Innovations in HEALTH SECTOR OF Karnataka

S. Selvakumar, IAS
Mission Director NRHM & Project Administrator, KHSRDP
Sincere desire to find solutions to the problems and willingness to swerve from the beaten path lead to exhilarating INNOVATIONS
Integrated Medical Information and Disease Surveillance System In PHCs
Integrated Medical Information and Disease Surveillance System in PHCs

The Background

- Health workers absenteeism biggest problem in rural and remote health facilities
- Rural patients deprived of timely health care
- Basic services like immunisation compromised
- Poor people forced to spend money for uncertain quality health care in private sector
Results of Baseline Survey: Presence is Low Even for Staff NOT Required to be in the Field

Daily Staff Attendance Rate by Position

- DOCTOR
- AYUSH DOCTOR
- STAFF NURSE
- PHARMACIST
- LAB TECHNICIAN
- CLERK
Results of Baseline Survey: Presence is Low on All Days of the Week

Daily Staff Attendance Rate by Day
Integrated Medical Information and Disease Surveillance System in PHCs

The Project

- This is a Health Care Management, Monitoring and Information system.

- The multi function devices used are basically an interface of a programmable mobile device with a fingerprint reader.
Integrated Medical Information and Disease Surveillance System in PHCs

**Aims** to capture,

- Beneficiary details
- Daily patient and disease summary
- Leave monitoring and digital attendance of doctors and staff.

**Status of implementation**

- Has been implemented on a pilot basis in five districts
- Presently operative in about 140 PHCs in the State
Integrated Medical Information and Disease Surveillance System in PHCs

Outputs

- Recording of attendance of health staff through Finger print reader
- Recording of details of cash benefits paid to patients along with photographs and signature/thumb impressions of beneficiaries
- Recording of statistics on number of patients seen and diseases treated.
• Multi-function devices placed in PHCs
Integrated Medical Information and Disease Surveillance System in PHCs

The Impact (Assessment by JPAL Survey)

- Has helped fighting absenteeism and has improved timely health care to rural patients
- Improved punctuality, and hence a sense of trust is instilled in the mind of patients.
- Good performing doctors and staff are identified, recognised and rewarded.
Regulation of Transfer of Medical Officers Act
The Act

- The Karnataka State Civil Services (Regulation of Transfer of Medical Officers and Other Staff) Act 2011, is a major initiative towards human resource planning and management in the department.
Regulation of Transfer of Medical Officers Act

The Background

- Irrational Posting due to political pressure resulting in speciality mis-match
- Large number of vacancies in rural, remote and backward areas leading to poor health care service delivery
- Lack of transparency in transfer process
Regulation of Transfer of Medical Officers Act

Objective

- transfer and posting of Medical Officers and other staff through computerised counselling
- Filling up posts in backward and remote areas
- enforcing compulsory rural service to doctors
- transfer/appointment of specialists only to the post of his specialisation
- rationalising the cadres/posts in the Health Department and need based HR restructuring of the department
Regulation of Transfer of Medical Officers Act

Implementation Methodology

- Digitization of service particulars of all employees.
- Rationalising the posts, compulsory rural service of Medical Officers.
- Scientific analysis of training needs of staff, organisational development, capacity building, post training evaluation and rational distribution of manpower.
e– Procurement System
The Background

- Earlier Rate Contract system of procurement of drugs lead to loss of revenue to govt.
- Raised suspicion of collusion between the procurement machinery and suppliers.
- Certain drugs and consumables procured in large quantities than needed
The System

- Karnataka has adopted e-procurement platform for all procurements above Rs. 1.00 lakh.
- Implemented through Karnataka State Drug Logistics Warehousing Society catering to the procurement needs of the Department of Health & Family Welfare Services.
e- Procurement System

The Objective

- To enhance transparency and accountability in departmental procurements.
- Promote competitive and market driven bidding environment.
- Enable ease of access and convenience to bidders anytime anywhere.
- Provide common bidding environment for all types of tenders.
- Handle entire procurement process in an online environment.
The Impact

- Downward variation in procurement rates from manual tendering system to e-procurement is glaringly visible.

For ex.

Procurement of Anti Rabies Vaccine (ARV)

2009-10 (manual tender) - Rs. 283 per unit

2011-12 (e-procurement) - Rs. 137 per unit
Financial Management Information System (FMIS)
The Background

- GOI releases a lot of funds to the State Health Society for effective implementation of programmes.
- The number of institutions handling funds are too large for effective monitoring.
- Enforcing Fiduciary discipline through manual control is unviable.

*Karnataka has pioneered in developing an integrated Financial Management Information System + e-banking system to bring about efficiency and ease in financial management.*
Financial Management Information System

The features

- Collaborated with SBI to develop this web based application
- Expedites the reporting time of financial transactions to almost real time reducing time gap.
- Provides live details of fund utilisation and fund position and aids in tracking expenditure.
Financial Management Information System

The Benefits

- Ease of budget preparation reducing time and effort.
- Improved clarity, transparency and control with respect to advances, expenditure refunds etc.,
- Effective monitoring of fund utilisation with sufficient checks and balances.
NRHM Financial Management Information System

Implementation Methodology

- User application test
- Procurement of computers to the PHCs
- Training of the application for the personnel
- Pilot conducted in the districts Bangalore Rural and Yadgir
- Rolled out in selected 10 districts
Intervention on Retinopathy of Prematurity
(Infant Blindness in premature babies)
The background

- ROP affects premature or low birth weight infants which can be prevented by timely diagnosis and proper care.

- But LBW babies in rural and semi-urban areas are not screened and are at risk of developing blindness.

- Number of Ophthalmic specialists trained to treat ROP is very low. Upgrading skills of in-service ophthalmologists is the need of the day.
NRHM pioneered to prevent infant blindness in association with Narayana Nethralaya.

Karnataka Internet Assisted Diagnosis of Retinopathy (KIDROP) partnered with Narayana Nethralaya is the first Tele-ROP network.

At present this is the largest Tele-ROP network in the world.
Intervention on Retinopathy of Prematurity

The Initiatives

- Training of ophthalmologists
- Free treatment of affected infants for 1 year
- Providing logistics for mobilization, screening and treatment of affected babies
- RETCAM to train technicians for screening ROP in rural areas
- Advocacy and health promotion
KIDROP in action
Mothers waiting for infant screening
Laser Surgery in a rural NICU
Mother and Child Tracking System
The Background

- Even though registration of pregnant woman takes place, the follow up for continuing care gets missed out due to various factors. Similar is the case with infant care.

- Dilution in ante natal care, and non-identification of complicated delivery cases lead to maternal mortality which could be prevented.

- Hence the need to build a more efficient system of follow up of ante natal, post natal and infant care.
The Objective

- To keep track of each pregnant woman from registration till post natal care.
- Timely identification of risk irrespective of the place of registration.
- Tracking of every child from birth to end of immunisation.
The Methodology

- ANM will register the pregnant woman and details are captured in the ‘Mother Card’
- Digitisation of data captured in the Mother card.
- ANM monitors the pregnant woman/mother/child and sends info through SMS to the data centre.
- Medical officers monitor the services provided to the pregnant woman/mother/child, and send necessary instructions to ANM if any service is missed.
The Hospital which renders service to the Pregnant woman has to send the service details through sms.
**Method of sending SMS**

<table>
<thead>
<tr>
<th>MCTS SOFTWARE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(dd/mm/yyyy)</td>
<td>ANC-1 Registration Date: 08/05/2010</td>
</tr>
<tr>
<td>(dd/mm/yyyy)</td>
<td>ANC-3 Registration Date: 08/09/2010</td>
</tr>
<tr>
<td>(dd/mm/yyyy)</td>
<td>TT1 Date: 10/12/2010</td>
</tr>
</tbody>
</table>

**Eg:** ANMPW space 789456123 space TT1space101210

**Mob. No.: 9212357123**

**Eg:** ANMPW space 789456123 space TT1space101210
Mobile Health Clinics
Mobile Health Clinic is a need and performance based innovative PPP scheme.

Broadly speaking, it is a “PHC on wheels”
Mobile Health Clinics

The Need

- Like many other states, Karnataka also has, due to its topography, many difficult to access areas, tribal population living in remote villages.
- Those people have to walk miles to reach a basic health care unit.
- Being poor, a day’s wage loss, is a considerable deterrent to seek health care service.
- Out reach services of the health care, and the health programmes hardly reach those under served people.
Mobile Health Clinics

The Objective

➢ to provide quality primary healthcare delivery to the door steps of the vulnerable sections of the population in remote and poorly accessible areas.

➢ To contribute to the efforts to reduce MMR, IMR, CMR and other Millennium Development Goals.

➢ To create awareness among community regarding communicable and non-communicable diseases and their prevention.

➢ To encourage private sector in providing essential health care to rural communities.
Mobile Health Clinics

Performance — Third Party evaluation

- Has been of great benefit to the poor in remote, hilly, forest and inaccessible areas
- Has helped to save loss of daily wages, travel and medical and incidental expenses.
- Healthcare seeking behaviour has improved
- Service has reached marginalised population and vulnerable groups. The concept should be sustained and scaled up.
Mobile Heath Van in Gadag
Medicines & instruments
Patient examination in a Lambani village
Citizen Help Desks
The Need

- Rural and poor people who come to District Hospitals for serious ailments get flummoxed by the complexity of the system.
- Without guidance they do not know what services are available, and how to avail them.
- Unscrupulous elements take advantages of this and fleece them for getting them service.
- The cases of malpractice by the hospital personnel hardly reach the administrative hierarchy due to lack of adequate feedback system.
The Objective

- To improve service at Govt. hospitals by educating staff and public about facilities and services available.
- To enhance transparency and accountability in service delivery.
- To actively assist the patients in obtaining services available in the hospital.
- To establish link between service providers and users through regular feedback mechanism.
The Operation

- Functions on PPP mode.
- 24 x 7 service providing information and guidance to the public for obtaining service in Government Hospitals.
- Has a Help Desk Manager/Coordinator along with four trained community volunteers.
- Will collect feedback on the quality of services from patients (in-patients and out patients) and identify bottlenecks in effective delivery of services.
- All services rendered free of Cost to the public.
The Performance – *(through third party evaluation)*

- Reduction in speed money or bribe for different services.
- Waiting time for patients reduced.
- Prompt replenishment of out of stock medicines on reporting.
CHD at District Hospital, Raichur
Assistance to a patient by CHD executive
An outreach service by CHD, Raichur
HIV – RCH Integration
The Aim

- Integration of RCH and HIV initiatives to concentrate on prevention of transmission of HIV from mother to child.
- To avoid overlapping intervention activities to make them more effective, and save on time and money.
- To screen every pregnant for HIV to prevent transmission of HIV from mother to child.
HIV – RCH Integration

The Strategy

- Universal coverage of HIV counselling and testing to all ANCs.
- Linking up Yeshaswini Scheme for cashless delivery with HIV positive ANCs and providing incentive to the institutions conducting them.
- Enhance institutional deliveries of HIV positive ANCs and ensure administration of prophylactic drugs to mother and baby.
HIV – RCH Integration

The Strategy . . .

- Linking up HIV positive ANCs with ANMs and ASHAs and creating ‘shared confidentiality’ for CD4 testing and ART initiation
- To track HIV positive ANCs, their spouses and children up to 18 months.
The Strategy . . .

- Comprehensive medical coverage for PLHIV
  - No cost based diagnostic coverage including US, CT & MRI
  - Medical Colleges to provide services in the absence of facilities at Govt. ART Centres
  - NRHM supplies chemical & reagents to district labs
  - Free Opportunistic Infections (OI) treatment coverage
  - Vajpayee Arogya Shree Insurance benefits extended
The Background

- Post Partum Haemorrhage is one of the main causes of maternal deaths. Majority of them occur due to non-availability of blood at times of emergencies.

- At FRUs/THs emergency of LSCS operations cannot be taken up due to non-availability of blood.

- Blood banks ask for donor replacement and heavy screening charges which the poor patients cannot afford.
The Scheme

Raktha Vahini was conceptualised to ensure availability of blood 24x7 in all FRUs and General Hospitals to prevent maternal deaths due to post partum haemorrhage.

Raktha Vahini is a 24x7 free blood supply scheme to all expecting mothers and neonates in low health indicator districts.

A PPP initiative – MOU with Red Cross Society of India
Thank You