Case Studies on e-Governance in India

104 Call Centers Deliver Health Advice in Maharashtra

Dr. A. K. Rao
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About the Initiative

This publication is a part of the Capacity Building initiative under the National e-Governance Plan (NeGP) by NeGD with an aim to draw out learnings from various projects implemented in various States/UTs and sharing this knowledge, in the form of case studies, with the decision makers and implementers to benefit them, by way of knowledge creation and skill building, from these experiences during planning and implementation of various projects under NeGP.

Conceptualised and overseen by the National e-Governance Division (NeGD) of Media lab Asia/DeitY these case studies are submitted by e-Governance Practitioners from Government and Industry/Research Institutions. The cases submitted by the authors are vetted by experts from outside and within the Government for learning and reference value, relevance to future project implementers, planners and to those involved in e-governance capacity Building programs before they are recommended for publication. National Institute for Smart Government (NISG), working on behalf of this NeGD provided program management support and interacted with the authors and subject matter experts in bringing out these published case studies. It is hoped that these case studies drawn from successful and failed e-Governance projects would help practitioners to understand the real-time issues involved, typical dilemmas faced by e-Governance project implementers, and possible solutions to resolve them.

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Abstract

Health Information Helpline (HIHL) is a health contact center that aims to reduce the minor ailment load on the public health system. At the cost of a phone call any person/user can receive medical information and advice, request directory information, or lodge specific service complaints. Qualified and trained paramedics and super specialists utilize cutting-edge software to triage callers. Medically validated algorithms empower paramedics and assist doctors to effectively drive this high level of standardized care forward. To meet the needs of the Government of Maharashtra Public Health Department, Health Management Research Institute (HMRI) customized its HIHL platform by building several algorithms to serve specific requirements of the callers.

Key Words: Health Helpline, Call Center, ICT

Note to Practitioners/Instructors

Teaching Objectives:

1. Understand how ICT could be effectively be used to serve the citizens
2. Understand the problems, challenges and issues faced in delivering health in rural areas
3. Understand the importance of ICT for the health workers to be effective

Case Questions:

1. Draw a process map for the call flow.
2. Create a project plan for implementation.
3. What are the service level agreements required for the success of the project?
4. Discuss the implementation approach.

Project Context

There is a vast disparity between the availability of urban and rural healthcare workers in India. Although 69% of India’s population inhabits rural areas, only 26% of doctors practice there. Urban India’s physician density is 14 physicians per 10,000 populations, on par with many developed countries. Rural India’s physician density is 2 physicians per 10,000 populations.

National Rural Health Mission (Maharashtra) is making constant and concerted effort to formulate and execute schemes to ensure adequate health care services to the people in line with the National Health Policy. While implementing these schemes, steps are taken to make improvements in the health care system within the State to cater to the health needs
of the people in rural areas, particularly in tribal and backward regions of the State. The key objectives of the health programs are as follows.

1. To provide preventive and curative health care services adequately to all the people of the State with greater emphasis on quality

2. To ensure greater access to primary health care by bringing medical institutions very nearer to the people through mobile health units, particularly to the under-served and backward districts

3. To reduce maternal and infant mortality drastically by extending better and faster health services to them.

4. To improve hospital services at the secondary levels especially in terms of effective infrastructure and man power.

5. To give training to doctors, nurses and other paramedical staff to meet the health demands within the State by upgrading their skills and knowledge

6. To implement various national health programs.

7. To provide health education for the development of healthy life style.

There are multiple challenges in providing good quality Health care. First, living in a remote area devoid of many basic facilities particularly distanced from the medical services results in delayed diagnose on illness. There are many constraints for the patient to reaching the medical center for treatment. Inability to travel far distances alone leads to dependency on someone to assist him/her. This turns out to be expensive both in terms of forgoing daily wage and cost of a visit for few days. Treatment is often not rendered effectively due to lack of information and access to doctor.

Secondly, updated Health Information and Medical resources are very essential for the successful implementation of health program. Predominantly Doctors are lacking resources to extend effective medical care to the patient who needs diverse medical requirement.

Thirdly, treatment provided is often proven to be ineffective as health care infrastructure is too poor resulting in hospital acquired infections. Finally the poor patient is always at a disadvantage in many ways even in trying to avail the services that are feasible so tends to compromise on health by surrendering to his/her illness with no treatment to cure it.

The challenges listed above can be addressed in the following ways. Firstly, Doctors could visit rural habitations on a regular basis to diagnose and treat the patients for acute ailments or chronic Diseases. However, it was observed lack of motivation for doctors to visit remote areas and at times to reside in rural areas even for a few days.

Secondly, rural healthcare workers could be trained to fill the gap to do the first aid and contact the specialist for critical cases. However these rural Health care workers can only
identify the primary health condition of the patient and cannot be present instantly in times of emergency when they are needed the most. Even the remote habitation for the healthcare workers is subjected to many grievances.

Thirdly, cutting-edge technologies could be leveraged to minimize the need for physical presence of skilled human resources in remote areas. The HIHL initiative leverages on cutting edge technologies to address the Health care requirements across the geography by providing Health care information and medical advice to peripheral public health personnel through a round the clock call center. Such advice is given to enable the peripheral public health personnel to take quick decisions required to provide effective and quality health care.

Rather than targeting the general population, the helpline in Maharashtra serves the health professionals viz., Accredited Social and Health Activist (ASHA), Auxiliary Nurse and Midwife (ANM) and Multi-Purpose Health Worker (MPHW) who are trained and certified social activists and health professionals who represent the General public health issues. This service is also extended to the Medical Officers working in the government health set up. ASHA will reach out to the villagers and monitor their health status in their purview and for more medical requirements and in emergency they can call to HIHL for a detailed medical assistance. HIHL gathers the information identify the symptoms and provide assistance to the health professional by giving information on treatment for the referred patients to their illnesses and if needed refer them to super specialists.

The call center is manned by specialties like gynecology, pediatrics, general medicine, public health and general surgery with a capacity of 12 qualified doctors and 20 paramedics, along with 7 staff for administration round the clock. Total number of calls received from the health care providers till 31st March 2013 is 2,33,492. Out of these, 51, 203 calls were serviced by the specialists. 104 Health Advice Call Centre, Pune has been voted as one of the best “Innovation in Healthcare through PPP” by elIndia. eINDIA is an annual conference run by Elets Technomedia to showcase and discuss the most significant technological innovations in India, with a special emphasis on health, education and governance. Health Advice Call Center awarded “Gold prize” in Maharashtra e-Governance in Innovative Use of IT in Governance.

HIHL project aims to reduce death rate, Infant mortality rate, and maternal mortality rate and disease morbidity through the medical triage with the help of a Call Centre. The Call Centre also provides instructions to the Health Care providers, Medical Officers working in government health care system during epidemics and other health campaigns as well. Besides, the paramedical and other medical staffs working in School Health Program are advised on the medical checkup and treatment.
HIHL project is implemented by Health Management and Research Institute (HMRI), a registered not-profit organization based in Hyderabad, Andhra Pradesh. HMRI has taken birth under the able administration and support by Satyam Foundation in the year 2007 with a vision that healthcare must be accessible, affordable and available to all segments of the population, especially those vulnerable. In order to actualize this vision, HMRI leverages cutting edge information and communication technologies to cut costs without compromising quality and forge public-private partnerships to scale its solutions. Within one years’ operations HMRI grew by operating a 400 seated Call Centre for providing Health information to the vulnerable populations living in habitations where the public health systems could not reach and also handled 375 Mobile units for reaching out to the poor right at their door step.

Right from inception the service activities of HMRI are recognized and applauded. HMRI started several verticals of health care activities like telemedicine centers, Integrated Disease Surveillance Program, Mother and Child Tracking System etc. predominantly with the support of the Government/NRHM under Public Private Partnership and by other international and national voluntary organizations like MacArthur Foundation, Deshpande Foundation etc. Currently, It was adopted by Piramal Foundation a CSR arm of Piramal Group. These people friendly successful health programs of AP has created interest in other states also to run similar health programs to provide better health services. HMRI believes that everyone has a right to validated health information. Information and communication technologies are essential for providing both low cost and high quality care. Public-private partnerships are one of the best ways to achieve massive scale. HMRI’s core beliefs form the foundation of the model. The solution can be broken into three programs:

1. Health Information Helpline provides medical advice round the clock
2. Mobile Health Services provides screening and follow up services for maternal and child health and chronic disease conditions
3. Telemedicine connects remote patients with urban doctors to deliver specialist care.

Each of these solutions integrates with India’s existing public health system by leveraging existing human resources, referring patients and reducing the load of minor ailments on the public health system. HMRI is headquartered in Hyderabad, monitoring all its operations across several states like Karnataka, Maharashtra, Rajasthan, Assam and Chhattisgarh.

Project Overview

Maharashtra is the third largest state in India by population. Maharashtra has 12% shortage of Primary Health Centers and Community Health Centers combined as well as a 35% short-
age of specialists at Community Health Centers. Despite these shortcomings, Maharashtra performs well compared to India’s national averages on key health indicators. The state’s total fertility rate is 2.0 (compared to a national average of 2.6), maternal mortality ratio is 130 (compared to 212) and infant mortality rate is 33 (compared to 50).

The Government of Maharashtra along with NRHM set up an inbound domestic call centre for the convenience of the health staff. This Call Centre functions as a helpdesk providing information about health activity and medical care. Health Advice is given to callers who dial toll free 3 digit number 104 from landline or any mobile phone to take mobile consultation. The call Centre renders advice to ANMs, ASHAs, other Health staff and MOs at PHC by trained paramedical and Specialists. Treatment to common man who resides in Remote areas is provided by assisting the health care professionals who reach out to them directly and monitor them on scheduled visits. As a design the Government of Maharashtra with NRHM a common man should approach through ASHA, ANM, MPHW who are trained in medical line. A panel of specialists, in addition to the paramedical team, will be available at the call Centre round the clock throughout the year for giving telephonic advice to patients. This specialist doctors guide the health care providers in remote villages who in turn would provide timely referral, proper intervention and management of the patients.

The services are available in three languages, viz. Marathi, Hindi and English. The paramedics are well qualified as per the requirements of the Government of Maharashtra. Further, specialist doctors viz., Pediatrician, Obstetricians & Gynecologist, General Surgeon, Physician and Public Health Specialist are available round the clock in the call Centre.

Immediate Objectives:-

- Manage the Health Advice Call Centre to provide round the clock uninterrupted services by putting in place robust technical and managerial support system
- Provide Medical advice by specialist doctors and paramedical staff for patient care
- Provide guidance to the Medical and Paramedical Health Care Provider for School Health Program (Examination and Treatment)
- Provide Information to Health Care Providers for quick action in epidemic outbreak, disaster, natural calamities and in major accidents
- Provide Directory Information of Government hospitals/Institutes including Blood bank and Eye bank for proper and early referral

However, the Long Term Objectives are stated as to integrate with other health initiative in the state such as:

- Emergency Medical Support
- Rajiv Gandhi Jeevandai Arogya Yojna
- Telemedicine
• Mobile Medical Unit.
• Any other State & National Health Programs.

Stakeholders
The services are reaching the health care social workers or the doctors and other paramedics in the PHC of the state by systematic support extended by various departments. Clinical Team from HMRI consists of doctors who continually update the medical content and train the medical officers and the other staff at the Call centres. IT support team provides customised IT services to respective call centres by enabling all the applications running efficiently by ensuring data security and administration controls.

Health care professionals contact the Call Centre and obtain relevant advice from specialists enabling them treat the patients with a better clarity. The specialists make use of the Algorithms to provide advice both for the social health workers and doctors at PHC to make the advice comprehensive. Algorithms are structured set of probing questions relevant to the concerned disease with robust validation by highly experienced and well qualified medical specialists who are professors at the teaching hospitals. The application software used at Call centres is user friendly and compatible which is maintained by the IT services personnel based at Call Centre who is trained in network and software and is assisted by a team of software professionals from Head office. The Government of Maharashtra and NRHM coordinates with HMRI to ensure the services are provided to assist health workers viz., doctors, paramedics and volunteers on Medical information. Therefore, the concerned stakeholders are as follows:

• Citizens especially living beyond the reach of the physical infrastructure like PHC
• Paramedics (ASHA, ANM, MPHW)
• Medical Officers
• Piramal Foundation
• Health department
• Medical Officers
• ANMs
• ASHAs

The expected outcomes of this project are:
• Access to health information for Peripheral Health and Medical Staff
- State would be better equipped to handle any health crisis by effectively managing the information dissemination process, and directing Medical and paramedical Personnel to the right place in the least amount of time
- Reduction in morbidity and mortality of patients
- State would be able to optimize the resources in the Healthcare- funds, personnel, facilities etc
- Effective implementation of all National Health Program
- One-to-one and easy communication with health care staff.

**Application for call center:**

This application is a medical triage application, which assists the helpdesk paramedics in providing sound advice to the beneficiary. For example, a caller asks the paramedic what should be done if a specific condition exists. Then the paramedic refers to the proprietary algorithm and arrives at the probable condition and either gives advice or refers to specialist if required. The algorithm checks the severity levels and prompts to advice the patient to refer to emergency or escalates the call to the specialist. The application also includes a detailed MIS system for generating system logs. A typical call flow is described below:

**Call Flow:**

- The call routing of any call coming to the call center is the following:
- A beneficiary dials the three digit 104 toll free telephone number.
- The call is received by a paramedic
- If the beneficiary needs emergency care, the call is routed to EMS helpline or to the various Health Institutes and their ambulance services
- The paramedic provides information to the beneficiary as per the data that is available with the helpdesk
- If the beneficiary asks for medical advice then the paramedic will forward call to specialist doctor

The Paramedic provides advice with the support of clinical decision support system available to him/her.
CALL CENTRE INTERFACE:-

This provides the interface to the user and operators of Call Centre for logging, tracking, resolution and closing of calls. The helpdesk staff consists of five specialist doctors working per shift between 7 AM to 9 PM and one medical officer during night shift. There are eight paramedical staffs per shift and scaled down during night shift.

Average calls serviced to ASHAs, ANMs/MPWs, MOs and Others per day by each specialty during the months of September to November, 2013 is shown in the graph- 1 below. Average calls serviced per day by each specialty are shown in the graph -2 below.
Average calls serviced per day by each specialty

Average calls serviced to ASHAs, ANMs/MPWs, MOs and Others per day by each specialty - November, 2013
Training is provided to the paramedics who are qualified B Pharma or BAMS and have got in-depth understanding on identifying the disease symptoms. Basing on the content in the standard algorithms paramedic provides the medical advice. Besides, they are also trained on the department roles and the calls handled for seekers of information with department specific information that is required for the smooth operation of the system.

The staff were trained on general aspects of working in a Call Centre, as well as using various IT systems including the medical triage system. The content of the training is on the following topics.

- Professional Customer Care.
- Correct pronunciation (English, Hindi and Marathi)/ Using phrases properly
- Probing Techniques to identify the correct Algorithm.
- Call handling/ Dispositions
- Reporting
- Quality Assurance/Monitoring
- Proper use of the various IT systems
- Call flow
- Demographic overview

The recruitment process is stringent and the traits of a successful call taker are observed in all the candidates before the selection is made. Primarily the selection process for the role of the paramedics would ensure the candidature is proficient in three languages. For upgrading their language skill specific to the paramedic post they are trained in three languages continually. Their performances are assessed through continuous assessment by a transaction monitoring process to generate quality score basing on their communication skills, good data entry skills, ability to interpret needs and articulate best responses, ability to deliver good rebuttal if a caller creates a nuisance and ability to mirror the caller's style etc.

**First Hand Experience:**

As this service is particularly helping the rural people majority of who fall below the poverty line in many ways. The call center has supported the poor especially in terms of gaining the health status and maintaining better life styles suggested over the call. Self-care proved to be a cost effective and preventive treatment which has been saving their time, earnings and avoid additional expenses by visiting the hospitals. The call volumes month on month is on an increasing trend signifying the impact and good response the service is receiving right from inception of the program.
The infrastructure requirements for the call center are as follows:

- The call Centre receives incoming calls from the public telephone operator through state-of-the-art switch/EPABX
- The call Centre network has multi-level security mechanism to protect it from attackers, hackers, worms, viruses, spamming etc.
- There is adequate provision in the call Centre for maintain the required data redundancy and backup of the call record database application. There is no loss of data or discontinuity of service due to hardware/server failure
- The call Centre has provision for full generator backup to run the call Centre in case of failure of power supply
- The call Centre has sufficient number of the incoming lines with a facility to increase additional lines in future.
- The call Centre has sufficient spare capacity to house sufficient number of additional seats. However, space is provided by the department but service provider has the ability to make provision for additional seats by setting up entire infrastructure in such a way that the call centre shall have capability to logically partition the switching system to avoid interference with other set of users
- Call Centre agents are capable to take calls, answer in the chosen language Marathi, Hindi & English. All interactions are logged and maintained in the call Centre for later reporting and analysis
- Each workstation is latest state-of-the-art PC with color TFT monitor, USB based optical mouse, key board etc.
- Call record management software is used to record the call details and is able to issue a unique query number for each call for future reference
- The call centre desks are connected to LAN (Local Area Network) connection for the execution of application software
- Each workstation has good quality headsets and telephone instruments from reputed brand with advanced features like background noise cancellation
- It has voice logging facility for recording and playing back agents conversations, so that it can be used to monitoring/analysis/review on regular basis.

**Role of HMRI**

Provide complete work plan for Call Centre with detailed Specifications of Hardware and Software specifically required for Health information help line which includes scope of work and also has provision for up gradation / addition as per Government of Maharash-
tra/NRHM directions/requirements in future. The software so developed will essentially be licensed and sponsored by the Government of Maharashtra.

- Be responsible for rendering the services from the inbound call center. HMRI is solely responsible for obtaining all statutory approvals required for operating such a service.
- Customize the IT Solution to meet the local needs in the State of Maharashtra in the local language Marathi, Hindi and English
- Set up and Commence Health Advice Call Centre.
- Put in place, standardized and validated algorithms that cover major prevalent diseases in India, for using in medial triage.
- Customize the IT solution to meet the local language needs in the state of Maharashtra
- The HMRI will ensure necessary power backup using both UPS and Generator with a backup of three each
- Recruit, train and induct necessary medical, paramedical and technical resources
- Procure the necessary hardware and software including computers, routers, switches, networking and it is hosted at PUNE
- Engage adequate staff to run the Centre in full capacity. The State Health Society reserves the right to conduct inspection of any employee and call Centre at any time. Recruit (Medical Specialists, Medics and Para medical and other staff), train and maintain the necessary staff to run the Centre in optimum capacity. There area around 120,000 Social Health workers who are assigned to defined habitations. Out of which 80,000 are ASHA, 14000-ANM’s,8000 Doctor’s &MPHW’s—18000 who are using the HIHL for the betterment of Medical service.
- Provide all call-logs, voice-logs, voice recordings and other necessary details as and when required by the government.
- Submit to State Health Society monthly reports (for reference a latest monthly report is shared )
- Manage the Health Advice Call Centre to provide round the clock uninterrupted services by putting in place robust technical and managerial support system. Especially the calls in the night are taken very seriously as they are considered as sensitive hours. Even though the call volume is low almost one fourth of the day’s call volume, it is made sure to keep 30 % of the total staff capacity available.
- Manage the data generated through fail proof Data Storage System, take periodic back-ups and arrange for furnishing of Daily Reports to designated Health Department Officials.
- Obtain three digit dedicated toll free telephone number.

**ROLE OF STATE HEALTH SOCIETY, NRHM, GOVERNMENT OF MAHARASHTRA PUBLIC HEALTH DEPARTMENT:**

- Authorize HMRI to establish and manage the Health Advice Call Centre.
- Release the Capex Funds after the signing up of MOU with HMRI and Opex on a quarterly basis.
- Provide premises for setting up the Call Centre (Health Information Helpline) by the Govt. of Maharashtra
- Arrange for audit of accounts by auditors appointed from the panel of NRHM
- The ownership of all assets of project will vest with Government of Maharashtra and
- Validate the algorithm that will be used by HMRI for medical triage.

**Quality Assurance and Service Level Agreements:**

All calls received by the paramedics second by second are recorded, enabling electronic transfer of the recorded call (*.mp3 files) to the Department of Health via email within 24 hours upon request. These same recorded calls are also sent to the Department on CD-ROM when required. Such calls are also used for paramedic training and coaching for which supervisor will listen to calls for improving the performance of paramedics.
About 90,000 last mile Health Workers of Maharashtra such as Male Health Workers, Auxiliary Nurse and Midwives, Medical Officers are connected through this 104 call centre. This programme went live from January 2012 and the statistics of call volume is shown in the above mentioned line diagram.

**Issues and Challenges faced during Implementation**

- Customization of the software to suit the local languages
- Validate and include additional health algorithms
- Set up in a short duration of 90 days
- Recruit and on boarding of paramedics, specialist medical officers
- Project Management
- Build and Operate model with stiff service level agreements

**Key Lessons**

- Buy-in of the health department personnel
- Managing the expectations of the stakeholders
- Continual improvements/enhancements based on feedback
- Great success stories
- Contextual/on the spot help & advice in sticky situations faced by the field healthcare worker.

**Road Ahead:**

The readymade platform can be used for various other programs/initiatives such as tele-medicine, epidemic/disaster management, tracking progress of camps etc.

**The following are the success stories to showcase the end customer experience.**

**ANM – ABCD– XXbad – YYY PHC**

Complaint: PNC shivering

Advice given:
- Advised to stop the IV fluids.
- Keep the patient warm.
- Advised to watch for bleeding, pulse and BP.
- Medication advised if shivering does not come under control.

Feedback: ANM informed that all the steps suggested had been taken and the patient is now stable.

**MO – Dr. MNOP– XXXbad**

Complaint: Breech presentation. Arrest of head after baby’s body delivered

Advice given:
- Specialist confirmed whether the baby was alive or not.
- Confirmed whether it was due to hydrocephalous.
- Advised delivery using the Burn Marshall technique as not due hydrocephalous.

Feedback: Specialist followed up for feedback. Was informed that the patient was referred to a higher center and conveyed our specialist’s instructions to the treating doctor. The doctor followed the instructions and delivered the baby successfully.

**MO – Dr. XYZ–XXXpur – RH**

Complaint: 2 year old with kerosene poisoning and had vomited once.

Advice given:
- To treat as aspiration pneumonia type.
Aspirate to clear the stomach using a small RT
Give antiemetic, oxygen if dyspnea noticed.
Give antibiotic and keep left lateral position
Keep the patient under observation.
MLC would be required.
Feedback: MO informed us the next day that the child was stable.

MO – Dr. STUV–XYZdha
Complaint: A few children had consumed seeds of Jatropha plant.
Advice given:
Specialist advised to immediately start antiemetic.
Start IV fluids for all
Advised to give Tab. Flatuna
Watch for urine output
Give symptomatic treatment if required
Feedback: MO informed us that all the children were stable and had been discharged.

MO –Dr. PQRS- Nashik–PQRS PHC
Complaint: Primi in prolonged labour. Dilatation not satisfactory. BP increased during labour
Advice given:
Advised appropriate IV fluids and medication.
Monitor FHS and BP
After the 2nd call, additional medication advised for dilatation.
Medication advised to bring BP under control.
Doctor advised to be calm.
Feedback: Followed up with the MO who said that the baby had been delivered normally and both the mother and child are doing well.

abcd - 3/20/2013  8:48:42 AM Pune – Khandala
Complaint: Call by an ANM regarding primie in labour with breech
presentation and fully dilated cervix

Advice: gynecologist spoke to the ANM and advised

To start IV RL with 5 units of pitocin @ 20 drops per min (induction of labour)

Allow the baby to come out as naturally as possible

Also explained various precautions and maneuvers to be followed to assist easy and safe delivery of the baby.

Feedback: ANM called back around 10:10 am to inform that the baby had been delivered and was nice and healthy. When she was asked if advice from 104 helped, she said advice from 104 has always helped her and she will continue to call us.


Complaint: Primie Advice: Gynecologist advised Diazepam IM. The ANM had moved the patient to the ambulance as she was bleeding and already had 2 convulsions within a span of 10 minutes. Specialist advised RL drip with 2 ampules of Pitocin till the patient reaches Regional Hospital. She was also advised to administer Methergin. ANM informed she had done all of the above except for diazepam. Specialist then advised again Mesoprostol per rectum also to be given if it could be bought from a pharmacy. The ANM thanked the doctor and closed the call. She called again at 6:30 am from the ambulance, saying that the patient had bitten her tongue and was again getting convulsions. Specialist advised her to put an airway in her mouth but since the ANM did not have one and was advised to turn the patient to the left side and keep something in the mouth to keep the patient from swallowing her tongue. Specialist further advised the ANM to keep calm and to give the patient 2.5 ml diazepam IM till she reaches the medical college at Sholapur which was 20 minutes away.

Feedback: The ANM called back at 3:30 pm to inform us that the patient had survived due to the gynecologist’s advice to give diazepam injection and now both the baby and the mother are doing well.

Awards and Recognition:

These initiatives have been considered as high impact program which has the greater applicability across India. The Call Center is manned by specialties such as gynecology, Pediatrics, General medicine, Public Health and General surgery with a capacity of 12 Qualified Doctors and 20 paramedics along with other staff for administration round the clock. Total number of calls received form the health care providers till 31st March 2013 is 2,33,492. Out of these 51,203 calls were serviced by the specialists since January 2012.

HMRI Maharastra has received eHealth Award on 16th Nov'12: 104 Health Advice Call Centre, Pune has been voted as one of the best “Innovation in Healthcare through PPP” by eIndia. eINDIA is an annual conference run by Elets
Technomedia to showcase and discuss the most significant technological innovations in India, with a special emphasis on health, education and governance.

**Maharashtra e-governance Award:**

“Health Advice Call Center awarded “Gold prize” in Maharashtra e-Governance in ‘Innovative Use of IT in Governance’.”