (Clinical Professor of Medicine, UC San Diego School of Medicine) and asked every participant to introduce themselves. Dr. Meenu Singh started the session by giving a brief introduction about professionalism. Dr. Anil Chauhan continued the session by asking everyone to define research and professionalism. The session was attended by the researchers and clinicians.

After defining the professionalism Dr. Anil Chauhan discussed about the Research Purposes. Purposed of the research includes Prediction, test new ideas, generate new ideas, inform societies and examine the past.

Then he defined that who is a researcher and their importance to society by asking participants to give their definition of researcher. A researcher is a person who collects the information for research paper to some extent. Society relies on the advice of researchers for making most of their decisions regarding setting standards to protect public health and safety.

Prof. Gita Mehta advocated on institutional research policies and the codes of ethics of professional societies. Different elements of professionalism was discussed such as

- Excellence in thinking and doing
- Intellectual honesty
- Collegiality and openness
- Autonomy and responsibility
- Self-regulation



Figure-8- The course on Professionalism in Medical Practice

Global Asthma Network (Chandigarh Centre)

Principal Investigator: Dr Meenu Singh

Co-Investigator: Dr Anil Chauhan

The Global Asthma Network emerged from the success of the International Study of Asthma and Allergies (ISAAC) programme which began in March 1991, whereby pre-existing multinational collaborative projects from Auckland, New Zealand and Bochum, Germany, each investigating variations in childhood asthma at the population level joined to form ISAAC.

The Global Asthma Network (<http://www.globalasthmanetwork.org>) was established in 2012 to identify and address the problem of asthma which is an important Non-Communicable Disease (NCD) globally. The Global Asthma Network evolved from ISAAC and the International Union against Tuberculosis and Lung Disease (The Union), two organisations dedicated to helping countries identify and address this important NCD for more than two decades, and from the Global Asthma Report 2011. The 2011 report was timed to coincide with the United Nations High-Level Meeting on NCDs, which took place in New York on 19–20 September 2011. Subsequently the Global Asthma Network published the Global Asthma Report 2014. It was launched at the 45th Union World Conference on Lung Health, Barcelona, Spain, 28 October to 1 November 2014.

The Global Asthma Network aims to progress from these reports and engage government's health ministers, policy-makers, health workers, and people living with asthma, development partners, donors and media in efforts to improve asthma care globally. Core activities of the Global Asthma Network are: global surveillance; promotion and backing of standard case management of asthma; operational research; capacity building; engagement with policy-makers; and access to affordable quality-assured medicines.

“**Global asthma network**” has started a questionnaire based survey in the various centres of India. Chandigarh PGIMER is also one of the centres among these. For this survey various schools private and government (age group 6-7 and 13-14 years) is selected from different zones of Chandigarh.

In Chandigarh centre, 38 surveys have been done in various schools with distribution of 1829 Questionnaires and ongoing. Height and weight measurements has also been taken of each age group (6/7 & 13/14 age group). Repository of the data collected through questionnaire has been created through Epi Info software. Children suspected to have any allergic symptoms after screening through questionnaire were asked to visit Dhanas, PHC.

Written Questionnaires: Written questionnaires consist various question related to asthma and their co-morbidities. These questionnaires will assess the prevalence and severity of asthma, rhino conjunctivitis and eczema in defined populations and explore management of asthma and environmental factors. This study consist of two age groups i.e13/14 years and 6/7 years along with their parents. After taking the permission from the education department these questionnaires were distributed among the randomly selected school from the chandigarhdistict.13/14 years age grouped children were fill their form in the school premises in the presence of GAN staff and for their parents they bring their forms along with them at home. The younger age group will take questionnaires home for parent/guardian completion about the health of their child about their own health. On the next follow up fieldworkers were collect the forms from the sites.

Adolescents: 13/14 year olds – written questionnaire (compulsory). The compulsory requirement is the study of the adolescents. Each centre will randomly select schools from a defined geographical sampling frame and a sample of 3000 adolescents (recruited from school class registers) will be invited to participate (this number may be reduced if a centre has less than this number but must not be less than 1000 per centre unless the centre, for example, is a whole island nation with less than 1000 adolescents). They will complete the written questionnaire at school . Height and weight measurements (strongly recommended) will be taken by the fieldworkers.

Children: 6/7 year olds – written questionnaire (strongly recommended). Another strongly recommended component is for centres to recruit an additional sample of 3000 6/7 year old children (this number may be reduced if a centre has less than 3000 but must not be less than 1000 per centre unless the centre is, for example, a whole island nation with less than 1000 children). The children, identified through school class registers, will take a questionnaire home for their parents/guardians to complete about their child. The video and its questionnaire will not be administered to this age group. Height and weight measurements (strongly recommended)

will be taken by the fieldworker at school and recorded on the questionnaire when the questionnaires are returned to the school .Not all questions need to be included.

Adults: - written questionnaire (strongly recommended). A questionnaire on asthma, rhino conjunctivitis and eczema symptoms, management of asthma and environmental factors has been developed for the parents/guardians of both the adolescents and children (ADULT questionnaire). This is a strongly recommended module about parent/guardian health. Both age groups (13/14 and 6/7) will take the questionnaires home for parental/guardian completion and return them to school.

Data of the survey:

Age-group wise final data retrieval and data entry detail till date 01-03-2018

	6/7 age group	13/14 age group
Number of schools where survey conducted	56	54
Number of students data collected	2469/3000	3000/3000
Number of parents/adults data collected (absolute number after calculating all single and double retrieval per student)	4938/6000	5606/6000

Survey for Assessment of Telemedicine Session on Staff Clinical Pathological Cases (CPCs)

Name	
Designation	
Department	
Institute	

Kindly Tick (✓) for the options given below:

1. How many CPC sessions you attended from PGIMER, Chandigarh?
 - a) 1
 - b) 1-5
 - c) 6-10
 - d) > 10

2. Overall, how satisfied are you with the transmission of these CPC sessions?
 - a) Not satisfied
 - b) Satisfied
 - c) Fairly satisfied
 - d) Very much satisfied

3. Have you advised other members of your department to attend these sessions?
 - a) Yes
 - b) No

4. Did you have any concerns during these CPC sessions?
 - a) Yes
 - b) No

5. If yes to Ques. No.4, Were the concerns related to:
 - a) Connectivity problem
 - b) Hardware problem
 - c) Lecture theatre capacity problem
 - d) Timing of CPC
 - e) Others (Specify.....)

6. How was strength of network during these telemedicine sessions?
 - a) Bad
 - b) Good
 - c) Very good
 - d) Excellent

7. Do you think that these telemedicine sessions improve your clinical knowledge and practice?
 - a) Yes
 - b) No

8. If Yes to Ques.No.7, then which new knowledge or clinical practice you gained?
 - a) Intervention
 - b) Diagnostic
 - c) Clinical presentation of patient
 - d) Others (Specify....)

9. How often you had applied the knowledge gained through these telemedicine sessions in your clinical practice?
 - a) Not applied
 - b) Few times
 - c) Very often
 - d) Regularly

10. Would you like to expand telemedicine network in other specialties of the institute? If Yes, then mention the name of the specialty?

a) Yes

b) No

(Specialty:)

Any Suggestions:

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Dated 16/08/17

VENUE: Telemedicine Centre, Nehru Hospital, PGIMER, Chandigarh

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He defined that who is a researcher and their importance to society by asking participants to give their definition of researcher. A researcher is a person who collects the information for research paper to some extent. Society relies on the advice of researchers for making most of their decisions regarding setting standards to protect public health and safety.

Haryana task force:

A task force for improving health care in Haryana has been formed. Department of telemedicine through the Evidence based health Informatics under RRC is also a part of it The task assigned are connecting the medical colleges through telemedicine facility Capacity building through telemedicine support i.e. Tele-education Providing inputs for standard treatment guidelines and upgrading the PHC and sub centres are other important tasks taken up.

PAN India initiative:- Annexure-9

Govt. of India has announced 115 districts as backward (aspirational) districts under their conference on Transformation of aspirational districts at NITI Aayog. Regional Resource Centres under the MoHFW has been provided with the task to develop PAN India Initiative. Under this program RRCs have to strengthen and develop telemedicine network in their concerned aspirational districts. Our Regional Resource Centre at PGIMER is involved in development of telemedicine infrastructure in four states of northern India (Punjab, Haryana, Himachal Pradesh and Jammu & Kashmir). Under the 115 identified aspiration districts by NITI Aayog, PAN India Initiative RRC, PGIMER has identified six districts in the concerned states. In Punjab there are two districts (Ferozpur & Moga), Mewat in Haryana, Kupwara & Baramula in Jammu and Kashmir, Chamba in Himachal Pradesh. The district hospitals situated in their district headquarters has been identified which needs to be strengthened for their telemedicine activity. RRC, PGIMER has also identified the referral centres for the district hospitals and their connectivity with RRC.

Annexure 1

Site Visit conducted at Dr
Rajendra Prasad
Government Medical
College, for up gradation
of existing Tele Medicine
Centre

Visit Date: 21.12.2017

Prepared By:- Dr. Amit Agarwal

Introduction:

A planned site visit was conducted at **Dr Rajendra Prasad Government Medical College** on 21st December 2017 in order to identify their existing Telemedicine Centre infrastructure with the purpose to upgrade it in order to meet their growing future requirement. The following persons from PGIMER were deputed for the site visit.

S.No	Name	Designation	Organization
1.	Dr Meenu Singh	Head and Principal Investigator , Department of Telemedicine	PGIMER, Chandigarh
2.	Dr. Amit Agarwal	Project Coordinator & Consultant, Department of Telemedicine	PGIMER, Chandigarh
3.	Mr. Munish Kumar	Tele. Infra. and Network Admn., Department of Telemedicine	PGIMER, Chandigarh

Visit Date: 21st December 2017, Thursday

Time: 10.30 AM onwards

Venue: Telemedicine Unit, Dr Rajendra Prasad Government Medical College, Tanda, Himachal Pradesh

Site Contact Person Name & Designation: Sh Vikas Sharma, Technical assistant, M: 09816645106

During the site visit Sh Vikas Sharma took the team to Tele Medicine Centre and the following observations were recorded.

General Site Checklist

S.No	Observations / Checklist	Status (Y/N)	Remarks (if any)
1	Lecture Theater Room available at selected site? (Y/N)	Yes	<ul style="list-style-type: none">Proposed Lecture Theater site is available.Full furnishing is required (i.e. Air Conditioners, False Roofing, VC Kit, Roof Projector, Speakers, Microphones, Desktop PC etc.)
1.1	Dimensions	-	
2	Tele Evidence Room available at selected site? (Y/N)	No	<ul style="list-style-type: none">All workload is being handled by 1 PC at present, it needs replacement.The Lecture Theater room is using for the Tele Evidence room
2.1	Dimensions	-	
3	Tele Medicine Room available at selected site? (Y/N)	Yes	<ul style="list-style-type: none">A 70 seater room with plastic chairs.Sound Proofing is required.No any LCD TV installed.Water Seepage on walls.Some furnishing is required.
3.1	Dimensions	-	
3.2	Any important note?	-	

4	What is the site Condition? (Furnished / Requires Furnishing)	-	All rooms require furnishing, Sound Proofing, good lighting, Water seepage on walls needs repair.
4.1	Any important note?	-	
5	Is NKN POP available in all the 3 Rooms? (Y/N)	No	<ul style="list-style-type: none"> LT room requires NKN connection. POP is located around 500 meters from this site.
6	If Yes, is it being utilized as on date? (Y/N)		
7	If No, where is the installation required? (Give brief details)	-	LT room requires NKN connection. POP is located around 500 meters from this site.
8	Distance from POP to Site? (Specify)	-	LT room requires NKN connection. POP is located around 500 meters from this site.
8.1	Any important note?	-	-
9	What are the current initiatives in Tele-Medicine & IT in your Hospital?	-	At present CPCs, Tele – Consultations are going on.
10	eHospital software from NIC available or not? (Y/N)	No	Not available at present.
11	If No, then which HIS software/system is being used currently?	-	Software developed in house.
12	Implementing Agency Name?	-	Developed in house.
13	In Tele Radiology Department, PACS available? (Y/N)	No	Not available at present.
14	Is there any Telemedicine Project running in the Hospital?	Yes	-
15	Status report - Services Provided, No. of Cases Resolved per department through TM?	-	Status report attached
16	Important Checklist - False Ceiling, Air conditioner, AV set, Projection Screen, Speakers, and Microphones etc.?	-	Projection screen is not available

A. Tele-Medicine Room Infrastructure (Tele-Medicine Room)

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	-	N	Required
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Originally installed VC unit is very old and not compatible with the currently available softwares
5	VC One year Warranty Pack	Nos.	1	N	Required
6	Group 500 Multipoint License	Nos.	1	N	Required
7	Network Printer	Nos.	1	N	Required
8	Telemedicine kit	Nos.	1	N	Required
9	Antivirus	Nos.	1	N	Required
10	Installation & Commissioning	Nos.	1	N	Required

B. Tele-Evidence Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	1	N	Required
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Required
5	VC One year Warranty Pack	Nos.	1	N	Required
6	MFD - Scanner/Printer	Nos.	1	N	Required
7	Antivirus	Nos.	1	N	Required
8	Installation & Commissioning	Nos.	1	N	Required

C. Board Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
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1	All in One PC	Nos.		N	Required
2	65" HD LED Display Unit	Nos.		N	Required
3	HD Video Conferencing Unit	Nos.		N	Required
4	VC One year Warranty Pack	Nos.		N	Required
5	Wi-Fi Access Point	Nos.		N	Required
6	10 KVA Online UPS	Nos.		N	Required
7	24 port network switch	Nos.		N	Required
8	21u Rack	Nos.		N	Required
9	Installation & Commissioning	Nos.		N	Required

Important Note: Board Room and Tele Evidence Room will be merged together; hence the infrastructure can be shared.

D. Digital Medical Lecture Theater

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	Digital Lectern (Podium)	Nos.	1	N	Required
2	4000 Lumens Projector	Nos.	1	N	Required
3	HDMI Splitter	Nos.	1	N	Required
4	Projection Screen	Nos.	1	N	Required
5	AV Switcher	Nos.	1	N	Required
6	Recording and streaming device	Nos.	1	N	Required
7	Wall Speaker	Nos.	1	N	Required
8	Wireless Handheld Microphone	Nos.	1	N	Required
9	Wireless Lapel Microphone	Nos.	1	N	Required
10	Gooseneck Microphone	Nos.	1	N	Required
11	Wireless Microphone Receiver	Nos.	1	N	Required
12	Amplifier	Nos.	1	N	Required
13	Wi-Fi Access Point	Nos.	1	N	Required
14	5KVA Online UPS	Nos.	1	N	Required
15	55" HD LED Display Unit with swivel mount	Nos.	1	N	Required
16	HD Video Conferencing Unit	Nos.	1	N	Required
17	Auxiliary PTZ camera	Nos.	1	N	Required
18	VC One year Warranty Pack	Nos.	1	N	Required

19	12u Rack	Nos.	1	N	Required
20	Installation & Commissioning	Nos.	1	N	Required

Important Note: No false ceiling was present, furnishing is required, no air conditioners installed and around 4T capacity air conditioners required.

Conclusions:

1. It is necessary to construct Tele Evidence room inside the Tele Medicine room, available dimensions - 19x25.
2. Board room also can be created within the LT room.
3. Existing computers are more than 8 years old and thus stand outdated. Their replacement is due.
4. No dedicated technical person available (to identify the medical cases) hence manpower is required, as communicated to our team.

Site Photographs:-

Inside view of Tele-Medicine Centre cum Tele-Evidence Room



Inside view no.2 of Tele Medicine Centre Cum Tele Evidence Room



Exstisting Video conferencing Kit



Existing Lecture theater in Department of Anatomy



Annexure 2

Site Visit conducted at
Indira Gandhi
Government Medical
College, for up gradation
of existing Tele Medicine
Centre

Prepared By:-Dr. Amit Agarwal and Dr. Anil
Chauhan

General Site Checklist

<u>S.No</u>	<u>Observations / Checklist</u>	<u>Status (Y/N)</u>	<u>Remarks (if any)</u>
1	Lecture Theater Room available at selected site? (Y/N)	Y	•
1.1	Dimensions	35'' x 90''	
2	Tele Evidence Room available at selected site? (Y/N)	N	•
2.1	Dimensions	-	
3	Tele Medicine Room available at selected site? (Y/N)	Y	•
3.1	Dimensions	14'' x 18''	
3.2	Any important note?	Y	Tele Medicine Room needs to be strengthen in every aspect.
4	What is the site Condition? (Furnished / Requires Furnishing)	-	Furnishing is required in Tele medicine Room
4.1	Any important note?	-	
5	Is NKN POP available in all the 3 Rooms? (Y/N)	N	NKN is available only in Tele Medicine Room
6	If Yes, is it being utilized as on date? (Y/N)	Y	It is being utilized in the institution.
7	If No, where is the installation required? (Give brief details)	-	Installation is required in Lecture theatre and Tele evidence room if created.
8	Distance from POP to Site? (Specify)	-	Approximate 300 meters
8.1	Any important note?	-	
9	What are the current initiatives in Tele-Medicine & IT in your Hospital?	-	<p>Telemedicine Facility is being used for live teaching sessions and for getting second opinion and for e-court evidence.</p> <p>IT deptt.is providing their services in HIMS for online investigation report, online registration, wi-fi facility to faculty and students</p>
10	eHospital software from NIC available or not? (Y/N)	No	
11	If No, then which HIS software/system is being used currently?	HMIS	

12	Implementing Agency Name?	Implemented by in house IT engineers	
13	In Tele Radiology Department, PACS available? (Y/N)	N	PAC system is available in the Deptt. of Radiology Department if IGMC, Shimla
14	Is there any Telemedicine Project running in the Hospital?	N	-
15	Status report - Services Provided, No. of Cases Resolved per department through TM?	-	
16	Important Checklist - False Ceiling, Air conditioner, AV set, Projection Screen, Speakers, and Microphones etc.?	Y	Available in Lecture Theatre.

A. Tele-Medicine Room Infrastructure (Tele-Medicine Room)

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	Y	
2	32" LED Display	Nos.	0	N	
3	Head Phone with microphone	Nos.	4	Y	
4	HD Video Conferencing Unit with IP Calling	Nos.	4	Y	Video Conferencing units are old
5	VC One year Warranty Pack	Nos.	0	N	
6	Group 500 Multipoint License	Nos.	0	N	
7	Network Printer	Nos.	1	Y	
8	Telemedicine kit	Nos.	0	N	
9	Antivirus	Nos.	0	N	
10	Installation & Commissioning	Nos.			

B. Tele-Evidence Room:-----At present not Available

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.			
2	32" LED Display	Nos.			
3	Head Phone with microphone	Nos.			
4	HD Video Conferencing Unit with IP Calling	Nos.			
5	VC One year Warranty Pack	Nos.			
6	MFD - Scanner/Printer	Nos.			
7	Antivirus	Nos.			
8	Installation & Commissioning	Nos.			

C. Board Room ----Not available

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.			
2	65" HD LED Display Unit	Nos.			
3	HD Video Conferencing Unit	Nos.			
4	VC One year Warranty Pack	Nos.			
5	Wi-Fi Access Point	Nos.			
6	10 KVA Online UPS	Nos.			
7	24 port network switch	Nos.			
8	21u Rack	Nos.			
9	Installation & Commissioning	Nos.			

Important Note: Board Room and Tele Evidence Room will be merged together; hence the infrastructure can be shared.

D. Digital Medical Lecture Theater

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	Digital Lectern (Podium)	Nos.	1	Y	
2	4000 Lumens Projector	Nos.	1	Y	
3	HDMI Splitter	Nos.	1	Y	
4	Projection Screen	Nos.	1	Y	

5	AV Switcher	Nos.	1	Y	
6	Recording and streaming device	Nos.	0	N	
7	Wall Speaker	Nos.	1	Y	
8	Wireless Handheld Microphone	Nos.	1	Y	
9	Wireless Lapel Microphone	Nos.	0	N	
10	Gooseneck Microphone	Nos.	0	N	
11	Wireless Microphone Receiver	Nos.	1	Y	
12	Amplifier	Nos.	1	Y	
13	Wi-Fi Access Point	Nos.	0	N	
14	5KVA Online UPS	Nos.	1	Y	
15	55" HD LED Display Unit with swivel mount	Nos.	0	N	
16	HD Video Conferencing Unit	Nos.	1	Y	
17	Auxiliary PTZ camera	Nos.	0	N	
18	VC One year Warranty Pack	Nos.	0	N	
19	12u Rack	Nos.	0	N	
20	Installation & Commissioning	Nos.			

Important Note:

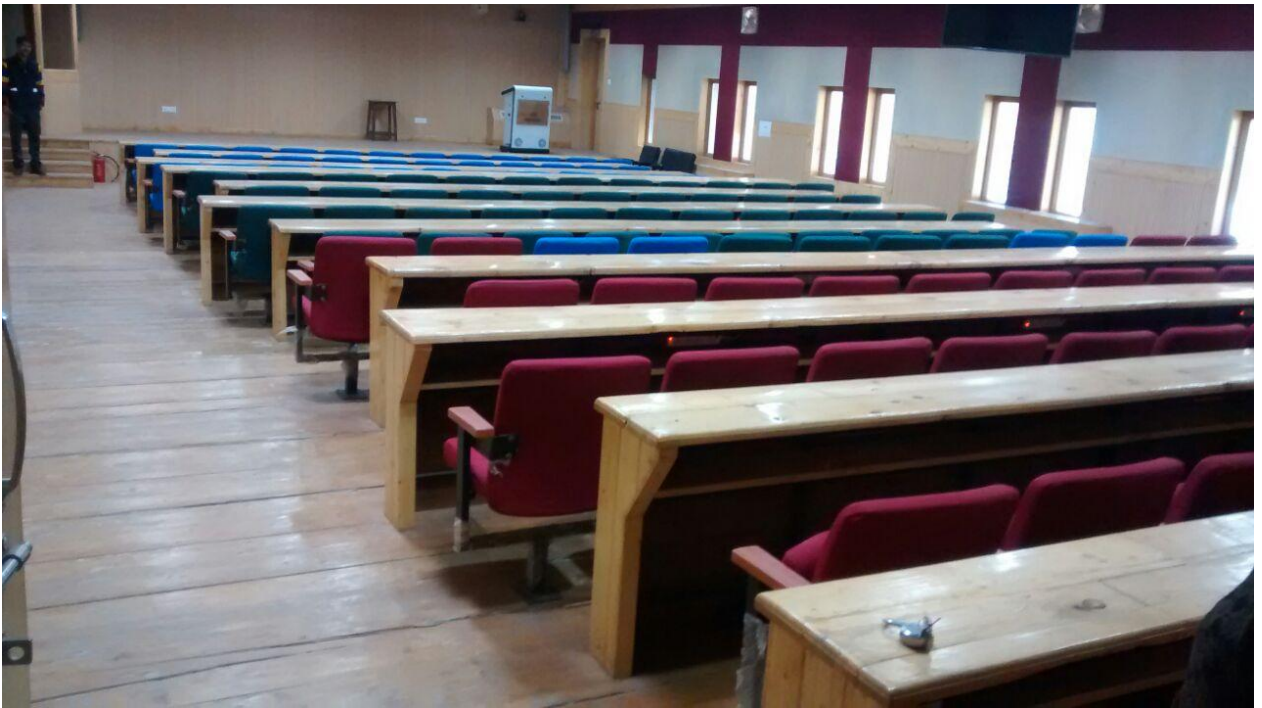
Conclusions:

1. .

Site Photographs:-

Tele- Medicine Room





Annexure 3

Introduction:

A planned site visit was conducted at Government Medical College, Amritsar on 30th September' 2016 in order to identify their existing Telemedicine Centre infrastructure with the purpose to upgrade it in order to meet their growing future requirement. The following persons from MoHFW New Delhi, PGIMER Chandigarh and SGPGI Lucknow were deputed for the site visit.

S.No	Name	Designation	Organization
1	Dr. Amit Agarwal	Project Coordinator, Telemedicine Department	PGIMER, Chandigarh
2	Mr. Pankaj Pant	Associate Consultant, Telemedicine Department	PGIMER, Chandigarh
3	Mr. Amit Mohan Yadav		SGPGI, Lucknow
4	Mr. Saurabh Kumar	Associate Consultant	MoHFW, New Delhi

Visit Date: 30th September 2016, Wednesday

Time: 10.30 am onwards

Venue: Telemedicine Centre, Government Medical College, Amritsar

Site Contact Person Name & Designation: Dr. I.P.S Grover

During the site visit Dr. I.P.S Grover took the team to Tele Medicine Centre and the following observations were recorded.

General Site Checklist

S.No	Observations / Checklist	Status (Y/N)	Remarks (if any)
1	Lecture Theater Room available at selected site? (Y/N)	No	LT room not present
	Dimensions	-	
2	Tele Evidence Room available at selected site? (Y/N)	No	Permission needs to be taken from MS Office as the Tele Evidence room needs to be located near to CRD.
	Dimensions	10 X10	
3	Tele Medicine Room available at selected site? (Y/N)	Yes	Tele Medicine room and Conference room are situated together.
	Dimensions	12X24	
	Any important note?	-	

5	What is the site Condition? (Furnished / Requires Furnishing)	-	The site is under renovation at present. It will require furnishing once renovation is over. Proposed time of completion is 3 months. It is recommended to visit the site again after renovation.
	Any important note?	-	
6	Is NKN POP available in all the 3 Rooms? (Y/N)	Yes	
7	If Yes, is it being utilized as on date? (Y/N)	Yes	
8	If No, where is the installation required? (Give brief details)	-	-
9	Distance from POP to Site? (Specify)	-	POP is located nearby to all rooms.
	Any important note?		
9	What are the current initiatives in Tele-Medicine & IT in your Hospital?	-	e-Sanjeevani, CPCs and CMEs, VC and Tele Consultation sessions are going on with PGIMER Chandigarh
10	eHospital software from NIC available or not? (Y/N)	No	Not available
11	If No, then which HIS software/system is being used currently?	-	It is under proposal at present
12	Implementing Agency Name?	-	-
13	In Tele Radiology Department, PACS available? (Y/N)	No	-
14	Is there any Telemedicine Project running in the Hospital?	Yes	
15	Status report - Services Provided, No. of Cases Resolved per department through TM?		
16	Important Checklist - False Ceiling, Air conditioner, AV set, Projection Screen, Speakers, and Microphones etc.?	-	Site under construction / renovation

A. Tele-Medicine Room Infrastructure (Tele-Medicine Room)

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	1	N	Required
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Required
5	VC One year Warranty Pack	Nos.	1	N	Old Kit, replacement required
6	Group 500 Multipoint License	Nos.	1	N	Required
7	Network Printer	Nos.	1	N	Required
8	Telemedicine kit	Nos.	1	N	Required
9	Antivirus	Nos.	1	N	Required
10	Installation & Commissioning	Nos.	1	N	Required

B. Tele-Evidence Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	1	N	Required
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Required
5	VC One year Warranty Pack	Nos.	1	N	Required
6	MFD - Scanner/Printer	Nos.	1	N	Required
7	Antivirus	Nos.	1	N	Required
8	Installation & Commissioning	Nos.	1	N	Required

C. Board Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.		N	Required
2	65" HD LED Display Unit	Nos.		N	Required
3	HD Video Conferencing Unit	Nos.		N	Required
6	VC One year Warranty Pack	Nos.		N	Required
4	Wi-Fi Access Point	Nos.		N	Required
5	10 KVA Online UPS	Nos.		N	Required
7	24 port network switch	Nos.		N	Required
8	21u Rack	Nos.		N	Required
9	Installation & Commissioning	Nos.		N	Required

Important Note: Board Room and Tele Evidence Room will be merged together; hence the infrastructure can be shared.

D. Digital Medical Lecture Theater

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	Digital Lectern (Podium)	Nos.	1	N	Required
2	4000 Lumens Projector	Nos.	1	N	Required
3	HDMI Splitter	Nos.	1	N	Required
4	Projection Screen	Nos.	1	N	Required
5	AV Switcher	Nos.	1	N	Required
6	Recording and streaming device	Nos.	1	N	Required
7	Wall Speaker	Nos.	1	N	Required
8	Wireless Handheld Microphone	Nos.	1	N	Required
9	Wireless Lapel Microphone	Nos.	1	N	Required
10	Gooseneck Microphone	Nos.	1	N	Required
11	Wireless Microphone Receiver	Nos.	1	N	Required
12	Amplifier	Nos.	1	N	Required
13	Wi-Fi Access Point	Nos.	1	N	Required

14	5KVA Online UPS	Nos.	1	N	Required
15	55" HD LED Display Unit with swivel mount	Nos.	1	N	Required
16	HD Video Conferencing Unit	Nos.	1	N	Required
17	Auxiliary PTZ camera	Nos.	1	N	Required
18	VC One year Warranty Pack	Nos.	1	N	Required
19	12u Rack	Nos.	1	N	Required
20	Installation & Commissioning	Nos.	1	N	Required

Important Note:

1. Proposed LT has 150 persons seating capacity.
2. It requires furnishing.
3. Air Conditioners, new furniture, projector, motorized screen, AV equipment need to be installed.

Conclusions:

1. The existing NKN line gets damaged sometimes due to storms etc.
2. Since major construction work is going throughout the campus, the NKN line has become venerable.
3. ISRO node is not working.
4. It is being proposed to create a digital library of 10x10 dimension

Site Photographs:-

Existing Tele Medicine Room - Under Renovation



Inside view of Proposed LT room photo 1



Inside view of Proposed LT room photo 2



Missing False Ceiling at Proposed LT Room



Other Site Photo 1



Other Site Photo 2



Proposed LT Room Site photo 3



Proposed LT Room Site photo 2



Proposed Tele Evidence & Board Room Site



Recommendations from Government Medical College, Amritsar:-

ITEM NAME	REQUIRED FOR	DETAILED SPECIFICATIONS	Qty
DESKTOP PC	TELE-MEDICINE	Computer with i7 processor, 12 Gb RAM, 2 TB Hard Disk, LED wide screen 22 inch, window 10 Operating System	6
LAPTOP	TELE-MEDICINE	i7 processor, 8 Gb RAM, 1 TB Hard Disk, window 10 Operating System, 15.6 INCH SCREEN	2
LED DISPLAY PANEL	TELE-MEDICINE	4K ULTRA HIGH DEFINITION 72 INCH	1
	TELE-EVIDENCE	4K ULTRA HIGH DEFINITION 42 INCH	1
	LECTURE THEATRE	4K ULTRA HIGH DEFINITION 90 INCH, AND 48 INCH	2
VIDEO CONFERENCING KIT	TELE-MEDICINE	1080p full high-definition video resolution	3
	TELE-EVIDENCE		
	LECTURE THEATRE		
M-HEALTH KIT	TELE-MEDICINE	LATEST	2
WHITE BOARD PROJECTION	TELE-MEDICINE	Size 78 1/2" W × 53 3/8" H × 6 1/2" D (199.4 cm × 135.6 cm × 16.5 cm) 16:10 aspect ratio	2
	LECTURE THEATRE		
MOTORIZED SCREEN	TELE-MEDICINE	Screen Size -4000mm x 3000mm to 6340mm x 4750mm, Motor Type-AC Tubular Motor; Silent Type	2
	LECTURE THEATRE		
UPS WITH POWER BACKUP	TELE-MEDICINE	5 KV WITH AT LEAST BACKUP OF 6-8 HOURS	1
	LECTURE THEATRE	3 KV WITH AT LEAST BACKUP OF 2-4 HOURS	1
NETWORKING COLOURED LASERJET PRINTERS WITH Wi-Fi	TELE-MEDICINE	Wireless LaserJet All-in-One, Product Dimensions 51.8 x 46.4 x 22.9 cm	1
	TELE-EVIDENCE		1
SCANNER WITH COPIER	TELE-MEDICINE	Dimensions (WxDxH) 25.2 x 25.7 x 43.8 in. (640 x 652 x 1,113 mm),Device memory (standard/max)256 MB / 512 MB	1
	TELE-EVIDENCE		1
PROJECTORS	TELE-MEDICINE	Projection System-3-chip technology, Screen Size: (Projected Distance) - 30" – 300" (2.8' – 28.5')	1
OVERHEAD PROJECTOR	LECTURE THEATRE		1
COMPUTER TABLE	TELE-MEDICINE	Size 4' x 2' Width 1200mm x Depth 600mm x Height 750mm : Top Work surface should be 18mm thick. Pre Laminated Particle Board (PLB), with lockable draws	8

Steel Almirah Big	TELE-MEDICINE	Welded Almira with 4 shelves & total 5 loading levels of Size Width 916mm x Depth 486mm x Height 1980mm. The material should be 0.7mm thick CRCA for shelf is required. 0.8mm thick CRCA for back is required, 0.8mm thick high yield strength CRCA	1
	LECTURE THEATRE		1
Steel Lockers with 8 Cabinets	TELE-MEDICINE	8 Door locker unit should be provided of overall Size : Width 760 mm x Depth 450 mm x Height 1830 mm. Internal size of each individual locker should not be : Height 429 mm x width 375 mm x depth 411 mm.	1
			1
Office Chair Mid Back Revolving type	TELE-MEDICINE	Overall Size of Chair : Width (W) 76.3 cm, Depth (D) : 76.3 cm, Height (H): 85.5 to 97.5 cm and Seat Height (SH) : 42.5 to 54.5 cm. Size of the back shall be 47.5 cm width x 58.0cm Height and Seat Size shall be 47.0 cms width x 48.0 cm Depth. The backrest should consists of a sliding up & down mechanism, which should be adjusted in the range of 7.5 cm and can be locked in 4 positions for correct position of lumber support. The pneumatic height adjustment should have an adjustment of 10.0 cm.	10
Office cushion Chair Visitor without revolving	TELE-MEDICINE	Overall Size of Chair: Width (W) 61.0 cm, Depth (D) : 64.5 cm, Height (H): 89.5 cm and Seat Height (SH) : 46.5 cm. Size of the back shall be 47.5 cm width x 58.0cm Height and Seat Size shall be 47.0 cms width x 48.0 cm Depth. The back foam should be designed with contoured lumbar support for extra comfort. The seat should have extra thick foam on front edge to give comfort to popliteal area	50
DUSTBINS	TELE-MEDICINE		5
	TELE-EVIDENCE		
	LECTURE THEATRE		
AIR CONDITIONING	LECTURE THEATRE	2 TON SPLIT AC	6

Additional information provided by Nodal Officer at GMC Amritsar:-

Overview of NKN Network at Govt. Medical College, Amritsar.

National Knowledge Network (NKN) is high speed internet connectivity -commenced on 11 May 2011 at the I T Centre at, GMC-ASR. The Link is of 100 Mbps Leased line of PGCIL (Power grid Corporation of India Limited). It is distributed in the campus through Firewalled Server having LAN, and Wi-Fi connectivity. It is also used for Daily online conference from PGI Chandigarh and online admission etc. Nearly about 800+ users have been using the Internet.

Proposal of NKN Network at Govt. Medical College, Amritsar.

At GMC-ASR NKN's router Cisco ASR 1002 was installed with 100 Mbps Link on 2011, now for an update of the NKN devices should be done.

1. Cisco Router should be replaced with the latest Juniper Router with 1Gbps link speed.

- a. As the number of MBBS seats have been increased from 150 to 200 students the users have also increased and managing more users on 100 link speed is difficult. So fast internet connectivity should be provided so that users can be managed.
- b. Now the billing system is also done online and the new conference has been done daily by the doctor's team with various institutes.
- c. The current users using the internet is 300+ at one time and the total users are 800+ and yet more to come, so the internet becomes slow as to allocate bandwidth to all users and to manage the online conferences.

2. Rack may be provided for the router and it's MUX

- a. Proper safety of the devices may be provided as router and its MUX are lying as it is, the rack will be providing proper safety to the equipment.

3. Digital Classroom may be setup for students.

- a. As the technology is growing so fast the new and advanced method of teaching is the digital classroom where students can learn new ways with this. The new method of teaching helps students to learn in an more attractive way. As the number of students per class has been increased from 150 to 200 and it will an easy way for teacher as well as student to learn and understand in a better way.

4. Fully equipped IT LAB should be there with latest 20 computers.

- a. In an era of computer each and every one should learn computers. The need of computer should help students to search online journals, search for new techniques of their field and one should learn how computer works as some will be new to the working of computers.

5. Latest firewalled server may be installed for better network performance.

- a. New and latest server may be provided so that the security of the network should be maintained and restrict the websites which are not needed or are unauthorized from the government. The Server can manage the users with its fixed speed to each users. The bandwidth can be utilized properly where ever needed.

6. Latest Conference Room may be setup for online conferences.

- a. Daily conferences are done with various institutes· and lots of students and faculty members attend the conference. The new fully equipped conference room with projector, conference kit and proper sound system can be helpful for all "to attend and listen to the conference.

7. Appropriate Budget may be allocated to meet the above mentioned infrastructure equipment's.

Introduction:

A planned site visit was conducted at Guru Govind Singh Medical College, Faridkot on 29th September' 2016 in order to identify their existing Telemedicine Centre infrastructure with the purpose to upgrade it in order to meet their growing future requirement. The following persons from MoHFW, PGIMER and SGPGI were deputed for the site visit.

S.No	Name	Designation	Organization
1	Dr. Amit Agarwal	Project Coordinator, Telemedicine Department	PGIMER, Chandigarh
2	Mr. Pankaj Pant	Associate Consultant, Telemedicine Department	PGIMER, Chandigarh
3	Mr. Amit Mohan Yadav		SGPGI, Lucknow
4	Mr. Saurabh Kumar	Associate Consultant	MoHFW, New Delhi

Visit Date: 29th September 2016, Wednesday

Time: 1.30 pm onwards

Venue: Telemedicine Unit, Guru Govind Singh Medical College, Faridkot

Site Contact Person Name & Designation: Dr. Shilekh Mittal, Nodal Officer

During the site visit Dr. Shilekh Mittal took the team to Tele Medicine Centre and the following observations were recorded.

General Site Checklist

S.No	Observations / Checklist	Status (Y/N)	Remarks (if any)
1	Lecture Theater Room available at selected site? (Y/N)	Yes	<ul style="list-style-type: none">Proposed Lecture Theater site is available.Full furnishing is required (i.e. Air Conditioners, False Roofing, VC Kit, Roof Projector, Speakers, Microphones, Desktop PC etc.)
	Dimensions	-	
2	Tele Evidence Room available at selected site? (Y/N)	Yes	<ul style="list-style-type: none">A small cabin (i.e. Tele Evidence Room) is included within the Tele-Medicine Room. Infrastructure Status :-Existing Desktop PC is 8 years old, Server SCSI Drivers are not available, UPS Batteries need immediate replacement.All workload is being handled by 1 PC at present, it needs replacement.
	Dimensions	-	

3	Tele Medicine Room available at selected site? (Y/N)	Yes	<ul style="list-style-type: none"> • A 70 seater room with plastic chairs. • Sound Proofing is required. • One 75 inch LCD TV installed. • Water Seepage on walls. • Some furnishing is required.
	Dimensions	-	
	Any important note?	-	
5	What is the site Condition? (Furnished / Requires Furnishing)	-	All rooms require furnishing, Sound Proofing, good lighting, Water seepage on walls needs repair.
	Any important note?	-	
6	Is NKN POP available in all the 3 Rooms? (Y/N)	Yes	<ul style="list-style-type: none"> • POP is available at Tele-Medicine room • POP is available at Tele-Evidence room • LT room requires NKN connection. POP is located around 500 meters from this site.
7	If Yes, is it being utilized as on date? (Y/N)	Yes	Report attached
8	If No, where is the installation required? (Give brief details)	-	LT room requires NKN connection. POP is located around 500 meters from this site.
9	Distance from POP to Site? (Specify)	-	LT room requires NKN connection. POP is located around 500 meters from this site.
	Any important note?	-	<ul style="list-style-type: none"> • NKN line (PGCIL) is coming from firozpur but frequent connectivity issues are being faced. • Lines break frequently due to harsh weather conditions and due to ongoing construction work and restoration takes 3- 4 weeks.
9	What are the current initiatives in Tele-Medicine & IT in your Hospital?	-	At present CPCs, Tele – Consultations are going on.
10	eHospital software from NIC available or not? (Y/N)	No	Not available at present.
11	If No, then which HIS software/system is being used currently?	-	Software developed in house.
12	Implementing Agency Name?	-	Developed in house.
13	In Tele Radiology Department, PACS available? (Y/N)	No	Not available at present.

14	Is there any Telemedicine Project running in the Hospital?	Yes	-
15	Status report - Services Provided, No. of Cases Resolved per department through TM?	-	Status report attached
16	Important Checklist - False Ceiling, Air conditioner, AV set, Projection Screen, Speakers, and Microphones etc.?	-	Projection screen is not available

A. Tele-Medicine Room Infrastructure (Tele-Medicine Room)

<u>S.No.</u>	<u>Component</u>	<u>Unit</u>	<u>Qty (X)</u>	<u>Availability (Y/N)</u>	<u>Remarks</u>
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	-	N	Not Required in Tele Medicine room as 75 inch LED is already installed
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Originally installed VC unit is not working; it has been borrowed from Bathinda at present, as per information provided to us by the Centre in-charge. Therefore new VC Kit is required at this site.
5	VC One year Warranty Pack	Nos.	1	N	Required
6	Group 500 Multipoint License	Nos.	1	N	Required
7	Network Printer	Nos.	1	N	Required
8	Telemedicine kit	Nos.	1	N	Required
9	Antivirus	Nos.	1	N	Required
10	Installation & Commissioning	Nos.	1	N	Required

B. Tele-Evidence Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.	1	N	Required
2	32" LED Display	Nos.	1	N	Required
3	Head Phone with microphone	Nos.	1	N	Required
4	HD Video Conferencing Unit with IP Calling	Nos.	1	N	Not Required
5	VC One year Warranty Pack	Nos.	1	N	Required
6	MFD - Scanner/Printer	Nos.	1	N	Required
7	Antivirus	Nos.	1	N	Required
8	Installation & Commissioning	Nos.	1	N	Required

C. Board Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.		N	Required
2	65" HD LED Display Unit	Nos.		N	Required
3	HD Video Conferencing Unit	Nos.		N	Required
6	VC One year Warranty Pack	Nos.		N	Required
4	Wi-Fi Access Point	Nos.		N	Required
5	10 KVA Online UPS	Nos.		N	Required
7	24 port network switch	Nos.		N	Required
8	21u Rack	Nos.		N	Required
9	Installation & Commissioning	Nos.		N	Required

Important Note: Board Room and Tele Evidence Room will be merged together; hence the infrastructure can be shared.

D. Digital Medical Lecture Theater

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	Digital Lectern (Podium)	Nos.	1	N	Required
2	4000 Lumens Projector	Nos.	1	N	Required
3	HDMI Splitter	Nos.	1	N	Required
4	Projection Screen	Nos.	1	N	Required
5	AV Switcher	Nos.	1	N	Required
6	Recording and streaming device	Nos.	1	N	Required
7	Wall Speaker	Nos.	1	N	Required
8	Wireless Handheld Microphone	Nos.	1	N	Required
9	Wireless Lapel Microphone	Nos.	1	N	Required
10	Gooseneck Microphone	Nos.	1	N	Required
11	Wireless Microphone Receiver	Nos.	1	N	Required
12	Amplifier	Nos.	1	N	Required
13	Wi-Fi Access Point	Nos.	1	N	Required
14	5KVA Online UPS	Nos.	1	N	Required
15	55" HD LED Display Unit with swivel mount	Nos.	1	N	Required
16	HD Video Conferencing Unit	Nos.	1	N	Required
17	Auxiliary PTZ camera	Nos.	1	N	Required
18	VC One year Warranty Pack	Nos.	1	N	Required
19	12u Rack	Nos.	1	N	Required
20	Installation & Commissioning	Nos.	1	N	Required

Important Note: No false ceiling was present, furnishing is required, no air conditioners installed and around 4T capacity air conditioners required.

Conclusions:

1. There is a provision to shift the existing Tele Evidence room to LT room.
2. Another provision is available to construct Tele Evidence room outside the Tele Medicine room, available dimensions - 19x25.

3. Board room can be created within the LT room.
4. Existing computers are more than 8 years old and thus stand outdated.
5. No dedicated technical person available (to identify the medical cases) hence manpower is required, as communicated to our team.

Site Photographs:-

Entrance to Tele-Medicine Centre cum Tele-Evidence Room



Inside view no.1 of Tele-Medicine Centre Cum Tele-Evidence Room



Inside view no.2 of Tele Medicine Centre Cum Tele Evidence Room



Existing Infrastructure in Tele Medicine Room



Entry to proposed LT Room



Inside View no. 1 of Proposed LT Room



Inside View no. 2 of Proposed LT Room



Existing Tele Evidence Room



Proposed site for Tele Evidence Room (19x25)



----- End of Document -----

Annexure 4

OFFICE OF THE I.T. CHAIRPERSON
GOVERNMENT MEDICAL COLLEGE, SRINAGAR



To,

S.K. Pani,

Under Secretary to the Government of India.

Reference: File No. T-21016/08/2016-eH

Subject: Identification of Lecture Theatre to be converted in Digital Medical Lecture Theatre.

Respected Sir,

This is regarding the National Medical College Network (NMCN) project envisaged by MoHFW to interlink selected medical colleges of the country with high speed optic fibre backbone from National Knowledge Network (NKN). Government Medical College, Srinagar is among the 42 medical colleges shortlisted.

However the college has been asked to provide the following:

1. Identification of lecture theatre from the existing one with:
 - a) Proper acoustics
 - b) Lighting suitable for video-conferencing system
 - c) Air conditioning facilities
 - d) Furniture for sitting arrangements.

As such in consultation with the Principal/Dean, Government Medical College, Srinagar we have shortlisted Auditorium of Government Medical College, Srinagar as the designated lecture hall for the purpose as it is close to the NKN Node (from library) and has sitting arrangements, only air conditioning facility and the proper acoustics of the lecture hall has to be improved.

Therefore in view of the above facts, the Principal/Dean of the Institution has consented for the utilisation of Auditorium of the college as Digital Medical Theatre as envisaged by National Knowledge Network (NKN).

Thanking you,

Prof (Dr.) Farida Noor,
I.T Chairperson/Nodal Officer, MCI,
Government Medical College,
Srinagar.

NO/IT/LAN: 122 - 125

DATED: 01-03-2018

Copy to:

1. Principal/Dean, Government Medical College, Srinagar for information.
2. Abhishek Chandra, Coordinator, NKN Project for information.
3. I. T. Section for information.

1/3/2018

Site Visit conducted at
PGIMS, Rohtak, for up
gradation of existing Tele
Medicine Centre

Prepared By:-

General Site Checklist

<u>S.No</u>	<u>Observations / Checklist</u>	<u>Status (Y/N)</u>	<u>Remarks (if any)</u>
1	Lecture Theater Room available at selected site? (Y/N)	Y	•
1.1	Dimensions	- 936.34 sqm	~35/26.75 meters
2	Tele Evidence Room available at selected site? (Y/N)	Y	•
2.1	Dimensions	- ~6/7 meters	
3	Tele Medicine Room available at selected site? (Y/N)	Y	• Telemedicine facility not available
3.1	Dimensions	- ~ 10/7 meters	
3.2	Any important note?	-	
4	What is the site Condition? (Furnished / Requires Furnishing)	- Furnished Lecture theater	
4.1	Any important note?	-	
5	Is NKN POP available in all the 3 Rooms? (Y/N)	N	•
6	If Yes, is it being utilized as on date? (Y/N)		
7	If No, where is the installation required? (Give brief details)	- At LT	
8	Distance from POP to Site? (Specify)	- ~ 1.4Km	
8.1	Any important note?	- Dark fiber available at telemedicine room	
9	What are the current initiatives in Tele-Medicine & IT in your Hospital?	- NA	
10	eHospital software from NIC available or not? (Y/N)	Y	
11	If No, then which HIS software/system is being used currently?		

12	Implementing Agency Name?	United Health Group	
13	In Tele Radiology Department, PACS available? (Y/N)	Y	PACS available
14	Is there any Telemedicine Project running in the Hospital?	N	-
15	Status report - Services Provided, No. of Cases Resolved per department through TM?	NA	
16	Important Checklist - False Ceiling, Air conditioner, AV set, Projection Screen, Speakers, and Microphones etc.?	-	All facilities available at Lecture Theater 5

A. Tele-Medicine Room Infrastructure (Tele-Medicine Room)

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.		Y	
2	32" LED Display	Nos.		N	
3	Head Phone with microphone	Nos.		N	
4	HD Video Conferencing Unit with IP Calling	Nos.		N	
5	VC One year Warranty Pack	Nos.		N	
6	Group 500 Multipoint License	Nos.		N	
7	Network Printer	Nos.		N	
8	Telemedicine kit	Nos.		N	
9	Antivirus	Nos.		N	
10	Installation & Commissioning	Nos.		N	

B. Tele-Evidence Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.		Y	
2	32" LED Display	Nos.		Y	
3	Head Phone with microphone	Nos.		Y	
4	HD Video Conferencing Unit with IP Calling	Nos.		Y	
5	VC One year Warranty Pack	Nos.		Y	
6	MFD - Scanner/Printer	Nos.		N	
7	Antivirus	Nos.		N	
8	Installation & Commissioning	Nos.		Y	

C. Board Room

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	All in One PC	Nos.		N	
2	65" HD LED Display Unit	Nos.		N	
3	HD Video Conferencing Unit	Nos.		N	
4	VC One year Warranty Pack	Nos.		N	
5	Wi-Fi Access Point	Nos.		N	
6	10 KVA Online UPS	Nos.		N	
7	24 port network switch	Nos.		N	
8	21u Rack	Nos.		N	
9	Installation & Commissioning	Nos.		N	

Important Note: Board Room and Tele Evidence Room will be merged together; hence the infrastructure can be shared.

D. Digital Medical Lecture Theater

S.No.	Component	Unit	Qty (X)	Availability (Y/N)	Remarks
1	Digital Lectern (Podium)	Nos.		N	
2	4000 Lumens Projector	Nos.		N	
3	HDMI Splitter	Nos.		N	
4	Projection Screen	Nos.		Y	

5	AV Switcher	Nos.		Y	
6	Recording and streaming device	Nos.		N	
7	Wall Speaker	Nos.		Y	
8	Wireless Handheld Microphone	Nos.		Y	
9	Wireless Lapel Microphone	Nos.		Y	
10	Gooseneck Microphone	Nos.		N	
11	Wireless Microphone Receiver	Nos.		Y	
12	Amplifier	Nos.		Y	
13	Wi-Fi Access Point	Nos.		N	
14	5KVA Online UPS	Nos.		N	
15	55" HD LED Display Unit with swivel mount	Nos.		N	
16	HD Video Conferencing Unit	Nos.		N	
17	Auxiliary PTZ camera	Nos.		N	
18	VC One year Warranty Pack	Nos.		N	
19	12u Rack	Nos.		N	
20	Installation & Commissioning	Nos.		N	

Important Note:

Conclusions:

1. .

Site Photographs:-

Photos of LT 5 attached with the mail.





Annexure 5

CPC 2017-18

Sr.	Date	Unit	Final Autopsy Dignosis	To	Dissussion
282	04-05-2017	Gastroentrology	Recurrent PTE	Lucknow, Shimla, AIIMS Bhuvneshwar, Forties, Trivendrm	Dr. arinderpreet kaur, Dr. BD radotara
283	04-12-2014	Neonatology	Acute liver failure with rh isiomunization.	Lucknow, Shimla, AIIMS Bhuvneshwar.	Prof. Kanya,Dr. richa
284	19/04/2017		ALK negative anaplastic large cell lymphoma with extensive mucosal	Lucknow, Faridkot,Trivendram,Fortis, AIIMS,Bhuvneshwar,Shimla	Prof. SC Verma,Prof. Ahima Das
285	19/07/2017	Dermatology	Cardic arrhythmia, refractory septic shock	Lucknow, shimla, trivendram, DMCH ludhana	
286	26/07/2017	Nephrology	Refractory shock- cardiogenic + septic	Lucknow, AIIMS bhuvneshwar, GMC Trivendrum	Dr. Rajesh Vijayvergiya
287	08-02-2017	Pediatric	Aspiiration post hypoxic/septic refratory shock	Lucknow, AIIMS bhuvneshwar, GMC Trivendrum	Dr. Arun Baranwal ,Dr. Anmol Bhatia, Dr. Nandita
288	08-09-2017	Endocronology	RPRF ? Etiology UTI: acute pyelonephritis pulmonary edema	Lucknow, AIIMS bhuvneshwar, GMC Trivendrum	r. A Bhansali, Dr. H Kohli
289	16/08/2017	Internal medicine	Systemic Lupus Erthematosus	Lucknow , Triventrum, AIIMS Bhuvneshwar	Dr. Sanjay Jain, Dr. Shefali K sharma
290	23/08/2017	Pediatric	ARDS, pulmonary hemorrhage, MODS	Lucknow , Triventrum, AIIMS Bhuvneshwar. Shilong(nigrims)	Dr. Amita trehan. Dr. Lesa Dawman,Dr. Anmol

291	30/08/2017	Pediatric	Chronic Enteroviral encephalitis	Lucknow, AIIMS bhuvneshwar, GMC Trivendrum, shilong	Dr. surjit singh, Dr. Arushi G Saini,
292	09-06-2017	Ped. Nephrology	Acute illness:UTI and Meningitis with sepsis CKD: CAKUT? Reflux Nephropathy	Lucknow, Shimla, Faridkot, Trivendrum, AIIMS Bhuwadeshwar, Haldwani (UK)	Dr. Karalanglin Tiewosh, Dr. Anmol, Dr, Kirti Gupta.
293	13/09/2017		Aneurysm of sinuses of valsalva involving the right and left coronary sinuses with reapture into the outflow of the left venticle.	Lucknow, AllS bhwneshwar, shilong, trivendrum, haldwani	Dr. Ankur Gupta, Dr. Prashant kumar Panda
294	20/09/2017		Massive Aspiration	shimla, shrilong, lucknow, AIIMS bhwneshwar, fortis Mohali , trivendrum	Dr. Munish, Dr Pankaj, Dr. Kim Vaiphie
295	27/09/2017		42 year male with clinical diagnosis of Pyrexia of unknown origin: Splenic diffuse large B-cell, lymphoma fungal ulcer in large intestine.	faridkot, lucknow ,shimla, shirlong, AIIMS bheshwar, fortis, GMC trivendrum	Dr. Ashok kumar pannu. Dr. Manphool, dr. Amarjit Bal
296	09-04-2017	Pediatric	7 years old boy with H/o developmental delay, macrocephaly	faridkot, lucknow ,shimla, shirlong, AIIMS bheshwar, fortis, GMC trivendrum JIPMER	Dr. Meenu singh, Dr, lokesh saini, dr. anmol bhatia, dr. kriti gupta.
297	10-11-2017	Gynae Unit I	Chronic HT with superimposed preeclampsia with heart disease Pulmonary edema	Lucknow, AllMS bhwneshwar, shilong, trivendrum, shimla, fridkot	Dr. anju singh , Dr. Ritambhra nada
298	18/10/2017	medicine	Classical hodgkin lymphoma-lymphocute deplete type (stage- IV) involving paraaortic and mediastinal lymph nodes, liver , spleen and periadrenal soft tissue and causing	GMC Trivendrum, shillong, lucknow, fortis mohali, bhwneshwar	Dr. Madhumita premkumar, dr. suvradeep, dr. pankaj gupta, dr. sanjay Jain.

			multiacinar confluent hepatic necrosis.		
299	25/10/2017	Pediatric	Cystic fibrosis(Pancreas, Liver,GIT,Atretic,Gall bladder Stress induced changes in thymus. Nesidioblastosis. Necrotising confluent bronchopneumonia with suppuration	Lucknow shimla,bhwneswar,shillong,trivendrum	Dr. Meenu singh,Dr. Jaivinder Yadav, Dr. KS sodhi, Dr. Uma Nahar
300	11-01-2017	Pediatric	Pre-Infantile Tremor syndrome phenotype with septic shock with meningitis? Inborn Error of metabolism (? MethyI malonic academic/? Propionic academic)	Lucknow ,shimla,bhwneswar,shillong,trivendrum,fortis mohali	Dr. Inusha Panigrahi, Dr. Anmol Bhatia,Dr. Bishan Radotra, Dr.S. Venkateshan
301	11-08-2017	Pediatric	Toxic Shock Syndrome.Health care associated infection with refractory shock	Lucknow ,shimla,bhwneswar,shillong,trivendrum,fortis mohali	Prof. Meenu Singh Dr. Sanjay verma, Prof. Nandita kakkar
302	15/11/2017		34 year old male with evidence of: Mural endocarditis involving the left ventricular aneurysm in the LAD territory following old myocardial infarction in a background of triple vessel extensive coronary atherosclerosis and purulent pericarditis	Shimla, Faridkot, shillong, trivendrum, fortis Mohali, DMCH , AIIMS bhwneshwar	Prof. sanjay Jain, Dr. Vikas Suri, Prof Ashim Das, Dr. Mandeep Garg
			After Winter Vacation		
	2018				

303	01-10-2018	Pediatric Hematology Oncology	Severe Aplastic anemia, Febrile neutropenia, Neutropenic enterocolitis ,Pneumonia (bacterial/ fungal) Severe sepsis, E.coli sepsis.(Pulmonary hemorrhage)	AIIMS bhwneshwar, Amritsar	Prof. Amita Trehan, Dr. Suresh Kumar, Dr. Anmol Bhatia, Prof. Kim Vaiphei
304	17/01/2018		A 28 year old female with generalized lymphadenopathy and hepatosplenomegaly: CD30 positive diffuse large B-cell lymphoma, Involvement of liver, peri-pancreatic nodes, para -aortic nodes and lungs. Candidial ulcer in stomach. Ischemic nlcer in large intestine	Lucknow ,shimla , faridkot, AIIMS bhwneshwar, GMC Trivendrm	Pinaki dutta, DR. Amanjit bal, Dr. Pankaj gupta
305	24/1/2018		5months ale baby (K/C/O SCID T-B-NK+ with RAG1 mutation)	Lucknow ,faridkot,AIIMS bhwneshwar, shillong, GMC trivendrum	Dr. Surjit Singh, Dr. Deepti Suri, Dr. Sameer Vyas, Dr. Kirti Gupta
306	02-07-2018		Necrotizing Pneumonia with secondary bronchiectasis, arteritis - Pulmonary vessels, coronaries, mesenteric, SAA Amyloidosis- kidneys,liver,adrenal, G	Lucknow, shimla, faridkot, shillong, fortis Mohali	Prof. D. Behera, Navneet singh, Ritambhra nada, ajay Gulati

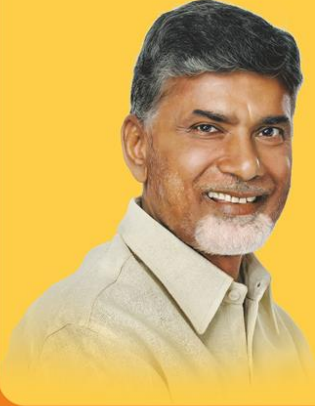
307	21/02/2018		A case of live related renal allograft transplant (2015), for ESRD, with chronic kidney disease	bhwnwshwar, shillong, SDPGI lucknow.	Prof. Ashish sharma, Dr. Deepesh B Kenwer, DR. Ujjwal Gors, Dr. Keshif
308	28/02/2018		HIV- 55male on art 1) Diffuse large B-cell lymphoma of the CNS 2) Extensive bronchopneumonia	Varnasi,	
309	03-07-2018		K/c Granulomatous polyangiitis with single right kidney . Renopulmonary disease: 1) Bronchoalveolar lesions with alveolar capillaritis and diffuse alveolar damage.2) Focal necrotizing glomerulonephritis (Pauci-immune) and healed sclerotic lesion.	lucknow, shimla, shillong, bhwnwshwar, trivendrum, Fortis mohali	Dr. shajal Dharia, Dr. Anindita sinha, Dr. Uma Nahar
310	21/03/2018		A 39 year old female 1) Polyarteritis Nodosa involving Pancreas, Liver,GIT,,Kidneys,Uterus and Ovaries, skin and Skeletal muscle.	Lucknow, Shimla, Faridkot, Shillong, Bhwnwshwar, Fortis mohali DMCH ludhiana, GMC Trivendrum, NMCN web streaming	Prof. Rakesh kochhar, Dr. Amarjit Bal, Dr. sarthak Malik.

Annexure 6

Report



Department of Health & Family Welfare
Government Of Andhra Pradesh



MUKHYAMANTRI AAROGYA KENDRAM

ముఖ్యమంత్రి ఆరోగ్య కేంద్రం



REMOTE
HEALTH CARE



Mukhyamantri Aarogya Kendram



Knowledge Partner- PGIMER, Chandigarh, India



Report

Mukhyamantri Aarogaya Kendrum

Submitted to

Health Medical and Family Welfare

Government of Andhra Pradesh

From

Postgraduate Institute of Medical Education and Research

Chandigarh, India

Report

Andhra Pradesh Ministry of Health and Family Welfare has started different public health programmes in partnership with Private companies. The health care providers like Apollo, GVK and e-Vaidya have been outsourced to provide services in different schemes. To evaluate these services and advise on improving them, Andhra Pradesh Ministry of Health and Family Welfare sought the services from Postgraduate Institute of Medical Education and Research, Chandigarh. Being an eminent institute and a leader in the sector of healthcare PGIMER was invited to be Knowledge Partner for the three programmes namely Mukhyamantri Aarogaya Kendrum, 108 Ambulance services and Thalli bidida express.

The first meeting was held on 3rd April, 2017 organized by the Health and family welfare, Andhra Pradesh. The main aim of this meeting was interaction between Service Providers, Knowledge Partners and Nodal Officers in the presence of Health Advisor, Principal Health Secretary and Hon'ble Health Minister of Andhra Pradesh Shri Kaminini Srinivas and Hon'ble Chief Minister of Andhra Pradesh Shri N Chandrababu Naidu. All the participants showed their presentation in front of the Hon'ble Chief Minister Shri N Chandrababu Naidu.

The Health and Family welfare, Government of Andhra Pradesh gave us three projects for monitoring.

1. Mukhyamantri Aarogaya Kendram
2. 108 Ambulance services.
3. Thalli bidida express.

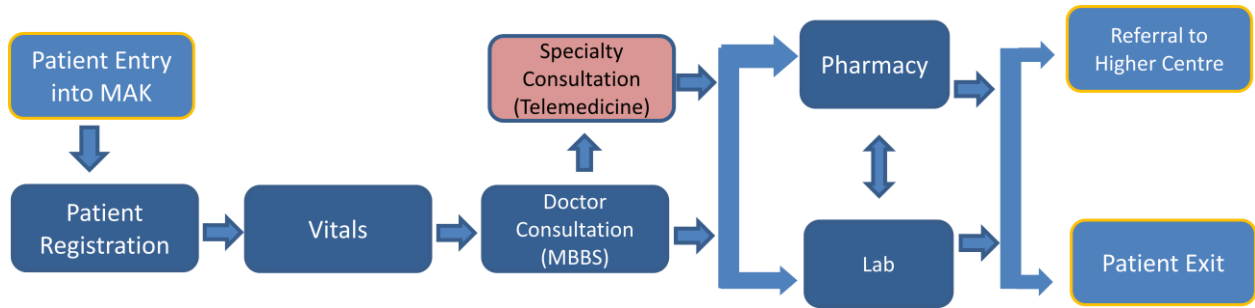
Dr. Amit Agarwal, Co-ordinator, RRC, Department of Telemedicine attended this meeting and represented PGIMER. He discussed about Key Performance Indicators (KPI) for Mukhyamantri Aarogaya Kendram and 108 Ambulance services. Shri G Vasudeva Rao was appointed as a Nodal Officer for Mukhyamantri Aarogaya Kendram and Shri Rajendra Prasad for the 108 Ambulance services.

Background-

The Mukhyamantri Aarogya Kendram are also called as eUPHCs. The Primary health care centres and dispensaries are upgraded to eUPHCs with the help of private healthcare service providers. These centres are fully digitalized and connected with CM dashboard on the website of Govt. of Andhra Pradesh (www.core.ap.gov.in). Data entered in the system are reflected on the CM dashboard in real time. Mukhyamantri aarogya Kendram or e-UPHCs should assure the availability:

- of full time medical officer,
- required adequate staff
- supply of medicines,
- of specialist services through a hub and spoke through video consultation
- of the required diagnostic tests (28) including Specialist Diagnostic test viz., ECG etc.,
- Integrated technology and EMR
- The data of patients visiting the facility, investigations conducted, report of investigation and the medicines given is being captured through an online real time software for transparency and efficiency, and is reflected on CMs CORE dash board on real time basis
- The entire inventory of medicines from the time of intending till consumption is being monitored through real time supply chain management software developed by c-DAC, this ensures 100 % accountability on consumption of medicines.

Patient Flow diagram:-



Shri G Vasudeva Rao, State Programme Manager and Nodal Officer for Mukhyamantri Aarogya Kendram asked us to prepare Key Performance Indicators after discussion with the Service providers.

To finalize the KPIs the second meeting was held in Hyderabad on 25th April 2017. The minutes of the meeting as follows: **Annexure 1**

Last meeting was held on 3rd May 2017 for freezing the Key Performance Indicators. Dr. Kiran K Thumburu from PGIMER, attended the meeting. The meeting was chaired by the Hon'ble Health Minister of Andhra Government. The minutes of this meeting is as follows: **Annexure 2**

Methodology:

The final Key Performance Indicators for the Mukhyamantri Aarogya Kendram are:

1. Productivity

OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-

- Number of Patients seen in OPD per day
- No of patients accessing laboratory services
- Ease of getting medicine
- No of Antenatal women visited facility Vs total OPD registered
- Number of children vaccinated in the facility
- Cleanliness of the premise (patient area, toilets)
- Clean Drinking water availability

Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation

- Specialty consultations – availability & accessibility of specialists in hub.
- Quality of specialist in tele-consultation. Qualification
- Video and audio quality through tele-consultation
- Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription
- Time taken from Tele consultation to receiving medicine.
 - Lab Utilization Index
 - Lab referral percentage
- Human Resource - Medical doctor, Paramedics, lab technicians
 - Availability of qualified staff
 - Skill of staff – weather all staff are adequately trained

2. Efficiency

- Specialty referral percentage
- Services offered- turnaround time for the investigations
- OPD per Doctor /Day/ Specialty
- Immunization Rate per age Group
- Repeat percentage

3. Clinical and service quality

- Disease burden profile
- Patient Satisfaction Score defined by following parameters
- Complete information about the illness
- Information about the treatment options
- Patient safety
- Hospital waste management
- Use of sterile equipments/syringes
- Universal precautions practicing
- Hand washing methods

The state of Andhra Pradesh is divided in to three zones geographically. These zones are:

Zone	District	Total No. Of centres	Service provider
Zone- I (58 centers)	Srikakulam	5	eVaidya Dhanush Health Care LLP
	Vizianagaram	8	
	Visakhapatnam	24	
	East Godavari	21	
Zone – II (87 centers)	West Godavari	18	Apollo Hospitals Enterprise Ltd
	Krishna	35	
	Guntur	26	
	Prakasam	8	

Zone – III (77 centers)	Nellore	12	Apollo Hospitals Enterprise Ltd
	Ananthapur	18	
	Kurnool	22	
	Kadapa	11	
	Chittoor	14	
	TOTAL	222	

The service provider for the Zone 1 (58 centres in four district) is eVaidya Dhanush health care; for Zone 2 (87 centres) and Zone 3 (77 centres) the service provider is Apollo Hospitals enterprise Ltd as shown in the table.

- The HFW, Andhra Pradesh suggested and discussed in the last meeting regarding the visits of Mukhyamantri Aarogaya Kendram. They asked the team from PGIMER to visit at least 10% of the total centres and atleast one centre in each district.
- 22 centres were randomly chosen (10% of the total 222).

Zone	Districts	No. of sites to be visited
Zone 1	Srikakulam	1
	Vizianagaram	1
	Visakhapatnam	2
	East Godavari	2
Zone 2	West Godavari	2
	Krishna	3
	Guntur	2
	Prakasam	1
Zone 3	SPSR Nellore	1
	Kurnool	2
	YSR Kadapa	1
	Chittoor	2
	Ananthapur	2

Observations:-

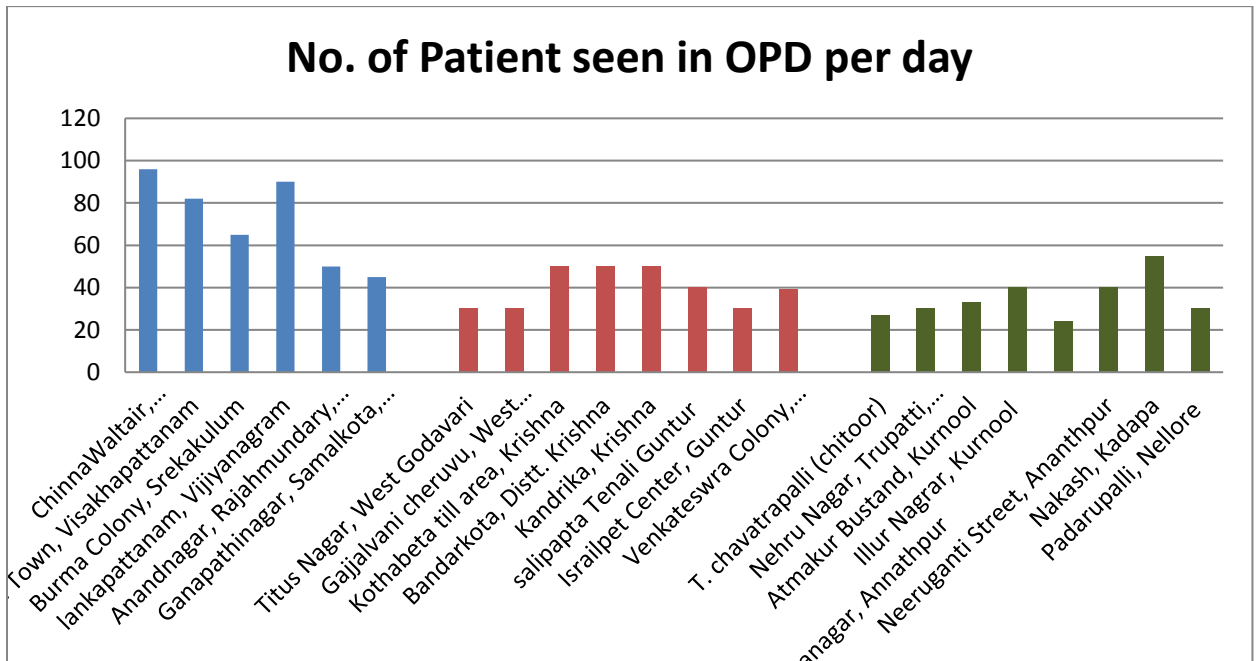
Dr. Amit Agarwal did first visit of Visakhapattanam on 15th May 2017. He visited six Mukhyamantri Arogaya Kendram in Zone 1, Two in Visakhapatnam, Two in East Godavari, One in Srekakulum and one in Vijayanagram on 21st May 2017.

Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar visited centres of Zone 2 (West Godavari, Krishna and Guntur), Centres of Prakasam district and Zone 3 (Nellore, Kadapa, Kurnool and Annathapur) districts done by Dr. Kiran Kumar Thumburu. The centres of Chittoor district visited by Dr. Amit Agarwal.

Outcome 1: Key Performance Indicator 1. Productivity

1.1 OPD services quality rate:

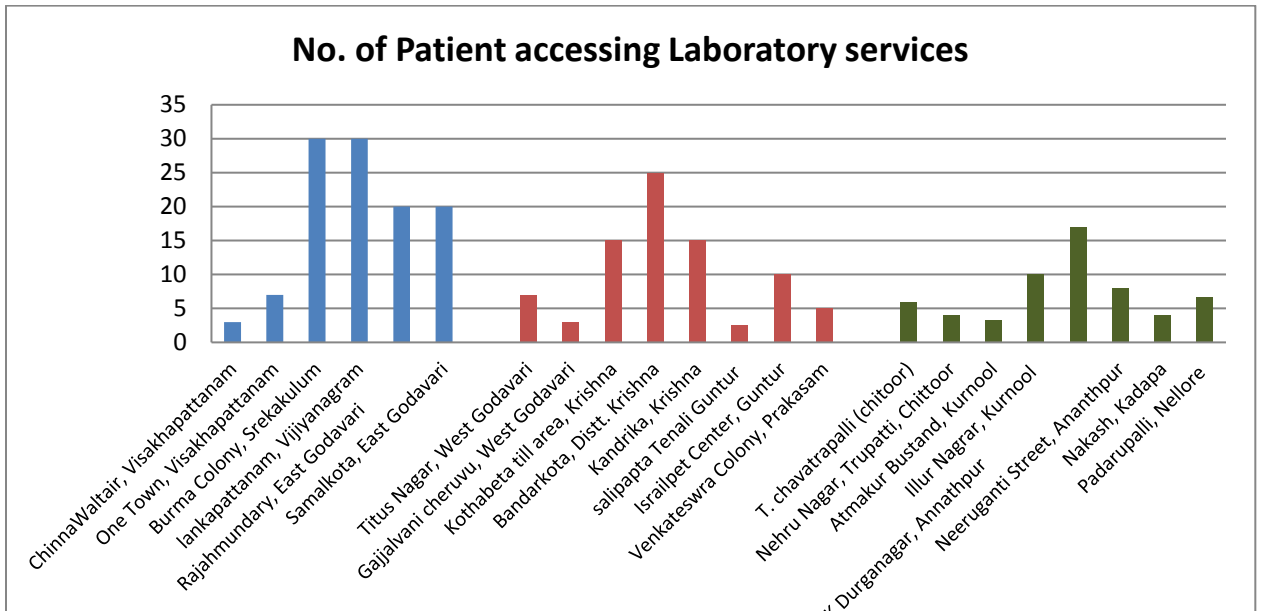
1.1.1 Number of Patients seen in OPD per day



Zone 1 █
Zone 2 █
Zone 3 █

No. of patient seen in OPD per day is higher in Zone 1 compare to Zone 2 and Zone 3. Average no. of patients seen in OPD per day in Zone 1, Zone 2 and Zone 3 was 71, 42 and 47 respectively as data provided by the service providers (Medical officer and Site manager).

1.1.2 No of patients accessing laboratory services



Zone 1 █
 Zone 2 █
 Zone 3 █

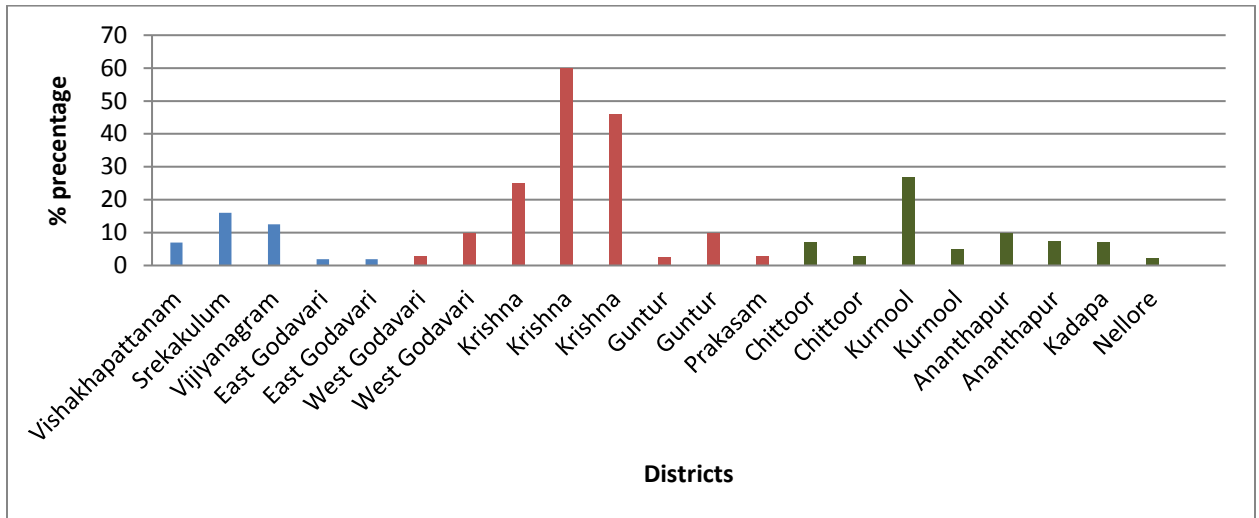
We observed that the stocks of chemicals were sufficiently available in each centre which are needed for the biochemical analysis.

1.1.3 Ease of getting medicine

All the centres visited by us have good availability of medicines. Medicines were available on prescription and free of any extra cost.

Same protocol was followed in all the three zones.

1.1.4 No of Antenatal women visited facility Vs total OPD registered



Zone 1 █
 Zone 2 █
 Zone 3 █

The eUPHCs in Krishna district (visited by knowledge partner) registered more antenatal cases as compared to any other eUPHCs visited in the state.

1.1.5 Number of children vaccinated in the facility

The eUPHCs have Wednesday and Saturday fixed for child immunizations. The number of children immunized differs from centre to centre.

1.1.6 Cleanliness of the premise (patient area, toilets)

It was observed that premises of all the eUPHCs were clean and tidy. Although no formulated infection control protocol was found.

1.1.7 Clean Drinking water availability

All the centres have RO facility to provide good quality of water to the visiting patients. We did not find any information regarding cleaning of RO systems nor we found any information regarding cleaning of the water storage tanks. This was consistent in all the eUPHCs visited.

1.2 Tele-consultations rate: Specialty consultations – availability & accessibility of specialists in hub.

It was found that all the service providers have different norms for Tele consultations. In Zone 1 there was no fixed time slot for Tele consultation and the specialists were available through out the timings of eUPHCs whereas in Zone 2 and 3 time slots were fixed for Tele consultations which varied from 15 minutes to 45 minutes.

Quality of specialist in tele-consultation. Qualification

Cardiologists, Endocrinologists, General Physicians and Orthopaedic Surgeons were available for Tele consultations.

1.2.1 Video and audio quality through tele-consultation

For all the eUPHCs the audio and video quality was good.

1.2.2 Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription

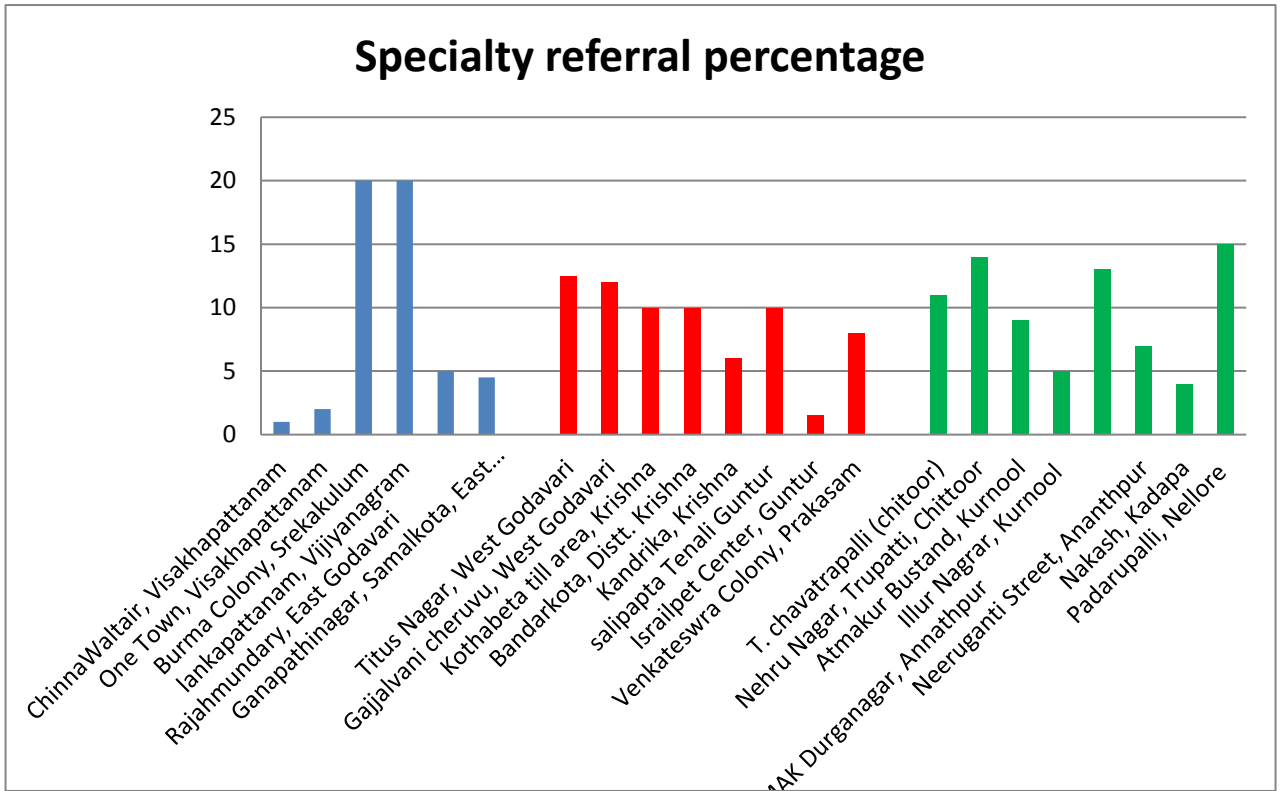
Time for Tele consultation after referral varied due to different norms followed and it ranged from 5 minutes to 45 minutes after referral by the medical officer.

1.2.3 Human Resource – Medical doctor, Paramedics, lab technicians, Availability of qualified staff, Skill of staff – weather all staff are adequately trained

We have found all the parameters up to mark.

2. Efficiency

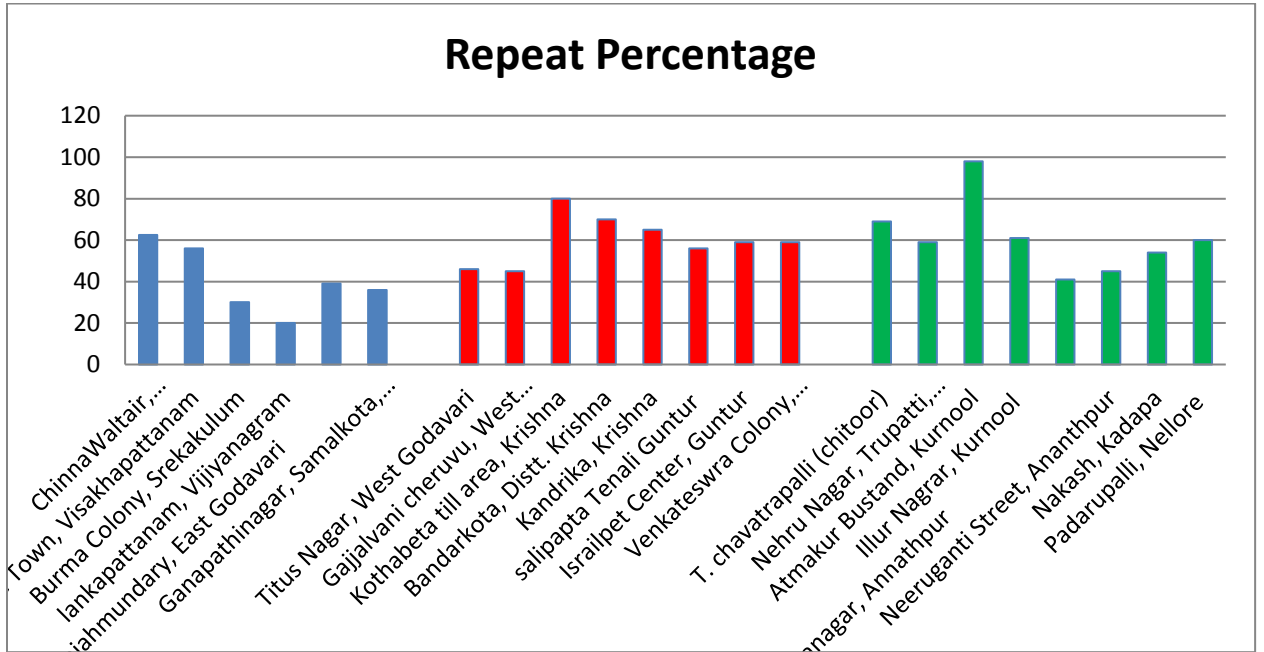
2.1 Specialty referral percentage



Zone 1 █
Zone 2 █
Zone 3 █

We accessed the record of past one month and in Zone 1 of all the eUPHCs visited, two (Burma colony, Srekakulum and Lankapattanam, Vijianagram) eUPHCs have 20% specialty referrals. In Zone 2 and Zone 3 the average specialty referrals were 10.47 and 9.75 respectively in last month.

2.2 Repeat percentage



Zone 1
 Zone 2
 Zone 3

The follow up percentage for Zone 1 was 40.58, for Zone 2 was 59.62 and Zone 3 was 64.25.

3. Clinical and service quality

3.1 Disease burden profile: As per the information provided by the medical officers of different visited eUPHCs, we have found that Diabetes Mellitus, Hypertension and fever were the main burden of diseases.

3.2 Patient Satisfaction Score defined by following parameters

3.2.1 Complete information about the illness

3.2.2 Information about the treatment options

3.2.3 Patient safety

We have interviewed one or two patients per centre and asked them questions related to above said parameters; according to them they were fully satisfied with the services.

3.3 Hospital waste management

It was observed that waste was segregated into yellow, red and blue coloured bins provided in the laboratory area. Information regarding waste segregation was displayed. Waste collection bins were also properly labelled.

3.4 Use of sterile equipments/syringes

Autoclaves and boilers were available in eUPHCs for sterilization of the equipments and syringes.

3.5 Universal precautions practicing

Universal precautions practicing rules were followed in all eUPHCs.

3.6 Hand washing methods

It was observed that hand washing area was available in doctors room, in labs and in patient area. Liquid soap and napkins were used for this purpose.

Recommendations:

It is a good initiative from Government of Andhra Pradesh. Mukhyamantri Aarogaya Kendram are well equipped centres with telemedicine facility available and is helpful in getting specialist consultation there and then. The installation telemedicine equipments saved lot of time and money for the patients and eased the process of referrals. The patient registrations were digitalized. These eUPHCs also had laboratory which were equipped to perform basic investigations and the reports were available electronically.

The establishment of Mukhyamantri Aarogaya Kendram has enabled the patients to get treatment, specialist consultations and prescribed medicines easily. It is a novel initiative by Govt of Andhra Pradesh. We did not find any such set up in the country for comparison. It may therefore be a benchmark in the Indian health care setting that may be referred to as a standard for setting up such facilities elsewhere in the country.

We found out the tele consultation services provided in the eUPHCs of Andhra Pradesh was better than any other Government or Private sector facilities. Actually it is becoming a gold

standard for other states also. The Tele consultations services is available in many centers in India and abroad the services provided by them are not up to mark as compared to the Mukhyamantri Aarogaya Kendram. The problem which is to be faced in these services are unavailability of the specialist doctors in real time mode. But we saw an excellent approach in Andhra Pradesh Mukhyamantri Aarogaya Kendram that the service providers made the hub in which the specialists were available throughout the timings of eUPHCs for the tele consultation in real time mode and these hubs are properly connected with the concerned eUPHCs of Andhra Pradesh.

Regarding super specialist consultation we observed that the quality of the video and audio quality was good in every Mukhyamantri Aarogaya Kendram and the doctor patient communication was also good in these centres. We would like to share our views that super specialist consultation is quite useful in avoiding unwanted follow up of the patient to tertiary care hospitals. Although there is a significant difference in face to face consultation and through tele mode consultation, because in some cases doctor needed much more information regarding the patient illness that is possible only in the physical presence of the patient but out of 100 cases 70-80 cases can be handle through tele mode consultation.

Beside this there are some recommendations which should be incorporated

1. Steps to be taken for increasing awareness about Mukhyamantri Aarogaya Kendram in the catchment area.
2. Currently available mike and speaker facility in the Tele Consultation room does not enable the medical officer to be a part of the conversation hence should be upgraded.
3. We recommend following the 2016 biomedical waste management guidelines issued by the Ministry of Health and Family Welfare, Government of India.
4. Urine examination (Urine R/E) should be included in the biochemistry analysis list.

Annexure 1

Minutes of the Meeting

DATE & TIME	25/4/2017
LOCATION	Conference Room – Hotel, Hyderabad
TOPIC	KPI Finalization
ATTENDEES	Dr Amit (PGIMER), Dr Ravi (Dhanush), Dr PBN (eVaidya), Dr Ayesha (Apollo), Sudhkar Ranga (Apollo), Venkat (Dhanush)
TIME ALLOTTED	1 Hour

DISCUSSIONS	KPI Finalization
	<p>The discussion was based on the KPIs listed in the KPI slides distributed by office of CHFV previously. It was decided that the focus would be on the KPIs where service providers had queries / concerns.</p> <p>The following were the points of discussion –</p> <ol style="list-style-type: none">1. Under Productivity<ol style="list-style-type: none">a. Waiting Time for Patients –The waiting time for Tele consults will be monitored form registration time of Tele consults to prescription submission time.b. Availability of essential medicine – Medicines are provided by the government and the service provided dispenses those to the patients which is recorded through e-aushadhi. Integration of the e-aushadhi and Service provider’s software must be done to monitor the KPI.c. Items like Cleanliness of premise, ease of getting medicine, availability of clean drinking water would be access during the physical inspection.2. Under Teleconsultation Rate<ol style="list-style-type: none">a. Ease of accessing the video conferencing was not a point of concern as the applications are web based and is easily accessible.b. Quality of the video and audio conferencing was to be inspected physically during the inspection.3. Under Lab Utilization Index<ol style="list-style-type: none">a. Only Lab referral percentage was declared as a KPI to be monitored for Labb. The other proposed Lab related KPIs were found to be not relevant for this project4. Under Human Resource<ol style="list-style-type: none">a. This included the Medical Doctor, Paramedics, Lab Technicianb. This was to be inspected during the actual visit.5. Clinical & Service quality<ol style="list-style-type: none">a. The time spent by doctor was removed as it was subjective depending on the patient complaint.b. Follow up rate was replaced by repeat percentage.c. The Patient safety items were to be inspected as part of the visit.

Annexure 2

Minutes Of Meeting Conducted By The Hon'ble Minister For Health, Medical & Family Welfare Along With The Principal Secretary To Government (Hm&Fw) On 3-05-2017 At Taj Gateway Hotel, Vijayawada.

The Hon'ble Minister for Health, Medical & Family Welfare along with the Principal secretary to Government (HM&FW) and the Advisor to the Government has convened a meeting on 03.05.2017 at Taj Gateway Hotel, Vijayawada to review the various activities that are being implemented by the Department with all the HODs, DCHSs, DM&HOs, Superintendents of Teaching Hospitals, District Hospitals, Programme officers, Nodal Officers, Service providers and knowledge partners.

The following members present

Dr. Ravi Shankar Ayyangar	CEO, NTR VST & DG DCA
Sri. Gopinath	Director, APMSIDC
Dr. S. ArunaKumari	Director of Public Health & Family Welfare
Dr. N. Subba Rao	Director Medical Education
Dr. K. Babji	Director Medical Education (Acad)
Dr. Jaya Chandra Reddy	Joint Commissioner APVVP

Programme: Mukhyamantri Aarogya Kendram (eUPHCs)

Knowledge Partner: PGIMER, Chandigarh

- The Key Performance Indications on Mukhyamantri Aarogya Kendralu are presented by Knowledge Partner i.e., Dr Kiran Kumar from PGIMER, Chandigarh
- The Knowledge Partner also informed that their team will conduct site visit from 10th May and will submit the final report by 30th June, 2017
- The Knowledge partner is advised to include Ambiance and Time taken from registration till issue of medicine to patient in KPIs.
- The service provider is directed to display sign boards prominently in the eUPHC depicting the wide range of services available including 4 Specialty services, list of Free Diagnostics, Free Medicines, Names of the Staff, Patient workflow etc.,

- The service provider is directed to give wide publicity in the catchment areas of eUPHCs on the wide range of services made available in e UPHC free of cost for the urban poor.
- The service provider is advised to conduct Time and Motion study as the waiting time for patients is high.
- The service provider is advised to position only specialists with required qualification in Hub as it is noticed that in one instance only an MBBS Doctor is available in Hub against the Tender condition and Service providers are advised to share the names of doctors in Hub with qualification.
- Directions issued to train all the Medical Officer on broad clinical protocols and to ensure that all needy patients get benefit of Tele consultation, free lab services and free drugs.
- The DM&HOs are directed to inspect all e UPHCs in their district surprisingly and to send their inspection reports with observations. The inspections shall be done every month

Service Providers are finally advised to give highest priority to Quality of Services, Ambiance, Cleanliness and to give wide publicity through IEC



Annexure 3

Mukhyamantri Aarogya Kendram:

Centre Name-Chinna Waltair, Visakhapattanam

Date of Visit- 13-May-2017

Name of the person who visited- Dr Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	96	Number of patients seen on the date of visit
2	No of patients accessing laboratory services	3	Data for 13 May, 2017
3	Ease of getting medicine	Yes	ePrescription generated in the EMR, the same is printed and handed over with the drugs and instructions to the patient
4	No of Antenatal women visited facility Vs total OPD registered	7	Data for 13 May, 2017
5	Number of children vaccinated in the facility	85	Data for 13 May, 2017
6	Cleanliness of the premise (patient area, toilets)	Clean	Patient waiting area- Clean Toilets- Clean with running water
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Cardiology Endocrinology Gen. Medicine Orthopaedics	Spoke to General Medicine and Orthopedician
9	Quality of specialist in tele consultation. Qualification	MD,DM MS	
10	Video and audio quality through tele consultation	Excellent	The video and audio call are extremely good. Patient Privacy maintained during the conversation by 2 head sets at the patient side.
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to	Within 20 seconds of sending the request for teleconsultation	They have 3 mechanisms for the availability of Specialty consultations; a physical hub at Hyderabad, a tie up with

	prescription	from telemedicine room.	a Super-specialty hospital at Vijayawada/Guntur and Virtual doctors on line.
Lab Utilization Index			
12	Lab referral percentage	3%	Data for the month of April 2017
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Qualified	
14	Availability of qualified staff	Yes	
15	Skill of staff – whether all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	1	Data for the month of April 2017
17	Services offered- turnaround time for the investigations	20 mins	
18	OPD per Doctor /Day/ Specialty	96/1	
19	Immunization Rate per age Group	-	
20	Repeat percentage	62.5% (60 repeat patients)	
Clinical and service quality			
21	Disease burden profile	Body pain, fever, HTN, DM,	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes, Given by the Doctor to the patient	
ii.	Information about the treatment options	Yes, Given by the Doctor to the patient	
23	Patient safety		
i.	Hospital waste management	Tied up with Maridi biomedical waste management	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	

Mukhyamantri Aarogaya Kendram

Centre Name-One Town, Visakhapatnam

Date of Visit- 13-May-2017

Name of the person who visited- Dr Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	82	Number of patients seen on the date of visit
2	No of patients accessing laboratory services	7	Data for 13 May, 2017
3	Ease of getting medicine	Yes	ePrescription generated in the EMR, the same is printed and handed over with the drugs and instructions to the patient
4	No of Antenatal women visited facility Vs total OPD registered	0	Data for the 13 April, 2017
5	Number of children vaccinated in the facility	11	Data for the 13 April, 2017 (Vaccination days- Wed and Sat)
6	Cleanliness of the premise (patient area, toilets)	Clean	Patient waiting area- Clean Toilets- Clean with running water
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Cardiology Endocrinology Gen. Medicine Orthopaedics	Spoke to Cardiologist and Endocrinologist via telemedicine
9	Quality of specialist in tele consultation. Qualification	MD, DM MS	Good Communication
10	Video and audio quality through tele consultation	Excellent	The video and audio call are extremely good. Patient Privacy maintained during the conversation by 2 headsets at the patient side.
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	Within 20 seconds of sending the request for tele consultation from telemedicine room.	They have 3 mechanisms for the availability of Specialty consultations; a physical hub at Hyderabad, a tie up with a Super-specialty hospital at Vijayawada/Guntur and Virtual doctors on line.
Lab Utilization Index			

12	Lab referral percentage	8.5	Data for 13 May 2017
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Qualified	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	2	Data for 13 May 2017
17	Services offered- turnaround time for the investigations	20 mins	
18	OPD per Doctor /Day/ Specialty	82/2	
19	Immunization Rate per age Group	-	
20	Repeat percentage	56% (46 repeat pts)	
Clinical and service quality			
21	Disease burden profile	Body pain, fever, HTN, DM,	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes, Given by the Doctor to the patient	
ii.	Information about the treatment options	Yes, Given by the Doctor to the patient	
23	Patient safety		
i.	Hospital waste management	Tied up with Maridi biomedical waste management	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	

Mukhyamantri Aarogaya Kendram:

Centre Name-Burma Colony, Srekakulum

Date of Visit- 21-May-2017

Name of the person who visited- Dr Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	60-65	Number of patients seen on the date of visit
2	No of patients accessing laboratory services	20-30	
3	Ease of getting medicine	Yes	ePrescription generated in the EMR, the same is printed and handed over with the drugs and instructions to the patient
4	No of Antenatal women visited facility Vs total OPD registered	10-12	(Wed., Sat.)
5	Number of children vaccinated in the facility	30-40	(Vaccination days- Wed and Sat)
6	Cleanliness of the premise (patient area, toilets)	Clean	Patient waiting area- Clean Toilets- Clean with running water
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Cardiology Endocrinology Gen. Medicine Orthopaedics	Spoke to Cardiologist and Endocrinologist via telemedicine
9	Quality of specialist in tele consultation. Qualification	MD, DM MS	Good Communication
10	Video and audio quality through tele consultation	Excellent	The video and audio call are extremely good. Patient Privacy maintained during the conversation by 2 headsets at the patient side.
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Within 20 seconds of sending the request for tele-consultation from telemedicine room.	They have 3 mechanisms for the availability of Specialty consultations; a physical hub at Hyderabad, a tie up with a Super-specialty hospital at Vijayawada/Guntur and Virtual doctors on line.
Lab Utilization Index			
12	Lab referral percentage	33	

Human Resource			
13	Medical doctor, Paramedics, lab technicians	Qualified	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	20	
17	Services offered- turnaround time for the investigations	20 mins	
18	OPD per Doctor /Day/ Specialty	62/1/20	
19	Immunization Rate per age Group	-	
20	Repeat percentage	30%	
Clinical and service quality			
21	Disease burden profile	HTN, DM	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes, Given by the Doctor to the patient	
ii.	Information about the treatment options	Yes, Given by the Doctor to the patient	
23	Patient safety		
i.	Hospital waste management	Tied up with Maridi biomedical waste management	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	

Mukhyamantri Aarogaya Kendram:

Centre Name-lankapattanam, Vijiyanagram

Date of Visit- 21-May-2017

Name of the person who visited- Dr Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	80-90	
2	No of patients accessing laboratory services	30-40	
3	Ease of getting medicine	Yes	ePrescription generated in the EMR, the same is printed and handed over with the drugs and instructions to the patient
4	No of Antenatal women visited facility Vs total OPD registered	10-15/80-90	(Wed., Sat.)
5	Number of children vaccinated in the facility	35/ week	(Vaccination days- Wed and Sat)
6	Cleanliness of the premise (patient area, toilets)	Clean	Patient waiting area- Clean Toilets- Clean with running water
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Cardiology Endocrinology Gen. Medicine Orthopaedics	Spoke to Gen. Med. doctor
9	Quality of specialist in tele consultation. Qualification	MD,DM MS	Good Communication
10	Video and audio quality through tele consultation	Excellent	The video and audio call are extremely good. Patient Privacy maintained during the conversation by 2 headsets at the patient side. Tele-consultation via video conferencing kit
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Within 20 seconds of sending the request for tele-consultation from telemedicine room.	They have 3 mechanisms for the availability of Specialty consultations; a physical hub at Hyderabad, a tie up with a Super-specialty hospital at Vijayawada/Guntur and Virtual doctors on line.
Lab Utilization Index			

12	Lab referral percentage	50	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Qualified	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	20	
17	Services offered- turnaround time for the investigations	10 mins	
18	OPD per Doctor /Day/ Specialty	90/1/18	
19	Immunization Rate per age Group	-	
20	Repeat percentage	20%	
Clinical and service quality			
21	Disease burden profile	HTN, DM	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes, Given by the Doctor to the patient	
ii.	Information about the treatment options	Yes, Given by the Doctor to the patient	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogaya Kendram:

Centre Name- Anandnagar, Rajahmundry, East Godavari

Date of Visit-22/05/2017

Name of the person who visited- Dr. Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	47 – 50	
2	No of patients accessing laboratory services	18-20	
3	Ease of getting medicine	Good	List of Drugs displayed in Center
4	No of Antenatal women visited facility Vs total OPD registered	28: 1411	
5	Number of children vaccinated in the facility	211	
6	Cleanliness of the premise (patient area, toilets)	Excellent	Photographs enclosed
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Good	Tele-consult – 4.2% 61 patients
9	Quality of specialist in tele consultation. Qualification	Good	List enclosed & also displayed at the center
10	Video and audio quality through tele consultation	Good	Videoconferencing camera with TV used
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	Good	Time for receiving consultation -5 to 10 min Case sheet creation & Prescription – 8 min
Lab Utilization Index			
12	Lab referral percentage	42%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Available	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	5%	
17	Services offered- turnaround time for the investigations	45 – 120 min	
18	OPD per Doctor /Day/ Specialty	6-8	
19	Immunization Rate per age Group		226 vaccinations in April

20	Repeat percentage	39%	
Clinical and service quality			
21	Disease burden profile	Evaluated	1.Hypertension 2. Diabetes 3.Orthopaedic issues
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Ganapathinagar, Samalkota, East Godavari Date of Visit-21/05/2017

Name of the person who visited- Dr. Amit Agarwal

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	42-45	
2	No of patients accessing laboratory services	18-20	
3	Ease of getting medicine	Good	List of Drugs displayed in Center
4	No of Antenatal women visited facility Vs total OPD registered	26:1377	
5	Number of children vaccinated in the facility	206	
6	Cleanliness of the premise (patient area, toilets)	Excellent	Photographs enclosed
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele-consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Good	Tele-consult – 3.8% 52 patients
9	Quality of specialist in tele consultation. Qualification	Good	List enclosed & also displayed at the center
10	Video and audio quality through tele consultation	Good	Videoconferencing camera with TV used
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Good	Time for receiving consultation -5 to 10 min Case sheet creation & Prescription – 8 min
Lab Utilization Index			
12	Lab referral percentage	45%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Available	
14	Availability of qualified staff	Yes	
15	Skill of staff – whether all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	4.5%	
17	Services offered- turnaround time for the investigations	45 – 120 min	
18	OPD per Doctor /Day/ Specialty	6-8	
19	Immunization Rate per age Group		206 vaccinations in

			April
20	Repeat percentage	36%	
Clinical and service quality			
21	Disease burden profile	Evaluated	1.Hypertension 2. Diabetes 3.Orthopaedic issues
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogaya Kendram:



Centre Name- Titus Nagar, West Godavari

Date of Visit- 26/5/17

Name of the person who visited- Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	30	
2	No of patients accessing laboratory services	7	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1-2	
5	Number of children vaccinated in the facility	6	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15-20 minutes	
Lab Utilization Index			
12	Lab referral percentage	21%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	12.8%	
17	Services offered- turnaround time for the	45minutes	

	investigations		
18	OPD per Doctor /Day/ Specialty	3	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	48%	
Clinical and service quality			
21	Disease burden profile	DM, HTN, Viral infection, skin infection and TB cases	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:

Centre Name- Gajjalvani cheruvu, West Godavari

Date of Visit-26/5/17

Name of the person who visited- Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	30	
2	No of patients accessing laboratory services	10	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	3	
5	Number of children vaccinated in the facility	11	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15-20 minutes	
Lab Utilization Index			
12	Lab referral percentage	19%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	11 %	
17	Services offered- turnaround time for the investigations	45minutes	
18	OPD per Doctor /Day/ Specialty	NA	

19	Immunization Rate per age Group	NA	
20	Repeat percentage	45	
Clinical and service quality			
21	Disease burden profile	DM, HTN, ARI (Children), eye infection and Anemia	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:

Centre Name- West Godavari (weaker section colony) Date of Visit- 26/5/17

Name of the person who visited- Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	60	
2	No of patients accessing laboratory services	10	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	3	
5	Number of children vaccinated in the facility	11	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15-20 minutes	
Lab Utilization Index			
12	Lab referral percentage	12%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	4%	
17	Services offered- turnaround time for the investigations	15-20minutes	
18	OPD per Doctor /Day/ Specialty	3	

19	Immunization Rate per age Group	NA	
20	Repeat percentage	70%	
Clinical and service quality			
21	Disease burden profile	DM, Diarrhea, UTI, HTN	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:

Centre Name- West Godavari (yagarla pathi)

Date of Visit- 26/5/17

Name of the person who visited- Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	45	
2	No of patients accessing laboratory services	35	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1-8	
5	Number of children vaccinated in the facility	6	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15-20 minutes	
Lab Utilization Index			
12	Lab referral percentage	9%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	5%	
17	Services offered- turnaround time for the investigations	20-30minutes	
18	OPD per Doctor /Day/ Specialty	2	

19	Immunization Rate per age Group		
20	Repeat percentage	53%	
Clinical and service quality			
21	Disease burden profile	DM, HTN, Injury cases and Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Kothabeta hill area, Krishna

Date of Visit- 25.5.17

Name of the person who visited- Mr Pankaj Pant

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40-50	
2	No of patients accessing laboratory services	10-15	
3	Ease of getting medicine	40-50	
4	No of Antenatal women visited facility Vs total OPD registered	10-15	
5	Number of children vaccinated in the facility	30	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	5 minutes	
Lab Utilization Index			
12	Lab referral percentage	30%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	10%	
17	Services offered- turn around time for the investigations	45 minutes	
18	OPD per Doctor /Day/ Specialty	4-5 per day	

19	Immunization Rate per age Group		
20	Repeat percentage	80%	
Clinical and service quality			
21	Disease burden profile	HTN, DM and Malaria	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Provided	
ii.	Information about the treatment options	Good	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Soap & Hand wash & soap	



Mukhyamantri Aarogya Kendram:

Centre Name- Bandarkota, Distt. Krishna Date of Visit- 22/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40-50	
2	No of patients accessing laboratory services	20-25	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	24	
5	Number of children vaccinated in the facility	75	
6	Cleanliness of the premise (patient area, toilets)	0-5	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	10-15 minutes	
Lab Utilization Index			
12	Lab referral percentage	18%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	8-10	
17	Services offered- turnaround time for the investigations	10 minutes	
18	OPD per Doctor /Day/ Specialty	4-5	
19	Immunization Rate per age Group	20-25	

20	Repeat percentage	70%	
Clinical and service quality			
21	Disease burden profile	Thyroid, Fever, Lippoma	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Sanitizer& Soap	



Mukhyamantri Aarogya Kendram



Centre Name- Kandrika, Krishna

Date of Visit- 25/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	50-70	
2	No of patients accessing laboratory services	5-10	
3	Ease of getting medicine	yes	
4	No of Antenatal women visited facility Vs total OPD registered	23	
5	Number of children vaccinated in the facility	10-12	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	2-3 minutes	
Lab Utilization Index			
12	Lab referral percentage	5-10	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	10 %	
17	Services offered- turnaround time for the investigations	5-10 Minutes	
18	OPD per Doctor /Day/ Specialty	3-4 per day	

19	Immunization Rate per age Group	100%	
20	Repeat percentage	60	
Clinical and service quality			
21	Disease burden profile		
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	3Yes	
iii.	Universal precautions practicing	Sanitizer & hand wash	
iv.	Hand washing methods	Soap	



Mukhyamantri Aarogya Kendram



Centre Name- Dargipeta (jakkampudi colony), Krishna

Date of Visit- 25/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	60	
2	No of patients accessing laboratory services	10-15	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	0	
5	Number of children vaccinated in the facility	5-6	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	5 minutes	
Lab Utilization Index			
12	Lab referral percentage	5-6%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	5-6	
17	Services offered- turnaround time for the investigations	10 minutes	
18	OPD per Doctor /Day/ Specialty	3	
19	Immunization Rate per age Group		

20	Repeat percentage	61%	
Clinical and service quality			
21	Disease burden profile	Fever cases, DM	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:

Centre Name- Mittaguden, Krishna

Date of Visit- 25/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	25-30	
2	No of patients accessing laboratory services	6-10	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	10 every week	
5	Number of children vaccinated in the facility	15-20	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Good	
10	Video and audio quality through tele consultation	Good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	3-5 minutes	
Lab Utilization Index			
12	Lab referral percentage	10-12 %	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	10-15%	
17	Services offered- turnaround time for the investigations		
18	OPD per Doctor /Day/ Specialty	2-3	
19	Immunization Rate per age Group	0-5	

20	Repeat percentage	60%	
Clinical and service quality			
21	Disease burden profile	DM and allergic	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Sanitizer	



Mukhyamantri Aarogya Kendram:

Centre Name- Uarred gudan (Krishna distt.)

Date of Visit- 22/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40-50	
2	No of patients accessing laboratory services	10-15	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	30-40	
5	Number of children vaccinated in the facility	60-80	
6	Cleanliness of the premise (patient area, toilets)	Good	
7	Clean Drinking water availability	Good	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Good	
10	Video and audio quality through tele consultation	Good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	2-3 hours	
Lab Utilization Index			
12	Lab referral percentage	20%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	5%	
17	Services offered- turnaround time for the investigations	15 minutes	
18	OPD per Doctor /Day/ Specialty	5	
19	Immunization Rate per age Group	0-5	

20	Repeat percentage	60%	
Clinical and service quality			
21	Disease burden profile	DM, HTN	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Sanitizer	



Mukhyamantri Aarogya Kendram



Centre Name- Salipapta Tenali Guntur

Date of Visit- 24.05.17

Name of the person who visited- Dr Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40	
2	No of patients accessing laboratory services	2-5	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1.-2	
5	Number of children vaccinated in the facility	11	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Excellent	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	30-40 minutes	
Lab Utilization Index			
12	Lab referral percentage	8	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	10	
17	Services offered- turnaround time for the investigations		
18	OPD per Doctor /Day/ Specialty	3.3	
19	Immunization Rate per age Group		
20	Repeat percentage	56	

Clinical and service quality			
21	Disease burden profile	DM, HTN, UTI, Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Israilpet Center, Guntur

Date of Visit- 24/05/2017

Name of the person who visited- Dr. Kiran Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	30	
2	No of patients accessing laboratory services	10	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1/10	
5	Number of children vaccinated in the facility	10/day	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	1-2 hour	
Lab Utilization Index			
12	Lab referral percentage	20	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	1.5	
17	Services offered- turnaround time for the investigations	30-40	
18	OPD per Doctor /Day/ Specialty	2.5	
19	Immunization Rate per age Group		
20	Repeat percentage	59	

Clinical and service quality			
21	Disease burden profile	DM, HTN, TB, UTI	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management		
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram



Centre Name- Venkateswra Colony, Prakasam

Date of Visit- 19/05/2017

Name of the person who visited- Dr. Kiran Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	39	
2	No of patients accessing laboratory services	5	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1.5/39/day	
5	Number of children vaccinated in the facility	1.5/day	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	30 minutes	
Lab Utilization Index			
12	Lab referral percentage	12	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	8	
17	Services offered- turnaround time for the investigations	30-45 minutes	
18	OPD per Doctor /Day/ Specialty	4	
19	Immunization Rate per age Group	6	
20	Repeat percentage	59	

Clinical and service quality			
21	Disease burden profile	UTI, DM, HTN	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	

ZONE 3



Mukhyamantri Aarogya Kendram:



Centre Name- T. chavatrappalli (chitoor)

Date of Visit- 29/5/17

Name of the person who visited- Dr. Kiran Kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	27	
2	No of patients accessing laboratory services	6	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	2	
5	Number of children vaccinated in the facility	4	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	15-20 minutes	
Lab Utilization Index			
12	Lab referral percentage		
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – whether all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	11%	
17	Services offered- turnaround time for the	45-1 hr	

	investigations		
18	OPD per Doctor /Day/ Specialty	3/D/D total Specialty	
19	Immunization Rate per age Group		
20	Repeat percentage	69%	
Clinical and service quality			
21	Disease burden profile		
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Nehru Nagar, Trupatti, Chittoor

Date of Visit-29/5/17

Name of the person who visited- Dr. Amit Agarwal, Dr. Kiran kumar Thumburu, Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	30	
2	No of patients accessing laboratory services	4	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1	
5	Number of children vaccinated in the facility	3-4	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	Waiting time is more depending on the slots 45-1 hour	
Lab Utilization Index			
12	Lab referral percentage	15%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	14%	
17	Services offered- turnaround time for the investigations	20 minutes	
18	OPD per Doctor /Day/ Specialty	4-5	

19	Immunization Rate per age Group	0-5	
20	Repeat percentage	59%	
Clinical and service quality			
21	Disease burden profile		
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Kajoor, Chittoor

Date of Visit- 30/5/17

Name of the person who visited- Mr. Pankaj Pant and Mr. Munish Kumar

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	35-40	
2	No of patients accessing laboratory services	10-15	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	1-2	
5	Number of children vaccinated in the facility	3	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Good	
10	Video and audio quality through tele consultation	Good	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital (referral centre), time for receiving the care] case sheet creation to prescription	Book slots for VC	
Lab Utilization Index			
12	Lab referral percentage	13%	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	11%	
17	Services offered- turnaround time for the investigations	45 minutes	
18	OPD per Doctor /Day/ Specialty	3/1/1	
19	Immunization Rate per age Group		

20	Repeat percentage	61%	
Clinical and service quality			
21	Disease burden profile	DM, HTN	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety	Yes	
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Atmakur Bustand, Kurnool

Date of Visit- 16/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	33	
2	No of patients accessing laboratory services	3.3	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	7-8	
5	Number of children vaccinated in the facility	3-4	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Yes 30 Minutes	
Lab Utilization Index			
12	Lab referral percentage	10	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	9	
17	Services offered- turnaround time for the investigations	30-60 Minutes	
18	OPD per Doctor /Day/ Specialty	1	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	98	

Clinical and service quality			
21	Disease burden profile	Ortho, DM, Cough, Cold	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Illur Nagrar, Kurnool District

Date of Visit- 16.05.2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40	
2	No of patients accessing laboratory services	10	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	20	
5	Number of children vaccinated in the facility	NA	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes, Medicine, Orthopaedics, Endocrinology	
9	Quality of specialist in tele consultation. Qualification	MD, MS, DM	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	30-40 minutes	
Lab Utilization Index			
12	Lab referral percentage	10	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	1	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	4-5%	
17	Services offered- turnaround time for the investigations	30-40 minutes	
18	OPD per Doctor /Day/ Specialty	2	

19	Immunization Rate per age Group	NA	
20	Repeat percentage	61	
Clinical and service quality			
21	Disease burden profile	Ortho, HTN, DM	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- MAK Durganagar, Annathpur

Date of Visit- 17/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	24	
2	No of patients accessing laboratory services	17	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	2.5/24	
5	Number of children vaccinated in the facility	7	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	30 Minutes	
Lab Utilization Index			
12	Lab referral percentage	17	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	13	
17	Services offered- turnaround time for the investigations	30-40	
18	OPD per Doctor /Day/ Specialty	3	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	72	

Clinical and service quality			
21	Disease burden profile	DM, HTN Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:

Centre Name- Neeruganti Street, Ananthpur

Date of Visit- 17/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	40	
2	No of patients accessing laboratory services	8	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	3/40	
5	Number of children vaccinated in the facility	NA	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	4	Yes
9	Quality of specialist in tele consultation. Qualification	Good	Yes
10	Video and audio quality through tele consultation	Good	Yes
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	30-40 Minutes	
Lab Utilization Index			
12	Lab referral percentage	10	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	7	
17	Services offered- turnaround time for the investigations		
18	OPD per Doctor /Day/ Specialty	1	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	41	

Clinical and service quality			
21	Disease burden profile	HTN, DM, Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Nakash, Kadapa

Date of Visit- 18/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	55	
2	No of patients accessing laboratory services	4	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	2.5/55	
5	Number of children vaccinated in the facility	10	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	1-2 Minutes	
Lab Utilization Index			
12	Lab referral percentage	6	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	4	
17	Services offered- turnaround time for the investigations	40-45 minutes	
18	OPD per Doctor /Day/ Specialty	2	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	54	

Clinical and service quality			
21	Disease burden profile	Gastro, Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Patha Kadapa, Kadapa

Date of Visit- 18/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	25	
2	No of patients accessing laboratory services	5	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	0.6/25	
5	Number of children vaccinated in the facility	2-5	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Yes 30-60 Minutes	
Lab Utilization Index			
12	Lab referral percentage	21	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	8	
17	Services offered- turnaround time for the investigations	40-45 Minutes	
18	OPD per Doctor /Day/ Specialty	2	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	45	

Clinical and service quality			
21	Disease burden profile	Endo, Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Vasanthapeta, Proddatur, Kadapa

Date of Visit- 18/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	39	
2	No of patients accessing laboratory services	3	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	2/39	
5	Number of children vaccinated in the facility	16	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Yes	
Lab Utilization Index			
12	Lab referral percentage	8	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	4	
17	Services offered- turnaround time for the investigations	Yes	
18	OPD per Doctor /Day/ Specialty	1-2	
19	Immunization Rate per age Group	-	
20	Repeat percentage	58	

Clinical and service quality			
21	Disease burden profile	HTN Ortho, DM	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:



Centre Name- Padarupalli, Nellore

Date of Visit- 19/05/2017

Name of the person who visited- Dr. T. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	30	
2	No of patients accessing laboratory services	6.6	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	0.7/30	
5	Number of children vaccinated in the facility	31	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15-30 Minutes	
Lab Utilization Index			
12	Lab referral percentage	22	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – whether all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	15	
17	Services offered- turnaround time for the investigations	20min-2 hour	
18	OPD per Doctor /Day/ Specialty	4	
19	Immunization Rate per age Group	NA	

20	Repeat percentage	60	
Clinical and service quality			
21	Disease burden profile	CVI,DM,HTN,TB	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:

Centre Name- Rajiv Nagar, Kavali April, Nellore

Date of Visit- 19/05/2017

Name of the person who visited- Dr. T. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	35	
2	No of patients accessing laboratory services	5	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	0.4	
5	Number of children vaccinated in the facility	1	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	15 minutes- 1 hour	
Lab Utilization Index			
12	Lab referral percentage	15	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	17	
17	Services offered- turnaround time for the investigations	45 minutes-1 hour	
18	OPD per Doctor /Day/ Specialty	6	
19	Immunization Rate per age Group	NA	

20	Repeat percentage	72	
Clinical and service quality			
21	Disease burden profile	DM, HTN Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	



Mukhyamantri Aarogya Kendram:

Centre Name-UCO Nagar, Nellore

Date of Visit- 19/05/2017

Name of the person who visited- Dr. Kiran Kumar Thumburu

S No.	Productivity	Data	Remarks
OPD services quality rate: We want to access the satisfaction and dissatisfaction rate of the OPD visitors defined by the following parameters-			
1	Number of Patients seen in OPD per day	22	
2	No of patients accessing laboratory services	6	
3	Ease of getting medicine	Yes	
4	No of Antenatal women visited facility Vs total OPD registered	0.5	
5	Number of children vaccinated in the facility	2.4	
6	Cleanliness of the premise (patient area, toilets)	Yes	
7	Clean Drinking water availability	Yes	
Tele-consultations rate: We want to access the number of patients who were referred for tele- consultation			
8	Specialty consultations – availability & accessibility of specialists in hub	Yes	
9	Quality of specialist in tele consultation. Qualification	Yes	
10	Video and audio quality through tele consultation	Yes	
11	Time for receiving consultation [Time for sending the consultation, response time of tertiary hospital(referral centre), time for receiving the care] case sheet creation to prescription	Yes 10Minutes	
Lab Utilization Index			
12	Lab referral percentage	8	
Human Resource			
13	Medical doctor, Paramedics, lab technicians	Yes	
14	Availability of qualified staff	Yes	
15	Skill of staff – weather all staff are adequately trained	Yes	
Efficiency			
16	Specialty referral percentage	8	
17	Services offered- turnaround time for the investigations	15min to 1/2 hour	
18	OPD per Doctor /Day/ Specialty	1.1	
19	Immunization Rate per age Group	NA	
20	Repeat percentage	51	

Clinical and service quality			
21	Disease burden profile	DM, HTN, Ortho	
22	Patient Satisfaction Score defined by following parameters		
i.	Complete information about the illness	Yes	
ii.	Information about the treatment options	Yes	
23	Patient safety		
i.	Hospital waste management	Yes	
ii.	Use of sterile equipments/syringes	Yes	
iii.	Universal precautions practicing	Yes	
iv.	Hand washing methods	Yes	

Annexure 4

1. Chinna Waltair



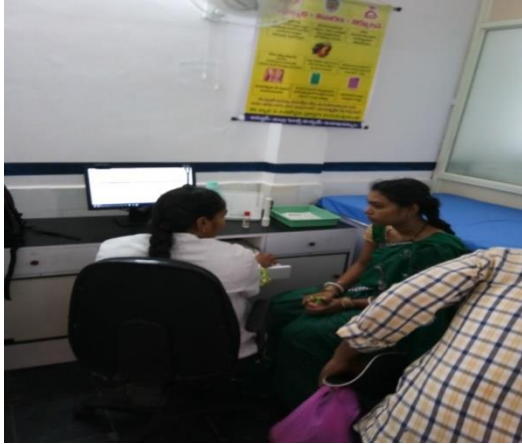
Water Facility



Fire Extinguser



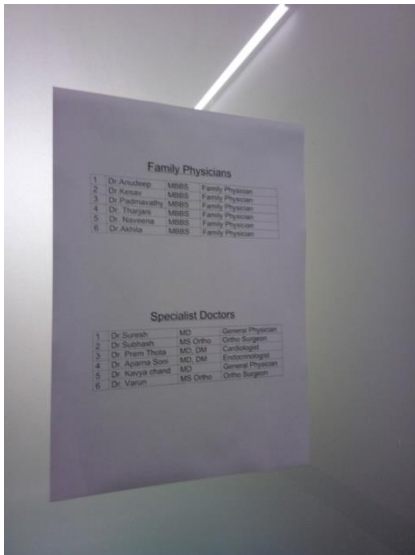
Vaccination progrmme



Doctor Room



Tele Consultation room



List of Specialists



Tele Consultation



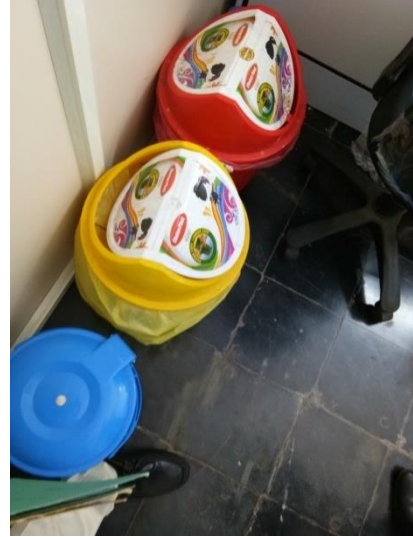
List of Biochemistry test



Biochemistry Lab



Biochemistry Lab



Waste Management

Zone 1- One town:

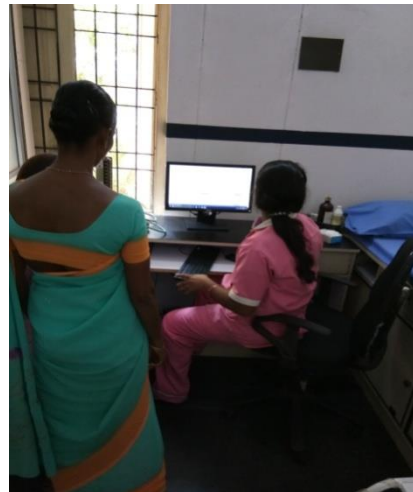
Centre 2



Waste Management



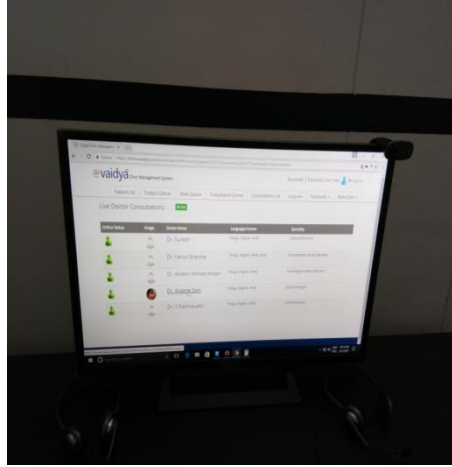
Patient waiting area



Tele Consultation room



Biochemistry Lab



Tele consultation

Zone 1-

Centre 3



Centre Front



Doctor's Room



Patient waiting area



Registration desk



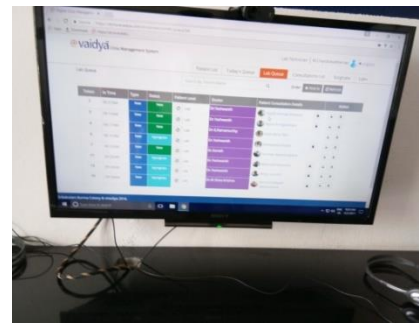
Pharmacy



Biochemistry lab



Waste Management

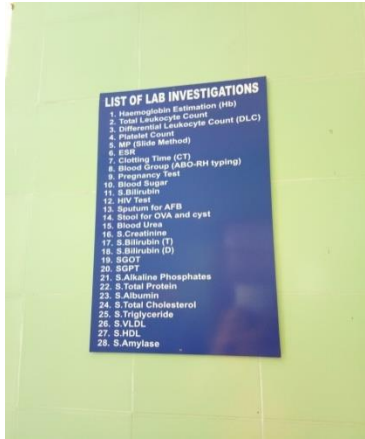


Tele Consultation

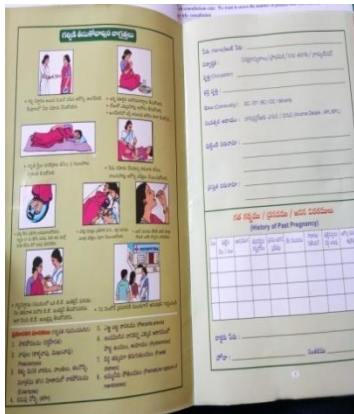


Biochemistry Lab





List of Biochemistry test



Vaccination diary



Tele Consultation



Biochemistry Lab



Staff photo



Patient waiting area

Zone 1

Centre 4



Hoardings



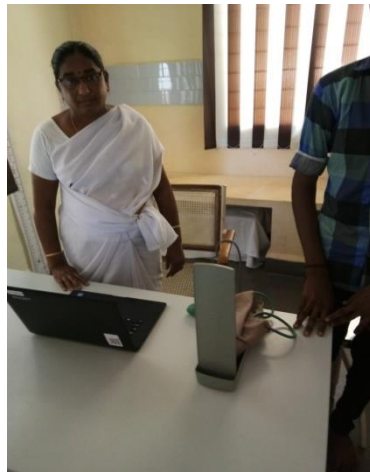
Centre



Registration desk



Information to the patient



Vitals and registration room



Patient waiting area



Pharmacy



Biochemistry test



Tele Consultation



Doctor's room



waste management



Facilities provides



Biochemistry lab



Staff

Anandnagar, Rajahmundry, East Godavari



Centre Name



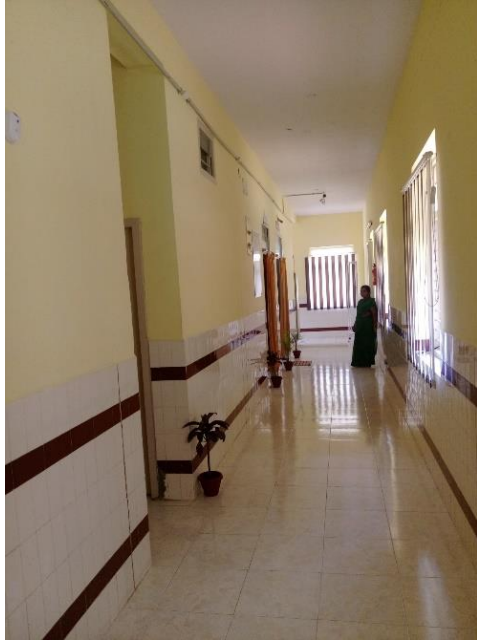
Centre Front



Centre Photo



Patient waiting area



Hoardings



Doctor's Room



Biochemistry Lab



Doctor's room



Centre Photos

ZONE 2



The screenshot shows the eUPHC Specialist Scheduler web application. The browser address bar contains the URL: `scheduler.phc.india/esched/field1.php?zone=Zone%20III&dist=Kurnool&city=Joharapuram%201&adate=2017-05-16&spec=General%20Medicine&doc=Dr.%20Virupaksha`. The application header includes the logo and the text "eUPHC SPECIALIST SCHEDULER". There are navigation buttons for "Logout", "Report", and "Home".

The main form contains the following fields:

- Zone: Zone III
- District: Kurnool
- Centre: Joharapuram 1
- Date: 2017-05-16
- Speciality: General Medicine
- Doctor: Dr. Virupaksha
- Patient Name: (empty field)

Below the form is a grid of time slots. The slots are arranged in two rows and 13 columns. The first row contains slots from 16:00 - 16:10 to 17:50 - 18:00. The second row contains slots from 18:00 - 18:10 to 19:50 - 20:00. A "Back" button is located to the left of the grid. Below the grid, there is a text prompt: "Press 'F5' to refresh slots".

The Windows taskbar at the bottom shows the date and time: "16-05-2017 12:15".

Spreadsheet: Daily Summary Report - 13-05-2017.xlsx - Spreadsheets

Excel Ribbon: Home, Insert, Page Layout, Formulas, Data, Review, View, Special Features

Excel Title Bar: Daily Summary Report - 13-05-2017.xlsx

DAILY SUMMARY REPORT - Joharapuram - Kurnool

Date	Center	Total No. of IAP Patients	New Patients	Repeat Patients	Repeat Percentage %	Total No. of Lab referrals	Total No. of Lab Tests	Lab Referral Percentage %	Lab Referral Entry	Total No. of Specialized Referrals	Total No. of Higher Centers referrals	Total No. of IAP Immunization cases	Total No. of ARI Cases	Total No. of RSV Cases	Remarks	
MAY 1	Joharapuram	17	20	17	100%	3	46	8%	37	0	0	0	0	1	0	NEL
MAY 2	Joharapuram	22	6	16	73%	5	135	23%	22	3	14%	0	0	1	0	NEL
MAY 3	Joharapuram	60	27	33	55%	3	59	7%	60	3	5%	0	16	4	0	NEL
MAY 4	Joharapuram	33	17	16	48%	6	118	18%	0	1	3%	0	0	4	0	NEL
MAY 5	Joharapuram	33	13	18	55%	3	52	16%	33+30	64	0	0	0	1	0	NEL
MAY 6	Joharapuram	35	14	21	60%	8	118	21%	27	0	0	0	9	0	0	NEL
MAY 7	Joharapuram	6	2	4	67%	3	45	38%	5+8+13	0	0	0	0	0	0	NEL
MAY 8	Joharapuram	26	16	10	38%	6	71	23%	26	0	0	0	0	2	0	NEL
MAY 9	Joharapuram	33	13	18	55%	8	156	24%	31	3	9%	0	13	0	0	NEL
MAY 10	Joharapuram	47	15	32	68%	0	0	0%	47	3	6%	0	0	2	0	NEL
MAY 11	Joharapuram	28	13	15	54%	2	29	7%	28	2	0	0	0	1	0	NEL
MAY 12	Joharapuram	27	14	13	48%	0	0	0%	26	0	0	0	11	3	0	Autobac server slow
MAY 13	Joharapuram	41	19	22	54%	8	109	26%	16	2	5%	0	3	1	0	NEL
MAY 14	Joharapuram	17	4	13	76%	6	36	55%	21+17	0	0	0	0	1	0	NEL
MAY 15	Joharapuram	19	8	11	58%	4	63	21%	9	6	32%	0	0	1	0	NEL
MAY 16	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		
MAY 17	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		
MAY 18	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		
MAY 19	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		
MAY 20	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		
MAY 21	Joharapuram								RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI	RDV/DI		

Excel Status Bar: 16-05-2017 12:16

Browser: 192.168.1.201\MSD\log\level\Registration.aspx

Page Title: MUKHYAMANTRI AAROGYA KENDRAM

Page Subtitle: Joharapuram - Beneficiary Registration

Page Content:

- Registration
- User Transfer

Search Fields:

- LRID: [] First Name: [] Last Name: [] Mobile No: [] Search
- LR ID: 0201361705160009 Add New

Demographic Details:

- Initials: [Select] First Name: [] Middle Name: [] Last Name: []
- Age: [Select] DOB: [] Mother Name: []
- Gender: [Select] Marital Status: [Select] Phone No: [] Mobile No: []
- Category: [Select] Aadhar No: [] Visit Type: [New Visit]

Present Address:

- Address 1: [] Address 2: [] City: [] State: Andhra Pradesh
- District: Kurnool Municipality: Kurnool Main Location: Joharapuram Pin: []

Permanent Address: []

General Information: []

Browser Status Bar: 16-05-2017 12:16



16-05-2017 12:37







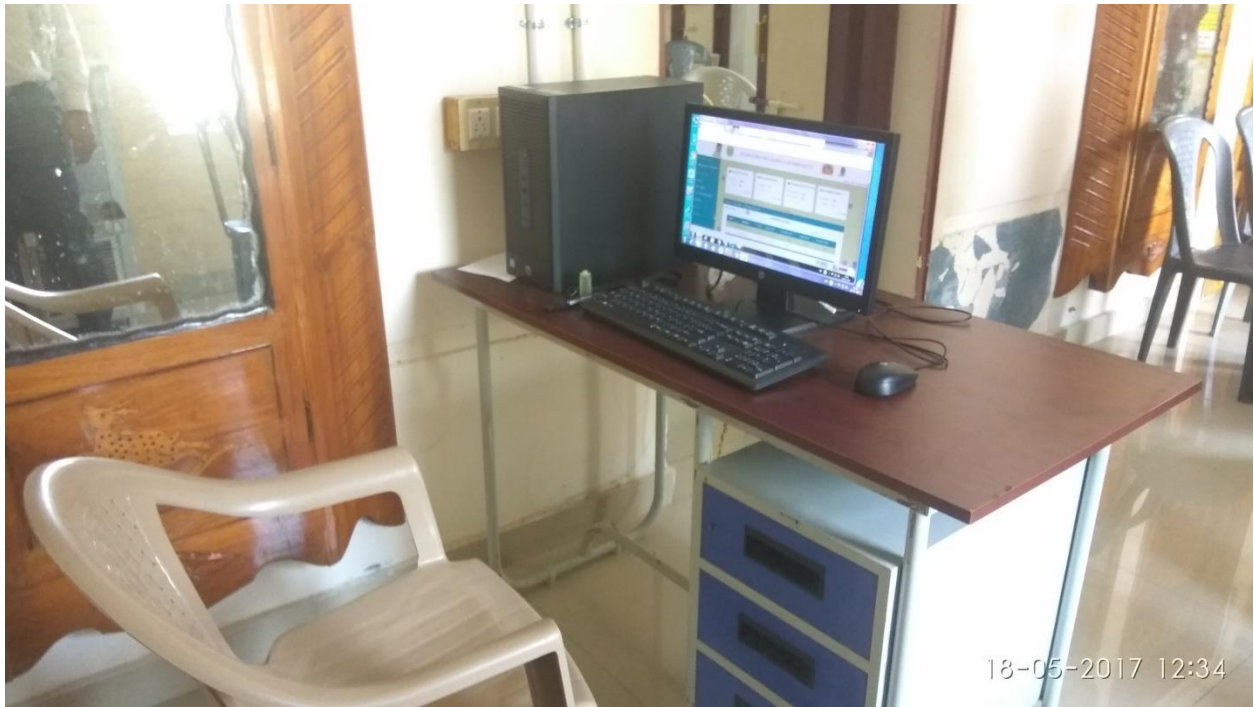










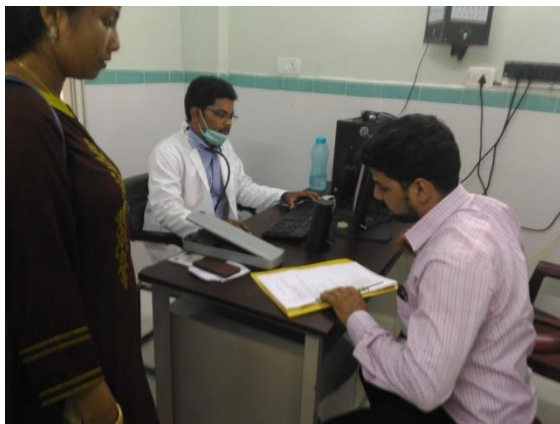




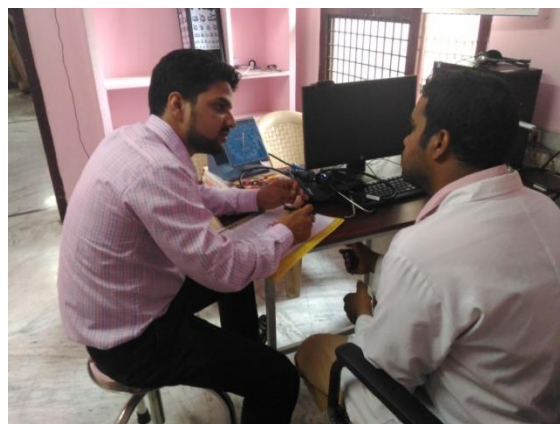
Centre



Doctor's Room



Doctor's Room





Annexure 7

Report



Thalli Bidda Express (102 services)

Knowledge Partner- PGIMER, Chandigarh, India



Report

Andhra Pradesh Ministry of Health and Family Welfare have started different public health programmes in partnership with Private companies. To evaluate these services and advise on improving them, Andhra Pradesh Ministry of Health and Family Welfare sought the services from Postgraduate Institute of Medical Education and Research, Chandigarh. Being an eminent institute and a leader in the sector of healthcare PGIMER was invited to be Knowledge Partner for the Thalli bidida express.

The first meeting was held on 3rd April, 2017 organized by the Health and family welfare, Andhra Pradesh. The main aim of this meeting was interaction between Service Providers, Knowledge Partners and Nodal Officers in the presence of Health Advisor, Principal Health Secretary and Hon'ble Health Minister of Andhra Pradesh Shri Kaminini Srinivas and Hon'ble Chief Minister of Andhra Pradesh Shri N Chandrababu Naidu. All the participants showed their presentation in front of the Hon'ble Chief Minister Shri N Chandrababu Naidu.

Dr. Amit Agarwal, Co-ordinator, RRC, Department of Telemedicine attended this meeting and represented PGIMER. Shri Rajendra Prasad was appointed as a Nodal Officer for the 108 Ambulance services and Thalli Bidida express.

Background

As part of improving post delivery care, the Andhra Pradesh government has launched the medical transport service for mother and new born to land the safely at their respective houses after delivery from the government hospital. This medical transport service christened as “Thalli Bidida Express”. The mother and their relatives can get this facility with a phone call to 102. This service is only meant for those pregnant women who were admitted to the government hospitals for their delivery.

The government has introduced this service in order to encourage deliveries at the government hospitals. The government has started this project with 10 new vehicles now the total number of vehicle for this service is 279 (Table 1). This service provides not only safe journey to the

womwn who was admitted to the government hospital for delivery, but also gives their family members relief as they need not hire a private taxi which are not affordable. Many pregnant women have access this service and continue the number is increasing.

The Government of Andhra Pradesh (GoAP) entered into a MoU with GVK EMRI, a not-for-profit organization, to provide this 102 thalli bidda service.

Methodology:

We want to access the following key performance indicators in this study

Process indicators

- Time taken to reach from health care centre to postnatal women home in urban areas
- Time taken to reach from health care centre to postnatal women home in rural areas
- Time taken to reach from health care centre to postnatal women home in tribal areas
- Utilization pattern of vehicle
- Mean number of postnatal women transported per ambulance per day

Assessment Parameter:

- Assess the safety measurements for postnatal women in this service
- Qualification and training of the staff especially for dealing with postnatal women with her child
- Availability of women attendant with this thalli bidda express
- Evaluate the efficiency and effectiveness of model in terms of performance as well as costs involved
- Assess user level satisfaction with respect to quality, timelines and effectiveness of the services being provided
- Comparison with the other similar services available in the other states of country.

Phase I: In this phase we initially discussed the above said KPI's with the state officials and then we prepared plan for the field visits.

Phase II: We reviewed and collected the relevant information and records of Thali Bidda. We visited average 1-2 thalli Bidda express in each district.

Phase III: We collated and analyzed the data which was collected by the officials of PGIMER Chandigarh. We identified the key issues and proposed recommendation for improved functioning of EMRI specifically 102 Thalli Bidda Express.

Fields visit were carried out in 9 out of 13 districts of Andhra Pradesh (Table 2). The selection of Thalli Bidda express based on their geographic coverage.

Table 1 (Available Thalli Bidda in different districts of Andhra Pradesh)

Zone	District	Total No. Of centres
Zone- I	Srikakulam	13
	Vizianagaram	14
	Visakhapatnam	27
	East Godavari	29
Zone – II	West Godavari	17
	Krishna	20
	Guntur	21
	Prakasam	16
Zone – III	Nellore	16
	Ananthapur	30
	Kurnool	26
	Kadapa	17
	Chittoor	33
	TOTAL	279

Table 2 (List of visited Thalli Bidda)

Zone	District	Total No. Of centres
Zone- I	Srikakulam	1
	Vizianagaram	1
	Visakhapatnam	0
	East Godavari	3
Zone – II	West Godavari	2
	Krishna	0
	Guntur	1
	Prakasam	1
Zone – III	Nellore	1
	Ananthapur	0
	Kurnool	0
	Kadapa	4
	Chittoor	4
	TOTAL	18

Observations:

We observed that transportation 102 Thalli Bida express is coordinated by the 102 call centre located in Vijaywada which is operational 24hr a day, 7days a week. 102 is a toll free service accessible from any landline or mobile. The operational model of 102 services is as follows:

- Call is placed to 102 then call is received by 102 call centre.
- Patient information is collected and verified.
- 102 call centre then call to Thalli bidda staff who are available at that location and the all the information of the patients shared with them.

- The primary roles of 102 call centers are receiving calls, arrange Thalli bidda Expresses and coordinate with concerned staff. The secondary roles are case closer and support services.

- 1) We also observed that this service is mostly available in urban and semi urban areas, less calls from rural and tribal areas. The main problem of this is the lack of communication in tribal areas.
- 2) The time taken to drop the women to her respective home is shown in the Figure 1. The range lies between 50 min to 95 min.

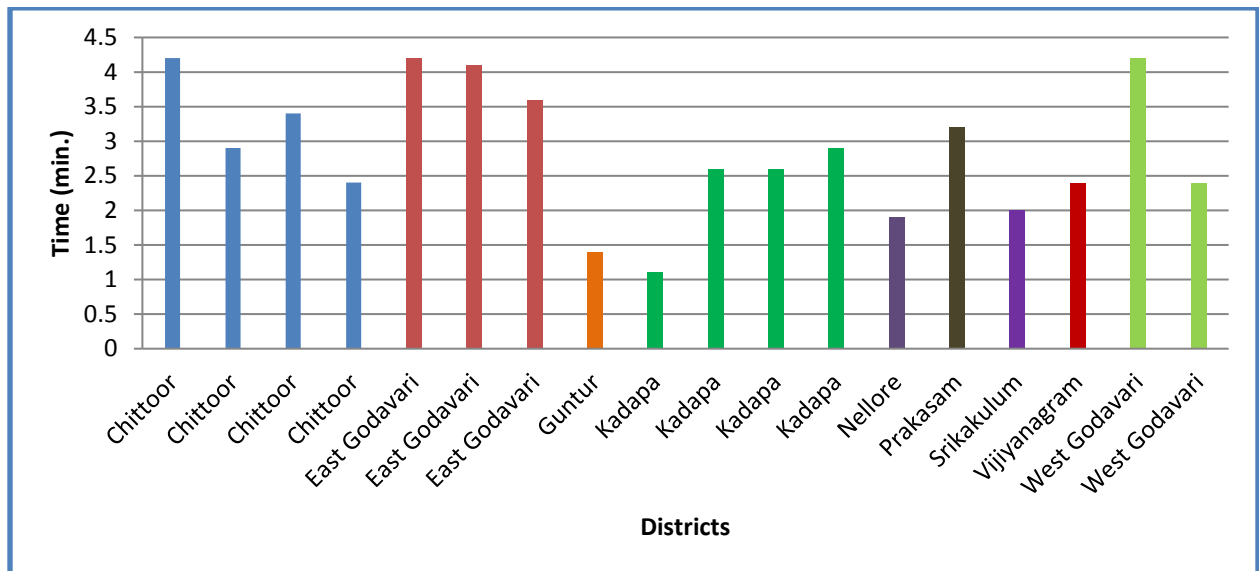


Figure 1

- 3) We asked the patients and their family for any pocket expenses for transportation while carrying new born baby to their home. We observed that there was no any pocket expenses from the family persons and we also not found any case where driver demanding money to drop at home.
- 4) During the interaction with captains of Thalli Bidda express we verified fleet records and some trip sheets randomly and found that there are following below aspects clearly-
 - a) All beneficiaries receiving TBE kit
 - b) Zero dose immunization
 - c) Status of disbursement of JSSK fund to the beneficiary often through cheque also to bank account.
 - d) Issuance of birth certificate at the time of discharge

- e) We found cost to Government is rupees 499/- and cost to beneficiary is zero, clearly mentioned in the trip sheet.

The mean no. of postnatal women transported per day was observed 2.86 approx 3 (Figure 2).

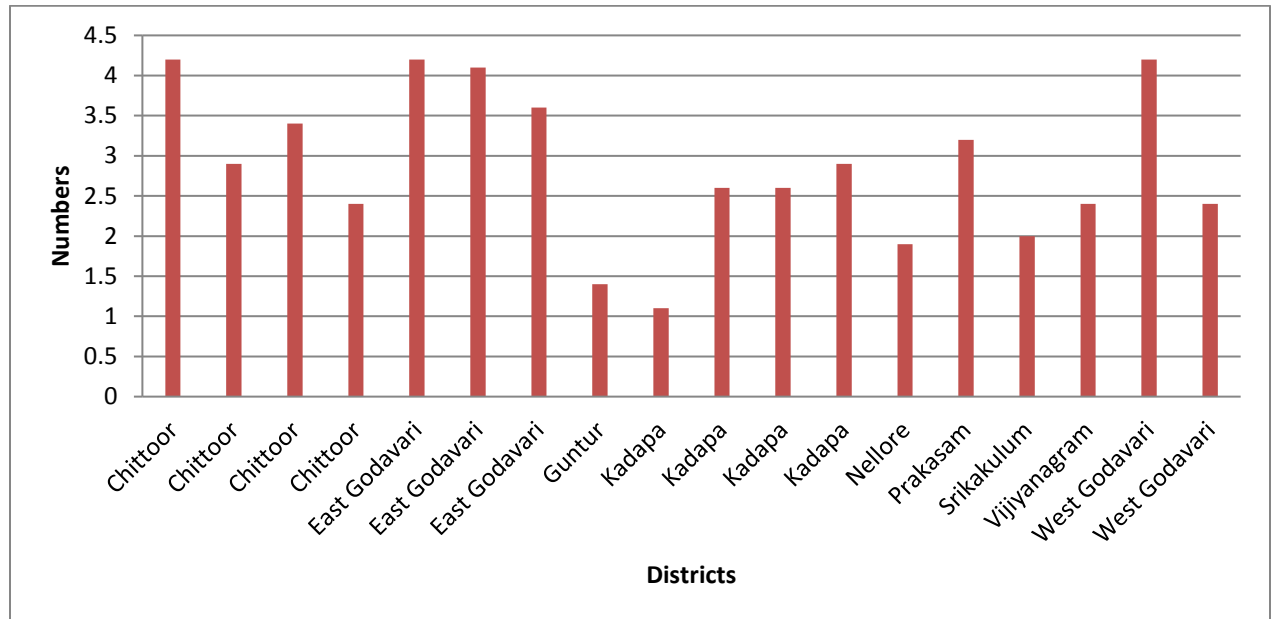


Figure 2

5) Qualification and training of the staff:

We found qualification and training of the staff was up to mark. All the staff underwent the preparatory program implemented by emergency medical learning team including driver.

All the emergency medical technicians were evaluated using pre design structured scheduled by the EMRI evaluation team.

- 6) We didn't observed availability of women attendant with the patient (Mother and child).
- 7) Assessment of user level satisfaction with respect to quality, timelines and effectiveness of the service was initiated in the form of feedback response. The beneficiaries also showed that the services were good and they were satisfied.
- 8) This type of services is available in different states of India like Haryana, Himachal Pradesh, Uttar Pradesh and Odisha. But in Andhra Pradesh the quality of this service is good compare to others and more number of people is using this service. In other states the vehicles are use in different service including drop of the women after delivery but in Andhra Pradesh the vehicle exclusively available for the drop of only. The numbers of vehicles for this service

are quite enough in Andhra Pradesh as compared to other states. This service is available in India only we did not find this kind of service in any other country.

- The reach processes are well defined implemented and managed by the fleet and field teams. The field operation team manages and handles staff and operations reasonably well. Pilots reflect a high level of confidence and motivation in carrying out daily tasks.
- We didn't capture the data regarding receiving of JSY amount, receiving of Birth Certificate and Zero Dose immunization.

Recommendations:

- We recommended increasing the service of Thalli Bidda in rural and tribal areas.
- Areas of improvement include reducing the delays in case closers and increase the communication facilities in the tribal and rural areas.
- The awareness of this service should be increase and government should take steps regarding this. It is important that government of Andhra Pradesh and GVK EMRI target these awareness gaps.
- The thalli Bidda express take too much time to drop the women to her home after delivery so steps to be taken to reduce it

Limitation:

The evaluation of this service is having limited data of cost so we didn't attempt to find out operational cost or any financial estimates.

Thalli Bidda express services:

Centre Name-Maternity Hospital, Tirupathi, Chittoor Dist.

AP16TH1241

Name of the person who visited- Dr.Amit Agarwal

Date of Visit- 2-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	01.34.37	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	101	
5	Mean number of postnatal women transported per ambulance per day	3.4	

Thalli Bidda express services:

Centre Name- Maternity Hospital, Tirupathi,Chittoor

AP16TG9554

Name of the person who visited- Dr.Amit Agarwal

Date of Visit- 2-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	57.22	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	73	
5	Mean number of postnatal women transported per ambulance per day	2.4	

Centre Name- Meternity Hospital, Tirupathi,Chittoor Dist.

AP16TH1228

Name of the person who visited- Dr.Amit agarwal Date of Visit- 2-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	54.44	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	126	
5	Mean number of postnatal women transported per ambulance per day	4.2	

**Centre Name- Ruya Hospital, Tirupathi,Chittoor Dist.
AP16TH1192**

**Name of the person who visited- Dr.Amit
Agarwal**

Date of Visit- 2-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	01.25.51	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	87	
5	Mean number of postnatal women transported per ambulance per day	2.9	

Centre Name- District Hospital,Rajahmundry,East GodavariDist. AP16TVC0851

**Name of the person who visited- Dr.Amit
Agarwal**

Date of Visit- 22-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	54.44	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	126	
5	Mean number of postnatal women transported per ambulance per day	4.2	

Centre Name- District Hospital, Rajahmundry,East Godavari Dist. AP16TH1423

**Name of the person who visited- Dr.Amit
Agarwal**

Date of Visit- 22-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	43.3	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	124	
5	Mean number of postnatal women transported per ambulance per day	4.1	

Thalli Bidda express services:

Centre Name- District Hospital,Rajahmundry,East Godavari Dist. AP16TH1420

Name of the person who visited- Dr.Amit Agarwal

Date of Visit- 22-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	01.11.13	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	108	
5	Mean number of postnatal women transported per ambulance per day	3.6	

Thalli Bidda express services:

Centre Name- Govt General Hospital,Guntur,Guntur Dist. AP16TG9686

Name of the person who visited- Dr.Kiran Kumar Thumburu

Date of Visit- 27-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	57.45	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	43	
5	Mean number of postnatal women transported per ambulance per day	1.4	

Thalli Bidda express services:

Centre Name- Old RIMS Hospital, Kadapa,Kadapa Dist. AP16TH1200

**Name of the person who visited- Dr.Kiran
Kumar Thumburu**

Date of Visit- 18-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	46.47	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	33	
5	Mean number of postnatal women transported per ambulance per day	1.1	

Centre Name- Old RIMS Hospital, Kadapa,Kadapa Dist. AP16TG9431

**Name of the person who visited- Dr.Kiran
Kumar Thumburu**

Date of Visit- 18-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	59.49	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	79	
5	Mean number of postnatal women transported per ambulance per day	2.6	

Thalli Bidda express services:

Centre Name- Old RIMS Hospital, Kadapa,Kadapa Dist. AP16TG9437

**Name of the person who visited- Dr.Kiran
Kumar Thumburu**

Date of Visit- 18-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	01.01.55	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	79	
5	Mean number of postnatal women transported per ambulance per day	2.6	

Thalli Bidda express services:

Centre Name- Old RIMS Hospital, Kadapa,Kadapa Dist. AP16TG9440

**Name of the person who visited- Dr.Kiran
Kumar Thumburu**

Date of Visit- 18-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	01.06.35	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	88	
5	Mean number of postnatal women transported per ambulance per day	2.9	

Thalli Bidda express services:

Centre Name-DSR Hospital, Nellore,Nellore Dist. AP16TG9705

Name of the person who visited- Dr.Kiran Kumar Thumburu Date of Visit- 19-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	51.29	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	57	
5	Mean number of postnatal women transported per ambulance per day	1.9	

Thalli Bidda express services:

Centre Name- District Hospital, Ongole,Prakasam Dist. AP16TH1475

Name of the person who visited- Dr.Kiran Kumar Thumburu Date of Visit- 19-5-17

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	42.37	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	95	
5	Mean number of postnatal women transported per ambulance per day	3.2	

Thalli Bidda express services:

Centre Name- RIMS Hospital, Srikakulam,Srikakulam Dist. AP16TG9421

Name of the person who visited- Dr Amit Agarwal **Date of Visit- 21-5-17**

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	56.53	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	61	
5	Mean number of postnatal women transported per ambulance per day	2	

Thalli Bidda express services:

Centre Name- Gousha Hospital, Vizianagaram,VizianagaramDist. AP16TG9409

Name of the person who visited- Dr.Amit Agarwal **Date of Visit- 21-5-2017**

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	57.51	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	73	
5	Mean number of postnatal women transported per ambulance per day	2.4	

Thalli Bidda express services:

Centre Name- District Hospital, Eluru, West Godavari Dist. AP16TG9667

Name of the person who visited- Dr.Kiran Kumar Thumburu Date of Visit- 26-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	54.44	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	126	
5	Mean number of postnatal women transported per ambulance per day	4.2	

Thalli Bidda express services:

Centre Name- District Hospital, Tadepallegudem, West Godavari Dist. AP16TH1327

Name of the person who visited- Dr.Kiran Kumar Thumburu Date of Visit- 26-5-2017

S No.	Process Indicators	Data	Remarks
1	Time taken to reach from health care centre to postnatal women home in urban areas	53.01	
2	Time taken to reach from health care centre to postnatal women home in rural areas	NA	
3	Time taken to reach from health care centre to postnatal women home in tribal areas.	NA	
4	Utilization pattern of vehicle.	71	
5	Mean number of postnatal women transported per ambulance per day	2.4	

Annexure 2





Annexure 8

Report



108 Ambulance service

Knowledge Partner- PGIMER, Chandigarh, India



Report

Andhra Pradesh Ministry of Health and Family Welfare have started different public health programmes in partnership with Private companies. To evaluate these services and advise on improving them, Andhra Pradesh Ministry of Health and Family Welfare sought the services from Postgraduate Institute of Medical Education and Research, Chandigarh. Being an eminent institute and a leader in the sector of healthcare PGIMER was invited to be Knowledge Partner for the 108 ambulance service.

The first meeting was held on 3rd April, 2017 organized by the Health and family welfare, Andhra Pradesh. The main aim of this meeting was interaction between Service Providers, Knowledge Partners and Nodal Officers in the presence of Health Advisor, Principal Health Secretary and Hon'ble Health Minister of Andhra Pradesh Shri Kaminini Srinivas and Hon'ble Chief Minister of Andhra Pradesh Shri N Chandrababu Naidu. All the participants showed their presentation in front of the Hon'ble Chief Minister Shri N Chandrababu Naidu.

Dr. Amit Agarwal, Co-ordinator, RRC, Department of Telemedicine attended this meeting and represented PGIMER. Shri Rajendra Prasad was appointed as a Nodal Officer for the 108 Ambulance services and Thalli Bidda express.

ABSTRACT

Assessment of 108 ambulance services in Andhra Pradesh

Amit Agarwal, Meenu Singh*, Pankaj Pant, Munish Kumar

**Department of Telemedicine, Postgraduate Institute of Medical Education and Research,
Chandigarh, INDIA**

The Government of Andhra Pradesh entered into a MoU with GVK EMRI to provide integrated emergency medical service with a toll free number 108. The Department of Health Medical and Family Welfare, Government of Andhra Pradesh asked PGIMER to assess the services of 108 ambulances. At present, the fleet of EMRI consisting of 439 segments including 75 Advance Life Support (ALS) ambulances across the 13 districts of the state. Besides this there are 29 back up Ambulances spread across 13 district are being made available to ensure uninterrupted emergency services and minimize the off road position of the segments. Hence the total Fleet Size of 108 Ambulance Services in AP is 468.

The objectives of this study to assess the appropriateness and relevance of management and implementation, user level satisfaction and provide recommendation relating to aspects such as scope for cost reduction and sustainability.

To evaluate the current performance of 108 ambulances in Andhra Pradesh, we prepared the field visit plan in each district and collect the data in pre designed form. After that we reviewed and analyzed the collected data. We further identified the key issues and made some recommendation to improve functioning of 108 ambulances.

We observed that this service managed by a group of people. We found in our study that 108 ambulances utilized the most for pregnancy cases followed by trauma, cardiovascular and acute abdomen cases. We also observed that the utilization pattern of ambulances was 100%.

We observed that the processes were well defined, implemented and managed by the fleet teams. EMTs and pilots reflected high level of confidence in carrying out their daily work. However, the manpower planning process would need to be robust and high percentage of ineffective calls would need to be addressed.

Background of the Scheme

The Government of Andhra Pradesh (GoAP) entered into a MoU with GVK EMRI, a not-for-profit organization, to provide integrated emergency response services through a toll-free number - 108, across the State in a phased manner.

The 108 service running in all 13 districts of Andhra Pradesh with 439 Segments including 75 Advanced Life Support (ALS) ambulances in the state to penetrate the services in every nook and corner of the state.

Context

Given the context of 108 services in the state of Andhra Pradesh, GoAP sought an external evaluation of the current status of emergency management services being provided by EMRI to identify strengths and areas of improvement of the model. Being an eminent institute and a leader in the sector of healthcare PGIMER was invited to be Knowledge Partner for the 108 ambulance services.

Limitation

As agreed during the inception phase, the evaluation is limited to data. Thus, the financial and operational impact of the ambulances is not covered in the study. Hence, we did not attempt to compare operational costs.

Methodology:

We want to access the following key performance indicators in this study

Process indicators

- Time taken to reach site of emergency in urban areas
- Time taken to reach site of emergency in rural areas
- Time taken to reach health facility from site of emergency in urban areas
- Time taken to reach health facility from site of emergency in rural areas
- Utilization pattern of ambulance by time of emergency
- Mean number of non-maternity emergency patients transported per ambulance per day

Performance Indicators:

- Client satisfaction with referral transport services
- Proportion of ambulances with paramedic/ EMT
- Proportion of ambulances with essential emergency drugs
- Call rate per ambulance per day
- Call rate per million population per day
- Cost per patient transported
- Operational cost per patient transported
- Operational cost per km travelled
- Mean distance travelled per ambulance per day.

Phase I: In this phase we initially discussed the above said KPI's with the state officials and then we prepared plan for the field visits.

Phase II: We reviewed and collected the relevant information and records of 108 ambulances. We visited average 2-4 108 ambulances in each district.

Phase III: We collated and analyzed the data which was collected by the officials of PGIMER Chandigarh. We identified the key issues and proposed recommendation for improved functioning of EMRI specifically 108 ambulance services.

Fields visit were carried out in all districts of Andhra Pradesh (Table 2). The selection of 108 ambulance based on their geographic coverage.

Table 1 (Available 108 ambulances in different districts of Andhra Pradesh)

Zone	District	Total No. Of centres
Zone- I	Srikakulam	28
	Vizianagaram	27
	Visakhapatnam	41
	East Godavari	39
Zone – II	West Godavari	34
	Krishna	35
	Guntur	35
	Prakasam	32
Zone – III	Nellore	28
	Ananthapur	37
	Kurnool	32
	Kadapa	28
	Chittoor	43
	TOTAL	439

Table 2 (List of visited 108 Ambulance)

Zone	District	Total No. Of centres
Zone- I	Srikakulam	2
	Vizianagaram	2
	Visakhapatnam	4
	East Godavari	4
Zone – II	West Godavari	4

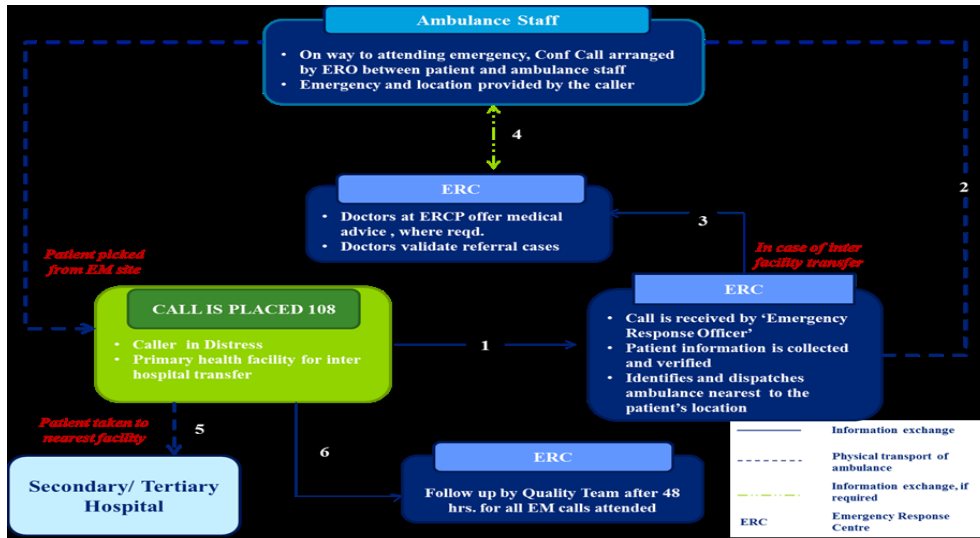
	Krishna	4
	Guntur	2
	Prakasam	2
Zone – III	Nellore	2
	Ananthapur	4
	Kurnool	4
	Kadapa	2
	Chittoor	4
	TOTAL	40

SENSE

IMPLEMENTATION MODEL – BACKGROUND AND SCOPE

The EMRI operational model is based on **Sense > Reach > Care** of an emergency. The emergency transportation, conducted in an ambulance, is provided free of cost. The transportation is coordinated by the Emergency Response Centre (ERC), which is operational 24-hours a day, 7-days a week. In addition, the call to the number 108 is a toll free service accessible from any landline or mobile cellphone. EMRI ambulance fleet includes Basic Life Support ambulances (BLS) containing critical drugs and equipment required for handling emergencies.

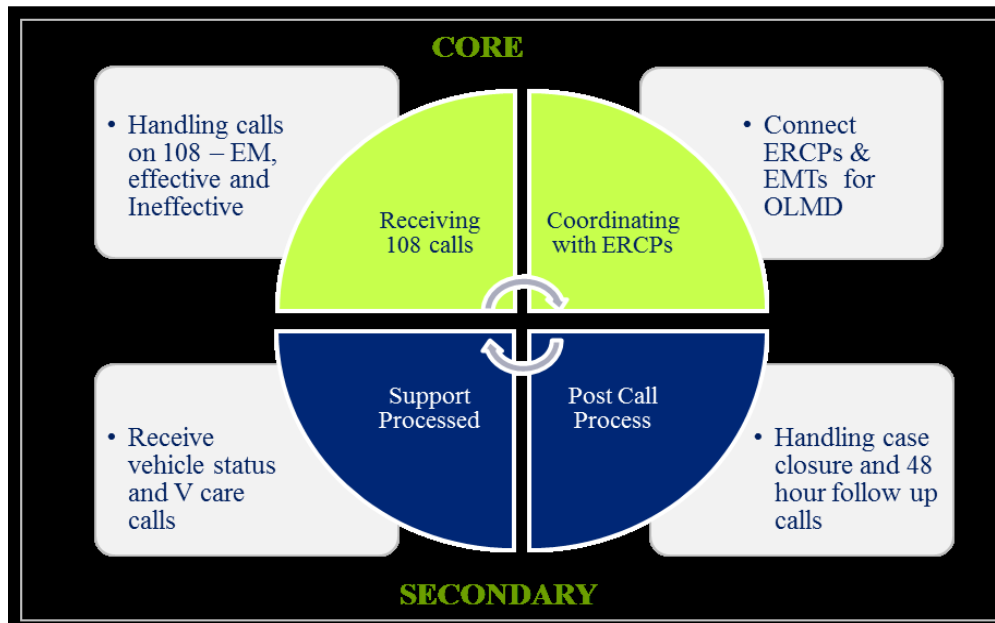




The Sense function of the ERS works through a 24 X 7 X 365 centralized call centre, also known as the Emergency Response Center (ERC), located at Hyderabad. The ERO is responsible for call handling and the Team Leads and the manager coordinate roistering and monitoring activities.

Scope of Responsibilities

Exhibit: Scope of activities for Sense



Primary role

Receiving calls of 108: The function of sense is to attend to all calls that land at 108, including:

Emergency Calls - Calls that result into medical emergency

Effective Calls - Calls that are related to emergencies but do not result in dispatches, including repeat, follow up, service cancellation and feedback calls.

Ineffective Calls - Calls that are not related to any sort of emergencies including silent, wrong, nuisance, no response calls etc.

Dispatching ambulances: On identifying the location of the emergency, EROs coordinate with nearby ambulances to identify and dispatch the closest available ambulance. In cases where all ambulances are busy, the ERC has a separate desk to track vehicle busy cases by dynamically coordinating with ambulances and keeping callers constantly updated of the status.

Coordinating with ERCPs: ERO is also responsible to connect EMTs (Emergency Medical Technicians in the ambulances) to ERCPs (Doctors at ERC) for Online Medical Direction (OLMD), if required.

Secondary role

Case Closure – The case closure process mandates ambulance staff to call the ERC on a separate “manager-on-duty number” to provide additional EM information such as diagnosed EM, reach times and hospital details, before attending to another case. This information is used for generating the daily automated report.

48 hour follow-up – This is a customer centric process initiated by EMRI to collect feedback from all callers on their experience with 108 and status of patient within 48 hours of emergency.

Support Services - Apart from the calls mentioned above, ERC provides other support services such as receiving calls from ambulance staff on updation of vehicle status (off-road, servicing, busy etc.), registering staff grievances etc.

REACH

This section focuses on the two aspects of the Reach function- Fleet and Field Operations.

Fleet: Currently the fleet of EMRI in Andhra Pradesh consists of 439 segments including 75 ALS Ambulances and remaining are BLS ambulances stationed across the 13 districts of the state.

Scope of Responsibilities

The Fleet team, consisting of Field Coordinators (FCs) and Fleet Technicians (FTs), is responsible for managing the procurement and maintenance of vehicles. The key responsibilities of the team include:

- Vehicle refurbishment, registration, branding and insurance
- Ensuring scheduled maintenance and any repairs of vehicles
- Coordinating contracts with service centres for servicing and tyre changes and with fuel stations
- Accident management
- Pilot training

Field Operations

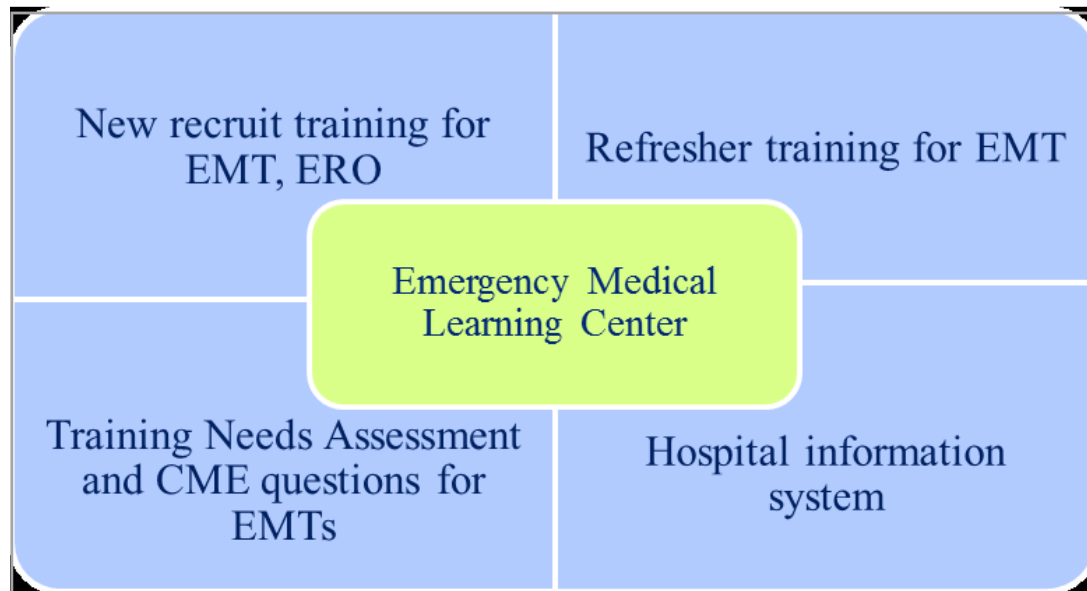
Field operations are managed by Regional Manager (RM) and Program Managers (PMs) at state and regional levels, Emergency Management Executives (EMEs) at district level, and Emergency Management Technicians (EMTs) and Pilots (Drivers) at the ambulance level.

Structure of field operations team



EMRI has defined a process to capture details of services, specialties, resources and infrastructure available across health facilities in each of the districts. EMEs play a vital role in coordinating with hospitals, collecting information, forwarding information to the EMRI state office and monitoring relationship with each of the hospitals. EMEs also provide advocacy to the Chief of Hospital on the importance of stabilizing critical EM patients before referring them to any other facility when required. Data collected from hospitals is then entered into Hospital Information systems (HIS) application which is linked to the case closing application of SENSE, in order to allocate each emergency to the corresponding hospital.

CARE: The CARE component of the EMRI operational model consists of providing pre-hospital emergency medical attention to the patients. It consists of three sub components – CARE cell at the ERC, Pre-hospital Care Record Cell and Emergency Learning Centre, led by the Head (EML&C).



EMT Preparatory training: New EMTs are mandated to undergo the EMT Preparatory Training Program. The training program was originally used to be held for 60 days and Refresher trainings every 6 months.

Observations:

The findings and observations made during the assessment visits are detailed below –

- *Well defined call taking process:* A clearly defined process guides the call taking process which is constantly reviewed and updated in order to improve efficiency and caller experience. For example, the ERO process was launched only in April as an improvement to the earlier CO-DO (Call Officer – Dispatch Officer) process, which involved different officers for call receiving and ambulance dispatch. This change was done to enhance caller experience by having only one point of contact and to reduce call handle time.

- *Proactive vehicle busy desk:* The vehicle busy desk is helpful to better engage with the caller in distress and reduce waiting times.
- *Good customer feedback process in place:* The 48 hour follow up initiative is a good feedback mechanism for the service. Discussions with beneficiaries also showed that this feedback was appreciated among callers and contributed to their satisfaction.
- *Well-designed Sense application:* The Sense application implemented by GVK EMRI for handling calls is well designed and structure based on the ERO algorithm ensuring minimum deviations and errors. The application is adequately supported by switches, servers and data storage hardware.
- *Mostly Medical Emergencies:* Over 90% of emergencies reported are medical emergencies. While the number of medical emergencies handled has constantly increased over time.
- *High % Vehicle Busy Cases:* The vehicle busy % reflects the capacity of the operational ambulances to handle current number of emergencies.
- Apart from cold packs, hazardous materials reference guide and patient care SOPs the current list of equipment which are available in the ambulance are sufficient for pre hospital care provided in the ambulance.
- During our assessment it was found that overall Basic life saving equipment and drugs were found to be present in the ambulances
- The field operations team manages and handles staff and operations reasonably well. EMTs and pilots reflect a high level of confidence and motivation in carrying out their daily tasks. Areas of improvement include delays in case closures, un-planned field marketing activities, weak liaising with district administration and weak hospital relationship processes.
- GVK-EMRI has detailed Standard Operating Procedures (SOPs) in place to ensure the level and quality of care is maintained in all ambulances.
- Trained medical technician in a mobile and well equipped set up along with 24*7 telephonic assistance support a qualified physician are the key strengths of the 108 EMRI care model.
- It was observed and reiterated by some EMTs that the shortened duration of the EMT preparatory training affected their level of retention of knowledge and confidence in handling patients.
- All EMTs met the required qualifications as defined by HR.
- All EMTs underwent the preparatory program implemented by the EM Learning team.

- Users have appreciated the round-the-clock availability of call services, simplicity of call process, attitude of call taking officers and negligent refusal of ambulance requests. In most cases, all users were completely aware of the process, and often gave the required information even before being asked, thus reducing the call handle time.
- The timely arrival of 108 vehicles usually within a short time regardless of the time of the day has led to user confidence in the service.
- **Time taken to reach site of emergency in urban areas**
The average time taken to reach ambulance on site in urban areas was 16.13 minutes (Range- 11.5 min-26.1 min).
- **Time taken to reach site of emergency in rural areas**
The average time taken to reach ambulance on site in rural areas was 28.82 minutes (Range- 16.4 min-29.6 min).
- **Time taken to reach health facility from site of emergency in urban areas**
The average time taken to reach health facility from site of emergency in urban areas was 19.73 minutes (Range- 15.1 min-26 min)
- **Time taken to reach health facility from site of emergency in rural areas**
The average time taken to reach health facility from site of emergency in rural areas was 26.28 minutes (Range- 18 min-33.3 min)
- **Utilization pattern of ambulance by time of emergency**
According to the data provided by the GVK the utilization pattern of ambulance by time of emergency was 100%.
- **Mean number of non-maternity emergency patients transported per ambulance per day**
We observed the mean number of non-maternity emergency patients transported per ambulance per day was 3.67.
- **Mean number of maternity emergency patients transported per ambulance per day**
We found that the mean number of maternity emergency patients transported per ambulance per day was 2 (Range 1-2). (**Figure 1**)
- **Client satisfaction with referral transport services**

According to the feedback form filled by the GVK EMRI the client satisfaction was excellent and satisfactory. As about 10 % of the EMs served by 108 Ambulances is referral cases,

always patient/Client is transported to the destination Hospital as mentioned in the Referral form.

The availability of trained Paramedic (EMT) in 108 Ambulance is added advantage to monitor the condition of the Patient inside the Ambulance continuously at a regular interval.

Based on the situation, the EMT provided necessary pre hospital care to the patient while transporting to destination hospital, and also on need basis takes the Online Medical Direction, from Emergency Response Centre Physician (ERCP) to ensure stabilization of the patient. Due to these aforementioned reasons, the client satisfaction vis-a-vis referral cases in 108 Ambulances is rated high.

➤ **Proportion of ambulances with paramedic/ EMT**

According to the data provided by the GVK EMRI the proportion of ambulances with paramedic/EMT was 2.5.

➤ **Proportion of ambulances with essential emergency drugs**

We observed that the proportion of ambulances with essential emergency drugs was 100%.

➤ **Call rate per ambulance per day and Call rate per million population per day**

After taking with the regional manager the average call rate per ambulance per day was 6 and average call rate per million populations per day was 54.82.

➤ **Cost per patient transported**

Average cost per patient transported was 760 INR.

➤ **Operational cost per km travelled**

Operational cost per Km travelled was 6.38 INR

➤ **Mean distance travelled per ambulance per day.**

Mean distance travelled per ambulance per day was 165KM.

- It was observed that the pregnancy related cases were maximum in using the utilization pattern of ambulance by type of emergency followed by Trauma, acute pain in abdomen and cardiovascular cases. **(Figure 2)**

Recommendations:

- ✚ Overall, the evaluation shows that the service meets its objectives of providing 24*7 quality and timely pre-hospital care, evidenced by the high levels of satisfaction amongst users, field functionaries and health care service providers.

- ✚ It is recommended that the current arrangement continues with extra budgets to be allocated to EMRI based on the planned communication strategy.
- ✚ Ambulance crew informed during the inspection that they are receiving less salary as compared to their counterparts in neighbour state Telangana. Hence GoAP need to enhance budget allocation in order to pay salaries to Ambulance crew at par with TS to implement this program more effectively.
- ✚ Overall, the reach function has clear implementation and monitoring processes. The team would need to better liaise with both external (partner hospitals and district administration) and internal (marketing and hospital relations) customers.
- ✚ *Spreading Awareness:* The most frequently undertaken awareness building activities are -
 - ✓ Demos are conducted in every village in the district by gathering people, informing them about 108 services and how to use them, showing the ambulance equipment and how EMRI can be helpful in case of any emergency.
 - ✓ EMEs are in constant contact with ASHAs who keep a track of pregnant women for planned deliveries and this provides an opportunity to spread awareness among the potential users.
 - ✓ Given the popularity of the scheme, details of special cases, ambulance launches of pilot and EMT days are well covered by the district level print media. This is also an important form of district level marketing to spread awareness of the service.

Analysis of GVK-EMRI's national benchmarks by GoAP:

Since GVK EMRI 108 ambulance services are operational in over 12 states, almost similar items would be procured in other states as well. We observed that GVK EMRI doing best job in the Andhra Pradesh.

Mean number of maternity patients transported per ambulance per day

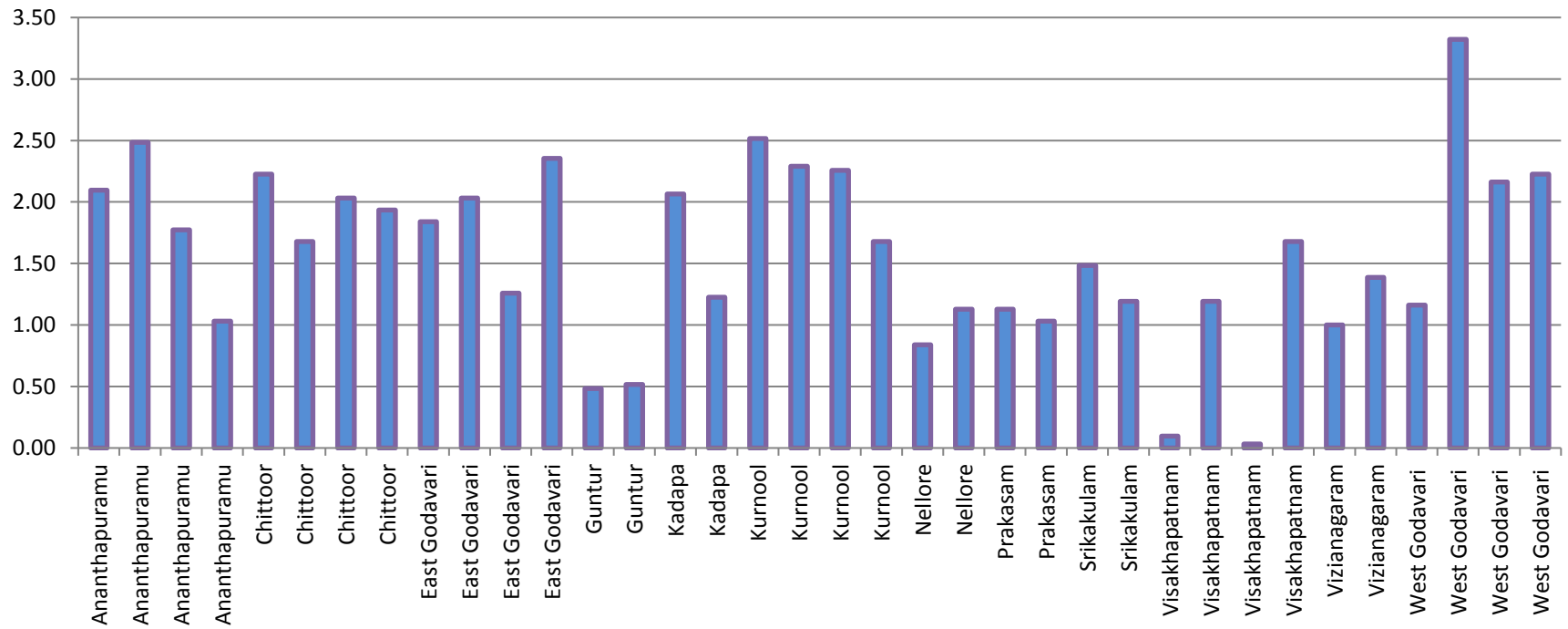


Figure 1: Mean number of maternity patients transported per ambulance per day

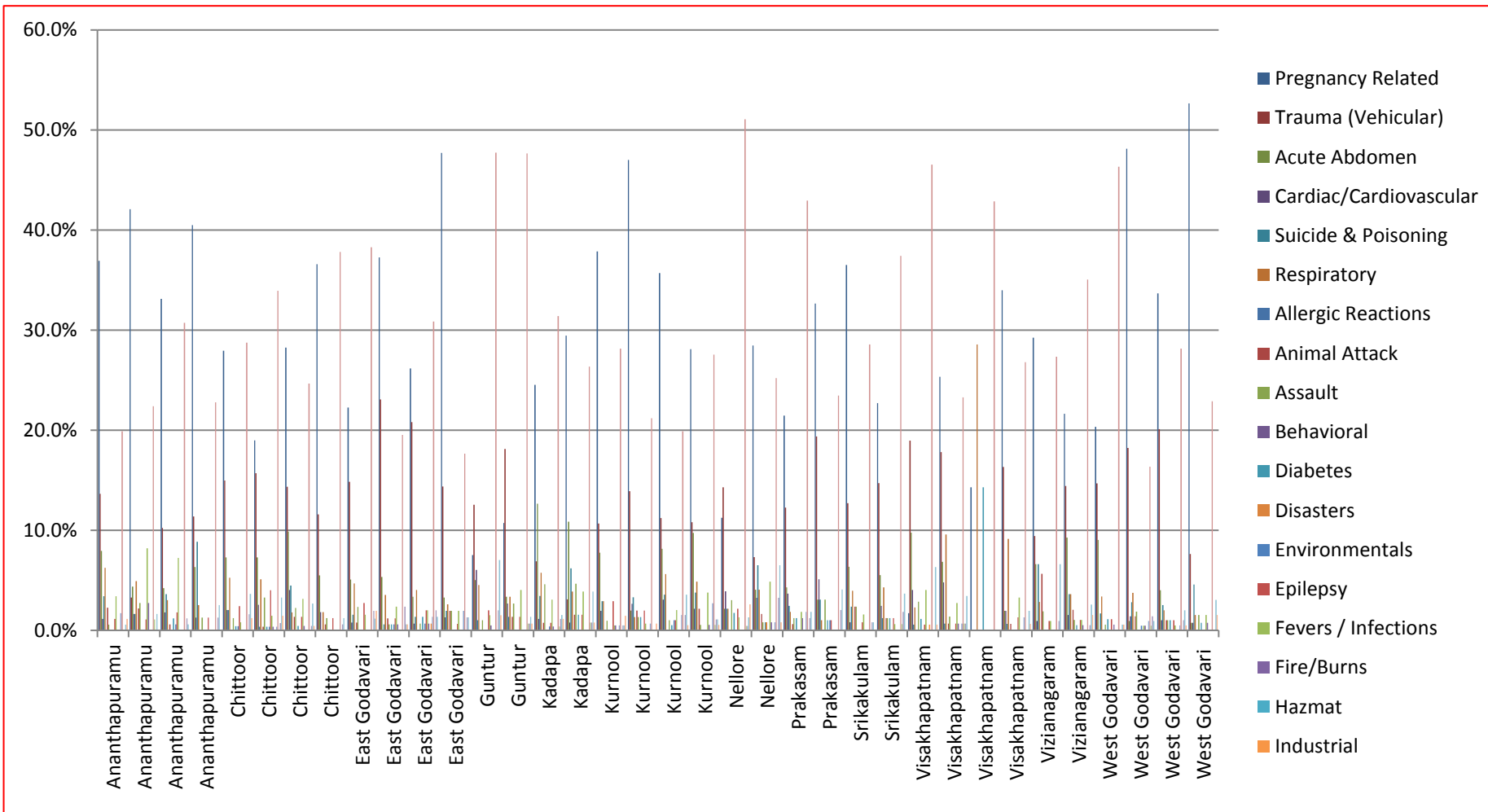


Figure 2: Utilization pattern of ambulance by type of emergency

Annexure 1

District	Ananthapuramu	Ananthapuramu	Ananthapuramu	Ananthapuramu
Segment	Ananthapuramu	Kalyanadurg	Rapthadu	Narpala
Vehicle No.	AP 16 TH 9833	AP 16 TH 9928	AP 16 TH 7675	AP 16 TH 7824
Time taken to reach site of emergency in urban areas	19.4	18.2	18.1	17.0
Time taken to reach site of emergency in rural areas	25.2	23.3	24.3	22.2
Time taken to reach health facility from site of emergency in urban areas	21.2	26.0	23.3	25.0
Time taken to reach health facility from site of emergency in rural areas	29.0	32.4	29.4	33.1
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	3.58	3.42	3.58	1.52
Time taken to reach site of emergency in urban areas	19.4	18.2	18.1	17.0
Performance Indicators				
Mean number of maternity patients transported per ambulance per day	2.10	2.48	1.77	1.03
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.42	6.42	6.42	6.42
Call rate per million population per day	58.2	58.2	58.2	58.2
Cost per patient transported	714.90	687.55	757.96	1592.68
Operational cost per patient transported	714.90	687.55	757.96	1592.68
Operational cost per km travelled	6.93	7.93	6.11	6.24

Mean distance travelled per ambulance per day	130	249	144	136
Utilization pattern of ambulance by type of emergency				
Pregnancy Related	36.9%	42.1%	33.1%	40.5%
Trauma (Vehicular)	13.6%	3.3%	10.2%	11.4%
Acute Abdomen	8.0%	4.4%	4.2%	6.3%
Cardiac/Cardiovascular	1.1%	1.6%	1.8%	1.3%
Suicide & Poisoning	3.4%	1.6%	3.6%	8.9%
Respiratory	6.3%	4.9%	3.0%	2.5%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	2.3%	2.2%	0.6%	0.0%
Assault	0.6%	2.7%	0.0%	1.3%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.0%	0.0%	1.2%	0.0%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.0%	0.6%	0.0%
Epilepsy	1.1%	1.1%	1.8%	1.3%
Fevers / Infections	3.4%	8.2%	7.2%	0.0%
Fire/Burns	0.0%	2.7%	0.0%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	1.7%	0.0%	0.0%	0.0%
Others	19.9%	22.4%	30.7%	22.8%
Paediatric(1-12years)	0.0%	1.1%	0.0%	0.0%
Stroke/CVA	0.0%	0.0%	1.2%	1.3%
Trauma (non Vehicular)	0.6%	1.6%	0.6%	2.5%
Unconscious	1.1%	0.0%	0.0%	0.0%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Chittoor	Chittoor	Chittoor	Chittoor
Segment	Tirupati-Municipal Park	Tirupati-TPS	Puttur	Srikalahasthi
Vehicle No.	AP16TH8032	AP16TJ0474	AP16TH8000	AP16TH9647
Time taken to reach site of emergency in urban areas	17.0	26.1	15.6	16.4
Time taken to reach site of emergency in rural areas	22.1	18.0	32.1	27.3
Time taken to reach health facility from site of emergency in urban areas	24.1	25.2	25.3	22.3
Time taken to reach health facility from site of emergency in rural areas	20.1	18.0	31.1	27.2
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	1.52	7.16	5.16	3.35
Time taken to reach site of emergency in urban areas	17.0	26.1	15.6	16.4
Mean number of maternity patients transported per ambulance per day	2.23	1.68	2.03	1.94
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.91	6.91	6.91	6.91
Call rate per million population per day	66.2	66.2	66.2	66.2
Cost per patient transported	509.40	459.20	564.22	767.21
Operational cost per patient transported	509.40	459.20	564.22	767.21
Operational cost per km travelled	5.70	6.94	5.60	5.68
Mean distance travelled per ambulance per day	181	176	302	223
Utilization pattern of ambulance by type of emergency				

Pregnancy Related	27.9%	19.0%	28.3%	36.6%
Trauma (Vehicular)	15.0%	15.7%	14.3%	11.6%
Acute Abdomen	7.3%	7.3%	9.9%	5.5%
Cardiac/Cardiovascular	2.0%	2.6%	4.0%	1.8%
Suicide & Poisoning	2.0%	0.4%	4.5%	0.0%
Respiratory	5.3%	5.1%	1.8%	1.8%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	0.4%	1.3%	0.6%
Assault	1.2%	3.3%	2.2%	1.2%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.4%	0.4%	0.4%	0.0%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.4%	0.4%	0.0%	0.0%
Epilepsy	2.4%	4.0%	1.3%	1.2%
Fevers / Infections	0.8%	1.5%	3.1%	0.0%
Fire/Burns	0.0%	0.4%	0.4%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.4%	0.0%	0.0%
Others	28.7%	33.9%	24.7%	37.8%
Paediatric(1-12years)	0.0%	0.0%	0.0%	0.0%
Stroke/CVA	1.6%	0.7%	0.4%	0.6%
Trauma (non Vehicular)	3.6%	3.3%	2.7%	1.2%
Unconscious	1.2%	1.5%	0.4%	0.0%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	East Godavari	East Godavari	East Godavari	East Godavari
Segment	Rajahmundry DGH	Rajanagaram	Ravulapalem	Korukonda
Vehicle No.	AP16TH9930	AP16TG0467	AP16TH9882	AP16TH8043
Time taken to reach site of emergency in urban areas	15.1	19.3	16.3	20.5
Time taken to reach site of emergency in rural areas	29.6	24.5	20.3	21.5
Time taken to reach health facility from site of emergency in urban areas	17.3	16.0	15.1	18.1
Time taken to reach health facility from site of emergency in rural areas	29.4	28.5	27.3	28.0
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	6.42	3.42	3.55	2.58
Time taken to reach site of emergency in urban areas	15.1	19.3	16.3	20.5
Mean number of maternity patients transported per ambulance per day	1.84	2.03	1.26	2.35
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.13	6.13	6.13	6.13
Call rate per million population per day	47.6	47.6	47.6	47.6
Cost per patient transported	491.49	744.51	844.44	822.37
Operational cost per patient transported	491.49	744.51	844.44	822.37
Operational cost per km travelled	7.06	6.71	6.32	6.94
Mean distance travelled per ambulance per day	115	172	156	184

Utilization pattern of ambulance by type of emergency				
Pregnancy Related	22.3%	37.3%	26.2%	47.7%
Trauma (Vehicular)	14.8%	23.1%	20.8%	14.4%
Acute Abdomen	5.1%	5.3%	3.4%	3.3%
Cardiac/Cardiovascular	0.8%	0.0%	0.7%	1.3%
Suicide & Poisoning	1.6%	0.6%	1.3%	2.0%
Respiratory	4.7%	3.6%	4.0%	2.6%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.8%	1.2%	0.0%	2.0%
Assault	2.3%	0.6%	0.7%	2.0%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.0%	0.6%	1.3%	0.0%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.6%	0.7%	0.0%
Epilepsy	2.7%	1.2%	2.0%	0.7%
Fevers / Infections	1.6%	2.4%	2.0%	2.0%
Fire/Burns	0.0%	0.6%	0.7%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.7%	0.0%
Neonatal(upto 1 month)	0.0%	0.0%	1.3%	2.0%
Others	38.3%	19.5%	30.9%	17.6%
Paediatric(1-12years)	0.0%	0.0%	0.0%	0.0%
Stroke/CVA	2.0%	2.4%	2.0%	1.3%
Trauma (non Vehicular)	1.2%	0.6%	1.3%	1.3%
Unconscious	2.0%	0.6%	0.0%	0.0%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Guntur	Guntur	Kadapa	Kadapa
Segment	Guntur	Pedhakakani	Kadapa-Old RIMS	Bakrapeta
Vehicle No.	AP16TH9633	AP16TH 7751	AP16TJ0863	AP16TH7753
Time taken to reach site of emergency in urban areas	18.3	17.3	15.5	18.3
Time taken to reach site of emergency in rural areas	20.5	23.6	26.3	21.6
Time taken to reach health facility from site of emergency in urban areas	17.5	19.1	15.6	24.2
Time taken to reach health facility from site of emergency in rural areas	22.0	20.3	22.2	29.2
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	5.94	4.29	6.35	2.94
Time taken to reach site of emergency in urban areas	18.3	17.3	15.5	18.3
Mean number of maternity patients transported per ambulance per day	0.48	0.52	2.06	1.23
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.94	6.94	5.9	5.9
Call rate per million population per day	49.7	49.7	58.1	58.1
Cost per patient transported	632.27	844.44	482.08	946.03
Operational cost per patient transported	632.27	844.44	482.08	946.03
Operational cost per km travelled	7.21	5.76	6.05	6.29
Mean distance travelled per ambulance per day	68	95	200	198
Utilization pattern of ambulance by type of emergency				

Pregnancy Related	7.5%	10.7%	24.5%	29.5%
Trauma (Vehicular)	12.6%	18.1%	6.9%	3.1%
Acute Abdomen	5.0%	3.4%	12.6%	10.9%
Cardiac/Cardiovascular	6.0%	2.7%	1.1%	0.8%
Suicide & Poisoning	1.0%	1.3%	3.4%	6.2%
Respiratory	4.5%	3.4%	5.7%	3.9%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	1.3%	0.8%	1.6%
Assault	1.0%	2.7%	4.6%	4.7%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.0%	0.0%	0.0%	1.6%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.0%	0.4%	0.0%
Epilepsy	2.0%	1.3%	0.8%	1.6%
Fevers / Infections	1.5%	4.0%	3.1%	3.9%
Fire/Burns	0.5%	0.0%	0.4%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.0%	0.0%	0.0%
Others	47.7%	47.7%	31.4%	26.4%
Paediatric(1-12years)	0.0%	0.7%	0.4%	0.8%
Stroke/CVA	2.0%	0.7%	1.1%	0.8%
Trauma (non Vehicular)	7.0%	1.3%	1.5%	3.9%
Unconscious	1.5%	0.7%	1.1%	0.8%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Kurnool	Kurnool	Kurnool	Kurnool
Segment	Kurnool- C Camp	Dhone	Kalluru	Orvakallu
Vehicle No.	AP 16 TH 9656	AP 16 TH 0450	AP 16 TH 7756	AP 16 TH 7782
Time taken to reach site of emergency in urban areas	18.3	15.4	16.4	19.2
Time taken to reach site of emergency in rural areas	24.4	29.3	23.1	23.3
Time taken to reach health facility from site of emergency in urban areas	19.3	21.2	19.1	21.2
Time taken to reach health facility from site of emergency in rural areas	22.4	27.3	27.2	28.5
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	4.13	2.58	4.06	2.48
Time taken to reach site of emergency in urban areas	18.3	15.4	16.4	19.2
Mean number of maternity patients transported per ambulance per day	2.52	2.29	2.26	1.68
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.1	6.1	6.1	6.1
Call rate per million population per day	48.2	48.2	48.2	48.2
Cost per patient transported	610.79	833.26	641.95	680.12
Operational cost per patient transported	610.79	833.26	641.95	680.12
Operational cost per km travelled	6.90	5.64	6.06	6.06
Mean distance travelled per ambulance per day	162	229	162	311
Utilization pattern of ambulance by type of emergency				

Pregnancy Related	37.9%	47.0%	35.7%	28.1%
Trauma (Vehicular)	10.7%	13.9%	11.2%	10.8%
Acute Abdomen	7.8%	2.0%	8.2%	9.7%
Cardiac/Cardiovascular	1.9%	2.6%	3.1%	2.2%
Suicide & Poisoning	2.9%	3.3%	3.6%	3.8%
Respiratory	2.9%	1.3%	5.6%	4.9%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	2.0%	0.0%	2.2%
Assault	1.0%	1.3%	1.0%	0.5%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.0%	1.3%	0.5%	0.0%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.0%	1.0%	0.0%
Epilepsy	2.9%	2.0%	1.0%	0.0%
Fevers / Infections	0.5%	0.7%	2.0%	3.8%
Fire/Burns	0.5%	0.0%	0.0%	0.5%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.5%	0.7%	1.5%	2.7%
Others	28.2%	21.2%	19.9%	27.6%
Paediatric(1-12years)	0.0%	0.0%	0.0%	0.5%
Stroke/CVA	0.5%	0.0%	1.5%	1.1%
Trauma (non Vehicular)	0.5%	0.0%	3.6%	1.1%
Unconscious	1.5%	0.7%	0.5%	0.5%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Nellore	Nellore	Prakasam	Prakasam
Segment	Nellore TPS	Podalakuru	Ongole Rims	Singaraya Konda
Vehicle No.	AP16TH 9650	AP16TH 9538	AP16TH 9641	AP16TH 7650
Time taken to reach site of emergency in urban areas	21.1	19.1	16.3	17.1
Time taken to reach site of emergency in rural areas	19.1	24.1	25.5	24.5
Time taken to reach health facility from site of emergency in urban areas	19.5	19.2	19.2	24.2
Time taken to reach health facility from site of emergency in rural areas	28.1	26.3	27.5	29.5
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	6.61	2.84	4.13	2.13
Time taken to reach site of emergency in urban areas	21.1	19.1	16.3	17.1
Mean number of maternity patients transported per ambulance per day	0.84	1.13	1.13	1.03
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	5.34	5.34	5.15	5.15
Call rate per million population per day	58.5	58.5	31.1	31.1
Cost per patient transported	544.68	1022.94	771.91	1283.90
Operational cost per patient transported	544.68	1022.94	771.91	1283.90
Operational cost per km travelled	5.99	5.68	6.32	5.49
Mean distance travelled per ambulance per day	154	199	116	156
Utilization pattern of ambulance by type of emergency				
Pregnancy Related	11.3%	28.5%	21.5%	32.7%

Trauma (Vehicular)	14.3%	7.3%	12.3%	19.4%
Acute Abdomen	2.2%	4.1%	4.3%	3.1%
Cardiac/Cardiovascular	3.9%	3.3%	3.7%	5.1%
Suicide & Poisoning	2.2%	6.5%	2.5%	3.1%
Respiratory	2.2%	4.1%	1.8%	1.0%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	1.6%	0.6%	0.0%
Assault	3.0%	0.8%	1.2%	3.1%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	1.7%	0.8%	1.2%	1.0%
Disasters	0.0%	0.8%	0.0%	0.0%
Environmentals	0.0%	0.0%	0.0%	1.0%
Epilepsy	2.2%	0.0%	0.0%	1.0%
Fevers / Infections	1.3%	4.9%	1.8%	0.0%
Fire/Burns	0.0%	0.8%	1.2%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.8%	1.8%	0.0%
Others	51.1%	25.2%	42.9%	23.5%
Paediatric(1-12years)	0.4%	0.0%	0.0%	0.0%
Stroke/CVA	0.4%	3.3%	1.2%	2.0%
Trauma (non Vehicular)	1.3%	6.5%	1.8%	4.1%
Unconscious	2.6%	0.8%	0.0%	0.0%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam
Segment	GVMC	Madhurawada	Simhachalam	Pendurthi
Vehicle No.	AP16TH9832	AP16TJ0453	AP16TH7644	AP16TH8551
Time taken to reach site of emergency in urban areas	11.1	18.2	14.2	18.2
Time taken to reach site of emergency in rural areas	0.0	24.3	12.5	16.4
Time taken to reach health facility from site of emergency in urban areas	9.3	19.5	18.4	21.5
Time taken to reach health facility from site of emergency in rural areas	0.0	28.0	27.4	28.3
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	5.52	3.52	0.19	3.26
Time taken to reach site of emergency in urban areas	11.1	18.2	14.2	18.2
Mean number of maternity patients transported per ambulance per day	0.10	1.19	0.03	1.68
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	6.54	6.54	6.54	6.54
Call rate per million population per day	65.6	65.6	65.6	65.6
Cost per patient transported	723.11	762.56	791.33	776.68
Operational cost per patient transported	723.11	762.56	791.33	776.68
Operational cost per km travelled	9.27	6.80	5.68	5.91
Mean distance travelled per ambulance per day	49	135	205	180
Utilization pattern of ambulance by type of emergency				

Pregnancy Related	1.7%	25.3%	14.3%	34.0%
Trauma (Vehicular)	19.0%	17.8%	0.0%	16.3%
Acute Abdomen	9.8%	6.8%	0.0%	2.0%
Cardiac/Cardiovascular	4.0%	4.8%	0.0%	2.0%
Suicide & Poisoning	0.6%	0.7%	0.0%	0.7%
Respiratory	2.3%	9.6%	28.6%	9.2%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	0.7%	0.0%	0.7%
Assault	2.9%	1.4%	0.0%	0.0%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	1.1%	0.0%	14.3%	0.0%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.0%	0.0%	0.0%
Epilepsy	0.6%	0.7%	0.0%	1.3%
Fevers / Infections	4.0%	2.7%	0.0%	3.3%
Fire/Burns	0.0%	0.7%	0.0%	0.0%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.6%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.7%	0.0%	1.3%
Others	46.6%	23.3%	42.9%	26.8%
Paediatric(1-12years)	0.0%	0.7%	0.0%	0.0%
Stroke/CVA	0.0%	0.7%	0.0%	0.0%
Trauma (non Vehicular)	6.3%	3.4%	0.0%	2.0%
Unconscious	0.6%	0.0%	0.0%	0.7%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	Srikakulam	Srikakulam	Vizianagaram	Vizianagaram
Segment	Srikakulam Burja	Srikakulam	Ganyada	Vizianagaram - Ganyada
Vehicle No.	AP16TH7742	AP16TH9653	AP16TH8423	AP16TH9643
Time taken to reach site of emergency in urban areas	19.2	17.5	17.2	16.5
Time taken to reach site of emergency in rural areas	22.4	27.0	18.6	28.5
Time taken to reach health facility from site of emergency in urban areas	16.2	17.6	24.2	17.4
Time taken to reach health facility from site of emergency in rural areas	29.1	26.3	29.2	28.1
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	2.58	4.06	2.42	4.90
Time taken to reach site of emergency in urban areas	19.2	17.5	17.2	16.5
Mean number of maternity patients transported per ambulance per day	1.48	1.19	1.00	1.39
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	5.03	5.03	5.85	5.85
Call rate per million population per day	52.2	52.2	67.4	67.4
Cost per patient transported	998.59	771.91	781.50	648.57
Operational cost per patient transported	998.59	771.91	781.50	648.57
Operational cost per km travelled	5.92	6.99	5.28	6.96
Mean distance travelled per ambulance per day	190	89	184	113
Utilization pattern of ambulance by type of emergency				
Pregnancy Related	36.5%	22.7%	29.2%	21.6%

Trauma (Vehicular)	12.7%	14.7%	9.4%	14.4%
Acute Abdomen	6.3%	5.5%	6.6%	9.3%
Cardiac/Cardiovascular	0.8%	2.5%	0.9%	1.5%
Suicide & Poisoning	2.4%	1.2%	6.6%	3.6%
Respiratory	4.0%	4.3%	2.8%	3.6%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	2.4%	1.2%	5.7%	2.1%
Assault	2.4%	1.2%	1.9%	1.0%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	0.0%	1.2%	0.0%	0.5%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.0%	0.0%	0.0%
Epilepsy	0.8%	1.2%	0.9%	1.0%
Fevers / Infections	1.6%	0.6%	0.9%	1.0%
Fire/Burns	0.0%	0.0%	0.0%	0.5%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.0%	0.0%	0.0%
Others	28.6%	37.4%	27.4%	35.1%
Paediatric(1-12years)	0.0%	0.6%	0.0%	0.0%
Stroke/CVA	0.8%	1.8%	0.9%	0.5%
Trauma (non Vehicular)	0.8%	3.7%	6.6%	2.6%
Unconscious	0.0%	0.0%	0.0%	1.5%
Grand Total	100.0%	100.0%	100.0%	100.0%

District	West Godavari	West Godavari	West Godavari	West Godavari
Segment	Eluru	Bhimadole	Tadepalligudem	Pentapadu
Vehicle No.	AP16TH9638	AP16TH8350	AP16TJ0660	AP16TH7810
Time taken to reach site of emergency in urban areas	15.4	17.3	16.3	19.0
Time taken to reach site of emergency in rural areas	22.4	25.3	29.1	19.4
Time taken to reach health facility from site of emergency in urban areas	15.4	18.5	16.4	18.1
Time taken to reach health facility from site of emergency in rural areas	27.3	29.2	26.3	24.05
Utilization pattern of ambulance by time of emergency	100%	100%	100%	100%
Mean number of non-maternity emergency patients transported per ambulance per day	4.55	3.58	2.00	2.00
Time taken to reach site of emergency in urban areas	15.4	17.3	16.3	19.0
Mean number of maternity patients transported per ambulance per day	1.16	3.32	2.16	2.23
Client satisfaction with referral transport services	Excellent	Excellent	Excellent	Excellent
Proportion of ambulances with paramedic/ EMT	2.5	2.5	2.5	2.5
Proportion of ambulances with essential emergency drugs	100%	100%	100%	100%
Call rate per ambulance per day	5.69	5.69	5.69	5.69
Call rate per million population per day	49.1	49.1	49.1	49.1
Cost per patient transported	710.86	587.95	632.27	925.16
Operational cost per patient transported	710.86	587.95	632.27	925.16
Operational cost per km travelled	7.43	5.49	7.52	5.73
Mean distance travelled per ambulance per day	94	253	108	134
Utilization pattern of ambulance by type of emergency				
Pregnancy Related	20.3%	48.1%	33.7%	52.7%

Trauma (Vehicular)	14.7%	18.2%	20.1%	7.6%
Acute Abdomen	9.0%	0.9%	4.0%	0.8%
Cardiac/Cardiovascular	0.0%	1.4%	1.0%	0.8%
Suicide & Poisoning	1.7%	2.8%	2.5%	4.6%
Respiratory	3.4%	3.7%	2.0%	1.5%
Allergic Reactions	0.0%	0.0%	0.0%	0.0%
Animal Attack	0.0%	1.4%	1.0%	0.0%
Assault	0.6%	1.9%	1.0%	1.5%
Behavioral	0.0%	0.0%	0.0%	0.0%
Diabetes	1.1%	0.0%	1.0%	0.8%
Disasters	0.0%	0.0%	0.0%	0.0%
Environmentals	0.0%	0.5%	0.0%	0.0%
Epilepsy	1.1%	0.0%	1.0%	0.0%
Fevers / Infections	0.0%	0.5%	0.5%	1.5%
Fire/Burns	0.6%	0.5%	0.0%	0.8%
Hazmat	0.0%	0.0%	0.0%	0.0%
Industrial	0.0%	0.0%	0.0%	0.0%
Neonatal(upto 1 month)	0.0%	0.9%	0.5%	0.0%
Others	46.3%	16.4%	28.1%	22.9%
Paediatric(1-12years)	0.0%	0.5%	0.0%	0.0%
Stroke/CVA	0.0%	1.4%	1.0%	0.0%
Trauma (non Vehicular)	0.6%	0.9%	2.0%	3.1%
Unconscious	0.0%	0.0%	0.0%	1.5%
Grand Total	100.0%	100.0%	100.0%	100.0%

Annexure 2











Annexure 9

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Govt. of India has announced 115 districts as backward (aspirational) districts under their conference on Transformation of aspirational districts at NITI Aayog. Regional Resource Centres under the MoHFW has been provided with the task to develop PAN India Initiative. Under this program RRCs have to strengthen and develop telemedicine network in their concerned aspirational districts. Our Regional Resource Centre at PGIMER is involved in development of telemedicine infrastructure in four states of northern India (Punjab, Haryana, Himachal Pradesh and Jammu & Kashmir). Under the 115 identified aspiration districts by NITI Aayog, PAN India Initiative RRC, PGIMER has identified six districts in the concerned states. In Punjab there are two districts (Ferozpur & Moga), Mewat in Haryana, Kupwara & Baramulla in Jammu and Kashmir, Chamba in Himachal Pradesh. The district hospitals situated in their district headquarters has been identified which needs to be strengthened for their telemedicine activity. RRC, PGIMER has also identified the referral centres for the district hospitals and their connectivity with RRC. The list of the identified district hospitals has been attached. The action plan of the RRC PGIMER, to strengthen the above listed districts as follows:

1. Mapping (electronic & physical) of the concerned health facilities to determine their infrastructure requirements for the feasibility of telemedicine activities including tele consultations and tele education for skill building.
2. Feasibility of Collab-DDS software for tele radiology in these district hospitals.
3. Development of Tele evidence facilities in district hospitals
4. Quality control and cost effectiveness for the purpose of health technology assessment of telemedicine activities in the identified district hospitals

The following list of backward (aspirational) districts of concerned states under RRC, PGIMER being listed by government of India for their transformation:

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

1. Himachal Pradesh: Chamba > District Hospital, Chamba > Dr. RPGMC, Tanda, Kangra (H.P) > RRC, PGIMER Chandigarh.

Contact: 01896227050

CHC	PHC	Referral & Govt. Hospital	Civil/Regional Hospital
Bharmour	Kakira	Chowari	Tissa
Choori	Purthi		Dalhousie
Holi			
Killar			
Sahoo			
Saluni			

Requirements:

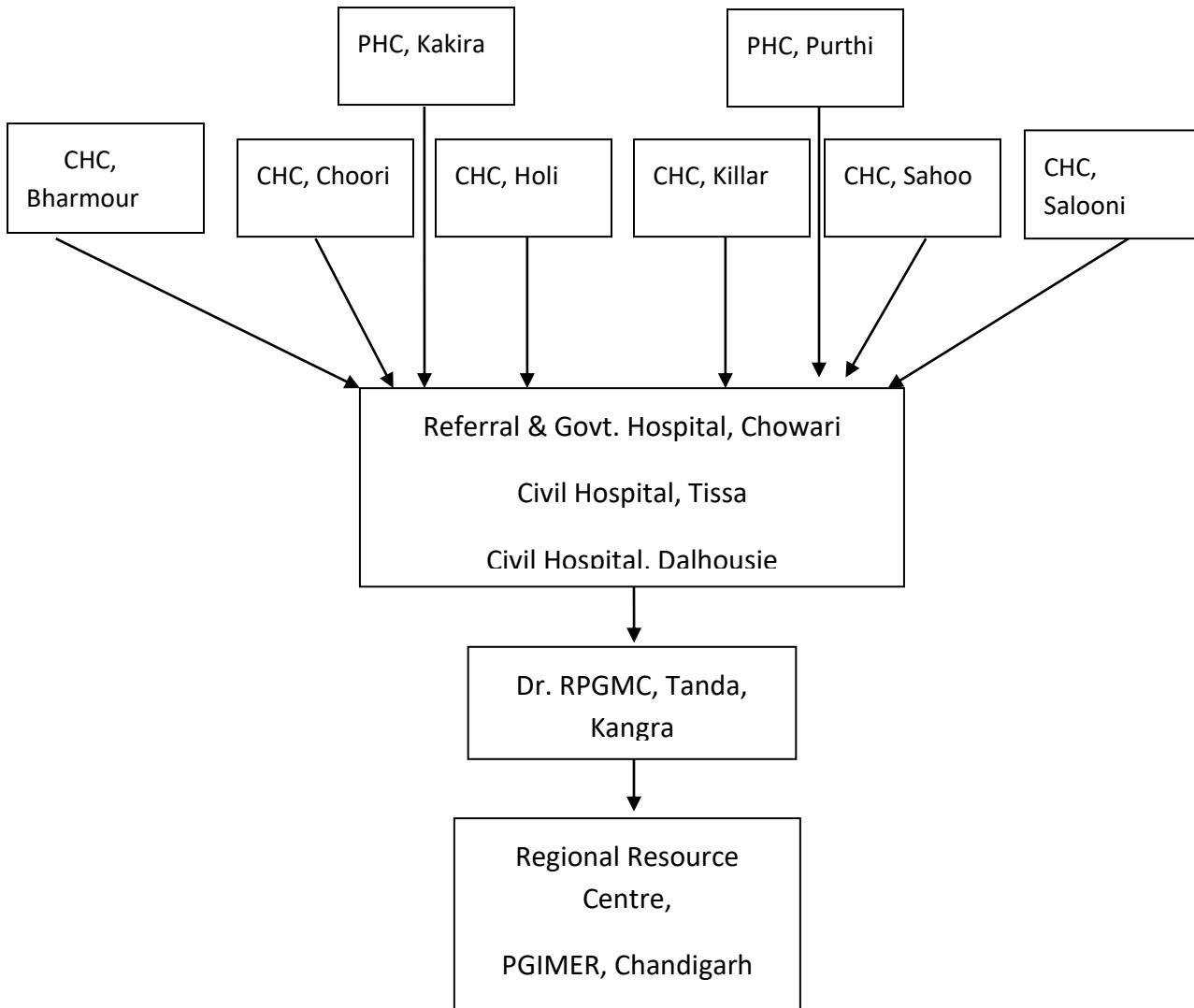
CHC	PHC	Referral & Govt. Hospital	Civil/Regional Hospital
Telemedicine kit -1	Telemedicine kit -1	Video conferencing kit-1	Video conferencing kit-1
Camera-1	Camera-1	Camera-1	Camera-1
Smart phone/Tablet-1	Smart phone/Tablet-1	Smart phone/Tablet-1	Smart phone/Tablet-1
Scanner-1	Scanner-1	Digital Scanner-1	Digital Scanner-1
Computer/Laptop 1	Computer/Laptop 1	Computer/Laptop-1	Computer/Laptop-1
		Medical Grade monitor-1	Medical Grade monitor-1
Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for Chamba district, Himachal Pradesh



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

2. Haryana: Mewat > PGIMS, Rohtak (Haryana)> RRC, PGIMER, Chandigarh

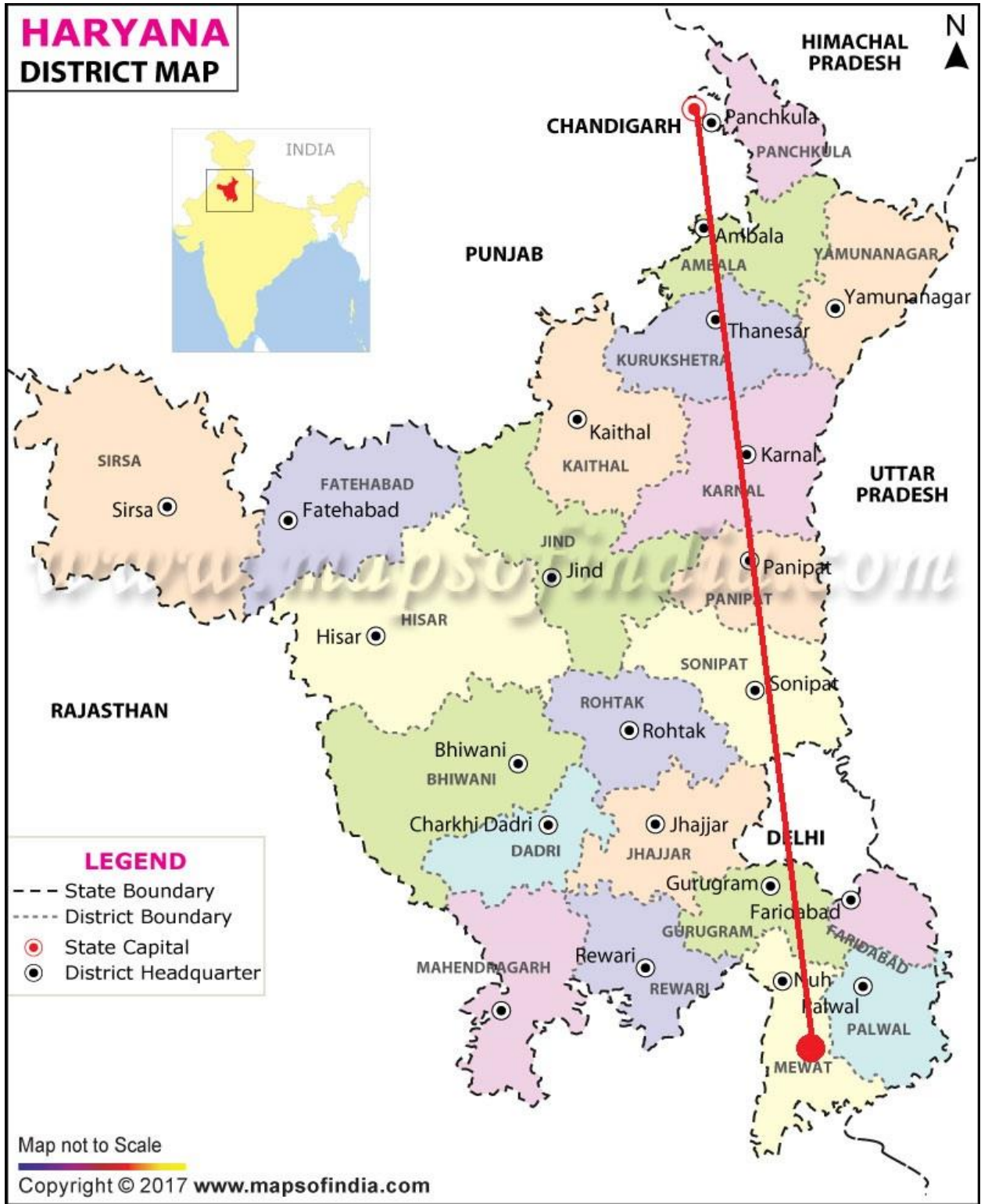
Contact: 01268283010.

CHC	PHC	Referral & Govt. Hospital	Civil/Regional Hospital
Al- Afia Hospital Mandi Khera	Ujina	-	Mewat
Tauru	Sangel		

Requirements :

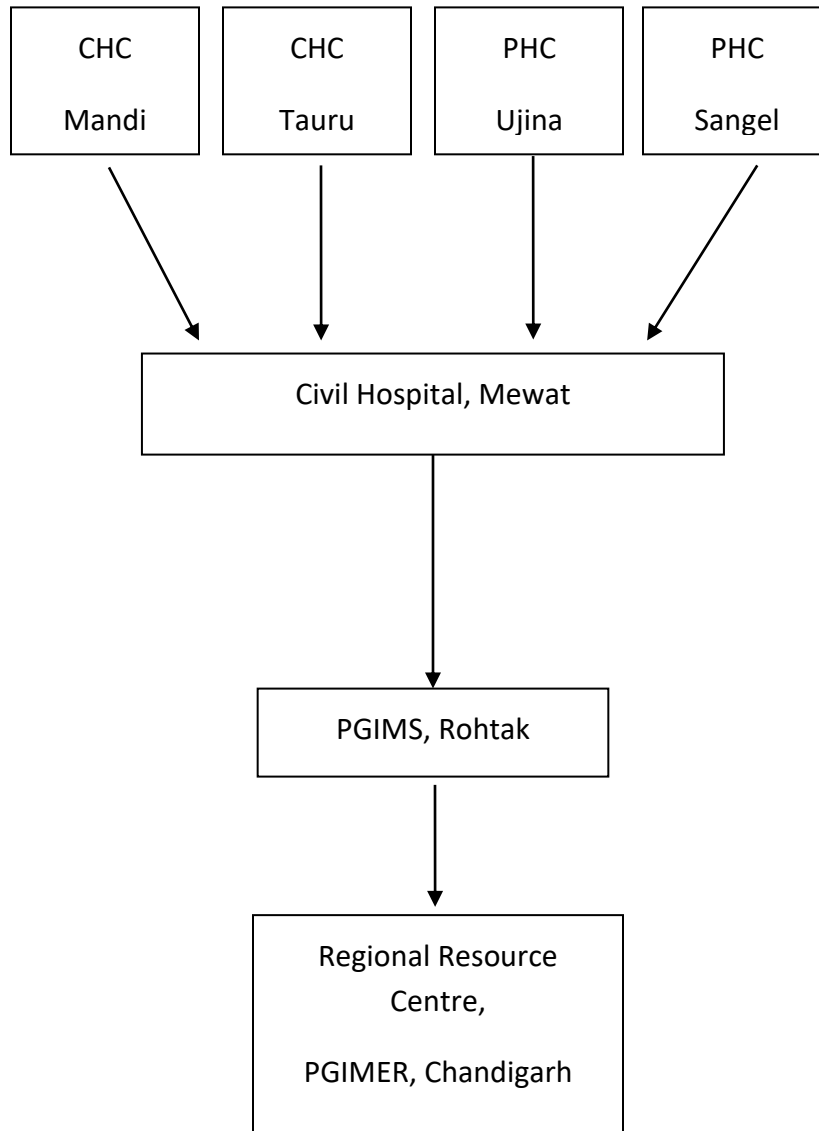
CHC	PHC	Referral & Govt. Hospital	Civil/Regional Hospital
Telemedicine kit -1	Telemedicine kit -1		Video conferencing kit-1
Camera-1	Camera-1		Camera-1
Smart phone/Tablet-	Smart phone/Tablet-1		Smart phone/Tablet-1
Scanner-1	Scanner-1		Digital Scanner-1
Computer/Laptop 1	Computer/Laptop 1		Computer/Laptop-1
			Medical Grade monitor-1
Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1		Manpower: Medical officer-1, Telemedicine Operator-1

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for district Mewat, Haryana



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

3. Punjab:

a) Ferozpur

(Civil Hospital, Ferozpur)

(Contact: 9855311605)

b) Moga

(Civil Hospital, Moga)

(Contact: 9464707605)

Govt. Medical College, Faridkot > RRC, PGIMER

a) Ferozpur:

CHC	SDH	Referral & Govt. Hospital	Civil/Regional Hospital
Jalalabad	Abohar	-	Ferozpur
Mamdot	Fazilka		
Ferozeshah	Zira		
Guruhar Sahai			
Dhabwali Kalan			
Sitto Guiro			
Khui Khera			

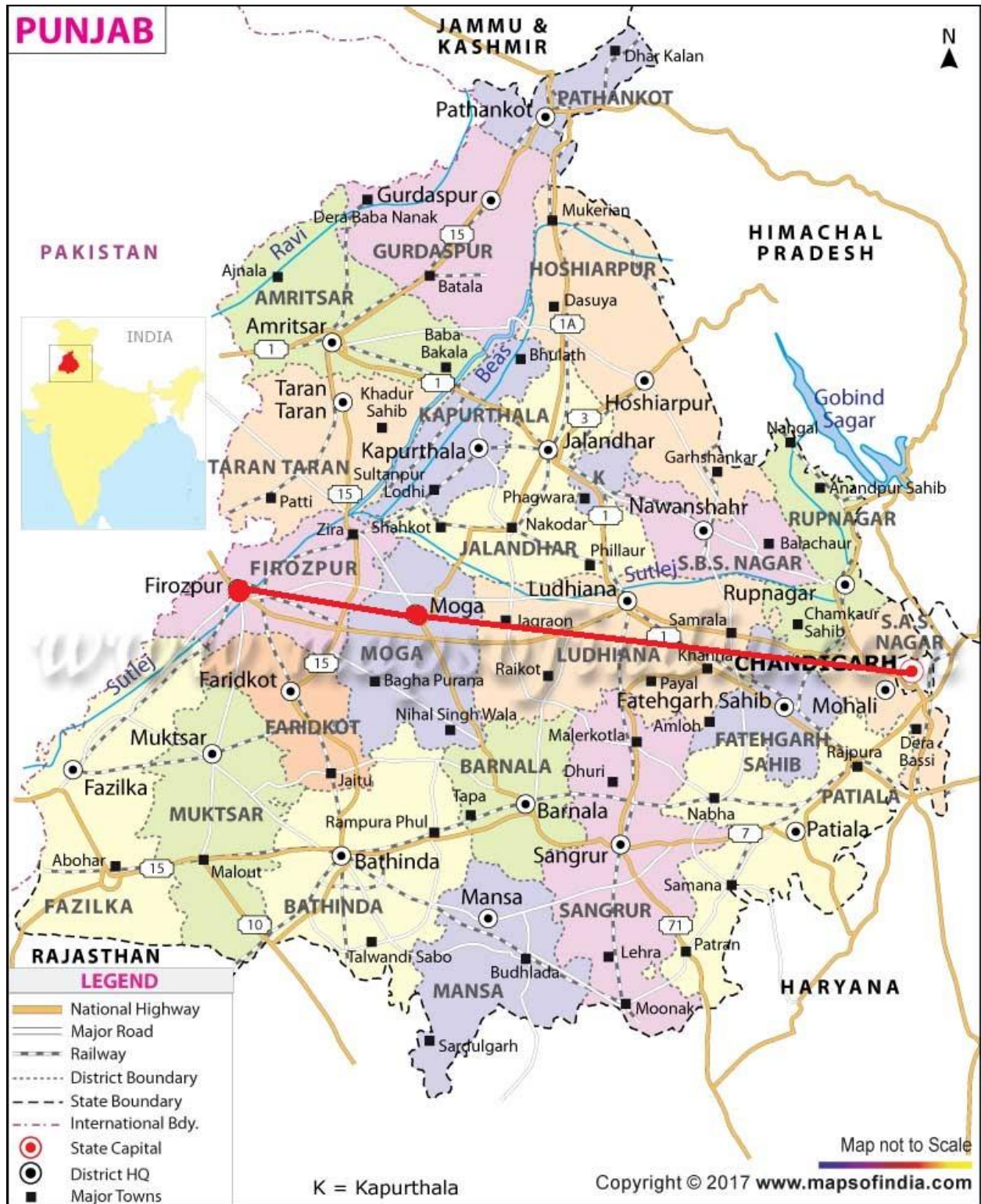
b) Moga:

CHC	SDH	Referral & Govt. Hospital	Civil/Regional Hospital
Nihal SinghWala		-	Moga
Bagaha Purana			
Dudhike			
Daroli Bhai			
Kot-Ise-Khan			

Requirements:

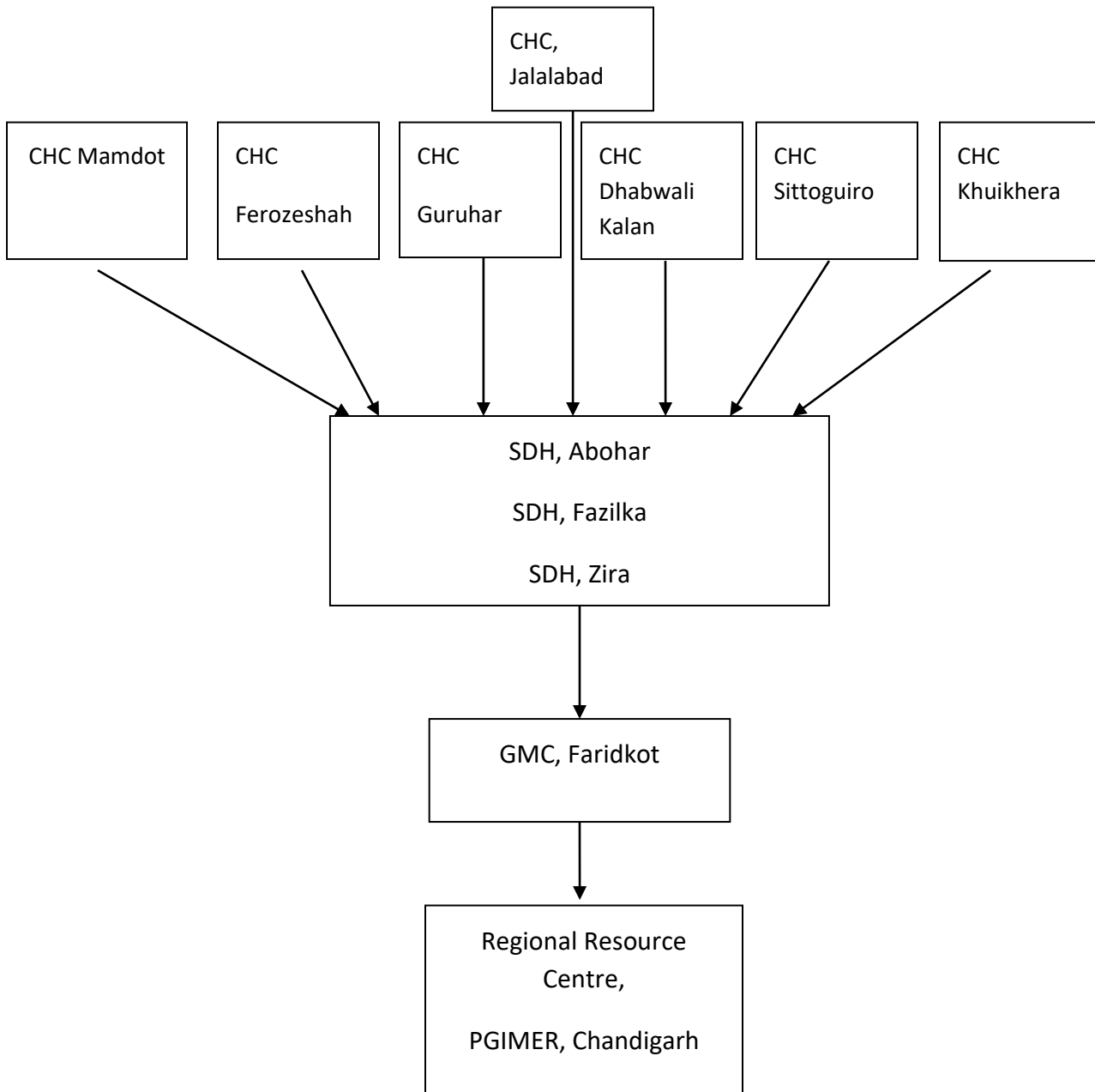
CHC	SDH	Referral & Govt. Hospital	Civil/Regional Hospital
Telemedicine kit -1	Telemedicine kit -1		Video conferencing kit-1
Camera-1	Camera-1		Camera-1
Smart phone/Tablet-1	Smart phone/Tablet-1		Smart phone/Tablet-1
Scanner-1	Scanner-1		Digital Scanner-1
Computer/Laptop 1	Computer/Laptop 1		Computer/Laptop-1
			Medical Grade monitor-1
Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1		Manpower: Medical officer-1, Telemedicine Operator-1

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)



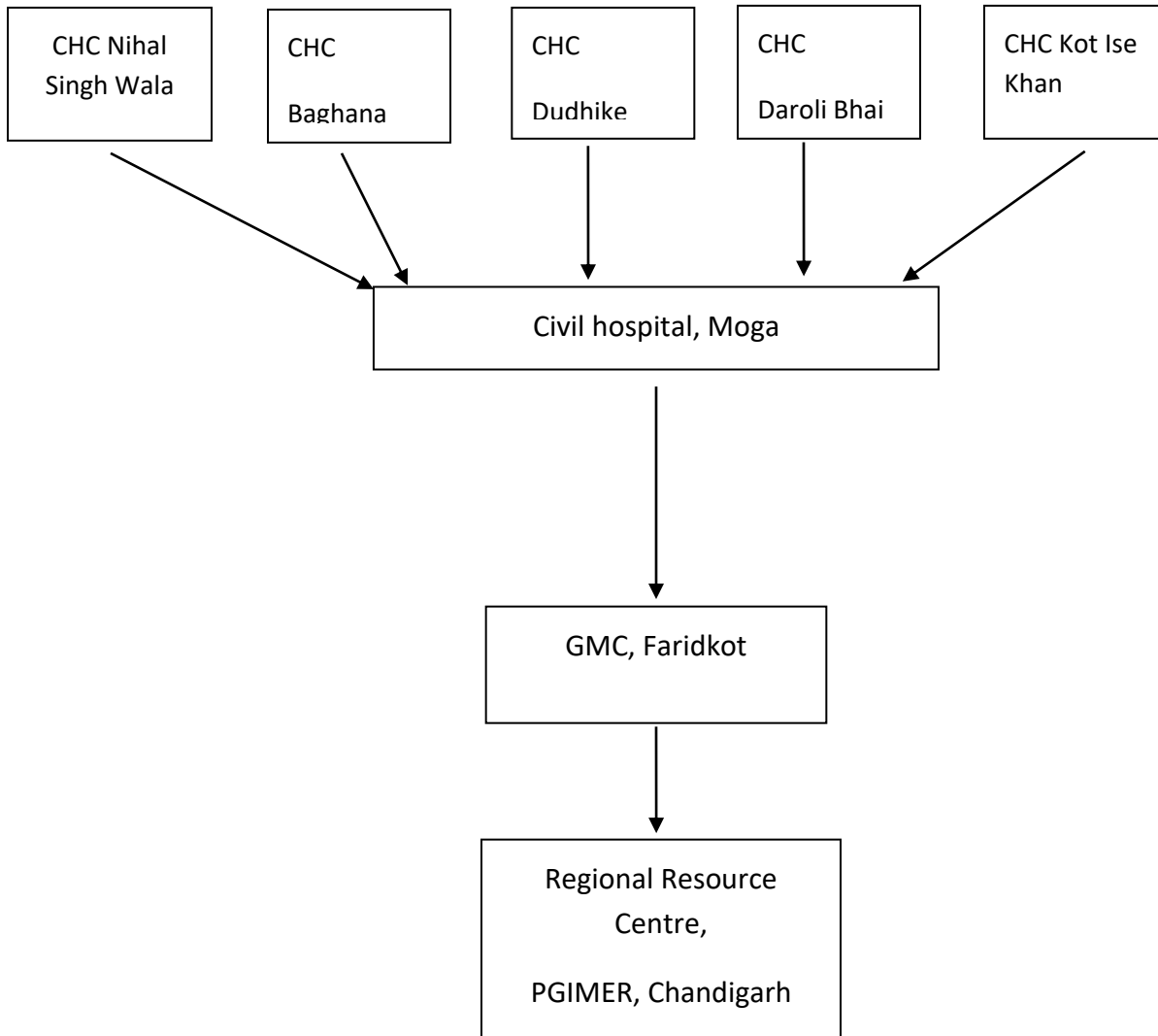
PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for Ferozpur district, Punjab



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for Moga district, Punjab



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

4. Jammu & Kashmir:

b) Kupwara

(District Hospital, Handwara)

District Hospital Kupwara)

Contact: 7006709692

Sher-e- Kashmir Institute of Medical Sciences,
Srinagar > Govt. Medical college, Jammu >RRC,
PGIMER

b) Baramulla

(District Hospital, Baramulla)

Contact: 01952234203

a) Kupwara: Annexure 1

CHC/SDH	PHC (No=31, List Attached)	Sub Centre (No=154, List Attached)	Civil/Regional Hospital
Sogam		-	Kupwara
Zachaldara			Handwara
Kralgund			
Langate			
Kralpora			
Tangdar			

b) Baramula : Annexure 2

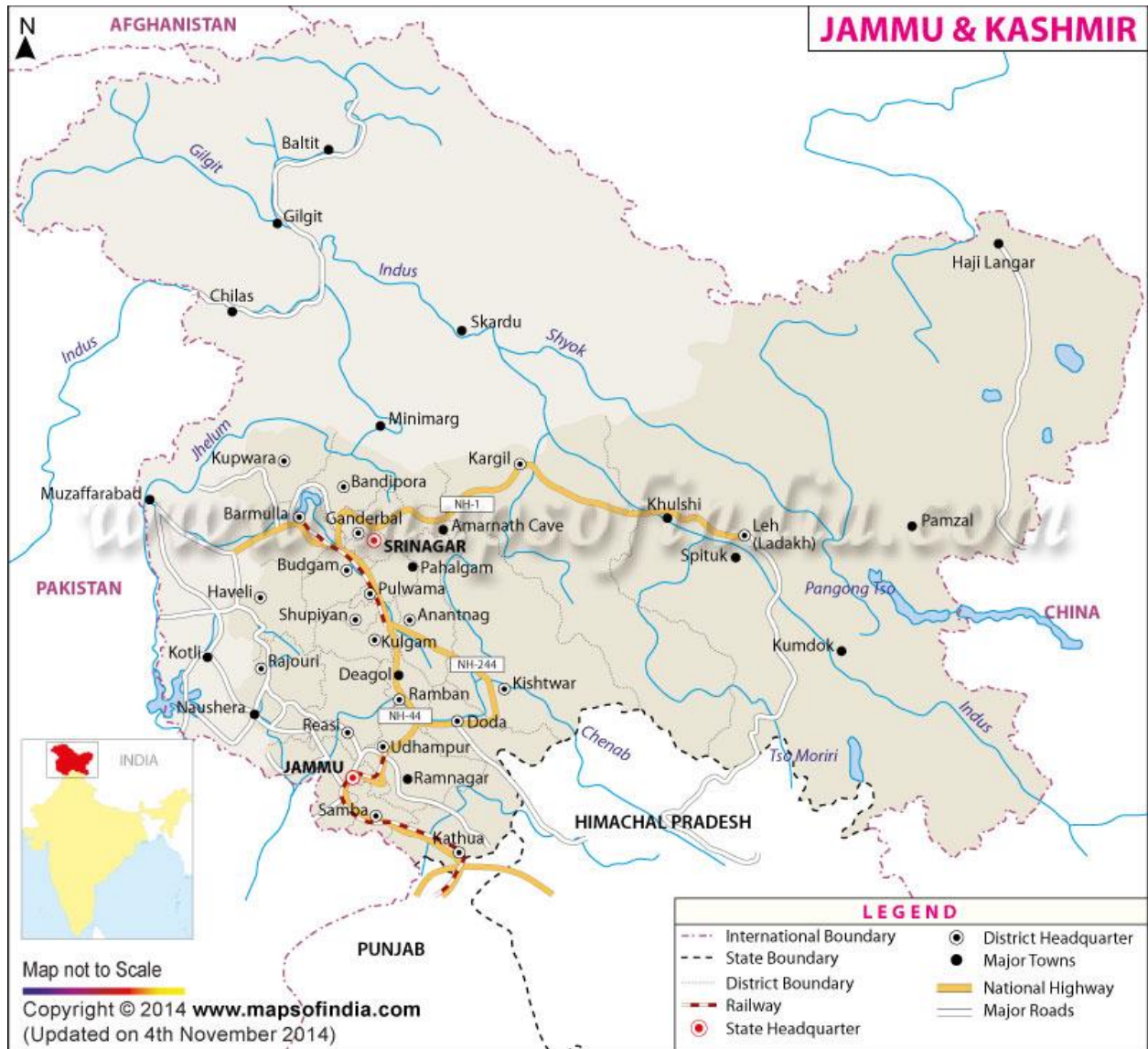
CHC/SDH	PHC (No=28, List Attached)	Sub Centre (No=126, List Attached)	Civil/Regional Hospital
Uri		-	Baramula
Kreeri			
Attan			
Tangmarg			
Sopore			
Chandoosa			

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Requirements:

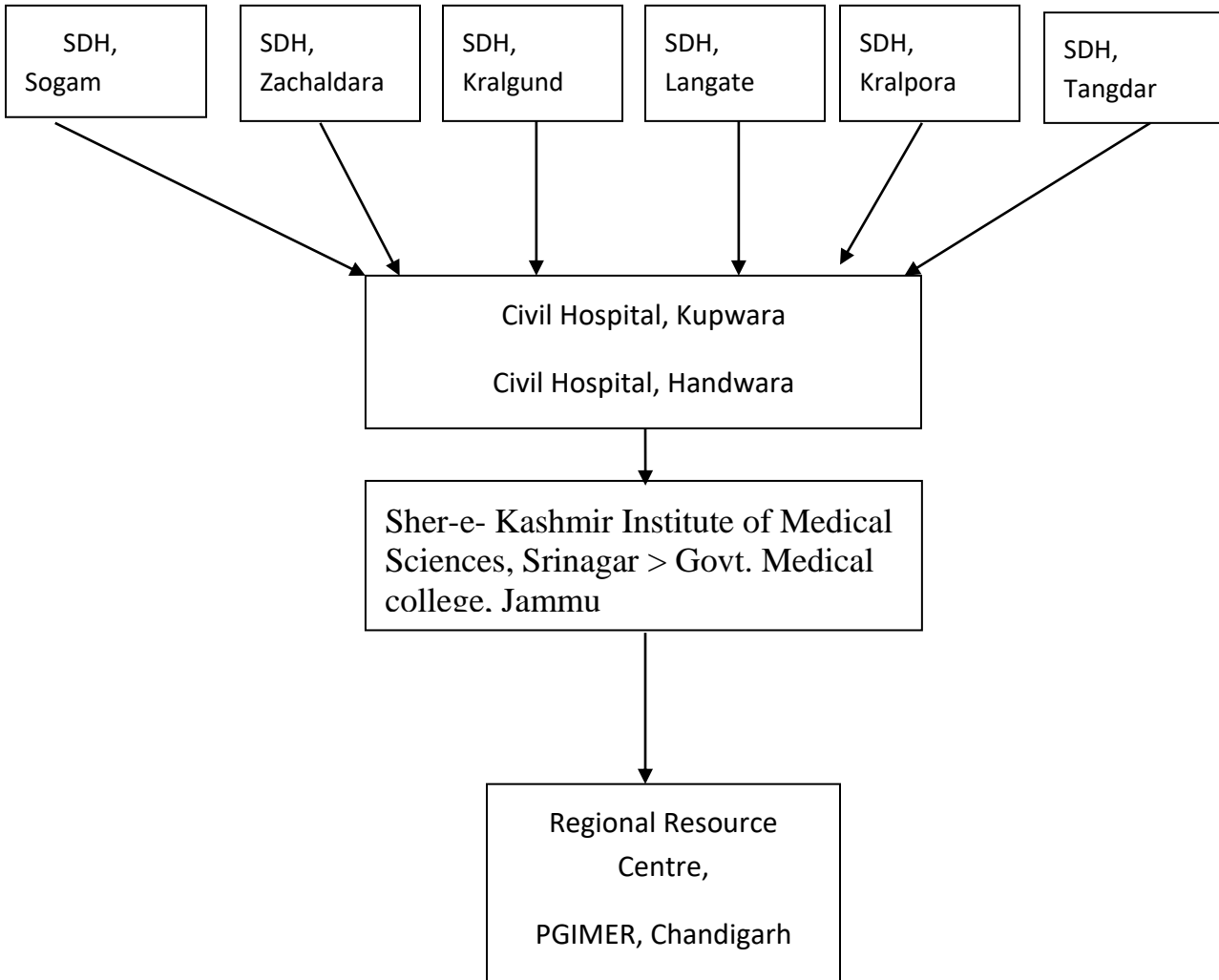
CHC/SDH	PHC (No=31, List Attached)	Sub Centre (No=154, List Attached)	Civil/Regional Hospital
Telemedicine kit -1	Telemedicine kit -1		Video conferencing kit-1
Camera-1	Camera-1		Camera-1
Smart phone/Tablet-	Smart phone/Tablet-		Smart phone/Tablet-1
Scanner-1	Scanner-1		Digital Scanner-1
Computer/Laptop 1	Computer/Laptop 1		Computer/Laptop-1
			Medical Grade monitor-1
Manpower: Medical officer-1, Telemedicine Operator-1	Manpower: Medical officer-1, Telemedicine Operator-1		Manpower: Medical officer-1, Telemedicine Operator-1

PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)



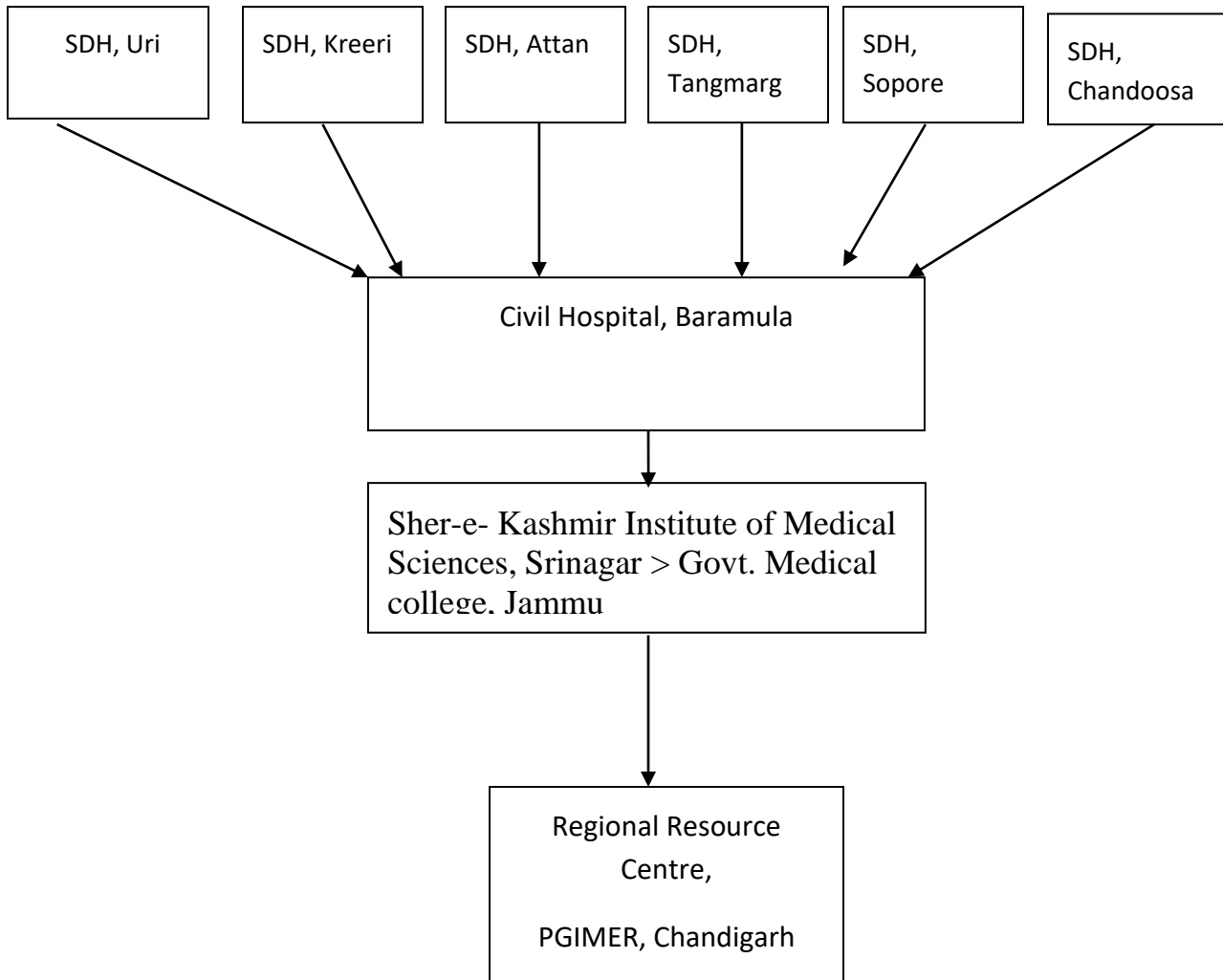
PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for Kupwara district, J& K



PAN India Telemedicine Initiative (RRC, PGIMER, Chandigarh)

Model for Baramula district, J& K



ANNEXURE - 1

Complete Detail Of Health Institutions In kupwara District

[Back to Search](#)

District Hospital = 2 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	DH,D H Handwara	D H Handwara	Kupwara
2	DH,Kupwara	Kupwara	Kupwara
Sub District Hospital/CHC = 6 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	SDH,Sogam	Sogam	Kupwara
2	SDH,Zachaldara	Zachaldara	Kupwara
3	SDH,Kralgund	Kralgund	Kupwara
4	SDH,Langate	Langate	Kupwara
5	SDH,Kralpora	Kralpora	Kupwara
6	SDH,Tangdar	Tangdar	Kupwara
Primary Health Centre = 31 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	PHC,Drugmulla	Drugmulla	Kupwara
2	PHC,Gonipora	Gonipora	Kupwara
3	PHC,Nagri Malpora	Nagri Malpora	Kupwara
4	PHC,Kandi	Kandi	Kupwara
5	PHC,Gundgushi	Gundgushi	Kupwara
6	PHC,Batpora	Batpora	Kupwara
7	PHC,Kalaroos	Kalaroos	Kupwara

8	PHC,Maidanpora	Maidanpora	Kupwara
9	PHC,Lalpora	Lalpora	Kupwara
10	PHC,Tekipora	Tekipora	Kupwara
11	PHC,Machil (SHC)	Machil (SHC)	Kupwara
12	PHC,Cheerkote	Cheerkote	Kupwara
13	PHC,Magam	Magam	Kupwara
14	PHC,Chogal	Chogal	Kupwara
15	PHC,Nathnusa	Nathnusa	Kupwara
16	PHC,Behnipora	Behnipora	Kupwara
17	PHC,Wadipora	Wadipora	Kupwara
18	PHC,Unisoo	Unisoo	Kupwara
19	PHC,Ashpora	Ashpora	Kupwara
20	PHC,Kalamchakla	Kalamchakla	Kupwara
21	PHC,Nowgam	Nowgam	Kupwara
22	PHC,Monbal	Monbal	Kupwara
23	PHC,Trehgam	Trehgam	Kupwara
24	PHC,Panzgam	Panzgam	Kupwara
25	PHC,Harai	Harai	Kupwara
26	PHC,Awoora	Awoora	Kupwara
27	PHC, Keran (SHC)	Keran (SHC)	Kupwara
28	PHC,Villagam	Villagam	Kupwara
29	PHC,aharatpora	aharatpora	Kupwara
30	PHC,Kakroosa	Kakroosa	Kupwara

31	PHC,Gabra	Gabra	Kupwara
Allopathic Dispensary = 8 Click to View the Complete Detail			
Medical Aid Centres = 41 Click to View the Complete Detail			
Sub Centres = 154 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	SC,Keegam	Keegam	Kupwara
2	SC,Water Khani	Water Khani	Kupwara
3	SC,Bramri	Bramri	Kupwara
4	SC,Natnussa/Trichi	Natnussa/Trichi	Kupwara
5	SC,Klumriyal	Klumriyal	Kupwara
6	SC,Shumriyal	Shumriyal	Kupwara
7	SC,Manzhar	Manzhar	Kupwara
8	SC,Hatmulla	Hatmulla	Kupwara
9	SC,Mirnag	Mirnag	Kupwara
10	SC,Pazopora	Pazopora	Kupwara
11	SC,Butargam	Butargam	Kupwara
12	SC,Sahipora	Sahipora	Kupwara
13	SC,Pushwari	Pushwari	Kupwara
14	SC,Bahernag	Bahernag	Kupwara
15	SC, ushi	ushi	Kupwara
16	SC,Karihama	Karihama	Kupwara
17	SC,Jaggarpora	Jaggarpora	Kupwara
18	SC,Gojerpati Keegam	Gojerpati Keegam	Kupwara
19	SC,Arapora	Arapora	Kupwara

20	SC,Kashmiri Monigah	Kashmiri Monigah	Kupwara
21	SC,Khurhama	Khurhama	Kupwara
22	SC,Doniwari	Doniwari	Kupwara
23	SC,Krusan	Krusan	Kupwara
24	SC,Darpora	Darpora	Kupwara
25	SC,Sarkoli	Sarkoli	Kupwara
26	SC,Dupal	Dupal	Kupwara
27	SC,Batnar	Batnar	Kupwara
28	SC,Wavoor	Wavoor	Kupwara
29	SC,Kuligam	Kuligam	Kupwara
30	SC,Chandigam	Chandigam	Kupwara
31	SC,Gundmacher	Gundmacher	Kupwara
32	SC,Dardpora	Dardpora	Kupwara
33	SC,Tangcheck	Tangcheck	Kupwara
34	SC,Surigam	Surigam	Kupwara
35	SC,Hogal	Hogal	Kupwara
36	SC,Madmadev	Madmadev	Kupwara
37	SC,Muqam Lolab	Muqam Lolab	Kupwara
38	SC,Dever	Dever	Kupwara
39	SC,Walkul	Walkul	Kupwara
40	SC,Thijan Kalaroos	Thijan Kalaroos	Kupwara
41	SC,Larkipora	Larkipora	Kupwara
42	SC,Saiyan	Saiyan	Kupwara
43	SC,Siver	Siver	Kupwara

44	SC,Moori	Moori	Kupwara
45	SC,Braripora	Braripora	Kupwara
46	SC,Neelipora	Neelipora	Kupwara
47	SC,Kanwari	Kanwari	Kupwara
48	SC,Vodhpora	Vodhpora	Kupwara
49	SC,Sodal	Sodal	Kupwara
50	SC,Dewaspora	Dewaspora	Kupwara
51	SC,Shogpora	Shogpora	Kupwara
52	SC,Chowgal	Chowgal	Kupwara
53	SC, Shehlala	Shehlala	Kupwara
54	SC,Zab Magam	Zab Magam	Kupwara
55	SC,Wader bala	Wader bala	Kupwara
56	SC,Nihama	Nihama	Kupwara
57	SC,Kremshore	Kremshore	Kupwara
58	SC,Bakhihakar	Bakhihakar	Kupwara
59	SC,Chagmulla	Chagmulla	Kupwara
60	SC,Yamlar	Yamlar	Kupwara
61	SC,Satkoji	Satkoji	Kupwara
62	SC,Ahgam	Ahgam	Kupwara
63	SC,Nildoger Zachaldara	Nildoger Zachaldara	Kupwara
64	SC,Baderkal	Baderkal	Kupwara
65	SC,Suchalyari	Suchalyari	Kupwara
66	SC,Sonwani	Sonwani	Kupwara
67	SC,Palpora	Palpora	Kupwara

68	SC,Ganapora	Ganapora	Kupwara
69	SC,Keno babagund	Keno babagund	Kupwara
70	SC,Propeth	Propeth	Kupwara
71	SC, Hanjash	Hanjash	Kupwara
72	SC,Yaroo	Yaroo	Kupwara
73	SC,Kargam	Kargam	Kupwara
74	SC,Martgam	Martgam	Kupwara
75	SC,Hangah	Hangah	Kupwara
76	SC,Batagund	Batagund	Kupwara
77	SC,Progroo	Progroo	Kupwara
78	SC,Shatgund bala	Shatgund bala	Kupwara
79	SC,Bedbug	Bedbug	Kupwara
80	SC,Haril	Haril	Kupwara
81	SC,Yarhama	Yarhama	Kupwara
82	SC,Lawsoosa	Lawsoosa	Kupwara
83	SC,Mankal	Mankal	Kupwara
84	SC,Bicherwari	Bicherwari	Kupwara
85	SC,Badroha payeen	Badroha payeen	Kupwara
86	SC,Ringpeth	Ringpeth	Kupwara
87	SC,Renon	Renon	Kupwara
88	SC,Panditpora	Panditpora	Kupwara
89	SC,ahama	ahama	Kupwara
90	SC, Kachloo Qaziabad	Kachloo Qaziabad	Kupwara
91	SC,Kunyal Payeen	Kunyal Payeen	Kupwara

92	SC,Gund Razla	Gund Razla	Kupwara
93	SC,Katloora	Katloora	Kupwara
94	SC,Zoonreshi	Zoonreshi	Kupwara
95	SC,Chowkibal	Chowkibal	Kupwara
96	SC,Bugna/pathru	Bugna/pathru	Kupwara
97	SC,Rehigund	Rehigund	Kupwara
98	SC,Manzchatri	Manzchatri	Kupwara
99	SC,Poshpora	Poshpora	Kupwara
100	SC,99 Gulgam	99 Gulgam	Kupwara
101	SC,Harri payeen	Harri payeen	Kupwara
102	SC,Marsari	Marsari	Kupwara
103	SC,Marhama	Marhama	Kupwara
104	SC,Shumnag	Shumnag	Kupwara
105	SC,Parkun	Parkun	Kupwara
106	SC,Kachama	Kachama	Kupwara
107	SC,Kunen	Kunen	Kupwara
108	SC,Saloor	Saloor	Kupwara
109	SC,Kabamarg	Kabamarg	Kupwara
110	SC,Dardpora Kashri	Dardpora Kashri	Kupwara
111	SC,Gulnar	Gulnar	Kupwara
112	SC,Budnambal	Budnambal	Kupwara
113	SC,umgund	umgund	Kupwara
114	SC,Awoora Mirmuqam	Awoora Mirmuqam	Kupwara
115	SC,Milyal	Milyal	Kupwara

116	SC, Hayen	Hayen	Kupwara
117	SC, Khanabal	Khanabal	Kupwara
118	SC, Manwan	Manwan	Kupwara
119	SC, Warsun	Warsun	Kupwara
120	SC, Gagloosa payeen	Gagloosa payeen	Kupwara
121	SC, Kawari Laderwan	Kawari Laderwan	Kupwara
122	SC, Rawatpora	Rawatpora	Kupwara
123	SC, Alachizun	Alachizun	Kupwara
124	SC, Trumnard	Trumnard	Kupwara
125	SC, Keran Bala	Keran Bala	Kupwara
126	SC, Kachaban Jumergund	Kachaban Jumergund	Kupwara
127	SC, Kaniyal	Kaniyal	Kupwara
128	SC, Lilam	Lilam	Kupwara
129	SC, Phalmarg	Phalmarg	Kupwara
130	SC, Hochmarg	Hochmarg	Kupwara
131	SC, Panzva	Panzva	Kupwara
132	SC, Panzalpora	Panzalpora	Kupwara
133	SC, Hhangnikote	Hhangnikote	Kupwara
134	SC, Padergund	Padergund	Kupwara
135	SC, Malikpora	Malikpora	Kupwara
136	SC, Tumina	Tumina	Kupwara
137	SC, Hafrada	Hafrada	Kupwara
138	SC, Nowbug	Nowbug	Kupwara
139	SC, Dohama Ramhal	Dohama Ramhal	Kupwara

140	SC,Nichyan	Nichyan	Kupwara
141	SC,Tadd	Tadd	Kupwara
142	SC,Kandi	Kandi	Kupwara
143	SC,Chambkote	Chambkote	Kupwara
144	SC,Baderkote	Baderkote	Kupwara
145	SC,Samari	Samari	Kupwara
146	SC,Jada	Jada	Kupwara
147	SC,Tribuni	Tribuni	Kupwara
148	SC,Teethwal	Teethwal	Kupwara
149	SC,Hajnar	Hajnar	Kupwara
150	SC,Gundishat	Gundishat	Kupwara
151	SC,Dildhar	Dildhar	Kupwara
152	SC,Khowerpora	Khowerpora	Kupwara
153	SC,Kona Gabra	Kona Gabra	Kupwara
154	SC,Batlan Gundi Gujran	Batlan Gundi Gujran	Kupwara
District TB Centre = 1 Click to View the Complete Detail			
Total Centres : 243			

ANNEXURE - 2

Complete Detail Of Health Institutions In baramulla District

[Back to Search](#)

District Hospital = 1 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	DH,Baramulla	Baramulla	Baramulla
Sub District Hospital/CHC = 6 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	SDH,Uri	Uri	Baramulla
2	SDH,Kreeri	Kreeri	Baramulla
3	SDH,attan	attan	Baramulla
4	SDH,Tangmarg	Tangmarg	Baramulla
5	SDH,Sopore	Sopore	Baramulla
6	SDH,Chandoosa	Chandoosa	Baramulla
Primary Health Centre = 28 Click to View the Complete Detail			
SNo.	Name of Institution	Location	Block
1	PHC,Mohura	Mohura	Baramulla
2	PHC,Bijhama	Bijhama	Baramulla
3	PHC,Boniyar	Boniyar	Baramulla
4	PHC,Shrakwara	Shrakwara	Baramulla
5	PHC,Kalantra	Kalantra	Baramulla
6	PHC,Khaitangan	Khaitangan	Baramulla
7	PHC,Wanigam	Wanigam	Baramulla
8	PHC,Singpora	Singpora	Baramulla

9	PHC,Dangiwacha	Dangiwacha	Baramulla
10	PHC,Rohama	Rohama	Baramulla
11	PHC,Panzalla	Panzalla	Baramulla
12	PHC,Khore	Khore	Baramulla
13	PHC,G K Qasim	G K Qasim	Baramulla
14	PHC,Sriwarpora	Sriwarpora	Baramulla
15	PHC,Gulmarg	Gulmarg	Baramulla
16	PHC,Mulgam	Mulgam	Baramulla
17	PHC,Haraboora	Haraboora	Baramulla
18	PHC,Hariwatnoo	Hariwatnoo	Baramulla
19	PHC,Kunzer	Kunzer	Baramulla
20	PHC,Ladoora	Ladoora	Baramulla
21	PHC,Dooru	Dooru	Baramulla
22	PHC,Tarzoo	Tarzoo	Baramulla
23	PHC,Tujer Sharief	Tujer Sharief	Baramulla
24	PHC,Bamai	Bamai	Baramulla
25	PHC,Hardshiva	Hardshiva	Baramulla
26	PHC,Sheeri	Sheeri	Baramulla
27	PHC,Feteh Garh	Feteh Garh	Baramulla
28	PHC,Delina	Delina	Baramulla
Allopathic Dispensary = 21 Click to View the Complete Detail			
Medical Aid Centres = 13 Click to View the Complete Detail			
Sub Centres = 126 Click to View the Complete Detail			

SNo.	Name of Institution	Location	Block
1	SC,Nowshera	Nowshera	Baramulla
2	SC,Sultandaki	Sultandaki	Baramulla
3	SC,Gowhalan	Gowhalan	Baramulla
4	SC,Mayan	Mayan	Baramulla
5	SC,Warikhan	Warikhan	Baramulla
6	SC,Paran Peela	Paran Peela	Baramulla
7	SC,Soura	Soura	Baramulla
8	SC,Cheeranda	Cheeranda	Baramulla
9	SC,Budyali	Budyali	Baramulla
10	SC,Burnait	Burnait	Baramulla
11	SC,Hellan Pehlipora	Hellan Pehlipora	Baramulla
12	SC,Dachi	Dachi	Baramulla
13	SC,Banday	Banday	Baramulla
14	SC,Zichanpora	Zichanpora	Baramulla
15	SC,Salamabad Dachina	Salamabad Dachina	Baramulla
16	SC,Dani Sayedan	Dani Sayedan	Baramulla
17	SC,Trekanjan	Trekanjan	Baramulla
18	SC,Limber	Limber	Baramulla
19	SC,Ishan	Ishan	Baramulla
20	SC, Boniyar	Boniyar	Baramulla
21	SC,Nambla	Nambla	Baramulla
22	SC,Ginjal	Ginjal	Baramulla
23	SC,Nowpora	Nowpora	Baramulla

24	SC,Dudbugh	Dudbugh	Baramulla
25	SC,Athoora	Athoora	Baramulla
26	SC,Wagoora	Wagoora	Baramulla
27	SC,Bulgam	Bulgam	Baramulla
28	SC,Khaipora	Khaipora	Baramulla
29	SC,Patchar	Patchar	Baramulla
30	SC,Malapora	Malapora	Baramulla
31	SC,Laripora	Laripora	Baramulla
32	SC,andfaran	andfaran	Baramulla
33	SC,Oplina	Oplina	Baramulla
34	SC,Kanispora	Kanispora	Baramulla
35	SC,Sangri Payeen	Sangri Payeen	Baramulla
36	SC,Khanpora	Khanpora	Baramulla
37	SC,Hardu Khul	Hardu Khul	Baramulla
38	SC,Wulraman	Wulraman	Baramulla
39	SC,Sultanpora	Sultanpora	Baramulla
40	SC,Sheikhpora	Sheikhpora	Baramulla
41	SC,Shirpora Kandi	Shirpora Kandi	Baramulla
42	SC,Watergam	Watergam	Baramulla
43	SC,Zeethan	Zeethan	Baramulla
44	SC,Saflipora	Saflipora	Baramulla
45	SC,Pazwalpora	Pazwalpora	Baramulla
46	SC,Sheikhpora	Sheikhpora	Baramulla
47	SC,Shatoosa	Shatoosa	Baramulla

48	SC,Fidarpora	Fidarpora	Baramulla
49	SC,kangroosa	kangroosa	Baramulla
50	SC,Binner	Binner	Baramulla
51	SC,Vankeray	Vankeray	Baramulla
52	SC,Old town Bla	Old town Bla	Baramulla
53	SC,Vohlutra	Vohlutra	Baramulla
54	SC,Khanmoha	Khanmoha	Baramulla
55	SC,Brandob	Brandob	Baramulla
56	SC,Tregpora	Tregpora	Baramulla
57	SC,Hajibal	Hajibal	Baramulla
58	SC,Khadinyar	Khadinyar	Baramulla
59	SC,Khoshipora	Khoshipora	Baramulla
60	SC,Reban	Reban	Baramulla
61	SC,Shirpora	Shirpora	Baramulla
62	SC,Reshyarpora	Reshyarpora	Baramulla
63	SC,Chukar	Chukar	Baramulla
64	SC,Khanpath	Khanpath	Baramulla
65	SC,Dever	Dever	Baramulla
66	SC,Ghatgopalan	Ghatgopalan	Baramulla
67	SC,Andergam	Andergam	Baramulla
68	SC,Archanderhama	Archanderhama	Baramulla
69	SC,Ghoom	Ghoom	Baramulla
70	SC, Pakiapora	Pakiapora	Baramulla
71	SC,Mundyari	Mundyari	Baramulla

72	SC,Nowlari	Nowlari	Baramulla
73	SC,Rambigarh	Rambigarh	Baramulla
74	SC,Yedipora	Yedipora	Baramulla
75	SC,Harinara	Harinara	Baramulla
76	SC,Hamray	Hamray	Baramulla
77	SC,Agrikalan	Agrikalan	Baramulla
78	SC,Chainabal	Chainabal	Baramulla
79	SC,Matipora	Matipora	Baramulla
80	SC,Gohaltengpora	Gohaltengpora	Baramulla
81	SC,Hardshura	Hardshura	Baramulla
82	SC,Hajiba	Hajiba	Baramulla
83	SC,Bunsaran	Bunsaran	Baramulla
84	SC,Nambli Nar	Nambli Nar	Baramulla
85	SC,Katibugh	Katibugh	Baramulla
86	SC,Ugmoona	Ugmoona	Baramulla
87	SC,Bandibala	Bandibala	Baramulla
88	SC,Waripora	Waripora	Baramulla
89	SC,Harnow	Harnow	Baramulla
90	SC,Pinjoora	Pinjoora	Baramulla
91	SC,Druru	Druru	Baramulla
92	SC,Baderkote	Baderkote	Baramulla
93	SC,Larkipora	Larkipora	Baramulla
94	SC,Rawatpora	Rawatpora	Baramulla
95	SC,Kreshama	Kreshama	Baramulla

96	SC,Ganibaba	Ganibaba	Baramulla
97	SC,Seerjagir	Seerjagir	Baramulla
98	SC,Krankshivan village	Krankshivan village	Baramulla
99	SC,Wadoora	Wadoora	Baramulla
100	SC,Lalad	Lalad	Baramulla
101	SC,Saidpora	Saidpora	Baramulla
102	SC,Gundbrath	Gundbrath	Baramulla
103	SC,Hatlangoo	Hatlangoo	Baramulla
104	SC,Adipora	Adipora	Baramulla
105	SC,Breth Kalan	Breth Kalan	Baramulla
106	SC,Wagud	Wagud	Baramulla
107	SC,Dengerpora	Dengerpora	Baramulla
108	SC,Seelu	Seelu	Baramulla
109	SC,Arapora	Arapora	Baramulla
110	SC,Sagipora	Sagipora	Baramulla
111	SC,Muqam Mir Shahid	Muqam Mir Shahid	Baramulla
112	SC,Krankshivan Colony	Krankshivan Colony	Baramulla
113	SC,Nowhamam	Nowhamam	Baramulla
114	SC,Vamberzal wari	Vamberzal wari	Baramulla
115	SC,Watlab	Watlab	Baramulla
116	SC,Trumbgund	Trumbgund	Baramulla
117	SC,Sangramma	Sangramma	Baramulla
118	SC,Harwan	Harwan	Baramulla
119	SC,Gantmulla	Gantmulla	Baramulla

120	SC,Chinad	Chinad	Baramulla
121	SC,Johama	Johama	Baramulla
122	SC,Khawaja Bagh	Khawaja Bagh	Baramulla
123	SC,Ushkura Bala	Ushkura Bala	Baramulla
124	SC,Gohan	Gohan	Baramulla
125	SC,Kitchama	Kitchama	Baramulla
126	SC,Boniyar	Boniyar	Baramulla
District TB Centre = 1 Click to View the Complete Detail			
Total Centres : 196			