NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

2013

Best Practices and Innovations

SECTION 1: REPRODUCTIVE AND CHILD HEALTH

ADDRESSING HUMAN RESOURCE NEED OF SPECIAL NEW BORN CARE UNITS- LEARNING'S FROM THE MADHYA PRADESH SUCCESS

Problem Statement

It has been estimated that health-facility based interventions can reduce neonatal mortality by as much as 23-50% in different settings [1]. To improve newborn survival, Government of Madhya Pradesh established 35 SNCUs at district hospital. However this rapid scale up also created huge need for trained doctors, nurses and paramedical staff to make these SNCUs functional. After assessing the options of diverting resources from the existing staff pool, or going for multitasking of staff, the state decided go against them. The state went ahead with decision have dedicated staff for SNCUs. However it could have been challenging to attract, redeploy and retain the required HR to meet special staffing needs of Special New Born Care Units. To address the HR gaps Government of MP took series of HR related policy decisions to address the recruitment and retention of trained HR in adequate numbers to effectively and efficiently operate these SNCUs

Programme Description

- **Pay hike:** Using the NRHM budget, the salary of pediatricians and nurses was increased nearly 3.3 times (even above private sector) during the five year period from 2007 to 2012 [3].
- **Walk in Interviews:** To remove administrative hurdles, recruitment was simplified with walk in interviews for Doctors (at state level) and nurses (at dist level) on a fixed day of every week.
- **Candidates from other States:** State adopted open door policy for candidates from other states. This facilitated quick deployment of HRH, especially nurses from Kerala and Rajasthan. Their registration in State nursing council was also facilitated
- **Flexibility in postings:** Every effort was made to give the candidates a posting on choice.
- **Preference to existing contractual staff for regular job:** Pediatricians and nurses who were initially hired as contractual staff were given preference in selection for regular jobs Thus ensuring that the investment made in their capacity building was not lost.
- **Rural service bond for pediatricians:** The State enforced compulsory one year rural service bond for the fresh postgraduates, and the post graduates in pediatrics were posted in SNCUs.
- **Relocation of pediatricians:** Pediatricians posted at PHCs were identified and offered relocation to district SNCUs.
- **Skill up gradation of MOs**: Government entered in an MOU with Maulana Azad Medical College, New Delhi for a forty day residential training program in neonatology. The graduate medical officers attending this course are posted in the SNCUs post traing.
- **On Job mentoring:** SNCU Staff is sent to PGI Chandigarh for two weeks observership. This helps them not only a chance to update knowledge and skills but also improves motivation. In addition opportunities to attend CMEs and workshops are also provided.

Program Impact

The results of this multipronged approach have been very encouraging

- **HR norms met:** 35 district hospital units were operationalized successfully in last four years. A total of 114 pediatricians and 390 staff nurses are working in these SNCUs giving 3.25 pediatricians and 11.14 nurses per unit against the norms of 3-4 and 12 posts per unit respectively [4].

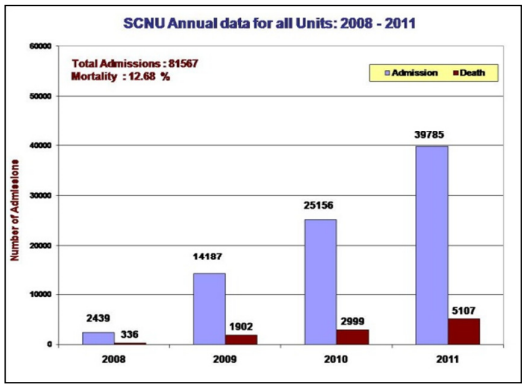
- **Increase in Utilization of SNCUs:** There was an exponential increase in the number of admissions; More than 80,000 sick newborns were treated in these 35 units in four years (2008-2011). It is expected that once scale up is completed nearly 60,000 sick new borns would benefit each year.

- **Improved health outcomes for sick neonates:** While it is anticipated that with improvements in coverage more and sicker children stary accessing the SNCUs and hence there is a danger of adverse outcomes. However despite huge patient load, the newborn mortality rate decreased from 13.8 in 2008 to 12.8 in 2011

- **Mentoring of peripheral MCH1 centers and operationalizing other units:** Trained Human resources from the District SNCUs are also helping to train staff from peripheral centers through regular mentoring visits to MCH centers for on-the job trainings and problem solving to improve quality of New born care.

Scalability

The experience from Madhya Pradesh clearly shows that it is possible to address the difficult challenge of meeting HR needs of SNCU and provide separate staff for the units if the HR policy is adapted to attract, retain and redeploy the required staff for these units. To meet the demand of human resources in SNCUs no single solution is available but multipronged approach involving creating of additional positions, pay hikes, removing administrative bottlenecks in recruitment by opting for open door policy with walk in interviews, enforcement of rural service bond, flexibility in place of postings and judicious redeployment of existing human resources is needed. In addition proactive look out for resources by reaching out to



Medical and nursing colleges is also helpful. Improving remuneration and working condition for doctors and staff nurses can attract and retain specialized human resources in SNCUs. It is also important to have strong political and bureaucratic commitment to make the above changes and have secured funding to meet the budgetary needs of addition HR. Last but not the least it is utmost important to constantly invest in capacity building of the HRH

For further details contact

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ANTENATAL CLINIC INTEGRATED WITH YOGA ND NATUROPATHY: AN INNOVATIVE APPROACH FROM TAMIL NADU

Problem Statement

The Indian Systems of Medicine and the modern system of medicine play a complementary role. With Siddha being popular in Tamil Nadu, the government of Tamil Nadu has made efforts to provide one AYUSH practitioner in every primary health centre in a phased manner. These centres are co-located with additional PHCs in order to provide adjunct or better alternative to allopathic medical treatment to the public at large for people to exercise their choice in accessing the health service.

Program Description

In addition to the District Hospitals, a Siddha wing was operationalized in all block PHCs. There were 479 such units prior to NRHM. Under NRHM, 475 additional centers started to provide AYUSH service - 300 Siddha, including 175 collectively for Ayurveda, Unani, Homoeopathy, Yoga and Naturopathy. 33 Yoga units were established in PHCs in 2010.

The antenatal clinic is once a week in the PHC. Integrated approach for normal delivery without episiotomy from early stage of antenatal period is encouraged. Nearly 50-80 mothers-to-be attend the clinic for medical examination and investigation by the allopathic doctors. While they wait for the examination or for the test results, groups of expectant mothers are sent to the Yoga and Naturopathy physician. He / she categorize the antenatal Cases by trimester and provide

appropriate treatment. During antenatal visit to PHC, a Naturopathic Doctor (ND) works with the expecting mother, providing counseling and educating her on lifestyle changes. This process begins with prenatal care, continuing through birth and after the delivery.

Siddha doctors also provide drugs that are required during pregnancy. Apart from this, the yoga physician teaches exercises during the antenatal and postnatal period, whenever mothers attend post natal check-up and during infant immunization.

The women learn exercises under direct supervision and continue to practice them at home. Postural, breathing and pelvic floor exercises along with back and spinal twist exercises are taught.

Program Impact

Kulumani, an upgraded PHC with 30 beds, in Tiruchirapalli District is one of the 33 yoga centers. It started providing yoga and naturopathy services in March 2010.

Sl. No.	Indicator	2011-12
1.	Number of maternal cases taught yoga	389
2.	No. of normal delivery cases (without episiotomy)	377
3.	No. of Caesarean cases	12

Scalability

The establishment of Yoga and Naturopathy along with Siddha together aims to provide better services. This integration of medical systems complimenting each other, providing health care to the mothers and the choice given attracts more beneficiaries. The yoga and naturopathy programme also aims at promoting NCD control. The programme is set be scaled across other PHCs where provisions will be made for integrating the AYUSH and allopathic systems, thereby greatly improving the quality of services rendered.

For further details contact

INNOVATIVE WAYS TO MANAGE SEVERE ACUTE MALNUTRITION IN CHILDREN LESS THAN SIX MONTHS OF AGE - A MADHYA PRADESH EXPERIENCE

Problem Statement

A recent survey conducted by National Institute of Nutrition, Hyderabad (2010), revealed that SAM prevalence in children of Madhya Pradesh is 8.3% i.e ~ 8.3 lakh children with SAM. While the guidelines for management of children 6-59 months with SAM exist, there is little clarity on management of malnutrition in infants <6 m (MAMI), making them more prone to death and disability. Poor birth weight, prevalence of sub-optimal breastfeeding practices, use of pre-lacteal feeds, ignorance regarding correct positioning and attachment prevent breastfed infants from obtaining requisite nutrition. Infants <6m suffering from SAM are often too weak to suckle therefore; they stimulate lesser amount of oxytocin and prolactin release, necessary for adequate galactogenesis. Paradoxically, the mother presumes she is suffering from milk insufficiency. Since these infants are also extremely weak to cry and demand feed, therefore more often than not tend to get neglected.

The felt need for addressing the burden SAM in small infants <6m, prompted the state to include Mother Milk Insufficiency "MMI" in NRC admission criteria.

Program Description

NRC: MP conceptualized the NRCs to be a child friendly 10/20 bedded institution with provision of kitchen, play room for children, counseling room for mothers and toilet facilities. Considering the emotional and psycho-sensory developmental needs of such children, NRC walls are brightly painted with attractive pictures for sensory stimulation and also to reduce austerity of traditional hospital settings.

Management of Acute Malnutrition in infants <6m: Infants having difficulty in breastfeeding (Mother Milk Insufficiency "MMI", baby too weak/feeble to suckle effectively) are identified alongside regular screening of children less than 5 years in the community using MUAC and brought to the NRCs for treatment of SAM.

In the NRCs, prioritised identification of mothers with MMI and lactation failure is done so that prompt initiation of SST can be ensued and adequately sustained lactation can be re-established. SST is an innovative technique where a mother is supported to breastfeed while simultaneously administering supplemental milk via an oro-gastric tube (OGT) attached to the breast. The baby is allowed to latch on to the breast and the tube. The free end of the tube is then dipped into a cup/syringe filled with F100D[1]. The baby suckles on the breast with the tube in its mouth which causes the formula milk to flow. The mother is encouraged to breastfeed every 3 hours for at least 20 minutes and SST is initiated in the following hour i.e. after 1 hour of each breastfeed. As breast milk production increases, quantity of supplemental milk is gradually reduced. The weight gain in the infant is monitored daily. If the infant is taking the same quantity of F100D with incremental weight gain, it implies that the breast-milk quantity is increasing. At an incremental weight gain of 20g per day, the quantity of F100D is halved. If the weight gain in infant is maintained at 10g per day then SST is withdrawn and the mother is motivated to continue regular breastfeeding

[1] F100 is diluted by adding one third extra water to make the re-constituted volume up to 135ml in place of 100ml and supplemented via infant feeding tube (size ℁8 or ℁6.). Since, wasted infants <6m require ~100 kcal/kg body weight and more of water, these infants are fed with this diluted catch-up formula feed.

on discharge. In refractory cases showing no weight gain, SST is stopped and the infant is re-assessed for underlying complications.

This type of the feeding is the best supplemental method because it encourages latching, equates suckling with receiving milk, stimulates milk production and allows easiest transition to full breastfeeding, as sometimes infants continue to suckle even when the tube runs dry. In oedematous infants <6m with SAM, F75[2] is given through OGT in place of diluted F100 (F100D). After resolution of oedema, SST is continued with F100D.

The infant is discharged from NRC on attainment of following criteria

- Infant gaining weight on breast milk alone
- Absence of bipedal pitting oedema since last 10 days
- No medical complication.

After discharge from NRC, the child is brought back to the NRC at fortnightly intervals for follow-up and discharged from the program after 60 days as per the standard protocol

Program Impact

In 2012, Infants <6m accounted for ~3% of the total admissions as against global average of 13.6 %[3]. In the SST centres of the state, 78% (mean) infants could achieve successful re-lactation through SST. The proportion of admissions discharged as cured is significantly higher in infants <6m than in infants aged 6 to 59m.

Year	2009-10		2010-11		2011-12 (till Mar 2012)	
	n	%	n	%	n	%
Total Admissions in NRC	**34369**	**-**	**50690**	**-**	**54881**	**-**
Total No. of admitted infants <6m	1039	**3.02**	1192	**2.35**	1998	**3.60**
No. of infants <6m initiated SST	303	**29.16**	509	**42.70**	632	**31.63**
No. of infants <6m showing weight gain with successful re-lactation through SST	257	**84.82**	422	**82.91**	427	**67.56**

Scalability

Given the high rates of SAM across Indian states, it is plausible that early interventions could prevent the escalation of SAM. This is a good model which may be adopted or adapted by the states to cover acute malnutrition in children <6 months. There are

varied experiences with supplementary suckling across the centres of the state which elicit staff time, age of infants, co-existing maternal morbidity and experience of the care givers as most important factors. Success in re-lactation is most evident between infants aged 1m to 3m which declines as age increases. Categorically, younger infants have better re-lactation establishment rates than older infants.

Contact Person

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INTERVENTIONS OF EYE SCREENING AND SUPPLY OF SPECTACLES IN SCHOOLS IN TAMIL NADU

Problem Statement

The school going age is formative for children in determining their physical, intellectual and behavioral development. Eye sight in general and particularly quality of eye sight is instrumental in this process in the formative age. In India, the prevalence of blindness is estimated to be 0.8/1000 among children in the age group of 0-15 years. Currently there are an estimated 270,000 blind children in India[2]. Myopia is a common cause of visual impairment which rarely occurs before the age of 5 years and new cases appear throughout childhood and adolescence; particularly between the ages of 6 to 15 years. Children form one of the main age groups requiring attention to refractive errors because of the high prevalence of myopia, hypermetropia and astigmatism. Research evidence in the recent past, including the population based study in Andhra Pradesh, has highlighted that prevalence of myopia, astigmatism, high-myopia, and anisometropia significantly increased with increasing age[3].

Program Description

School Eye Screening (SES) Program became the integral part of the National Prevention and Control of Blindness (NPCB) since 1994, after successful implementation in five pilot districts. In TamilNadu, during the regular school inspection process, it was highlighted that many of the refractive error cases are referred to higher institutions for mere provision of spectacles to children. As a consequence, Government of Tamil Nadu has initiated massive program to provide spectacles to all the school students free of cost, who were with the refractive error. In order to gain insights into the nuances of implementing a sensitive program and gain its acceptance among the growing age group of children, and inculcate the habit of wearing spectacles, the program is implemented in three phases. First Phase covered 6th Std. to 8th Std. children in the year 2009-10 and Second Phase, new entrants of 6th Std., 10th and 11th Std. (those in 9th Std. having already received specs in their 8th Std.) with replacement for changes in refractory error or spectacles broken during the year 2010-11.The Third Phase covered new entrants of 6th Std. and with replacement changes in refractory error or spectacles broken.

Convergence process is adopted for planning of SES, with respective District Health Societies, involvement of teachers, health workers, and PMOA, and identification of supply agency in bulk with minimal rate with MoU. One teacher in each school is selected for a half-a-day training course using SarvaShiksha Abiyan (SSA) funds and regular school health fund from DPH. Preference is given to women, so as to counteract prejudice against girls wearing spectacles, and to teachers who themselves wear spectacles as they are likely to be more motivated. During the training, teachers are provided with a kit for screening the children in their schools. The teacher's kit contains a six-metre (20 feet) measuring tape, standard vision screening "E"

[2] R Jose and Sandeep Sachdeva, "School Eye Screening and the National Program for Control of Blindness",from the Directorate General of Health Services, MoHFW, NirmanBhawan, New Delhi.

[3] Krishnaiah S, Srinivas M, Khanna RC, Rao GN, "Prevalence and risk factors for refractive errors in the South Indian adult population: The Andhra Pradesh Eye disease study".

card, referral card for children with suspected poor vision, and educational material.

The screening team with PMOA, along with School Medical team visited schools. Screening is carried out by the school teachers. From a distance of six metres (measured with the tape provided), child is shown the vision card, which is white with black “Es” of standard size (6/9 of Snellen’s Chart). For each eye, child has to indicate the direction of the open end of the “E”. By simply rotating the card, the sequence can be changed. The child indicates the direction correctly (eyesight “good”) or incorrectly (eyesight “not good”). If there is any doubt, the teacher should record the eyesight as “not good”.

Program Impact

There were coordination meetings at state, district and blocks. The School Medical Team verifies the cases identified by teachers and prescribe glasses with duplicate prescription with the student, and they are entered in the on-line order of the approved supply agency and finished spectacles are couriered. Earlier, during screening, students were given choice of the spectacles and were to give their option

in the prescription itself. The spectacles received were supplied through the PMOA within a month after the examination. The school-wise screening was taken up for 6th, (7,71,648 children) 7th (7,86,572) and 8th Standards (7,63,622) in the first semester of 2009. Local Deputy Director and State official visited the schools for the quantity and quality of supply and to get the feedback from children. Total budget is Rs.5.52 crores inclusive of Rs.50 lakhs provided under NBCP for School Eye Screening.

Refractory error is varying from 8-10% in the age group of 10-12 years. More girls had refractory error than boys. A total of 163,162 benefited in the Program, out of which 45.14% are boys and 54.86% are girls. High quality specification is made for the material used in the frame production, eye piece, temple, screw, pad arm pipe, nose pad and lens.

An important learning is that knowledge regarding perceptions and awareness of eye diseases among parents is important in this context. state has to address other various childhood eye conditions like squint, disease like Vitamin A deficiency, eye injuries, refractive errors, corneal opacities and retinopathy of prematurity (ROP) especially among school age group so as to improve eye care in government institutions. Program is able to address School Group but it is still a challenge to reach the community residing in under/unserved areas and out-of-school children in pockets like Nilgiris within the

available resources, infrastructure and trained manpower.

Scalability

Convergence model between school health and education teams and other programs and agencies in Tamil Nadu, with its meticulous coordination, utilizing the sectoral funds, has proved to be a boon in resolving the problem of eye sight disorders, provision of quality care and supply of free spectacles among school going age groups. It can be concluded this model has the potential of being scaled up across other states but with the prerequisite strategies of dedicated, effective coordination mechanisms among different departments of health and education and sensitization of parents and adolescent groups.

Contact Person

ILAM SIRAR IRUDHAYA PADUKAPPU THITTAM
HEART SURGERY PROGRAMME FOR SCHOOL CHILDREN IN TAMIL NADU

Problem Statement

Congenital anomaly includes any morphological, functional, biochemical or molecular defects that may develop in the embryo and fetus from conception until birth, present at birth, whether detected at that time or not. The incidence of Congenital Heart Disease (CHD) depends primarily on the number of small Ventricular Septal Defects (VSD) and this number depends upon how early the diagnosis is made. The incidence of moderate and severe forms of CHD is about 6/1,000 live births and 75/1,000 live births if tiny muscular VSDs present at birth and other trivial lesions are included.

Type of Surgery	Case wise assistance	Revised Assistance
Closed Heart surgery	10,000	20,000
Open Heart surgery (Simple)	30,000	50,000
Open Heart surgery (Complex)	70,000	1,00,000

Table 1. Case wise assistance for school children heart surgery

Tamil Nadu state conducted a community based survey of visible congenital defects including CHD during 2004-05. The survey covered 47.2 million population, of which 27% (12.8 million) are children in the age group of 0-15 years. 1.25% of total children identified with visible congenital anomalies. Considering the need, the Tamil Nadu introduced the scheme for school children for early diagnosis and treatment of heart diseases in the state.

Programme Description

"Ilam Sirar Irudhaya Padukappu Thittam" school children screening and treatment programme for heart diseases was announced in the floor of state assembly in April 2008. School Health Programme (SHP) is a continuous ongoing programme for government and government aided schools in TN. A special drive was undertaken during SHP to identify suspected acyanotic, cyanotic and mixed cardiac cases. Until December 2008, TN state illness society released funds based on need and demand from operating hospitals as per amount specified for different surgeries by directorate of medical services. During 2009-10, NRHM released fund under risk pooling for private hospitalization, which was diverted to district health society. The chairperson, district health society monitor each and every case and release the fund to private hospitals. This enabled the state to initiate action on effective and visible risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

There are 28 accredited government/private hospitals enrolled for these surgeries with standard quality control mechanism through insurance companies. Memorandum of Understanding (MoU) has been signed with these 28 hospitals under *ilam sirar irudhaya padukappu thittam,* which include list of diseases under three different categories. The support under the scheme includes mobility support for parents and student, hospital stay and follow-up investigations and interventions.

Table 2. Category wise list of heart diseases

Category A	Category B	Category C
Closed Heart Surgery	Simple Open Heart Surgery and Major Heart Surgery	Complicated Open Heart Surgery
PDA – Ligation	ASD / VSD	Intra Cardiac Repair for Cyanotic Heart Disease (TOF, TAPVC, TGA, TA, Truncus Arteriosus, Pulmonary Atresia)
Pericardiectomy	Valvular Pulmonary Stenosis	DORV with PS
Closed Mitral Commissurotomy for Mitral Stenosis	Valve repairs (OMV, OAV, OPV)	Arterial Switch for TGA
	Coarctation of Aorta Repair	Fonatan's IBD Glenn Shunt
	Systemic Pulmonary Shunt	A.P. Window
	Baloon Valvotomy	Valve replacement
	Baloon Septostomy	Complete AV Canal defects
	PA Banding	Permanent Pace Maker Implantation

Program Impact

Around 10,000 suspected students were identified at PHC level and 24% of students recommended for surgery. A specialist team consisting of cardiologist, cardiothoracic surgeon and general physician assessed and identified 81% of the total recommended students fit for surgery. 93% (1813) of them underwent surgery of which, 135 students were covered under the insurance scheme. The graph below graph depicts Health Unit District (HUD) wise list of surgeries conducted from 2008 to 2010. These initiatives have had a positive impact on government facilities in terms of improvement in infrastructure and human resources for health. Many of the private hospitals are in pipeline to get accredited under the scheme. The scheme established strong linkage between preventive and curative health care. The scheme also had a positive impact on health sub-center level in terms of community mobilization for CHD.

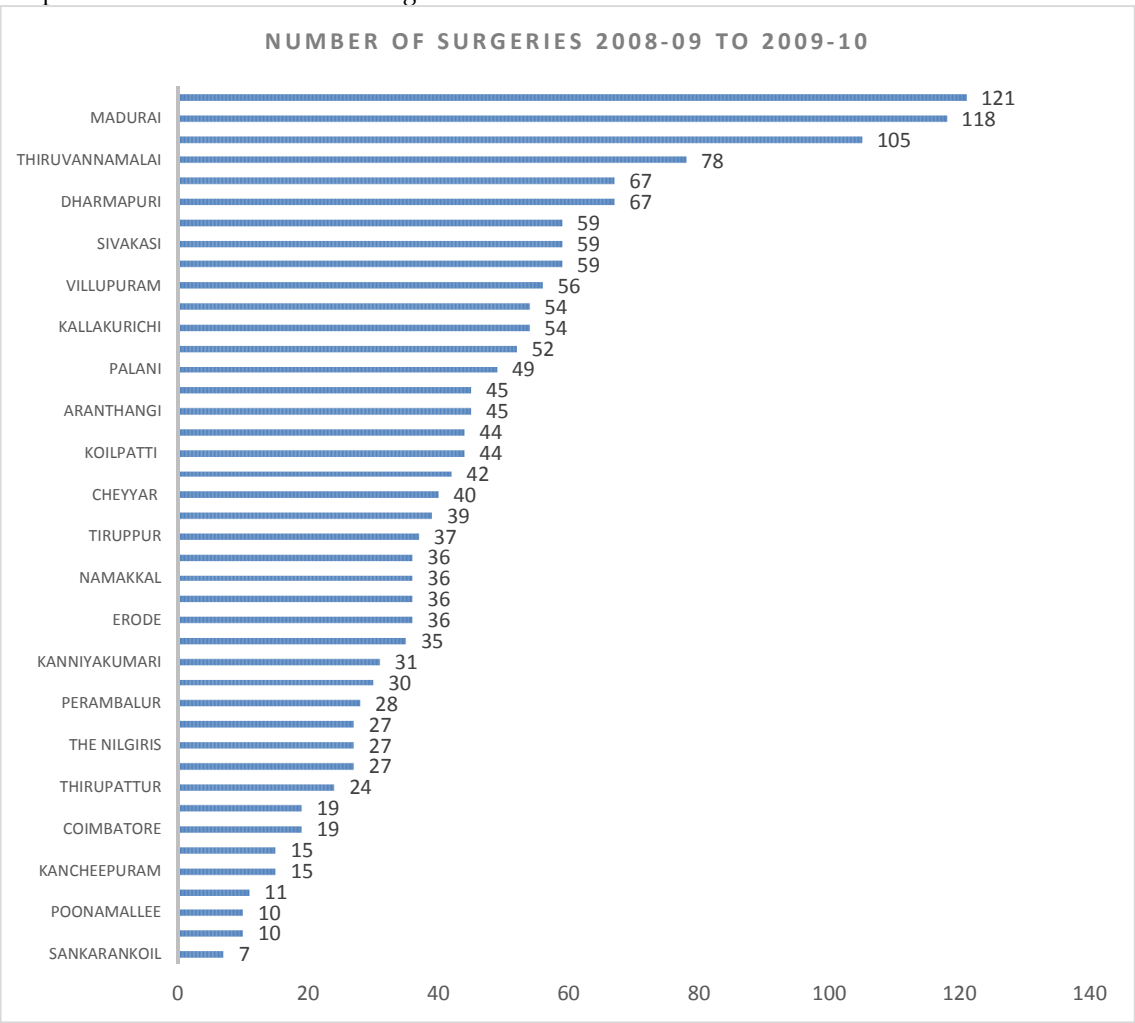
The linkage between insurance companies and private hospitals enabled the state government to have a dialogue with private institutions to bring innovative insurance products for surgical and medical interventions. At community level, a visible impact is seen in utilizing VHSC untied fund for mobility support for selected cases in the village. The available data reveals that most of the beneficiaries belongs to marginalized and poor communities with lack of access to the health care facilities.

Scalability

The percentage of vulnerable sections of society using public health facilities is a benchmark for the performance of public health institutions. Unregulated private health facilities that cause health distress leads to vicious circle of indebtedness and poverty as experienced by Tamil Nadu during Tsunami were able to cover under the private health insurance schemes. The scheme *PALLI SIRAR IRUDHAYA PADUKAPPU THITTAM* therefore established a launching pad for setting up effective risk pooling system. Involvement of government agencies, NGOs and insurance providers had helped to generate more confidence in the risk pooling arrangement. Many studies have shown acceptable health indicators of socially and economically deprived groups in Tamil Nadu and in addition NRHM makes conscious efforts to address any such inequity in the state. Hence, this model can be adopted at national level to provide affordable health care services to marginalized and poor communities in the country.

Annex:

Graph: Health Unit District wise surgeries conducted from 2008-09 to 2009-10



SCHOOL BASED TREATMENT OF DENTAL CARIES IN THE PRIMARY DENTITION IN TAMIL NADU

Problem Statement

A current review of the available epidemiological data from countries indicates that there is a marked increase in the prevalence of dental caries in the developing nations. This global increase in dental caries prevalence affects children as well as adults, primary as well as permanent teeth, and coronal as well as root surfaces. This increase in dental caries signals a pending public health crisis[1]. Dental caries is a multi-factorial disease influenced by many factors including age, sex, socioeconomic status, diet, microorganisms, trace elements, saliva, genetic predisposition and tooth morphology. Among various stages of life, the school going period is the crucial one where the children are facing multi-dimensional challenges in terms of educational and health perspective risks which leads to various morbidity conditions especially oral diseases.

National Health Survey[2] was conducted in 2004 by the Dental Council of India, in order to ascertain the oral health status and prevalence of dental disease in representative age groups. The following percent prevalence of dental caries was reported for the various age groups examined, for both coronal and root surfaces:

51.9% in 5 year-old children

53.8% in 12 year-old children

63.1% in 15 year-old teenagers

80.2% in adults aged 35-44 years-old

85.0% in adults aged 65-74 years-old

The report recommended providing preventive dentistry program, such as water fluoridation etc. One study in the six primary schools of rural Tail Nadu children aged 5-10 years, reported caries prevalence of 71.7% and 26.5% in primary and secondary denture respectively[3]. Caries was more prevalent in primary dentition of boys (78.9%) than in girls (65%)[3].

Program Description

Tamil Nadu is the first state to adopt Preventive dentistry through the Public Health Dentistry of Madras Dental College. The state placed 32 contractual dental units in rural PHCs which are located in fluoride belt and then expanded to all 30 bedded hospitals as per Indian Public Health Standard. This findings of high caries prevalence in school children lead to formulate a massive strategy to cover entire rural government and government aided school children in Tamil Nadu through number of dental camps.

Objective was to provide a strong set of teeth to the school children and to prevent dental caries and related disorders in later years

Based on a pilot study covering children from 3rd to 8th Std in districts of Kancheepuram and Thiruvallur Districts, it was decided to limit the programme to treatment of caries alone & to include the other diseases year by

year on an incremental basis. The rationale behind this was that during the age range of 8 to 13 years, all the milk teeth (20 in number) are shed and replaced by upto 28 of the 32 permanent teeth. This strategy to of targeting the specific age group could leverage to prevent Dental Caries in 28 of the 32 permanent teeth.

Two strategies were tried in the pilot programme. Screening at camp and mobilizing children to the base treatment center (either PHC or Taluk hospital) or screening by school teachers followed by treatment camp in the school. The second was well accepted by the parents who gave consent letters through the teachers for removal or filling the caries milk teeth. The Village Health Nurse (ANM) of Health Subcenter and Sector Health Nurse and Teachers were sensitized and oriented towards the programmme and for organizing and follow up of cases.

Program Impact

a. Inputs and outcomes of Pilot Study - (August 2010)

Indentified cases	No.of PHCs	No. Of schools	No. Of teachers	No.of students Screened	Total cases	Fillings	Extraction
Kattankulathur block, Saidapet HUD	5	113	226	19600	2151	1201	524
Ellapuram block, Tiruvallur HUD	3	37	74	10600	1587	1423	559

b. Nearly 11-15% treated on the spot and balance cases were referred to PHCs which require more sittings. This preventive strategy has lead to treatment of school children which otherwise would have gone on to develop serious teeth problems.

Scalability

This strategy than either be tagged along the recently launched RBSK or as a standalone programme depending upon the local context and resources. One thing is clear that timely interventions can save higher investments in providing curative services later

Contact Person

MAMATA VAHAN: REDUCING THE DELAY OF REACH

Problem Statement

Maternal Mortality Ratio (MMR) in the State of Jharkhand remains high. Annual Health Survey (AHS) 2011-12 data reflects that MMR in the State is 267 per one lakh live births which is much higher than the National average of 212 (SRS 2007-09). In addition Jharkhand has a low institutional delivery rate of 37.6 (AHS 2010-11). A major contributing factor for is the inaccessibility and paucity of public transport measures resulting in delay in reaching health facilities for accessing obstetric care. To reduce the delay in referral during childbirth and the treatment of sick newborns Government of Jharkhand initiated the novel idea of free referral services to the health facilities for the beneficiaries. This is achieved through availability of vehicles referred to as Mamta Vahans.

Program Description

The referral network aims to increase safe delivery practices, through increase in –institutional deliveries by generating awareness and knowledge about timely referral services among Sahiyas (Accredited Social Health Activist –ASHA) and Skilled Birth Attendants (SBAs). Piloted in the State with technical support from UNICEF, Government of Jharkhand has now established a referral network in all the 24 districts of the State. Call centers have been established at the district level in the District Hospitals. The call centers are operational round the clock with trained operators working in 8 hours shifts. Vehicles have been arranged for at the panchayat level and all vehicle owners have a written agreement with the State Government. Sahiyas in the villages facilitate the telephone call to the call centre and then accompany the pregnant woman to the Institution for delivery. Drop back facility is also made available to the beneficiaries.

Program Impact

The scheme was initiated on 4th July 2011 in Ranchi district and the entire State was covered by October 2011. Till date 2438 vehicles have been contracted under the scheme and referral services rendered to around 1, 91,449 pregnant women and drop back services to 1, 34,544 women with more than half the referral services having been availed by the marginalized population groups.

Scalability

The model is operational in many States of the country and the impact in improving the institutional delivery rates well established.

Conclusion

Mamta Wahan Call Centre Health Minister & Additional Chief Secretary, GOJ flagging off the first Mamta Wahan

The initiative has gone a long way in improving the rates of institutional deliveries in the State and is functioning very well as evidenced by the fact that 97% of the calls received at the centers have been rendered referral services and 99% rendered drop back services.

For more details contact:

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ARTICLE 1.8

ESTABLISHING MODEL DEMONSTRATION CENTERS FOR ROUTINE IMMUNIZATION AND ESSENTIAL NEW BORN CARE- AN INNOVATIVE APPROACH FOR QUALITY SERVICE DELIVERY

Problem Statement

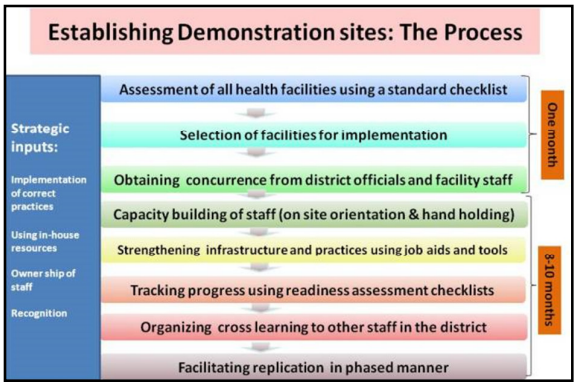
The recent Call to Action: Child Survival and Development initiative focusing on implementation of RMNCH+A in High Priority Districts (HPDs) of the country stresses upon the need for reducing Under 5 Mortality Rate (U5MR). The initiative also recognizes the need for improving and sustaining the quality of health care service delivery. Within the spectrum of Child Health, New Born Care and Routine Immunization (RI) are prioritized areas which make a major dent in reducing child morbidity and mortality. To improve and enable system strengthening and facilitate capacity building of health workers, the State of Jharkhand with technical support from USAID-MCHIP has established Model Demonstration Centers for RI and Essential New Born Care (ENC).

Program Description

3 such demonstration centers for RI and 4 demonstration centers for ENC have been established as a pilot initiative in Deoghar and Jamtara districts in the State. The demonstration centers have been established with the following objectives: strengthen immunization and new born care related practices and processes at selected health facilities in an integrated manner, develop these facilities as cross learning centers for program managers and health staff working on immunization and new born care and facilitate capacity building of staff through interactive discussion, demonstrations, and participatory learning.

Program Impact

The initiative has led to demonstration centers being modelled as centers of excellence and the impact is reflected in improved attitude and health practices of the workers at the centers. RI Demonstration centers have been established for four thematic areas of RI: Cold Chain and Vaccine & Logistics Management, Recording & Reporting (MIS), Program Management (Planning & Review) and Immunization Waste Disposal. At ENC centers New Born Care Corners (NBCCs) were operationalized and, delivery room and recording and reporting practices improved. With the introduction of the delivery and newborn register- the State has started reporting data on neonatal deaths and asphyxiated new borns. Skill stations have been established at these centers which have instituted the practice of mentoring and



Supportive Supervision (SS) for up-gradation and maintenance of skills and practices. Cross learning visits have resulted in replicability of the practices at other health facilities in the districts.

Scalability

The State is in the process of scaling up the initiative. Funds have been approved in the Routine Immunization State Program Implementation Plan (SPIP) for 2013-14 for sustenance of these centers and cross learning visits planned for health staff and functionaries from three poor performing districts to these centers.

Conclusion

The initiative has definitely resulted in improved quality of services related to the two thematic areas.

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RAPID- SUPPORTIVE SUPERVISION FOR STRENGTHENING ROUTINE IMMUNIZATION SERVICES

Problem Statement

It is well established the effective Supportive Supervision (SS) is key towards successful implementation of any public health intervention measure or program. With more than 9 million immunization sessions and a high number of cold chain points supervision is an integral part of the Universal Immunization Program (UIP) in India. Regular Appraisal of Program Implementation in District (RAPID); a SS and review approach developed by USAID-MCHIP has been adopted and implemented by Government of Jharkhand (GOJ) in collaboration with Development Partners (DPs) in the State primarily UNICEF, MCHIP and WHO-NPSP. The model aims at improving the quality and service delivery of the Immunization Program by focussing on key thematic areas of program management; cold chain maintenance including vaccine and logistics management; immunization safety and waste disposal; records, reports and use of data for action.

Program Description

Conducted as a 3-4 day activity the RAPID model includes a one day orientation and training on Routine Immunization (RI) facilitated for all stakeholders at the district level. Following that, teams visit all Community Health Centers (CHCs) and Primary Health Centers (PHCs) which are planning units for immunization and have vaccine storage facilities and randomly selected outreach session sites in the district over one or two days. Each team is comprised of trained supervisors – a district level health official, Medical Officers at the block level and a Partner representative. The teams observe key thematic areas as outlined above at the cold chain points and session sites and capture the observations in standardized checklists. The team discusses program related issues with facility staff, ensure onsite corrections, and provide training to contribute to the strengthening of skills and service delivery of the facility staff and ANMs at session sites. Collected data is compiled and analyzed using an Excel based tool, contributing to an analytical report with indicators and grading of ILR points. The findings are shared with the district to develop an action plan for the next six months.

Program Impact

The model has resulted in a significant improvement in the quality of services across Cold Chain points in various districts as evidenced by the following data. Whereas in the first round only 1 (14%) cold chain point was in good category; 6 (75%) facilities were in good category after six rounds.

Results of six rounds of RAPID conducted in Deoghar district

Facility / CHC	Round 1 (Feb 2010)		Round 2 (Nov 2010)		Round 3 (April 2011)		Round 4 (Nov 2011)		Round 5 (May 2012)		Round 6 (March 2013)	
	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade
Sarath	47	Avg	41	Avg	53	Good	55	Good	51	Good	55	Good
Madhupur	36	Avg	41	Avg	50	Avg	55	Good	56	Good	57	Good
Jasidih	54	Avg	52	Good	52	Good	58	Good	56	Good	54	Good
Sarwan	47	Good	53	Good	53	Good	58	Good	56	Good	56	Good
Palojori	37	Avg	50	Avg	50	Avg	53	Good	46	Avg	55	Good
Mohanpur	33	Avg	43	Avg	55	Good	59	Good	51	Good	51	Good
Karron	25	Poor	35	Avg	53	Good	58	Good	57	Good	47	Avg
Devipur							46	Avg	47	Avg	41	Avg

Scalability

The RAPID model is being implemented across the State with funds approved in the State Program Implementation Plan (PIP). The model has also been adopted by other States in the country.

Conclusion

The model has definitely resulted in improved services at the cold chain points in the districts.

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MEASURES TO REDUCE MATERNAL MORTALITY IN KERALA

Problem Statement

Many health indices of Kerala are comparable to that of the developed nations. Maternal Mortality Ratio in Kerala is lowest in India compared to other states; however it is much higher than that of the developed nations. This has to be further brought down.

The confidential audit of Maternal Death has been in started in Kerala in 1990s and Kerala is the first state to implement confidential audit of Maternal Death. The format for the confidential audit has been revised in 2010. The death audit is as per the international standards and aims to reduce the Maternal Death. Guiding principles of Maternal Death audit in Kerala is to improve the standards of care by identifying correctable missing links in the health system or professional practice. Hence death audit is observed as a learning activity not a fault finding exercise or intended to take legal action. This audit is conducted by the committee constituted for the purpose and aims constructive criticism than fault-finding exercise. During the analysis all names and identities of the patient is not included and report contains observations as description of activities with possible corrective steps or alternatives. The analysis of the maternal death audit during the last few years, revealed the causes of maternal death in Kerala. Major causes of death are haemorrhage, hypertension, and sepsis, heart disease complicating pregnancy, amniotic fluid embolism and hepatitis. Major two causes are haemorrhage (19.3 %) and hypertension (12%).

Programme Description

Department of Health, Government of Kerala recently took steps to reduce Maternal Mortality in Kerala. A programme has been started by NRHM and Health Services Department with the technical support from NICE international United Kingdom and Kerala Federation of Obstetrics and Gynecology. In the pilot phase, Quality Standards developed by the Health Department is being implemented in selected hospitals.

Maternal Mortality Ratio is most commonly used universally as a health indicator to make international comparisons of women deaths in reproductive period during pregnancy and delivery. World Health Organization defines “a

maternal death as the death of woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or internal cause".

A Quality Standard document has been prepared for reducing the maternal death during the antenatal period, delivery and post natal period. Quality standards that are derived from evidence-based clinical guidelines and that are agreed by relevant stakeholders provide powerful levers to drive and measure quality improvement in health care institutions. It focuses on improving the health care, mothers receive in hospitals, both public and private, and to help reduce maternal mortality, which is one of the main health priorities in Kerala. Drawing from a range of published local and international clinical guidelines the quality standard contains a set of ten concise statements and measurable indicators covering the management of post-partum haemorrhage and also hypertensive disorders of pregnancy. These ailments have been highlighted as the leading causes of maternal mortality in the Confidential Review of Maternal Deaths published by the Kerala Federation of Obstetrics and Gynaecology. Better management of these two conditions would lead to improved outcomes and to potential decrease in maternal deaths.

The pilot project is being implemented in 8 selected hospitals in the state. These hospitals are W and C Hospital Trivandrum, District Hospital Peroorkada, THQH Chirayinkezhu, CHC Kanyakulangara, SAT Hospital, General Hospital Ernakulam, SUT Hospital and Mother Hospital Thrissur.

The disposable delivery kits are introduced in these hospitals, to improve the quality of care, reduce hospital infections and also to measure the blood loss during the delivery. The delivery kits includes sterile perinial towel, abdominal towel, masks, caps, blood lose measuring pads etc. More over the requirement of equipments for the maternity care has been collected from the hospitals. The administrative sanction has been issued to Kerala Medical Services Corporation Limited to purchase of the equipments.

Trainings were conducted by Kerala Federation of Obstetrics and Gynaecologists at Trivandrum and Ernakulum. All the Gynaecologists and other staff from selected hospitals participated in the training. The blood lose is being measured during the vaginal delivery and Caesarean section. The quality standards are being followed by all the staff in the selected hospitals.

Flow charts for the implementation of Quality Standards has been developed and made available in the selected hospitals in labour room and maternity wards. New labour room register was designed and implemented in all selected hospitals.

The Quality Standards are the product of a multi-stakeholder partnership between Government of Kerala, National Rural Health Mission, Kerala Federation of Obstetricians and Gynaecologists, Departments of Health Services, Medical education and the National Institute for Health & Clinical Excellence (NICE) International with support from the UK Department for International Development (DFID) Multi Country Partnership grant (HPS) and the Joint Learning network (JLN). The pilot project is being reviewed every month and will be up scaled to all other hospitals in the state.

Program Impact

There meetings were conducted to review the progress of the implementation of Quality Standards in the pilot hospitals. It was found that all the pilot hospitals are following the prescribed Quality Standards. Preliminary reports indicate that there is a reduction of complication and referrals to higher institutions. It was also noted that, the total number of blood transfusions is reduced in the pilot hospitals.

Scalability

After the pilot project, all the Government hospitals, providing the maternity services and selected private hospitals will be included in this project.

The project can be scaled up to other states to reduce the Maternal Mortality. However it

may be noted that major causes of maternal death varies from state to state. Hence the Quality Standards need to be revised for other states, depending on the cause of death.

Conclusion

Measures to Reduce Maternal Mortality in Kerala project is implementing successfully in the pilot selected hospitals. This project will help to reduce the Maternal Mortality in Kerala. The programme will be up-scaled to all other health care organizations which offer the maternity services to the public. It was also found that the quality of services improved in the selected hospitals. The standard guidelines are in place for the management of complications. The complications and referral to higher centers are reduced.

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ADDRESSING SKILLS GAPS OF HEALTH PROFESSIONALS IN BIHAR: THE SKILLS LAB EXPERIENCE

Problem statement

For several decades, and until very recently, Bihar was a by-word within India for economic and political backwardness. Bihar was special among BIMARU states for its deplorable standards of governance: widespread insecurity, corruption, and apparently highly conflictual & dysfunctional political competition. This was especially the case in the period between 1990 and 2005, when there has been an acute shortage of technical personnel at all levels, and health department was no exemption. In the government health service, 90 per cent of doctors posts were vacant, as were 95 per cent of posts for paramedical staff[4].

The NRHM goals lays stress on making sufficient number of nurses equipped with appropriate skills and knowledge available and the various Government of India monitoring reports (CRM[5], JRM[6]) have highlighted the lack of skills among health professionals in the State as one of the factor adversely impacting quality health services. The nursing services study conducted by NHSRC in 2008[7] have made recommendations on the need to have skill based trainings and mobile mentoring in the State. This was despite the state undertaking skill based trainings like SBA, IMNCI, NSSK etc. The staff from the public health institutions reported lack of exposure to training on mannequins or real patients as an important factor. Even though the number of people accessing healthcare increased many fold, the lack of skills and confidence prevented them from practicing it.

The in-house quality improvement initiative, called the Family Friendly Hospital Initiative, undertaken by Bihar focused specifically on the skills of health professionals since it was an important factor for certification. The establishment of skills lab in Bihar was done with the specific objective of (a) demonstrating a model of training for addressing skill gaps (b) to build capacity of ANM/Staff Nurse & Medical Officers working in public health institutions. Bihar started setting up Skills lab in 2011.

Program Description

Skills labs in Bihar are established in Bihar at two levels; District and Block level. The Skills lab at District level was supported by UNICEF and the ones at Block level are supported by Care India. The number of skill stations also varied among these.

The skills lab at district level is established in 6 districts and Block / Institutional level Skills lab are located in 32 institutions in 8 districts.

Methodology of Training and Evaluation

Each District Skill Lab consists of 30 skill stations - 10 pertaining to obstetrics, 15 newborn & child health and 5 pertaining to infection control practices, arranged in a space of 1500 sq.ft. The training program is conducted through a three-day module for a batch of 30. On the first day, after introductory session, the existing skills (and related knowledge) of each trainee is assessed, and following this, supervised practice after demonstration at Skill stations for each trainee is provided. The TOT for the Skills Lab trainers was held in State Training Institute, Tamil Nadu. The batch of trainers

[4] Government of Bihar (2006) *White Paper on State Finances and Development*, Patna: Government of Bihar

[5] CRM reports – 1st (2007), 2nd (2008), 3rd (2009), 5th (2011), 6th (2012)

[6] JRM reports – 7th (2009),8th (2010)

[7] Nursing Services in Bihar: current situation, requirements & measures to address shortages, NHSRC, 2008

(24) consists of Medical doctors and graduate nurses. The trainer: trainee ratio is 5:1. The post training evaluations were conducted in selected skill stations and lasts for 150 minutes.

The Block / Institutional Skills lab, is set up in a 800 sq.ft space. The Skills lab has skill stations. The trainers are graduate nurses trained at EVERONN Institute, Tamil Nadu. This training is offered at institutional level and the trainers are mobile. Training team consists of two trainers and is allotted four facilities in a district. They are providing training to all ANMs and staff nurses in a health facility for a week (one out of six modules) and then trainers move to next health facility. After three weeks trainers revisit the facility and asses the skill of ANMs and GNMs and start next module. Presentably 16 master trainers are providing training in 32 Health facilities.

In 2012-13, sixty two staff nurses and 127 ANMs were trained at block / institutional level skills lab, and in the district skills lab 347 doctors and 1555 staff nurses / ANMs were trained. Mobile mentoring visits have shown 'improvement in performance' of 80% in Bhojpur, 65% in Rohtas, 75% in Kaimur and 85% in Nalanda *(evaluation in 4 out of 14 districts in which Skills lab is located)*.

Lessons Learnt

a) Daily skills use results in improved skills practice and improved quality of services (for this availability of equipment, consumables and favourable environment is important at the working site)
b) Hand holding/ mentoring / follow up is a must for sustaining the skills learnt
c) After the training, ANMs are willing to work in health facilities and provide services in labour room independently but rotational posting of ANMs in Labour room is a constraint in practicing skills

Scalability

The GOI guidelines on Skills Lab were released in February 2013[8].

For further details:

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[8] Skills Lab: operational guidelines, MoHFW, GOI, February 2013

MATERNAL DEATH REVIEW IN MAHARASHTRA

Introduction

The government of India guidelines[9] on Maternal Death Review (MDR) deals with Facility Based (FBMDR) and Community Based (CBMDR) reviews. As per the guidelines the third party review at the district level is to be conducted by the district magistrate / district collector, who is an officer from Indian Administrative Services Cadre working with the revenue department. The national workshop on MDR was conducted to orient all the state nodal officers in 2010.

Program Description

Maharashtra released Government Resolution dated May 28th 2010[10] on MDR (i) notifying the facilities to do the FBMDR (ii) designating the officers performing reviews at district level. District Quality Assurance Committees are constituted both for Corporations and Districts separately under Chairmanship of Health Officer Corporation (MOH) and Civil Surgeon respectively.

As per the Government Orders, the third party review at district level is designated to be done by the Chief Executive Officer, Zilla Parishad in the districts and by Commissioner Corporation in the corporation area. There are four reasons as to why the CEO, Zilla Parishad / Commissioner Corporation are given the charge of reviewing the MDR cases. One, the public health institutions like Sub Health Centres and PHCs are under administrative control of Zilla Parishad as health is a transferred scheme to Zilla Parishad; two, CEO Zilla Parishad is also vice chairman of the District Health Society; three, the District Health Officer is also under the administrative control of CEO, ZP; four, the release of funds under NRHM to the institutions under control of Civil Surgeons viz. CHCs/DH are also with the approval of CEO ZP. Commissioner Corporation is overall in-charge of health services provided in corporation area and Health Officer Corporation works under administrative control of Commissioner. There is separate Health Society on par with the District Health Society for the corporation. The CEO Zilla Parishad/Commissioner Corporation are also a IAS officers /or officers with conferred IAS. CEO ZP is under administrative control of the Rural Development department. Commissioner Corporation is under Urban Development Department. There are 33 districts where CEO Zilla Parishad conducts the review and 23 corporations where Commissioner of Corporation conducts the review in the State. The review by CEO Zilla Parishad and by Commissioner Corporation is attended by members of the respective District Quality Assurance Committee (DQAC) and not any member from PRI.

As per GOI guideline, there is no function given to the divisional level officers. But in Maharashtra, the health division is handholding and reviewing the MDR process in the districts and facilities. This meeting is attended by the MDR nodal officers and the District Quality Assurance Committee (DQAC) members.

MDR findings

In 2012-13, the total number of facilities notified for FBMDR in the state were 1154 (Govt. 623, Pvt. 479, NGO/ Trust 52). FBMDR committees have been formed in all these institutions. In 2012-13, all of them conducted review meetings. In 2012-13 the estimated

[9] Guidebook on Maternal Death Review, MoHFW, GOI, 2010

[10] GO dated May 2010

number of maternal deaths in Maharashtra was 2055. Against this, a total of 1402 cases were reported. At the district level CMO (Civil Surgeon, Health Officer Corporation) conducted review of 1315 cases. The CEO Zilla Parishad reviewed 531 cases. In the corporation area Commissioner of Corporation reviewed 721 cases. All divisions conducted review meetings. The bi-annual meeting of the State Task force is also held. The preparation of annual report is under process.

The findings of MDR reviews[11] are;

TABLE 1. MDR ANALYSIS

Age	< 18 years	19-25 years	26-35 years	>35 years
	8	**862**	**482**	**50**
Caste	**SC**	**ST**	**Others**	
	159	**217**	**1026**	
Delays	**1st**	**2nd**	**3rd**	**Not Indicated**
	692	269	130	311
ANC Coverage	**<3**	**>3**	**No ANC**	**Not Indicated**
	554	477	220	151
Place of Death	**At Home**	**On Road**	**Institute**	**Others**
	97	133	1171	**1**
Causes of death			**Number**	
Hemorrhage (APH, PPH)			285	
Sepsis			133	
Abortion			17	
Obstructed Labour			15	
Ruptured uterus			15	
Hypertensive Disorders in Pregnancy / Eclampsia			216	
Anemia			90	
Heart Disease			72	
Hepatitis			70	
Not indicated			180	
Others			309	
Total			**1402**	

[11] MDR report, Government of Maharashtra, 2012-13

1,2 – NHSRC, 3-Consultant (MH), SFWB, Maharashtra

Scalability

Involvement of Zilla Parishad and handholding support from Divisional level Quality Assurance Committees can strengthen MDR process. The DQAC are already notified in states as per GOI guidelines.

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SECTION 2: DISEASE CONTROL

REDUCING MALARIA MORTALITY AND MORBIDITY THROUGH LONG LASTING INSECTICIDAL NETS INTERVENTION: THE ODISHA EXPERIENCE

Problem Statement

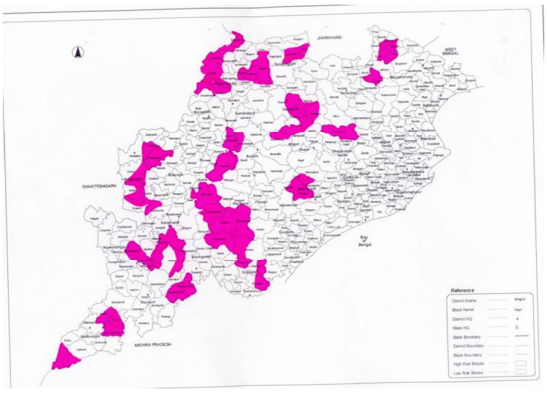
Nearly 1.5 million Malaria cases are reported annually in India. At 0.4 million, Odisha accounts for 4% of the Malarial Disease Burden. Anopheles Fluviatilis is the predominant vector and the State has a high burden of Falciparum Malaria i.e > 85%, causing complicated malarial disease. Odisha accounts for 18 % of the total malarial deaths in India (192 of 1068).[12] Based on several drug resistance studies, most of its districts have been declared chloroquine resistant. Malaria morbidity and mortality maximally affect hilly areas, populated by Tribal communities where the penetration of health service is weakest and the health seeking behaviour is often poor. In these malaria endemic areas children below 5 years and pregnant women are the most vulnerable.

Program Description

Long Lasting Insecticidal Net (LLIN) is acknowledged as one of the most effective personal protection measures against malaria and other vector borne diseases. In 2009 – 2012 State Vector Borne Disease Control Programme (State VBDCP), Department of Health and Family Welfare, Government of Orissa (GoO) in collaboration with the National Rural Health Mission (NRHM) launched and implemented the *'Mo Masari Scheme'* to protect pregnant women by LLIN under the Odisha Health Sector Plan. Since inception, 38 lakh LLINs have been distributed in Odisha in 21 clusters covering 26 districts, protecting a population around 85 lakh.

Careful planning and implementation of the program resulted in successful outcomes.

These stages are as follows:



- **Planning Phase:** A robust distribution plan and guideline was developed by State VBPCP after a series of consultations with district officials and other stakeholders. This endeavour was supported by NRHM and TMST. The state plan was backed by strong district micro planning. Each district had their own unique experience and learning based on how the LLIN distribution was envisioned on paper and how it turned into reality. Goan Kalyan Samitis (GKS) were involved in the distribution process to ensure greater permeability, transparency and coverage

[12] NVBDC 2009

of LLIN. District administration and field level health staff assisted the GKS in LLIN distribution and monitoring process.

- **Process:** As a spin off from the success of the Pulse Polio Programme, LLIN was distributed within a single day, to ensure zero pilferage; greater accountability; maximum coverage and better coordination. Follow-up or mop-up rounds lasting another week helped assess shortage of LLIN at village level based on which additional requisition was made from the buffer stock available at district. Three strategies were used to distribute the LLINs. These are:

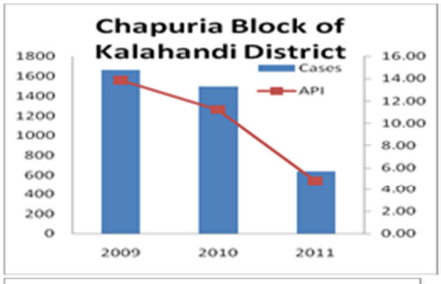
- *Cluster Approach:* GIS mapping identified the clusters of targeted sub – centres having high APIs or difficult terrain making Indoor Residual Spray difficult to implement.

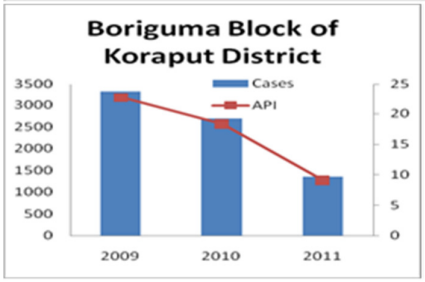
- *Time bound approach* to deliver LLINs

- *Generating awareness for use of LLIN:* A three tier approach to Behaviour Change Communication (BCC) was developed. The first tier included a community needs assessment and demand generation through '*Swasthya Kantha'* (the health wall at the village), use of platforms such as VHND and Immunisation days, dissemination in local haats (market), stalls in local fairs/festivals. The second tier included demonstration of hanging and drying of nets by the Block level Health Team and a BCC campaign known as *'Nidhi Mousa to Masari Ne'*. The third tier concentrated on bringing in behavioural change amongst the users by reiteration of messages on malaria control and prevention and usage and maintenance of LLIN. It included included *Nidhi Ratha* (A van campaign) and *Jatra performance* (folk theatre).

Program Impact

There has been drastic reduction of cases and API over the years after the LLIN distribution. The following are few examples from selected districts which substantiate the best practices revolve around the LLIN distribution its use by the community.





ARTICLE 2.2

TOBACCO CONTROL IN SIKKIM

Problem Statement

Tobacco is a major risk factor for Non Communicable diseases such as Cardio – Vascular Diseases, Respiratory Diseases and Cancer. In Sikkim, smoking tobacco is the most common form of tobacco product used and was prevalent throughout the State. At a point of time smoking cigarettes was indeed considered to be a fashion statement.

Programme Description

The Cigarettes and Other Tobacco Product Act 2003 were implemented in the State in the Year 2008. During the initial stages awareness campaigns were conducted and No Smoking signages were put up in public places such as Government Offices. A series of sensitization and training workshops were conducted for Programmes Officers, Law Enforcers including Police Officers, Medical Officers and Health Personnel, Members of the Civil Society and Non-Government Organizations in both urban and rural areas. Within two years Sikkim was declared Smoke Free State.

To ensure the gains made through tobacco control are maintained have been a challenge for the State. There have been efforts to maintain the same rigor through orientation trainings, workshops, awareness programs to Law Enforcers, Health Officials, Members of the Civil Societies, Faith Based Organizations and Non – Government Organizations along with constant monitoring and supervision by the Tobacco Control Cell. Radio spots / TV spots are being given prime importance to generate mass awareness.

There is also a special enforcement squad, at the State and District level, comprising of Designated Nodal Officers of different departments. To enforce this act at the rural level School Principals, teachers, Panchayats MPHW Male/female, Health Assistants are given the designated powers.

In 1997, Sikkim passed the "Sikkim Prohibition of Smoking and Non Smokers Health Protection Act, being one of the few states to do so. Smoke free Public Place is only small component of overall Tobacco Control. Currently, the State is working towards achieving a comprehensive tobacco control including Tobacco Free Sikkim. This effort includes mass awareness campaigns, coalition building with special focus on tobacco and integrating tobacco mitigation efforts in other routine activities. This effort is fortified with continuous monitoring and enforcement strategies. To curtail the supply tobacco products such as gutka have been banned.

There is no advertisement or visibility of tobacco products

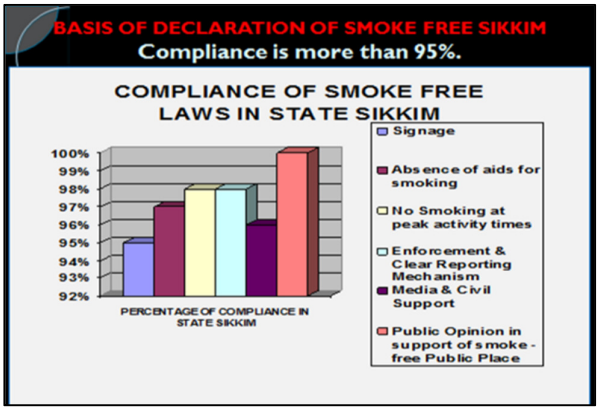
Program Impact

The efforts in tobacco control has led to total ban on smoking in all indoor public places, outdoor public places such as roads and markets. It has resulted in no smokers in public places.

Though there are cases of smoking in Public places as it is social laws has been dramatic changes in prevalence of smoking in Public Places and perception of common men on tobacco has changed dramatically.

Scalability

The Health Departments in all States need to collaborate with other departments for comprehensive tobacco control and enforcement of COTPA in all States. Despite many challenges in maintaining the efforts, tobacco free environment is the first step towards a tobacco free society and is an attempt towards comprehensive tobacco control.



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ARTICLE 2.3

INTEGRATION OF PPTCT SERVICES WITH RCH UNDER NRHM-KARNATAKA EXPERIENCE

Problem Statement

About 430,000 children aged under age 15 became infected with HIV in the world, in 2008. Almost all of these infections occurred in developing countries, and more than 90 per cent are the result of mother-to-child transmission during pregnancy, labour and delivery or breast feeding (UNAIDS, 2009). Parent-to-child transmission accounts for about 4.3 per cent of the overall HIV transmission in the country. According to the NACO Annual Report 2009-2010, between April and December 2009, 44 lakh (69 per cent) pregnant women have been tested for HIV under the PPTCT services, against an annual target of 63 lakh. Of those tested, 15,089 were detected HIV positive. Among those detected positive pregnant women, 9,398 (62.28 per cent) mother-baby pairs received Nevirapine prophylaxis to prevent the mother to child transmission of HIV.

Program Description

The PPTCT programme was initiated in India in 2002 following the feasibility study in 11 centers in the six high prevalence states. There has been remarkable improvement in the uptake of pregnant women under this programme in the past five years, especially in the six high prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu, with funding support from the Global Fund.

In 2007, the Government of Karnataka initiated the efforts to integrate PPTCT services with the existing RCH and other components of primary health care. The following steps were followed:

1. Formation of a technical team supported by NACO to draft the components of the model and operational guidelines. The technical team included key staff from KSAPS, NRHM, RCH and the TSU.

2. Fostered dialogue among collaborators to identify entry points, resources, roles and responsibilities.

3. Leverage 'Yeshaswini Scheme' for cashless institutional delivery to HIV+ mother. This has ensured supervised delivery, administration of Nevrapine to mother-baby pair and counselling.

4. Getting buy-in from the district RCHOs through consultative meeting chaired by MD, NRHM.

5. Orientation and sensitization of staff including District RCH Officer (DRCHO), District AIDS Programme Managers, ANMs and ASHAs.

6. RCH Officers to enter the data on HIV+ pregnant women data in the Master Register – monthly EDD wise.

7. Camps by Counsellors and Lab Technicians to cover pregnant women in last trimester of pregnancy

8. Untied funds of NRHM leveraged for (i) travel and daily allowances for Lab Technicians and Counsellors for conducting camps at PHCs; (ii) food and refreshments for pregnant women when they come for testing; (iii) transportation for delivery when needed; and iv) purchase of refrigerators and centrifuges

at PHCs wherever they are unavailable and dysfunctional.

9. Public-private partnerships for expanding coverage for institutional deliveries.

10. Effective monitoring systems are introduced at the state and district level. Key features of the monitoring include (i) Daily reporting from DRCHO to KSAPS to MD (NRHM) in the beginning; (ii) Monthly review meetings of District Collectors, Commissioner of Health and the Director, Health and Family Welfare Services; (iii) State level co-ordination committee; (iv) Monthly and quarterly review meetings and (v) Field based supervision.

11. For the universal access to treatment and care for all HIV infected pregnant women, a circular signed by MD (NRHM) and Director, KSAPS was sent to all districts.

The package of services included:

- ANMs, ASHAs and Anganwadi Workers mobilize pregnant women for testing in the second trimester at the Primary Health Centers (PHCs).
- Counsellors and Lab Technicians offer counselling and testing at PHCs.
- Link up HIV positive pregnant women with the ANM/ASHA/AWW.
- Information to Medical Officer (MO) of PHC, RCH Officer, DAPCU Officer, and District Supervisor.
- Shared confidentiality maintained among Medical Officer PHC, RCHO, District AIDS Prevention and Control Unit (DAPCU Officer), and District Supervisor.
- Birth Planning and follow-up of HIV positive pregnant women by ANM and MO.
- MO issues Yeshaswini Cards for cashless institutional delivery to HIV positive pregnant women.
- Referrals to the District ART centre for CD4 estimation and Pre-ART registration

Program Impact

Table 1 shows that as a result of integration of both the programmes, pre Test counselled ANC mothers have increased almost ten times since 2000. Almost every ANC cases registered in the district are counselled and tested for HIV during last 10 years.

Table 1: ANC Cases Counselled and Tested in District Mysore (2002-2010)

Sl No.	Year	Pretest Counselled	Tested	Posttest Counselled	Positive	Positive deliveries	Mother-baby pairs provided NVP	Infants followed up
1	2002	4238	870	466	6	1	1	0
2	2003	12860	4842	3171	42	20	20	1
3	2004	17391	12154	10197	97	43	43	8
4	2005	17115	15583	14169	91	54	48	16
5	2006	17512	16004	14515	89	57	45	42
6	2007	24901	23945	22321	117	74	66	32
7	2008	31055	27838	27728	173	106	104	83

8	2009	35343	35229	34983	110	107	102	194
9	2010 Jan - Aug	22554	22523	22454	57	58	52	204
Total		**182969**	**158988**	**150004**	**758**	**520**	**481**	**580**

Scalability

This program can be scaled in other states to ensure that 100% of Pregnant Women registered are counselled and tested for HIV.

SECTION 3: HEALTH SYSTEMS STRENGTHENING

ADDRESSING OVERCROWDING IN OPD AT PHC BANAVARAM, DIST. VELLORE (TAMILNADU) BY PROCESS MAPPING AND PROCESS RE-ENGINEERING

Photo 1: OPD Consultations Before and After the Intervention

Problem Statement

Out Patient Department (OPD) of any health facility acts as a "Shop – Window" and is the first point of contact of a patient with Health Care Delivery System. Overcrowding is one of the commonest problems of OPDs across Health facilities, especially in the Registration Counter, Waiting Areas, Consulting room, and Dispensary among others. It contributes significantly towards patient dissatisfaction because of long waiting and less consultation time. The reasons for this is manifold such as lack of familiarity to the hospital environment ('alien' feeling for first timer), absence of guidance for OPD procedures, uneven flow distribution of the patients, impression in the community that to avail the services one must reach in morning hours. To improve the quality of health care and provider - patient relationship, the NHSRC facilitated the implementation of one of the 'Business Process Re- Engineering' models, in OPDs of Health Facility of Tamil Nadu.

Program Description

Quality Management System (QMS) was implemented in 48 Primary Health Centres of Tamil Nadu, facilitated by technical support from NHSRC. A situational analysis *'As – Is study'* was conducted as the first step to elucidate gaps and identify mechanisms to traverse these gaps. It was noted that utilization of Public health services in Tamil Nadu was good, in most PHCs, with the number of daily out – patient's attendance ranging from 200 to 350 per day. However, overcrowding remained an overarching issue in all these PHCs. Banavaram PHC was one such PHC, which was identified to study *'Business Process Re-engineering'* of the Out Patient Department.

The Process approach comprised of 'Process Mapping' and 'Process Redesigning'. A process map is a visual graphical representation of a series of processes documented through direct observation of service delivery at the OPD.

The first step was to identify the bottle necks by using a *'basic flow chart'*. This tool documents every step from the entry of the patient into the OPD to his/ her exit. (Figure 1)

The second step was to do a '*root cause analysis',* with active participation of local and State Medical Officers and Health Staff. The root cause analysis helps identify the actual reason for the bottlenecks and issues. (Table 1)

Table 1: Bottlenecks in OPD Processes and their Root-cause Analysis

S.No.	Bottleneck/Issues	Root cause
1.	Patients and visitors were facing problems in locating OPD area	No directional signages were available.
2.	Overcrowding at Registration counter.	Only one Registration counter was functional.
3.	Overcrowding in waiting area.	All the patients entering waiting area simultaneously
4.	Overcrowding in doctor's chamber (Photo 1)	a) 8 to 10 Patients were entering the OPD chamber together b)Male and female OPD s were conducted in single room c)No assistance / help was available
5.	Time spent by doctors for examination and prescription was very less.	Cascading effect of all of above

The third step was to identify cost effective and simple mechanisms were then initiated to remove the identified bottle necks such as intermediate links in existing processes, duplication of activities etc. These included

a) Installation of directional signages in local language to locate the Registration counter and other departments.
b) Operationalization of separate counters for male and female patients.
c) Introduction of a token and patient calling system with electronic display, to enable patients to sit and relax while waiting for their turn. Those with longer waiting time were seated outside the waiting area to decrease the patient inflow and resultant overcrowding. (Photo 2).
d) The patients were also sent in batches of 15 – 20 to stagger the patient numbers in the patient waiting areas.
e) Segregation of male and female OPD Consultation rooms, within the spaces available. For this no new construction was initiated, instead there was slight rearrangement and relocation of certain services such as the store rooms to another location within the premises.
f) The Health Inspector activities were rescheduled in a manner that he could oversee and coordinate the activities of the morning OPD and conduct field visits in the afternoon

Photo 2: Electronic Display System in Patient Waiting Area

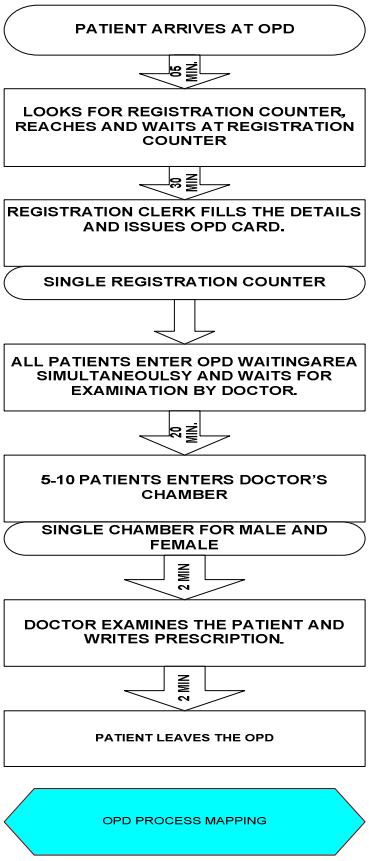
The fourth step was to redesign the entire process of the OPD to enable better patient management and put it into action.

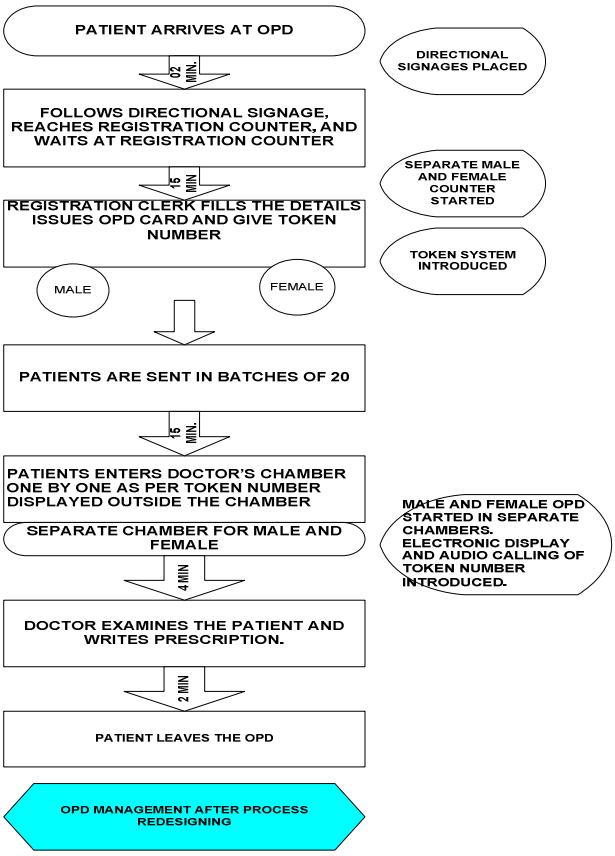
Program Impact

With these measures in place, the turnaround time reduced by 18 minutes per patients. This was from their time of entry to time of exit from the OPD.At the same time the Consultation time increased from 2 minutes to 4 minutes, which greatly improved patient satisfaction. The other improvements are highlighted in table 2.

Table 2: Effect of Business Process Re-engineering

S. No	Indicator	Before intervention ('As-is' Study)	After Intervention
1.	Total journey time of patient in OPD	57 minutes	36 minutes
2.	Waiting Time taken for registration	30 minutes	15 minutes
3.	Waiting Time for OPD consultation	20 minutes	15 minutes
4.	Time spent by doctor per patient	2 minutes	4 minutes.
5.	Overcrowding at registration counter		Significantly reduced
6.	Overcrowding outside and inside the OPD chamber		Significantly reduced





Scalability

This intervention has been replicated in other PHCs of the state, with success. Thus Process mapping and redesigning principles and techniques can be adopted for any healthcare process to improve them.

For further details contact

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ARTICLE 3.2

PRIVATE PARTNERSHIP FOR MANAGEMENT OF PRIMARY HEALTH CARE SERVICES: ARUNACHAL PRADESH

A model of remote, difficult to access and sparsely populated regions of the country

Problem Statement

India has one of the highest maternal mortalities in the world. National estimates for Maternal Mortality Ratio are 212 deaths per 1, 00,000 live births per year[13]. More than a decade ago, India made a commitment to the Millennium Development Goals (MDG), and in order to achieve MDG-5 and reduce MMR by three-quarters before 2015, prioritising universal access to reproductive healthcare services and improving women's health have been one of the key interventions[14].

Arunachal Pradesh, geographically, the largest State in North East India, is nestled in the Himalayan Ranges within altitudes ranging from 150 and 7300 metres above sea level. The State comprises of 16 districts and shares international borders with Bhutan, China and Myanmar. Due to its distinct topography and difficult terrain, there is widely dispersed settlement pattern of the population, with average density of only 17 persons per Sq. Km, of which 80% reside in rural areas. The major challenge for provision of comprehensive healthcare including maternal health in these difficult-to-access underserved areas is deficient infrastructure and acute shortage of health personnel.

Studies have shown that maternal health indicators in Arunachal Pradesh lag behind the National Average. NFHS-3 (2006) reported 63.3% first antenatal check-up among pregnant women in Arunachal Pradesh compared to the National Aggregates of 75.2%. NFHS-3 also reported 31.7% institutional deliveries in the State, which is below the National Figures of 40.8%[15], [16].

Program Description

To ensure universal access to maternal health care, the Government of Arunachal Pradesh piloted a PPP Project in 2005-06, by outsourcing management of 16 hard-to-reach PHCs and 29 Sub Centres, one from each district[17], to 4 NGOs with financial support from NRHM.

Infrastructure & Human Resources: Facility Survey reveals that since the initiation of the PPP scheme, the 16 PHCs which were hardly functional due to lack of proper infrastructure, healthcare personnel, and incomplete record keeping were all operationalized. OPD, Wards, Laboratory and Labour Room are well equipped with NRHM funding and functional.

Service Delivery: Maternal Healthcare including Antenatal Care (ANC) and 24X7 Institutional Delivery (ID) among other services is provided on a regular and

[13] Ministry of Health and Family Welfare (2011). NRHM Health Information System (HMIS) Portal. Available at: http://nrhm-mis.nic.in/ (accessed on 02.12.2011)

[14] WHO (2007). Maternal mortality ratio falling too slowly to meet goal. Available at: http://www.who.int/mediacentre/ news/ releases/ 2007/ pr56/en/ (accessed on 3.10.2011)

[15] State Program Implementation Plan 2011-12 for Arunachal Pradesh

[16] International Institute of Population Sciences (IIPS) and Macro International (2007) National Family Health Survey (NFHS 3), 2005-06: India; Volume 1 Mumbai: IIPS; 2007.

[17] The 16 districts of Arunachal Pradesh are Anjaw, Changlang, Dibang Valley, East Kameng, East Siang, KurungKumey, Lower Dibang Valley, Lohit, Lower Subansiri, Papum Pare, Tawang, Tirap, Upper Siang, West Kameng and West Siang

continuous basis along with treatment for communicable diseases, and non-communicable diseases, among others.

Table 1: District wise Infrastructure, Human Resource and Service Delivery in PHCs under PPP

Sl. No	District	Name of PHC	SERVICES		HUMAN RESOURCE IN PLACE					STATUS OF ANTE-NATAL CHECK-UPS RECEIVED				TYPE OF DELIVERY		Total No. of respondents
			ANC	24x7 ID	MO	ANM in PHC	ANM in SC	Pharmacist	Lab Tech	1 ANC		3 or More ANC		HD	ID	
			Y/N	Y/N	No.	No.	No.	No.	No.	No.	%	No.	%	No.	No.	
1	Anjaw	Walong	Y	Y	2	2	4	1	1	10	91	7	63	4	7	11
2	Changlang	Khimyong	Y	Y	2	3	1	1	1	27	100	18	66	5	22	27
3	Dibang Valley	Etalin	Y	Y	2	2	4	1	1	10	71	8	57	11	3	14
4	East Kameng	Bameng	Y	Y	2	4	4	1	1	33	66	18	36	44	6	50
5	East Siang	Sille	Y	Y	2	5	2	1	1	47	83	31	54	31	26	57
6	KurungKumey	Sangram	Y	Y	2	3	5	1	1	46	71	22	34	55	10	65
7	Lower Dibang Valley	Wakro	Y	Y	2	6	4	2	2	22	79	12	43	15	13	28
8	Lohit	Anpum	Y	Y	2	3	4	1	1	42	82	19	37	21	30	51
9	Lower Subansiri	Deed Neelam	Y	Y	2	2	6	1	1	29	81	24	67	22	14	36
10	Papum Pare	Mengio	Y	Y	2	2	3	1	1	28	93	22	73	17	13	30
11	Tawang	Lumla	Y	Y	1	3	4	1	2	31	77	21	53	32	8	40
12	Tirap	Wakka	Y	Y	2	2	4	1	1	56	92	42	69	16	45	61
13	Upper Siang	Jeying	Y	Y	2	1	4	1	1	14	58	10	42	17	5	24
14	Upper Subansiri	Nacho	Y	Y	2	4	4	1	1	16	53	11	37	20	10	30
15	West Kameng	Thrizino	Y	Y	1	5	1	1	1	11	55	3	15	10	10	20
16	West Siang	Gensi	Y	Y	2	2	6	1	1	29	97	22	73	14	16	30
Total					30	49	60	17	18	451	79	290	51	334	240	574

*Y –Yes *N – No *No – Number *HD - Home Delivery *ID - Institutional Delivery

Program Impact

Positive results yielded by the first exploration of improving healthcare delivery including maternal healthcare through the PPP initiative in managing PHCs in remote, difficult-to-access underserved areas of Arunachal Pradesh. Non-functional facilities in these areas have been operationalized and skilled personnel are in place, delivering good quality services. Results show 60-90% ANC coverage more than 40% Institutional Deliveries (NFHS-3: 31.7% ID in the State and National Figures of 40.8%) within 3 years in most PHCs, in areas where no such services were available earlier. This model reveals that with intensified management under the PPP, otherwise non-operational health facilities in difficult-to-access underserved areas can deliver effective health care. Increasing trends in utilization of healthcare services in these facilities is an indication that with ensuring availability of quality care at health facilities, healthcare seeking behaviour can be positively influenced.

Scalability

Although this initiative has not translated into achievement in terms of sheer numbers, as this project was implemented in a State with population density of 17 persons/ sq km, yet this project has brought much needed relief to populations residing in very remote and difficult to access, sparsely populated areas. The success of this project highlights the need for more such project in remote, sparsely populated regions of other States, where the outcome measure should not be merely the number of patients served, but the quality of services provided.

Contact Person

Dr Dimong Padung, State Nodal Officer, NRHM

COMMUNITY OWNERSHIP AND PARTICIPATION OF HEALTH CARE CENTERS IN MIZORAM

Problem Statement

Lack of human resources and infrastructures are common issues that hinder effective implementation of health programmes. Most health centers, especially in the rural periphery insufficiently exist due to the lack of community participation and ownership of the facility. Dilapidated sub centers with no drugs and no staffs are in existence in many rural areas.

Community participation in Mizoram, especially in the health care sector is worth mentioning.

Mizoram is a state knit together by committed citizen who invest heavily in the overall development of the land. The Young Mizo Association (YMA) is the spirit behind this great endeavor of social restructuring and reformation that have propelled the growth of this community participation in every aspect of socio- political and economics. They have also devised strategies to find local solutions to the issues of Health.

Description Of The Initiatives

1. **Community initiated PHC*:** until the late 1980's, Chhingchip in Serchip District did not have any health facilities. The community came together to build a provisional dispensary building in 1982. People contributed towards hiring the Human Resources necessary to make the building functional. Today this effort has translated into a fully functional 10 bedded Primary Health Centre staffed with Medical Officer, Staff Nurses, Pharmacist, Laboratory Technician and other ancillary staff serving the local peoples health needs.

More information about the history of the PHC can be referred to the book- "Chhingchhip Chanchin" by Pu. Haukhama.

Chhingchip PHC **before** NRHM initiatives

Chhingchip PHC **after** NRHM initiatives

2. **Local made - Baby Wooden Warmer:** Resource constraints perpetually affect program implementation. The Haulawng Primary Health Center, Medical Officer, with support of the local Baptist Church Youth Fellowship, decided to redress this resource constraint through use of local material. There was a pressing need for a Radiant Baby Warmer, an equipment which costs on an average Rs 60,000/- or more. With the technical assistance of the Medical Officers, the local carpenter modeled a wooden version

such a Radiant baby Warmer, using locally available materials, for Rs 2800/-, the money for which was also donated by the Baptist Church Youth Fellowship.

3. **Local Made Labour Table:** with the advent and active involvement of ASHA workers at Zokhawthar Health facility, Champhai district, there was a rise in Institutional Deliveries and ANC in – patient care. This led to an immediate need for more labour tables of good quality. Thus, the community at Zokhawthar village voluntarily constructed and donated a wooden labur table replicating the original structure in size, shape and functionality. This locally made delivery table has been used extensively for conducting births in the PHC ever since it was donated in June 2010.

Impact

These initiatives by the people of Mizoram reflect how community participation can change and uplift delivery of health services, ease issues of access and costs incurred. Currently, many health facilities in Mizoram have replicated the Wooden Baby Warmer and the wooden labour table. The benefit of having such locally made equipment is that the cost of manufacture and maintenance are low and the process is much faster and easier.

As for the community of Mizoram, these initiatives highlight the fact that absence and or unavailability of a facility or equipment has never deterred the commitment to save life. As the saying goes - "If there is a WILL, there is a WAY". Anybody can make a difference, by daring to explore beyond the available resource and knowledge to innovate and excel.

Scalability

Such models can be replicated in resource constraint hard to access regions, where the cost of transportation remains difficult and high. Innovating with local materials can go a long way to save lives in such settings.

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PUBLIC HEALTH MODEL IN THE CARE OF THE INCURABLY ILL, CHRONICALLY ILL AND DYING PATIENTS

Problem Statement

Life with an incurable and debilitating disease is associated with a lot of suffering. Pain, many other symptoms like breathlessness, nausea and vomiting, paralysis of limbs, fungating ulcers etc can make life unbearable not only for that person, but also for the family. In addition to physical problems, they usually suffer from social, emotional, financial and spiritual issues caused by their condition. Suffering at the end of life can be effectively reduced by sensitive care with effective control of physical symptoms, good psycho social, emotional and spiritual support. The system of care aiming to improve quality of life of the incurably ill, dying and bedridden people is called palliative care.

The total number of people in need of palliative care in India can be estimated to be 60 percent of all deaths, or 5.4 million people a year. A study on 'quality of death' carried out by Economist Intelligence Unit of "The Economist" in 2010 covering 40 countries, ranks India the last, even below Mexico, Brazil, Uganda, etc. The estimated average coverage of palliative care services in the whole of the country is less two percent. Kerala is estimated to have more than 125,000 incurably ill, bed- ridden and dying patients in need of palliative care.

Program Description

Formal attempt to provide palliative care for the needy in Kerala was initiated by a civil society organisation in Calicut in early nineties. This approach, even though led by committed doctors and social workers could expand to only 30 projects by the year 2000. After great deal of discussion and analysis, it

was decided by a group of people involved that a paradigm shift is necessary by involving the community. With this objective, Neighbourhood Network in Palliative Care (NNPC) a concept of wider and deeper participation by the community was floated. Community initiatives within the conceptual framework NNPC started getting established in Northern part of Kerala.

In 2009, the Government of Kerala declared a pain and palliative care policy highlighting the concept of community based care and giving guidelines for the development of services with community participation for the incurably ill and bed ridden patients. The generation of this document was the result of a series of discussions between the government and the various initiatives in palliative care in the state.

NRHM Palliative Care Project was initiated in 2009 with the aim of facilitation of development of a public health model in palliative care in Kerala in line with the Pain and Palliative Care policy of Government of Kerala. The project aimed to establish the primary, secondary and tertiary care facilities for all the bed ridden incurably ill and dying patients in Kerala with community participation. The strategy was to facilitate the development of palliative care programs through Local Self Government Institutions while taking care to maintain the spirit of community participation in the program. Focus of the program was on sensitisation and capacity building among various strata of the society and also health care professionals at the primary, secondary and tertiary level health care system. Since NRHM projects are for one year, the whole program was divided to 'stand-alone' annual projects and each year's project has been getting submitted to NRHM. Institute of Palliative Medicine, WHO Collaborating Center for Community Participation in Palliative Care and Long Term Care has been entrusted with the task of preparation of yearly projects with the overall project in mind.

Program Impact

In a project of this kind which essentially reduces physical and mental suffering, which induces a sense of belonging among the terminally ill, the impact in the community is more than what can be quantified by measurable indicators. The effective network of palliative care services extending in the more than 800 of the local governments covering more than 60 % of the needy has given a different quality of life to beneficiaries and their families. Kerala, with 3% of the national population now has more than 90% of palliative care units in the country. The project also provided a common platform for likeminded compassionate individuals and various organizations to effectively orient their complete potential for the well-being of the society.

Scalability

An innovative project by National Rural Health Mission acted as the facilitator for local government to establish palliative care projects in Kerala. Since the model works through existing institutions and processes within the public system, it is easily replicable. The processes, procedures and systems can be explained in detail to provide an adaptable model to any agency or Government. The experience in Kerala has been that once the scale of the problem is brought out into the open, social and political support is almost naturally assured. The universal nature of the problem of incurable illness, debility, dying and death makes sensitisation and advocacy easier than other health issues.

Conclusion

Palliative care services are poorly developed in India, the second most populous country in the World. National Rural Health Mission has

facilitated the development of a unique public health model in Kerala which can be replicated in other states of the country.

For further details contact

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EMERGENCY MEDICAL SERVICE (EMS) – ARUNACHAL PRADESH

Problem Statement

It has been observed that due to geographical barrier, transportation of emergency patients takes longer period in Arunachal Pradesh. Further, it has been also observed that when emergency case reaches the PHC, medical staff will run here and there to find the required medicines, instruments or equipments. This way also there is delay in attending the patient. The case may be even worse if the PHC/CHC located either in remote hilly area or an inaccessible area to reach through roadways.

Program Description

To save the time in order to address the emergency patient, Karuna Trust started Emergency Medical Service in its PHCs which is quite unique in its nature. Karuna Trust has developed a guideline and a reporting format for the mentioned (attached here is the guideline). The guideline not only speaks how to provide the services but also includes annexure of IEC/BCC materials to be used by the staffs during the handling of emergency time. It has also been mentioned that the IEC materials should be hanged in the emergency rooms for ready reference. The basic objective of the program is to save the life of emergency patient, to save the time in searching the emergency medicines & to provide quality treatment in emergencies.

For the purpose a room of the PHC building is converted to an emergency room where all emergency & life savings medicines are kept together in such a way that it is available for the Doctors at the time of emergency. A drug toolkit is prepared with several compartment and hanged in this room. In each compartment, a label pasted and particular drug/item is kept. Along with this, there is a poster on ABC management while effective management of Obstetrical emergencies and Neonatal emergencies are also kept on the walls so that all can see. Life savings medicines, surgical items, ambu bags etc are kept in this toolkit. Two days long first training was given in Karnataka followed by two trainings per year have been organized in Arunachal to train the new staff

Program Impact

Because of the emergency medical services during the year 2012-2013, following emergency cases were attended in the PHCs/CHCs run by Karuna Trust in Arunachal Pradesh.

Emergencies	Total
Chest Pain	33
Respiratory Distress	25
Snake bite	9
Dog bite	13
Poisoning	5
Fits	1
Anaphylaxis	2
Trauma and/or fractures	39

Acute Abdomen	52
Burns	21
Emergency Delivery cases brought in ambulance	11
Premature labour	1
Obstructed labour or fetal distress	3
Birth asphyxia	2
ARI	71
Severe dehydration	65
Malaria	13

Scalability

This may be a tiny step but big step to create a system where all the emergency tool kit kept in a room reserved for emergency only. Because it has been observed that in so many hospitals in the emergency room when an emergency patient comes, the tool kit has to be searched for where it was kept. That is why not these simple steps may be followed so that life may be saved within seconds rather being late by searching tool kit to handle the emergencies. This may be followed either in a hilly terrain like Arunachal Pradesh or in a plain area too so that life may be saved. This needs no extra money but need an extra effort from the part of the hospital superintendent.

Conclusion

Though this is happening in Arunachal Pradesh but still it is confined to only those PHCs/ CHCs run by the Non- governmental organization. The hospitals run by the government need to follow up the same kind of procedure in Arunachal Pradesh so that life can be saved by saving time to handle emergencies.

Person to be contacted

Mr. Anup Sarma state coordinator, Karuna Trust;

Drug tool kit hung in the emergency room

IEC hung in Emergency room

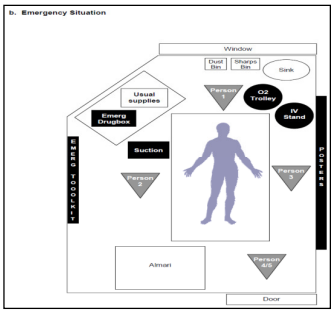

Diagram of the emergency room

"ABILITY GUJARAT"-AN INITIATIVE FOR PROVIDING USER-FRIENDLY SERVICES TO PERSONS WITH DISABILITIES (PWD) AT PUBLIC HEALTH FACILITIES IN GUJARAT

A model for increasing Health Access for Differently Abled People

Photo 1: A visually impaired Girl is registering herself

Photo 1: A differently able person collecting his certificate through IT enabled system

Problem Statement

It is estimated that approximately 2.13% of the India's Population are the persons having some kind of disability (census 2001), while, Gujarat has approximately 2.1% Persons with Disability. Till July 2012, approx. 2,06,000 persons with disability were issued with the 'disability certificate' out of expected 10,45,465 disabled persons in the state (19.7%). The number was abysmally low. Apparently large number of PwD was not getting the benefits under the welfare scheme of the state and centre due to non-possession of the certificate by them.

"Ability Gujarat" is the initiative of Department of Health & Family Welfare, Government of Gujarat for ensuring that process of issuing the disability certificate at health facilities is made simpler and transparent, which can be accessed by all. Revised system significantly reduces number of visits of 'Persons with Disability' (PwD) to Public Health Facilities for obtaining the certificate, which is a key document for availing the benefits and assistance under *'Persons with Disability Act 1995 (amended)* and other benefits announced by the state.

Program Description

It was found that existing system of issuing the disability had many bottle necks, thereby making it difficult for beneficiaries to possess the certificate. Then, commonly observed barriers in getting the certificate are given in the Table 1.

TABLE 1: BARRIERS IN OBTAINING DISABILITY CERTIFICATE

1. CONSTITUTION OF MULTI-MEMBER DISABILITY BOARD ONLY AT LARGE HOSPITALS (USUALLY DISTRICT HOSPITALS)	2. LENGTHY & CUMBERSOME DOCUMENTATION PROCEDURE
3. BOARD MEETING ON LIMITED NUMBER OF DAYS IN A MONTH	4. MANDATORY REQUIREMENT OF HAVING 'OPINION' BY CONCERNED SPECIALISTS FROM GOVT. FACILITIES, EVEN WHEN THE DISABILITY IS APPARENT (SUCH AS AMPUTATION)
5. REQUIREMENT OF LATEST INVESTIGATION REPORTS FROM GOVT. DIAGNOSTIC FACILITIES ONLY	6. LONG DISTANCE & REPETITIVE TRAVEL FOR INVESTIGATIONS & OPINION, AND FOR PRESENTING BEFORE THE DISABILITY BOARD
7. SUBJECTIVITY IN DECISION MAKING IN R/O EXTENT OF THE DISABILITY	8. ABSENCE OF MONITORING SYSTEM

Key Interventions

Under the initiative of 'Ability Gujarat' from July 2012 onward, for making the process of issue of the disability certificate simpler and user friendly, the Department of Health & Family Welfare delegated this authority to all government medical officers, the process has been made simpler, opinion of private sector specialist doctors could be taken in absence of specialist at local government hospitals and the system has been I T enabled. Key interventions under the new system are given below –

1. On-line registration with generation of user's ID/ Registration through NGO/ Registration through post.
2. Time bound delivery of the certificate - Issue of the certificate within a week from the date of receipt of the application by the medical administration, not later than one month. It is monitored centrally at the state level.
3. Beneficiary is not required to travel to CDMO Office. Medical Officer (non-specialist) at nearest Public Health Facility (SDH, CHC & PHC) can issue the disability certificate for the obvious disabilities – (locomotor, amputation, etc).
4. Single specialist doctor has been delegated power for issuing the certificate for non-obvious disabilities, such as hearing & visual impairment.
5. Government institutions like DH/SDH/CHC/PHC are authorized for taking opinion from the specialists, working in Private sector.
6. Specialists from Medical Colleges and DHs are Master Trainers for the MOs in CHCs and PHCs.

Figure 1 shows the old system of obtaining the disability certificate and Figure 2 shows the current system of issuing the disability certificate, which is user friendly, time bound, IT enabled and ensures transparency.

Program Impact

The impact of this initiative is that it has generated a time-bound service delivery. Due to initiation of on-line performance monitoring the crowding at district hospitals is reduced significantly, un-necessary travel and hard-ship to individual have been mitigated. This has also assisted in efficient services at health facilities due to digitalization of records and Real-time Information about PwDs and has resulted in reduced per visit time and less waiting time for the certificate and longer life of Disability records

Scalability

'Ability Gujarat' intends to harness the benefits of ICT to improve effective and efficient delivery of services to PwDs. The project has been designed to cover the entire state of Gujarat. The key component of the project is to identify Persons with Disability (PwDs) and undertake issuance of "disability certificates" to the individuals within a specified time period. The initiative of Government of Gujarat is replicable in other states as well.

Persons to contact

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2. Vinayak Sarolia- State Nodal Officer-Ability Gujarat and Disability Project, Commissionerate of Health, Govt of Gujarat. email: vinayak.sarolia@gmail.com. Contact: 9099075218
3. Ms Rashmi Singh; Consultant – Quality Improvement; NHSRC. Email – rashmi.ihmr@gmail.com

Fig 1: Old system of obtaining Disability Certificate in Gujarat (till Jun 2012)

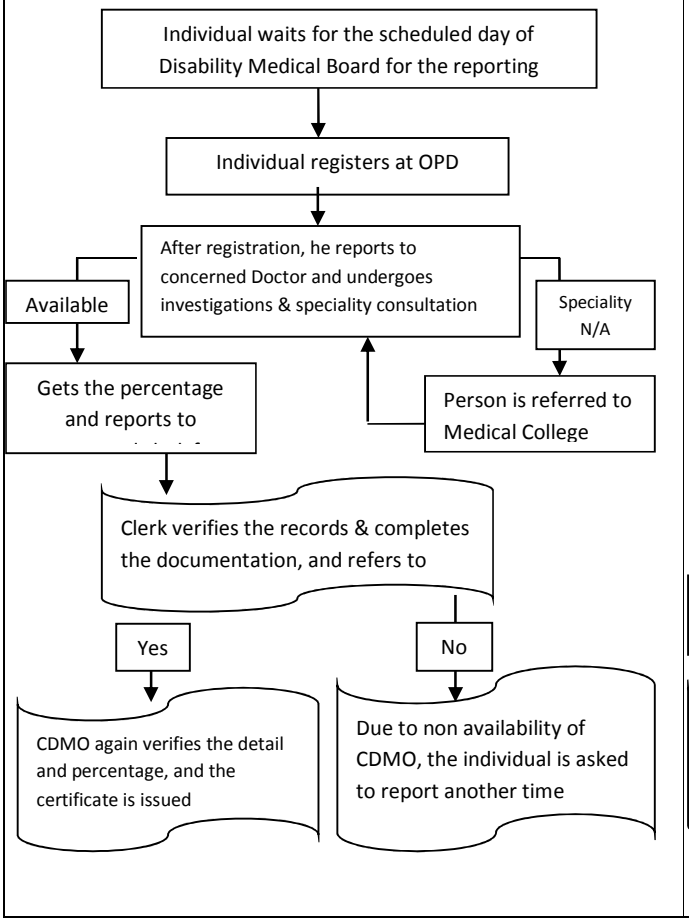
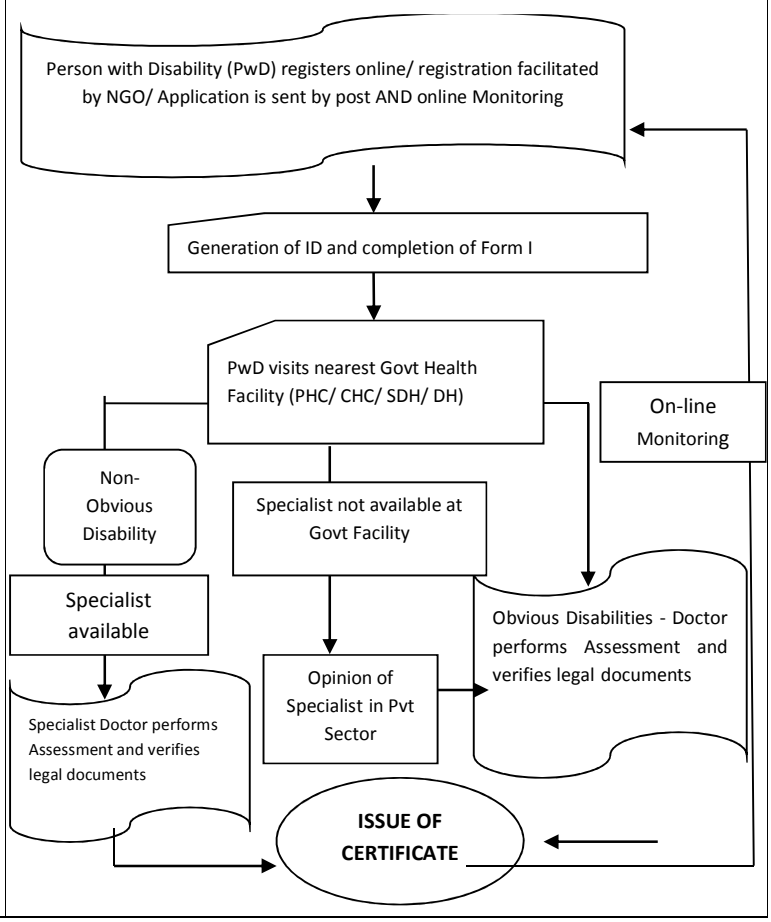


Fig 2: Current Process of obtaining Disability Certificate in Gujarat after July 2012



SUPPORTIVE SUPERVISION AT HEALTH FACILITIES IN HARYANA

Problem Statement

Program implementation at the Health facilities is a challenge due to various constraints related to availability of Infrastructure, functional equipments and a robust supply chain management of drugs and logistics, and efficient human resources with skills to provide the requisite services. Supportive supervision is of paramount importance in smooth implementation and ensuring quality of health care service delivery at the grass root level. Such supervision ensures providing the requisite support or changing staff attitude to work more effectively towards achieving the goals of NRHM. It also provides greater coordination between the supervisor and employee to resolve problems and creating a better working environment. The NRHM, Haryana has introduced one such regular and systematic approach of supportive supervision concurrently through internal and external mechanisms.

Program Description

Supportive supervision in Haryana covers peripheral health facilities such as the sub – centres, Primary Health Centres, Community Health Centres, Sub Divisional Hospitals and the District Hospitals. It has the following components:

Tools: Regular information is collected in checklists such as the a) Supervision Format for the Health Facility b) Questionnaire for ANM or Staff Nurse c) House to House monitoring formats (for sub centres only) and d) Supervision feedback format. These forms are available online and have to be entered after each visit is completed.

Human Resources for supervision: The external supportive supervision component relies heavily on the residents of the Department of Social and Preventive Medicine, of the local Medical College. They spend one week every month on conducting supportive supervision in the districts. For internal supervision Program Officers and Consultants from State NRHM Head Quarters are engaged. Mostly the external and internal supervisory activities are conducted synergistically. The Deputy Civil Surgeons, Senior Medical Officers and Medical Officers of the District also accompany and are actively involved in this process.

Plan for supervisory activities: The plan for supervisory activities is drawn up much prior to the activity on the field. This plan has details of the date of visit, health facility to be visited, and names of the internal and external monitor. The activities are carried out according to schedule to ensure efficient and effective supervisory visit.

Process: The rounds of supportive supervision activities are conducted every month or over two months by Residents of PGIMS, Rohtak and Program Officers/Consultants from NRHM State HQ. The Residents and Program officer are allotted Districts and the facilities to be supervised within the districts. At least one Resident and One Program officer supervise each district. Advance monthly roster is prepared by Deputy Civil surgeon (Supportive Supervision) for all the Medical officers, Senior Medical Officers and Other Deputy Civil Surgeons. Minimum of 3 sub-centers are to be supervised per PHC by the MOs. The SMOs supervise PHCs and sub-

centers while Deputy Civil Surgeons supervise SDH and CHCs. The tool used in the field is uniform for all supervisors. As an incentive a sum of Rs 500/- is given for each documented visit by the MO at sub - center on submission of completed form and online entry of the supportive supervision format.

Round/Health Facilties type	Subcenters	PHCs	CHCs/SDHs/DHs
Ist round	225	168	89
2nd round	141	143	72
3rd round	Undergoing	Undergoing	

Program Impact

The achievements of the supervisory visits are reflected in Table 1. Until date two rounds of the activity has been conducted and the third is underway. A total of 366 sub centres, 311 Primary Health Centres and 161 Community Health Centres have been effectively covered under this activity.

Scalability

Such models comprising of teams of external and internal monitors can also be implemented in other states.

For further details contact

IMPROVING ACCESS AND PERFORMANCE THROUGH LOCAL COLLABORATION: INNOVATIONS AT DISTRICT HOSPITAL DURG (CHHATTISGARH)

District Hospital, Durg was started in year 1906 as a civil hospital. It became a 100-bedded District Hospital in 1963. On 12 February 2008, it was upgraded to a 430-bedded hospital. Besides catering to the need of local population, the hospital is also a referral centre for 17 Community Health Centres (CHC) and 72 Primary Health Centres (PHC) of the district. The hospital was certified to ISO 9001:2008 Standards on 16th April 2011.

Problem Statement

During the review, the hospital management identified following problem areas, requiring 'root-cause' analysis, corrective & preventive actions.

1. Unacceptable level of cleanliness with stains of PAAN & GUTKHA (betel nuts, tobacco, lime, etc.) all over, clogged drains, unhygienic environment, cobwebs and litter within the premises and inside the hospital building
2. Non-availability of comprehensive and quality Dental services
3. Non-availability of full range of Physiotherapy services

Interventions

Problem Area-1 Cleanliness

Root cause - During the course of root-cause analysis, following causes were found for poor cleanliness in the hospital

(a) The cleanliness service has been outsourced. However, the TOR of the service was not explicit and comprehensive

(b) Payment to the agency was based on number of staff deployed, rather than quality of delivered services

(c) Absence of performance monitoring system of the out-sourced service

(d) Use of substandard cleaning agents and disinfectants by the outsourced agency

(e) In-different attitude of the patients and visitors towards cleanliness

Interventions –

a) Each and every cause was adequately addressed by the hospital management. A detailed cleaning schedule for each department, building and surrounding area was developed through a consultative process. A typical schedule includes- Frequency of cleaning, and details of activities to be carried out in each schedule.

b) Terms and Condition of the MOU were reframed. Several innovative and interesting clauses have been included in the contract.

c) Payment to the outsourced agency has been directly linked to the performance. Check sheets for each department (Wards, OT, Labour room, OPD, SNCU, ICU, etc) have been developed. After cleaning a facility housekeeping staff is required to inform the Staff nurse/ Nurse /Technician on duty, who would check and score against the check sheet.

d) Penalty clauses for non/poor performance were introduced. E. g. Penalty of Rs. 50/- on housekeeping staff being on duty without proper dress, under influence of alcohol, incidence of misconduct, presence of cobwebs, stray animals, etc.

e) At the end of the month an overall score (cumulative of all check sheets minus penalties imposed) is calculated and the vendor is paid accordingly. For example if the overall score is 70% and the penalties of Rs 5000/- the vendor would get 70% of the contract value less Rs 5000/-.

f) "Gandhigiri" has been adopted to educate patients, visitors and hospital staff. Additional staff have been hired to wipe the spit immediately, with a smile, without any comments. After initial indifference, now the visitors and patients do not spit within the hospital premises.

Contractor Mr. Jayrajan Pillay informed that initially he incurred considerable losses with realisation of approx. 60% of the dues. Gradually, things started improving. Now he is proud of his consistent 95% plus score. He has also partially mechanized the cleaning process with use of Scrubbers and Vacuum cleaners. This saves time, water and man power.

Problem Area 2 & 3: lack of Dental care and Physiotherapy Services.

Jeewan Deep Samiti (JDS) (equivalent to RKS), at DH Durg has entered into a MoU with a local Private Dental College (Maitri Dental College-Anjora Road Durg) for providing comprehensive dental services to all patients. The JDS has also signed another MoU with a local Physiotherapy college in private sector for providing full range of physiotherapy services within the hospital premises. Both these colleges have staff and state-of-art Infrastructure. However, they had few patients coming to their institutions.

After drawing detailed terms of reference, the colleges have brought in equipment, fittings & fixtures within DH Durg. Under the terms & conditions of the MoUs, OPD consultation within DH premises is free. Rate and charges for different procedures have been fixed by the JDS. Treatment for BPL patients, indoor patients and staff and their dependents is also free. The colleges are required to deposit 10% of the total money, collected for the procedures, with the JDS. One Post graduate (MDS/ MPT) Faculty and 4 graduate staff are available during morning and evening shifts for providing the services. Dental college has established a 4-chair dental centre in the hospital, and the physiotherapy college a modern department for the treatment.

Benefits:

The above mentioned approach has resulted into a WIN-WIN situation for patients, DH and the private institutions (Dental and Physiotherapy College).

Quality Dental care and Physiotherapy services are available at affordable prices to the public. Prevailing rates of the procedures are given below –

DENTAL SERVICES.			
S.NO	PROCEDURE	MARKET Rate	DH Rate
1.	OPD consultation	Rs. 100	Free
2.	Tooth extraction	Rs. 200	Rs. 50
3.	Impacted tooth	Rs. 1500-Rs 3000	Rs. 100
4.	Ceramic cap	Rs. 2000	Rs. 800
5.	Denture (Full)	Rs. 4000	Rs. 700
PHYSIOTHERAPY SERVICES			
1.	Lumbar Traction	Rs. 100	Rs. 10
2.	Wax Bath	Rs. 100	Rs. 10
3.	Short wave Diathermy	Rs. 150	Rs. 10
4.	Tens	Rs. 10	Rs. 100
5.	Hand Rehab	Rs. 15	Rs. 250

This has resulted in increased level of satisfaction of patients. This has helped in building positive image of hospital. Revenues generated by the JDS has increased and the same is being utilized for day to day operation of the hospital.

General Lessons and Scalability

Local collaboration may not be the panacea for every healthcare problem, but at DH Durg, it is seen that with innovations & experimentation, local support could be leveraged to create 'a win-win' situation for all stakeholders. Innovations of DH Durg could be tried out at other facilities. Of course, it would require enabling policy framework and guidelines.

For further details contact

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SUPPORTIVE SUPERVISION AS A TOOL TO IDENTIFY ACCESS GAPS IN PUBLIC HEALTH FACILITIES OF ANDHRA PRADESH , INDIA

Problem Statement

In the state of Andhra Pradesh, India, the Department of Health, Medical and Family Welfare manages 12522 Sub Centres (SC) and 1709 Primary Health Centres (PHC), apart from CHCs, Area, District and Teaching hospitals under public sector. These health facilities are designed to provide preventive and curative health services which are critical to the system in provision of maternal and child health care.

The department is facing the twin challenges of slow pace of decrease in infant and maternal mortality rates over the recent years when compared to other southern states and the concurrent demand for human resource, drugs, medicines, equipment, and other basic facilities. Hence the department decided to use the system of routine inspections by the field officials to translate the observations into meaningful action, deriving supportive supervision into decisive actions.

Program Description

The program was initiated with the following objectives: (1) Use of routine inspections of the health facilities to assess the gap in access areas to health care and (2) Prioritize the gaps for systematic reduction in the specified delivery areas (3) Estimate the implications on service delivery.

Methodology: Supervisory formats have been designed for the SC and PHC. A team of five senior officers have been formed at the district. The Statistical Officer of the district was asked to carefully select the SC and PHC for field inspection team on stratified sampling technique to eliminate dual and repeated inspections. The team was asked to visit 2 SC and 2 PHC and record their observations in the supervisory formats at the inspecting field unit and attest their signature along with those of the field staff. The reports are scanned and sent to the State office where a program has been developed to compile the data and analyze the results to identify the gaps.

Results: About 10% of SCs and 75% of PHCs which are spanned across twenty three districts in the State have been covered in period of about two and half months. An analysis of the SC reports reflected 34 % of gap in infrastructure, 62 % in rented buildings, about 90% facilities having drugs, 72% having equipment, 22% not having registers, about 66% of staff require training and capacity building in conducting certain lab tests and usage of equipment.

Similarly an analysis of the PHC reports reflected 43 % of gap in human resource, 99%

Facilities having own buildings, about 90% facilities having drugs, about 35% facilities not having lab facilities, 74% having equipment, 24% not having registers, about 15% of staff nurse and ANM not knowing the use of partographs, initiation of oxygen in emergencies, take measurement of BP, conducting foetal examination and undertaking cervical dilatation assessment.

Program Impact

This arrangement is a cost effective solution, as people and processes adopted in the activity are completely internal to the system, the system is internalized to complement the departments' planning of infrastructure, human resource placement, capacity building, training and provision of funds processes. The results from the efforts are integrated into a mechanism of review, monitoring, evaluation and decision making process to provide the required continuous support to the field units and extract the desired results.

Scalability

Provision of basic health care remains the responsibility of the Government; hence it is important to realize the comparative advantage of involvement of the public health cadre for efficiency and effectiveness. Supportive supervision proves to be an immense opportunity for public health providers to understand the gaps in health care and offer affordable and timely solutions. However continuity of such systems largely depends on clearly defined focus areas in public health services. Sustainability of such arrangements also depends on the commitment and will of all involved partners.

For further details contact

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AROGYAKERALAM RADIO HEALTH

Background

A number of innovative initiatives have been undertaken by the NRHM in Kerala to promote equity, efficiency, quality and accountability in Public Health Systems, enhance People orientation and community based approaches, ensure Public Health Focus, recognize value of traditional knowledge base of communities, promote new innovations, method and process development and decentralize and involve local bodies.

The concept of a community radio for disseminating health education and public health messages to the rural population was one among these. Radio Health is envisaged as a vehicle for providing information on health-related activities in the State and for giving health education to the community, especially rural women. Apart from relaying programmes on health topics, Radio Health also functions as a link between the community and the health workers.

Programme description

Radio Health, the FM production under NRHM Kerala in collaboration with AIR, was initiated in September 2008. Radio programmes of 30 minutes duration is being telecast 4 days a week on various subjects mainly focusing on health issues.

The primary target audience of Radio Health is rural women and school children, who could influence and encourage behavioral changes on health issues within the family and community.

The programmes included health education talks by doctors, maternal and childcare issues, phone-in programmes, and those that discuss native knowledge on health ('Naattarivukal'). The response to the initiative from the field has been very enthusiastic and in many block panchayats, Accredited Social Health Workers (ASHAs) are taking the lead to anchor programmes and to develop skits that focus on health education.

Radio Health aims (i) to build up an innovative and comprehensive health literacy model through the medium of RADIO by assuring wider community participation for mass appeal (ii) to create awareness among the audience of the importance of health and the need to lead life as a healthy individual;(iii) to create a friendly and open atmosphere for audience interaction through innovative ideas; (iv) to create a positive change in the health habits and behavior of people (v) To ensure that the idea/ message conveyed, reaches every nook and corner to gain targeted feedback.

Topics for this radio program include maternal health and child health, JSSK, Oral Cancer, Contagious diseases, Mental Health, Tribal Health, Antenatal care, Food and Nutrition, Adolescent Health, and Yoga.

Impact of the programme

Apart from the constant feedback from the listeners through email, post and telephone, a study was carried out in July 2009 to understand the reach of the programme. The responses showed that 85.5% of the people

have listened to the FM Radio Health programme either on a daily or frequently basis and rated its performance as either good or very good.

Scalability

Initially broadcasted through only FM covering the capital region alone, Radio Health is now scaled up so as to cover all the districts in Kerala. The timings are as follows:

Transmission Station	Timings	Day
Kannur A.M	9 -9.15 am	Monday - Friday
Kozhikkode A.M	9 -9.15 am	Monday - Friday
Thrissur A.M	2.30 -2.45 pm	Monday - Friday
Thiruvananthapuram - Alappuzha A.M	9 -9.15 am	Monday - Friday
Mancheri F.M	9.30 - 9.45 am	Monday - Friday
Devikulam F.M	5.30 - 5.45 pm	Monday - Friday
Cochin F.M	9.45 - 10 am	Monday - Friday
Ananthapuri F.M	3 - 3.15 pm	Sunday - Saturday

Conclusion

Radio Health is a combination of public health activity and Media intervention, focusing mainly on Preventive Health, Non-Communicable diseases, Emerging infections, RCH and Geriatric Health issues. Health messages are prepared through community participation and radio health acts as a common platform for doctors, health workers, ASHAs and general population to exchange and update their knowledge and experiences on health issues. Radio Health also functions as a tool for disease surveillance, solving local health problems and coordinating health activities. Radio Health has now initiated a process of forming community radios across the state thus developing community health communicators through radio clubs.

Contact person

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USE OF CIVIL REGISTRATION DATA TO KNOW THE HEALTH SCENARIO AND FOR IMPROVEMENT OF HEALTH CARE IN SIKKIM

Problem Statement

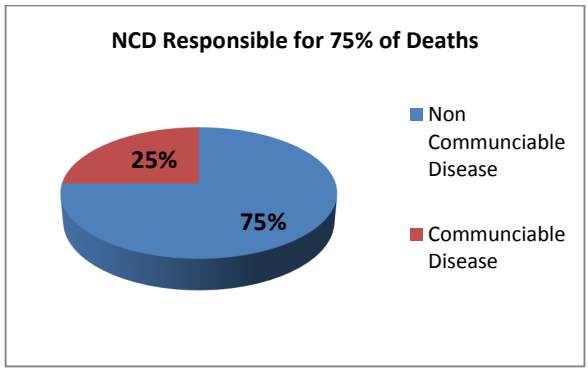
Despite the availability of civil registration in the State, these data are not being used properly. This system could have been fully utilized for Planning, Monitoring and Implementation of various programmes.

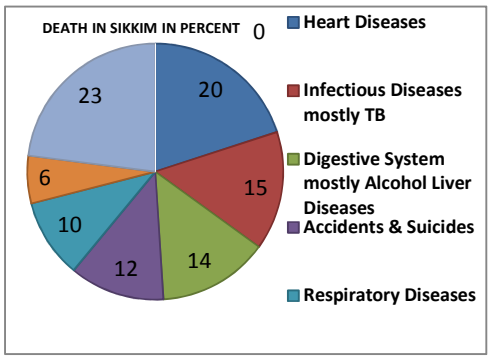
Programme Description

Analysis of Data of Civil Registration System(CRS) including medically certified cause of death is being done for the State of Sikkim. This system is very effective where registration of Births and Deaths is more than 95% .In addition to this ,more than 50% of all deaths are Medically Certified.The State has made tremendous progress in Health Status of the people. Taking advantages of the high coverage of registration, the following activities are undertaken to use the CRS system.

Sikkim was able to know the Epidemiological shift from communicable to Non Communicable as the major causes of Deaths in Sikkim.

Medically Certified Causes of Death in Sikkim 2006-09





The transition from Communicable to Non Communicable Diseases as major Health Problem is quite obvious.

Based on the available records the most important causes of deaths in Sikkim are Heart and Blood vessel diseases, Alcohol Related Diseases, Accidents & Suicides, Respiratory Diseases, Cancer (Non Communicable Diseases) &Tuberculosis (Communicable Diseases).

Program Impact

1. Following these changes which were seen strong case, for getting pilot Programme was initiated with Ministry Of Health & family Welfarefor NCD in Sikkim. Full-fledged programme on

National Programme for Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), National Programme for Health Care for the Elderly was initiated in two out of four districts.

2. Realizing that tobacco was responsible for major causes of morbidity and mortality, tobacco control programme was initiated throughout the state and Sikkim was the first State to be declared as Smoke Free State in World No Tobacco Day 2010.

3. Chief minister's Comprehensive Annual and Total Checkup for Healthy Sikkim (CATCH) programme was initiated based on the findings of CRS as major Public health Problem of the state.

4. Data of CRS is fully utilized to estimate number of Children, Pregnant mothers and other eligible population for taking all Public health Initiatives for proper implementation of RCH programmes.

Scalability

At present the data is utilized at the State level only. It is proposed to analyze the available data at District level and at the PHC level to get disaggregated data and use the data locally as well. Other States with higher level of registration rate can also use this instead of SRS data.

Conclusion

Effective use of CRS data is proven to be a very effective in improving the health indicators in the State level, District and also in case of PHC level.

For further details contact

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GENDER BASED VIOLENCE MANAGEMENT (GBV) CENTERS- BHOOMIKA: AN INITIATIVE BY NRHM & DEPARTMENT OF HEALTH, GOVT OF KERALA

Problem Statement

The Gender & Health aims to provide insight into how gender roles and relations affect women's health. Furthermore, it shows what is being undertaken to address women's, and men's, health needs and rights, and to promote equal access to health care. Reproductive health programs are becoming increasingly aware of how cultural norms and social roles shape women's health. Violence often results in physical and mental ill health and is responsible for death, disease and disability among women. Women seek services of the health personnel for apparent manifestation of violence like burns, bruises, fractures, cuts, internal injuries etc. as also for the not so obvious conditions like anxiety, depression, aches and pains, skin pigmentation, eruptions etc which may have a link to the violence in their lives. However counselling and other support services are grossly lacking in the hospitals and violence is not seen as a concern of the health delivery system, which provides symptomatic relief, and does not address the underlying causes of violence. Therefore, there is a need to create greater sensitivity among health service providers to the gender and social underpinnings of violence and ill health and to provide supportive services to the women by developing strategic linkages with the legal and police departments as well as welfare and rehabilitation agencies to provide holistic services to achieve violence free life since violence denies woman her basic human rights.

Health department in association with an NGO conducted a study on gender based violence in Kerala that suggested the need of a policy at the health sector to treat violence against women as a public health issue. A minimum package of services should be offered for women who report to health care setting experiencing violence. Doctors, nursing staff, Junior Public Health Nurse (JPHN)/Junior Health Inspector (JHI), Accredited Social Health Activist (ASHA) shall be equipped to interact with sensitivity and clear perspective. Hence there is need for in service and pre service training and development of appropriate curriculum for such training.

Considering the prevalence of Gender Based Violence (GBV) in the state and its consequences on health status, especially reproductive health of women, there is increasing recognition of need to have policy and programmatic response to address GBV. Lack of a public health focus to address GBV has resulted in large number of such cases being undetected with often, adverse consequences. Service providers need to appropriately respond to the victims of GBV, as often this is the only opportunity for them to interact with any agency outside four walls of house.

Program Description

Government of Kerala has launched District level Gender Based Violence Management Centres (Bhoomika) to address the above mentioned issues. The Centre focuses on the Medical Care for Victims of Gender Based Violence/Social Abuses and is funded under the State Plan Fund. This project is a new intervention by NRHM & Health department. Government of Kerala has earmarked Rs.50 lakhs for the management of gender issues. NRHM support is for IEC activities through campaigns and appointment of GBV Coordinators/Female Counselors. All the GBVM Centers were upgraded and strengthened to function as One ***Stop Crisis Cell (OSCC).*** The service of the centre is available round the clock. A Woman Police Officer from the police station where the

centre is located comes to this centre and record the First Information Report (FIR) of the victim in the centre itself. Medical Examination by a Government Medical Officer or Gynecologist or a Lady Medical Officer will be done as the case may be and Medico Legal Case report is prepared. Women Lawyer from KELSA (Kerala Legal Services Authority) offer legal assistance and explain the legal provisions and remedies available to the victim at the centre. The protection Officer of the Social Justice Department offer guidance and referral services to safe Shelter Homes under government or those conducted by accredited NGOs. All the centers should have facilities like toilet, washroom, resting place for the victims.

Objectives of the Centre

1. Provide social and psychological support to women coming to the centre.
2. Train the hospital staff of the casualty and various out patient departments in identifying women facing domestic violence.
2. Sensitize the hospital staff on gender issues.
3. Network with other organisations working on women's issues for mutual support and sharing.

Services

1. Counselling: Trained counselors help women to build their strength so that they can rebuild their lives.
2. Medical aid to all women coming to the centre
2. Legal aid: Through our collaboration with KELSA, and other lawyers we provide legal aid to women.
3. Temporary shelter: There is provision for temporary shelter for emergency

There is at least one centre in all the districts functioning in District/General Hospital or Taluk Hospital in the district- currently there are 20 centres across the state

Program Impact

From 2009 onwards 8912 cases were addressed by the centers and for each cases a minimum of 3-7 follow ups were given. Besides, many cases are referred to legal cells, police, probation officers of Social Welfare department, NGOs etc. A total of 2036 doctors, 2798 staff nurse, 7464 filed staff (HS, LHS, HI, LHI, JPHN, and JHI) and around 10,000 ASHA were trained during 2009-12 period on gender based violence management. Wide publicity through print and electronic media helped to disseminate the information of availability of services.

Scalability

The success of the project points to the need to have more centres in the state. This will be done based on an evaluation to be held this year.

Conclusion

The functioning of Bhoomika centres is showing palpable results. More cases being reported from the field is an indicator that Bhoomika is becoming a solace to many women.

Contact person

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SECTION 4: E - HEALTH

HEALTH INFORMATICS

Introduction of information technology is one of the most significant achievements of 21st century, which brings with it a lot of benefits and opportunities. All sectors of the economy have benefitted from information technology and health sector has also responded well. However the penetration of IT in Indian Public Health was limited and maximum benefit of IT in health is yet to be explored. Within the NRHM various IT initiatives have been taken place both at the State level and national level and all of them can be broadly categorized into four groups- aggregate number reporting systems, patient tracking and hospital information systems, mobile-based initiatives and telemedicine.

Among these at the national level various program specific reporting systems were designed and implemented these include- HMIS Web Portal- for aggregate number reporting system, MCTS- a patient tracking system etc. These initiatives to a great extent have helped improve program data reporting, data quality and finally use of information.

6th CRM report documented that number of IT initiatives in the States have increased over a period of time and largely supporting local program needs. Tamil Nadu has taken maximum number of IT initiatives in the public health system followed by Odisha. In the aggregate number reporting systems, DHIS 2.0 has been one of the most sustainable initiatives in the States from 2008 and currently nine States (Bihar, Madhya Pradesh, Odisha, Tamil Nadu, Kerala, Himachal Pradesh, Punjab, Haryana, and Maharashtra) are using this for HMIS data reporting.

State have also done innovations in managing hospital data by implementing hospital information system- these include Himachal, Punjab, Gujarat, Tamil Nadu etc and all of them are at various levels in terms of utilizations of these systems for day to day decision making. For mother and child tracking three States i.e. Tamil Nadu, Rajasthan, and Gujarat have developed their own state specific applications and are relying on the data provided by them. However all of these applications are linked with the national pregnancy tracking system- MCTS. A number of states have taken up initiative to manage dynamic human resource through Human Resource Management Information System. States like Bihar, Jharkhand, Assam, Karnataka, Odisha and Tamil Nadu are using HRMIS to manage large volume of HRH data. In terms of usability both Bihar and Karnataka are ahead of other states. Chhattisgarh has started reporting of tracking data from remote areas through Mobile phones however the impact and usability of that is yet to be realized. In Bihar mobile technology is used for ASHA payment which has improved transparency and timely payment to the AHSA worker. Maharashtra State has started e-filing system which has improved departmental working and access to the documents from

anywhere. Files are also being tracked to ensure timely decision making.

These various innovations are mostly developed to support one program and are not integrated to exchange data among each other. Out of these, seven initiatives which have made most positive impact in the Public Health Systems are shortlisted here as the best practice.

E-FILE SYSTEM - STATE HEALTH DEPARTMENT MAHARASHTRA

Commissioner (FW) & NRHM-Mission Director

Pre-launch of e-file system

Post-launch of e-file system

Problem Statement

Delayed decision making is one of the major hurdles being faced by most government offices. One of the most crucial factors that affect decision making in government offices is manual system of filing and documentation, where file goes from one table to another till final decision is made. Many crucial decisions are delayed due to either slow movement of files or non-availability or officer in charge for clearing these files. Theft and missing files is also not uncommon in most of the government offices. The State Public Health Department Maharashtra took notice of these issues and aspired to solve these problems by use of information technology by implementing e-filing system in their offices. The idea of implementing this system was to give transparency, improve access to the documents from anywhere and design a good document storage system.

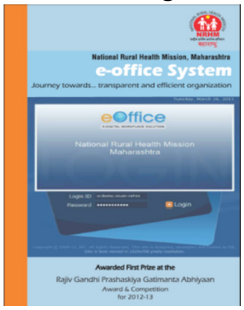
Program Description

The State Public Health Department took inspiration from National Academy of Administration, Mussoorie where e-filing system was implemented. The Department coordinated with the team which developed that system and discussed with them their concerns related to security, record keeping, audit, language, data corruption etc and finally took the decision to implement e-filling system in their Mumbai & Pune Offices. This has been a very successful initiative and the Department benefitted a lot from this system. Some of the benefits of this system are listed below.

- Improved correspondence: This system provides systematic and stepwise process of distribution of day-to-day correspondence, tracking movements of files and management of the Inward/Outward documents through an online computing system.
- Uniform working procedure – This application is based on Central Secretariat Manual Office Procedure (CSMOP) and has standardized work flow in the department.

- Easy records search and management – A unique file /receipt id is automatically generated which helps in management and easy retrieval of different files and receipts from different departments/sections. Files can be easily searched using key words.
- Monitoring pending files – Each file can be tracked by senior officials with a single click enabling easy processing of files.
- Reducing time, money and human efforts: Due to electronic movement of files the usage of paper has reduced considerably leading to virtually paperless office. In addition lot of time and human effort of transferring files from one place to another has also reduced. Files can be cleared by officers while they are on tour. It saves their time as well as promotes faster file movement.
- e-banking - One of the major advantages of e-file system is e-payment to the vendors, release of district and corporation funds, employee salaries after approval.
- Secure & Safe: e-File uses Digital Signature Certificates, which ensures high level of security to the users of this application.

In order to ensure the sustainability of the e-file system to physical file handling and movement, a GR of the Public Health Department, Govt. of Maharashtra was formulated and issued on 15 Feb. 2012. Provision of dedicated fund for the e-governance through the NRHM funds has also been made to sustain this initiative. Various institutional arrangements such as IEC cells dedicated for e-filling system has also been created to strengthen this initiative. All employees received training and hand holding support to use this system effectively. Currently the provisions are being made in the department to link this system with the leave management system, tour management system and personnel information system.



Scalability

The basic requirement of the e-file system is primarily related to the infrastructure and training as the software is available free of cost. This model can therefore be easily replicated in other government departments with good investment in capacity building and change management. As a positive impact of NRHM e-file system many offices including various departments in Mantralaya, Directorate of Health Services, Mumbai, all State Public Health Bureaus across Pune and Brihan Mumbai Corporation have successfully replicated this system. It would soon be scaled up at Public Health Department offices of 8 Deputy Director Circles and Public Health Department offices in all 33 districts of the State (i.e CS and DHO Offices). Impressed by the successful launch of the e-file system at NRHM Mumbai, Forward Market Commission (FMC), and MMRDA have approached NRHM to replicate this system in their offices.

For further details contact

Mission Director, State Health Society, NRHM Maharashtra.

ARTICLE 4.2

HOSPITAL INFORMATION SYSTEM IN SHIMLA, HIMACHAL PRADESH

Problem Statement

In India, District Hospitals cater to a large population, provide variety of services and absorb a good amount of financial and human resources. Despite these their performance measurement & monitoring remained a challenge in public health systems. Traditionally hospitals were working on paper-based records and were reporting aggregate numbers on limited parameters in the Health Management Information System (HMIS). The information reported from district hospitals was limited to the service delivery events required by National Health Programs. Information on curative care and administration required for facility management was remained in the hospital registers due to lack of proper recording & reporting system.

Electronic Medical Record based Hospital Information System has potential to strengthen the clinical, management and administrative systems in the hospital. However, these systems are difficult to implement and have their own challenges and limitations as faced by 'resource rich' western hospitals. In India District Hospitals functions with certain level of complexity and their information requirement changes very frequently. For an information system to be successful in that setting it is desired that it should have greater flexibility to adapt to the changing needs of the health system.

Program Description

Himachal Pradesh State after realizing this challenge has implemented Open MRS based Hospital Information System in District Hospitals with help of NHSRC & HISP India. The objective of this initiative was to not only to document longitudinal patient records but also give aggregate data to hospital administrators as well as provide aggregate statistics required for national program reporting. The project was initially developed and implemented in Deen Dayal Upadhaya Zonal Hospital, Shimla. The system was designed considering patient flow, work flow and information flow in the hospital. Specific Objectives of development and implementation of HIS are documented below:

i. Clinical
   a. Provide integrated longitudinal and comprehensive patient records of the patients.
   b. Facilitate better service delivery through integrated operational workflows sharing a common data structure.

ii. Administrative
   a. Provide access and availability to operational Information to monitor performance of various units and to improve decision-making.
   b. Facilitate effective utilization of resources (human, capital etc)

iii. Managerial
   a. Provide reports on hospital performance, quality indicators, revenue generation etc.
   b. Reports required for district health system reporting.

For systems development participatory method of development was adopted and HIS development team documented requirements through a strong and ongoing participatory process with all stakeholders. The team then converted these requirements into mock-up screens and reviewed these requirements based on user feedback. After deliberations it was decided that 10 modules (registration, billing, laboratory, radiology, pharmacy, inventory, outpatient department (OPD), inpatient department (IPD), blood bank and finance) to be developed and implemented.

The Hospital Information System is integrated with facility based aggregated reporting system DHIS2 using the WHO SDMX.HD standard. Patient level data from DHIS Hospital is aggregated and exported into the DHIS2, enabling the generation of management indicators (such as bed occupancy rates and average length of stay), and presented as tables, graphs & charts, which also allows for inter-hospital comparison to support management analysis.

Comprehensive training program were conducted for all level of users in the hospital. In addition long term hand-holding support was also given to the staff to effectively use hospital information system and to solve issues as and when they arise. The initial results were very encouraging and the hospital staff promptly started generating various reports from the system. Administrators were also able to get analyzed reports for their reviews, using Hospital Information System.

Program Impact

The process of building and implementing the integrated hospital information system started at DDU hospital in Shimla, has already been spread to five more hospital – RH Solan, DH Kulu, ZH Mandi, DH Hamirpur and DH Dharamshala, and RHP Medical College and Hospital, Tanda Kangra, and by the end of the year should cover more than 12 such facilities. The system has streamlined patient record keeping with a facility to provide continuity of care. Aggregate reports are being generated through the patient-based encounters, which helps in improving data integrity and quality. The system has also rationalized complex hospital processes which further improved data collection and reporting. During

implementation local capacity to manage HIS has also been developed.

Scalability

The system is very flexible and is based on open-source philosophy which is low cost. The system can be replicated in other public sector hospitals. This model is already been adapted and being implemented by Punjab.

For further details contact

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ARTICLE 4.3

TELE-OPHTHALMOLOGY SERVICES IN TRIPURA

Problem Statement

Dearth of infrastructure and trained human resources in primary health care setting for ophthalmic services was a huge challenge for Tripura. Most ophthalmic specialists and assistants resided and functioned in urban areas. Consequently, urban health centres such as the Medical College was grossly over burdened, despite being mandated to provide tertiary care primarily. In addition rural people were spending too much time and money to avail eye care services from urban areas.

To reduce the increase in patient out of pocket expenditure and case load at the secondary and tertiary levels, the government of Tripura initiated the Vision center program with an objective *"to provide primary & preventive eye care to the rural population of Tripura using advanced information & communication technology."*

Project description

Vision Center is the main feature of the Tele-ophthalmology program. There are 40 Vision Centers (VCs) established in each block of the State which are connected to the secondary care center at IGM Hospital, Agartala through intranet (TSWAN) & internet (Tulip). Each Vision center is managed by Ophthalmic Assistant who examines the patient and is also responsible for managing computer, data entry, Tele-consultation and patient counseling. After conducting eye examinations the Ophthalmic Assistant enters patient details in the software application with a picture of the affected eye. Patient specific data is then reviewed at the IGM

Hospital by the Ophthalmologist, who diagnoses the case and decides on treatment modalities.

Vision centers work on the principles of low-cost technology and resource sharing. Each vision center uses very simple imaging instruments and simple digital camera for initial screening of the patient. The specialist using his computer can access patient details and advice for treatment. Two different software applications are used in the vision center- for patient-wise data transmission, Arvind Eye Care provided software is used and for Audio-Video chat Argusoft Communicate @Work software is used. Management of the project and annual maintenance is out-sourced to the private provider.

Project Impact

The project has computerized screening & outreach component of the Blindness Control Program, which has helped in identification of cases with preventable blindness.

The project has also been successful in providing primary & preventive eye care at the door steps of people. Availability of Vision Centers at the block level has improved service utilization by women and children and has also improved timely referral of complicated cases. From 2009 to 2012, Vision Centers have screened 1, 51,979 patients. Out of this 6.3% were referred to the IGM Hospital, Agartala for further treatment and about 15% of the patients visited Vision centers for review and follow-up. Vision Centers have helped to reduce patient load at higher institutions. Simple refractive errors and minor ailments are treated locally with the help of vision center.

Most of the patients are now being referred to the Vision Centers from Health Sub Centers and PHCs for primary screening. Even the Self Help Groups and NGOs refer patients to the Vision Centers for screening and primary care. Till date the Vision center has referred around 2,500 cases of cataract to the IGM hospital for surgery. In addition the centers have also managed to identify 70 odd cases of Glaucoma & Diabetic Retinopathy.

Scalability

Project is focused on specific need of the community and this is the reason it has achieved its objectives. This project has the potential to be scaled in the other parts of the country, which can further help address resource constraints in rural areas and improve screening and timely referral under Blindness Control Program.

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MOBILE MONEY TRANSFER FOR ASHA IN BIHAR

Problem Statement

ASHA payments have always been a concern in many States. In Bihar the problem was more serious where delays in payments to ASHAs were sometimes more than six months. This has resulted in lack of motivation and commitment among ASHA workers in the State. Additionally Block Medical Officers were overburdened with administrative works related to ASHA payment, which hampered their routine clinical and administrative activities. The State was also not being able to record ASHA payment details for each activity due to fragmented reporting. Considering these challenges State Health Society, Bihar (SHSB) along with UNOPS-NIPI implemented Mobile Money Transfer Technology (MMT) for timely and transparent ASHA payment.

Project Description

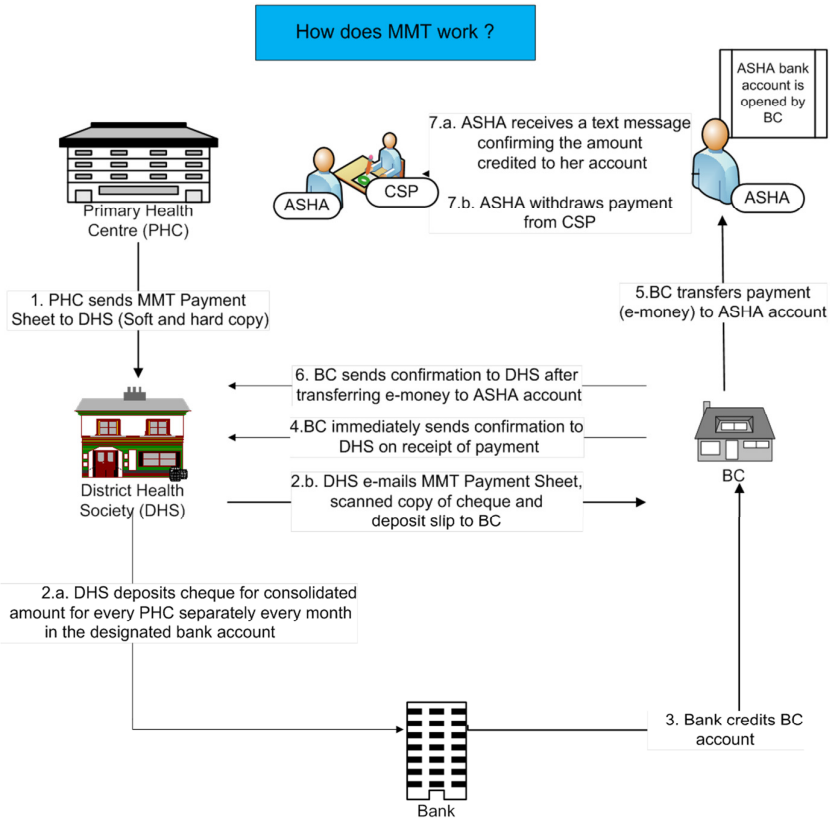
The pilot project for timely payments of ASHA worker's incentives using Mobile Money Transfer was initiated in Sheikhpura district of Bihar in December 2010. The project is implemented by State Health Society Bihar (SHSB) with funding and support from UNOPS-NIPI Program and technical support from Eko Aspire Foundation (Business Correspondent) and State Bank of India (SBI).

Under this project ASHA payments are made directly from the District Health Society (DHS) to the ASHA accounts. Block Program Management Unit which was earlier making the payments is now helping District Health Society in compilation of details of payments, reporting and documentation.

Provisions were made for ASHAs to open bank accounts from 18 Customer Service Points of State Bank near PHCs in Sheikhpura District. All 429 ASHAs have received one day training on use of mobile phone, making mobile money transactions, inquiring bank account balance, cash withdrawal and the process of depositing money into their account. Program Managers were also oriented on procedural change in ASHA payment. In addition tools and guidelines were developed for distribution of funds and monitoring payment delays. The District and block program managers were identified as nodal persons responsible for facilitating and monitoring the payment processes.

Project Impact

Several benefits of MMT to ASHAs were observed. These included timely & transparent payments, elimination of cheque payment and cost saving. With MMT it is now possible for ASHAs to know the status of account. Travel cost and time for collection and submission of cheques has reduced significantly. Leakage in incentive payment was also prevented by the MMT scheme. Other benefits observed were increased financial awareness, increased personal savings among ASHA workers. The MMT process brought benefits to the program managers as well by reducing paperwork, improved monitoring and fund utilization.

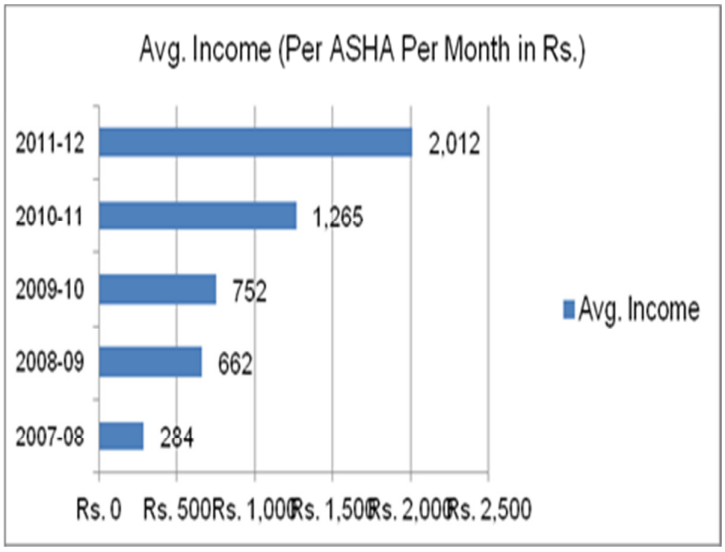


For further details contact

NIPI _UNOPS Team

Scalability

The project has worked well in Sheikhpura District of Bihar. The project has the potential to be scaled in the other part of the country for timely ASHA payment and improve transparency in payments.



ONLINE INCENTIVE PAYMENT TO ASHA THROUGH CPSMS IN ODISHA

Problem Statement

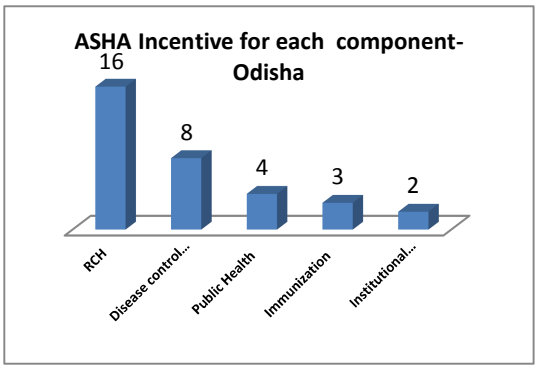
Accredited Social Health Activists (ASHAs) under National Rural Health Mission (NRHM) have been playing a vital role in bridging the gaps between community and public health systems. ASHAs are being compensated for the activities they perform and timely payment of incentives to the ASHAs is a significant factor for keeping them motivated towards their service. In Odisha, there is provision of ASHA incentives for 33 activities under different components of NRHM. To ensure timely ASHA Payment State of Odisha has started fixed day payment (e-transfer) approach from Community Health Centers since 2009-10.

After implementation of Central Plan Scheme Monitoring System (CPSMS), the State has switched over to Direct Benefit Transfer (DBT) for paying incentives to the ASHAs as well as JSY beneficiaries.

Program Description

DBT to JSY beneficiaries and ASHAs has been started in all the facilities of Cuttack district and in Hospitals in Bhubaneswar District in the month of Apr'13 on pilot basis.

For making payments each ASHA's Demographic and back account details were first collected in a prescribed format designed by CPSMS team and it was then verified and uploaded in the CPSMS portal. Each activity of ASHA, as per the approved PIP has been mapped in the portal and linked to its corresponding bank account. After the ASHA incentives for each activity is verified and approved by the District Data Officer, individual activity amount is then entered in the CPSMS portal. With due approval of the Administrator, transfer of funds is made to the bank account of ASHAs at one go in case the facilities have Corporate Internet Banking (CINB) facility. For the facilities having no CINB facility, a print advice is generated from the CPSMS portal and sent to bank under the signature of the Authorizer for transfer to the bank account of ASHAs. So far, payments to 1800 ASHAs and 600 mothers have been



made under DBT through CPSMS portal. Payment has been made in both print advice and Corporate Internet Banking (CINB) system in real time.

For obtaining the information on the performances of ASHAs, a common voucher system for all the activities relating to ASHAs under NRHM is going to be rolled out in the State. This would enable to map the payment with the date of performance of ASHAs. Provisions are also being made for display of beneficiary names in the website via CPSMS database to improve transparency in ASHA payment. In future ASHA details were uploaded in the MCTS and from their data will be extracted and uploaded in the CPSMS portal.

Program Impact

a. The tedious and time consuming process of payment through separate cheques to each

ASHA account has now been completely replaced by CPSMS. Payment is directly made from the CPSMS portal to the individual ASHA bank accounts.

b. ASHA payment from multiple bank accounts is also mapped in CPSMS portal. When the user enters the payment details it automatically selects the account from which the payment will be issued as each account is mapped against each component.

Note: All amounts are in Rs.

Sr. No	Beneficiary Name	Bank Name	Account Number	Benificiary Name As per Bank	AIPWD	VHND-NFD	SCCORD	MEC-V	Total
1	ABANI MOHARANA	STATE BANK OF INDIA	30776359349	Mrs. ABANI MAHARANA	1	2	3	4	10
2	AFIFA KHATUN	STATE BANK OF INDIA	31391308905	Mrs. AFIFA KHATUN	0	3	5	2	10
3	ANJALI BHOI	STATE BANK OF INDIA	30863556188	Mrs. ANJALI BHOI	1	0	5	4	10

c. As the payment details are linked with each activity, a comprehensive and reliable data on ASHA performance is generated through CPSMS. This data can be generated by facility and by district against each activity every month.

Scalability

The provisions are being made to scale this project to three more districts i.e. Bolangir, Puri and Sonepur from July 2013 onwards. After successful implementation in these 4 districts, the same would be rolled-out in rest districts from Sept. 2013. The provisions are also being made to link each account with Adhar Card.

For further details contact

Mission Directorate, NRHM, Odisha H&FW Dept., Govt. of Odisha

E-HEALTH ARCHITECTURE –ODISHA

Problem Statement

During the inception of NRHM, Odisha was considered one of the poor performing States in India in terms of health outcomes and program performance. The State was struggling with poor infrastructure, unavailability of human resources in addition to the structural and organisational issues. One of the major gap was timely unavailability of information to guide program and policy decision.

Program Description

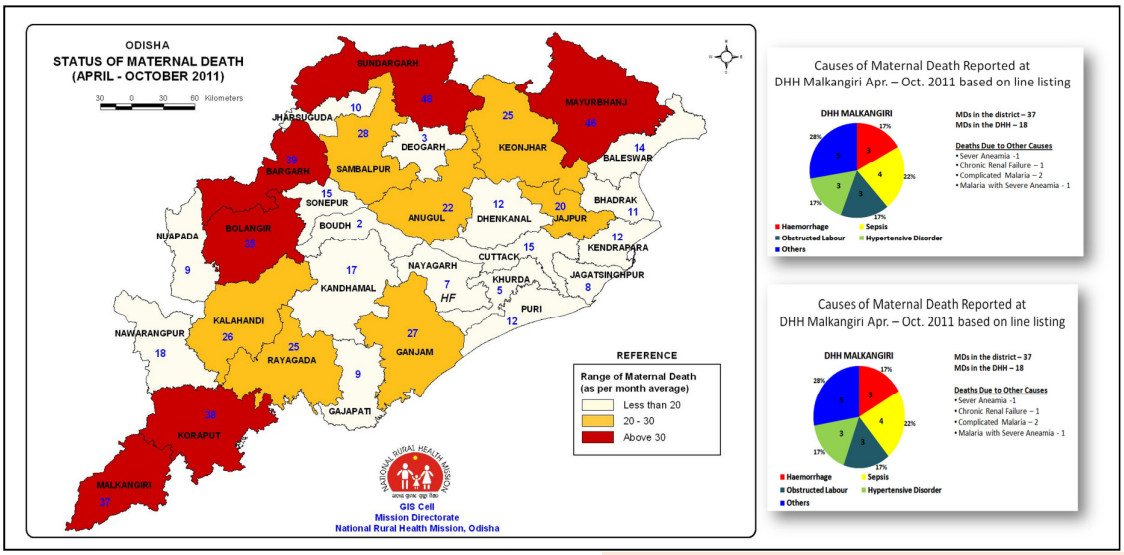
Since NRHM the State has taken various initiatives to overcome these issues. One of the major innovations in this area was development of e-health architecture to cater various program needs. Various information systems have been created to cater different program needs. Some of these systems were developed to support program specific reporting needs (i.e. e-Swasthya Nirman, HRMIS), some of the other hand were developed as an interface between public health system and common people. (i.e. e-Blood Bank, JSSK Grievance Redressal System). Various IT initiatives have taken place in the State and the major objectives of putting these systems were following.

- Improve program planning, progress monitoring & management.
- Reduce process errors present in the paper-based reporting systems.
- Improve efficiency and reduce wastage of time and efforts to collect data.
- For better documentation and timely data retrieval.
- For improved transparency and grievance redressal.
- Monitoring of various schemes and programs under NRHM.

List of IT System available in Public Health Department, Odisha

Program Monitoring Applications	
e-Swasthya Nirman for monitoring construction activities	Drug Testing and Data Management System
e – Sanjog : GPS based MHU Tracking	FRU (First Referral Unit) Monitoring System
E-Dispatch	Contraceptive Logistics Management Information System (C-LMIS)
District Health Information System (DHIS 2.0)	OVLMS (Odisha Vaccine Logistics Management System)
Odisha Drug Management Information System	HMIS Web Portal
MCTS	OSMIS (Orissa State Malaria Information System)
Human Resource Monitoring & Management	
e-Attendance	ITEMS (Integrated Training & Evaluation Management System)
Mission Connect (CUG)	HRMIS (Human Resource Management Information System)
Citizen Centric Applications	
Grievance Redressal System for JSSK Scheme	JSS Call Centre- Sanjog Helpline
e-Blood Bank	Telemedicine
Application for Planning and Management	
Geo-informatics initiatives	

Among these one of the major initiatives was linking some of these systems with the Geographic Information System for map-based data analysis and display of information in user-friendly format. The State is currently using GIS system for the identification of underserved areas and for MCH Centres planning. Digital terrain modelling is also done to identify inaccessible and hard to reach areas and to plan for additional facilities. GIS is also used for planning of Janani Express Ambulances & tracking of Mobile Medical Units in the state. The State has also started utilising GIS for analysis of malaria case reporting, maternal & child death reporting, which gives more clarity in terms of geographical spread and concentration.



Program Impact

Using these many initiatives the health department has made huge progress in data analysis, use and information sharing and dissemination. In the State people now use mobile technology to know the status of blood availability in nearest facility through e-blood bank system. ASHAs use SMS system to update and request contraceptive and medicine for their drug kit. Program managers while planning for training can get data on a click of button from HR-MIS & Integrated Training System. For most of the programs updated data is timely available now which helps in monitoring, supervision, planning and program management. These initiatives have helped State in evidence-based planning and effective resource allocations.

Scalability

Most of these innovations can be replicated in the other states to maximise use of technology. Timely information availability, more information sharing and giving information access to the people will have a large impact of the health services in future.

For further details contact

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INTEGRATED HUMAN RESOURCE INFORMATION SYSTEM (IHRIS), BIHAR

Problem Statement

India faces critical human resource (HR) challenges in health sector especially in rural and underserved areas. Achievement of Universal Health Coverage is also highly dependent on availability of quality workforce in public health systems. National Rural Health Mission (NRHM) has initiated various policy measures to ensure availability of health workers in public health facilities. However there is limited information support available on Human Resources for Health (HRH). The HRH information is very dynamic and frequently changes with recruitment, transfer, posting and attrition. The currently available information is paper-based and is highly fragmented, where piece by piece information is kept in different department files making it difficult to retrieve and use. This greatly reduces the ability of decision-makers to access and use accurate and timely data to improve the efficiency and effectiveness of the workforce, which is critical in order to meet national health objectives. An improved HR information system is an essential tool needed to improve HRH policies as well as workforce planning, development, and support.

A human resources information system (HRIS) not only works as repository of HRH data but also provides managers and decision-makers with information needed to effectively plan, develop, and support their health workforce.

Program Description

State of Bihar faced similar problems and tried to solve this problem through use of information technology solutions. The State having earlier implementation experience with IT solutions took a decision to adapt to a system which is flexible, scalable and should support decentralized decision making. State Health Society, Bihar choose Integrated Human Resource Information System (iHRIS) among other systems and requested Intra Health International Inc, NHSRC & HISP India to conduct pilot in Bihar. iHRIS is an open source HRH solution that gives a lot of flexibility to the users and has the ability to adapt to the local information needs. The initial pilot was conducted in Siwan District in 2010 and after realizing the success the project was scaled to the whole state. For iHRIS implementation the State had set-up a committee and identified a nodal officer responsible for iHRIS development and implementation. The committee along with development team conducted stakeholder consultation, documented system requirements, designed tools, guidelines and protocols for data collection, verification and entry in the application. The committee also crafted

user manual, designed standard training plans and implemented them in the state.

Arrangements were made for the local data entry and block and district were given ID & Passwords to access the application and conduct data entry. Program managers from each of the district received training on the use of application. Up to January 2013, 47,729 employees' records were uploaded in the application of which 28267 records were of regular employees' and 19384 of contractual employees'. The SHS Bihar decided to upload all employees' records in the iHRIS application in the phased manner. It was decided that in the first phase medical officers' data will be uploaded and in the second phase staff nurses data will be uploaded. ANM, Other staff and ASHA data will be uploaded and verified in 3rd, 4th and 5th phase respectively. Currently up to third phase of data entry is completed and fourth phase is near completion.

The data in the iHRIS includes individual government employee record on cadre, posting location and qualification. However training and transfer history over a period of time have not been included in the first phase, due to lack of authentic data on these parameters. The system has the flexibility to add these attributes in the later stages.

Program Impact

The system has become single source of information for HRH in public health system and is extensively used for district health planning, development of State PIP. In the State now all deployment decisions for transfers, postings are taken based on the iHRIS data. The System is also extensively used for contract renewal, management of contractual employees. System is also used to reply to the judicial query and for departmental proceedings. System provides flexibility to provide output reports in the forms desired by program managers and administrators. Multiple user-centric reports are now being generated from the system.

Currently the SHS Bihar is planning to integrate facility-based reporting system DHIS2.0 with the iHRIS for more integrated data analysis and use. In iHRIS additional modules like trainings are also planned to be added once the data is stabilized.

Cadre-wise Doctors Status-Bihar (Source-iHRIS, Jan 2013)

Cadre Description	Regular Employees	Contractual Employees	Tenure	Total
State Health Services	2771	0	0	2771
Medical Education Cadre	1053	77	78	1208
Ayush Cadre	272	1216	0	1488
Ayush Medical Education	133	0	0	133
District Health Services	0	2226	0	2226
Total	4229	3519	78	7826

Human Resources in Public Health System-Bihar (Source-iHRIS, Jan 2013)				
Designation	**Total number**	**Regular**	**Contractual**	**Tenure**
Doctor	7826	4229	3519	78
Nurse A Grade	3750	918	2832	0
ANM	16460	8333	8127	0
No. of Specialist	1233	1023	178	
Other Employees	18492	13764	4728	0
Total	47,729	28267	19384	78

Scalability

The system has already been scaled to the whole of State and is also been implemented in the State of Jharkhand. iHRIS is very flexible, Open-source solution that can be implemented in any setting. It has the capacity to adapt to the local needs.

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ARTICLE 4.7

JAMMU &KASHMIR WEB PORTAL

Problem Statement

Planning process in the J&K State was being affected due to lack of updated information on human resources, public health infrastructure and facility performance. The State Mission Director decided to tackle this problem by making information available in one place which can be accessed by all program managers with a click of button. The Mission Director decided to hire local IT experts to solve this problem and design a Web Portal to provide access to health related information. The Department of Health J&K launched a web portal www.jkhealth.org in 2009 to record the service bio data of its doctors along with the complete details of the Health Institutions spread across the length and breadth of the State. The system also provides service delivery statistics on key parameters. The system evolved over a period of time and there are many functions available with the portal.

Program Description

The J&K Web Portal is locally developed application which provides facility to enter details of health institutions, human resources and service delivery performance of each facility. The system is being managed by one IT expert at the State Health Society level. Data on each of these parameters are reported by the respective Districts and data entry is conducted at the State level. After finalisation this data is then printed in the booklet form and is distributed to each district/ block for district health planning, monitoring, and management. Following information is compiled in the JK Web Portal.

I. On line service records of Doctors: The biggest strength of this system is to have complete information of doctors placed in different institutions in the State. The information includes their name, place of posting (Province/District-wise), stay duration at particular station, retirement age

and date of birth etc. System enables search of individual doctor's data in the database. This has helped to have a transparent transfer policy in the department, to mobilize the manpower during the emergency situations and ensure the availability of the appropriate health care professionals at the remotest corner of the state. A decentralized mechanism for information updation has been put in the place whereby the Director Health Services (J) & (K) and the nodal officers have been issued instructions for editing and updating this information on day to day basis.

II. Details of Health Institutions: The Portal also contains details regarding Health care infrastructure. The province-wise details of health delivery institutions like District Hospitals, Sub-District Hospitals, Primary Health Centres, Allopathic Dispensaries, Medical Aid Centres and Sub-Centres have been compiled. The link for searching institutions in any particular area has also been provided to make it user friendly.

III. Details of performance parameters: The Institution wise performance details are also uploaded on the web portal on monthly basis. The website provides details of IPD, OPD, Surgeries, Deliveries, various tests / investigations and revenue generation.

IV. In addition, the Web Portal also provides detailed information about the activities of the Directorate of Health Services (J) & (K), Directorate of Family Welfare, RCH & NRHM, Jammu and Kashmir State AIDS Prevention and Control Society, Directorate of ISM and Controller, Drug and Food organization. It also serves as a show case for the achievements of the department. Profile and contact details of each institution are also available in public domain through Web Portal.

V. The other highlights of the portal include sections pertaining to health sector reforms, right to information act, Major projects related to the physical Infrastructure augmentation (New/upcoming), tenders, news, licensing norms, citizen charter, upcoming conferences/workshops, departmental directory, health education bureau, centrally sponsored schemes, policies (health/drug), important days observed in the health department, and links to various other important websites. To make the portal more interactive 'feedback', 'complaints', 'suggestions' and 'contact us' forms have been devised to allow all the stakeholders to contribute towards making this website more useful and a vibrant media for interaction. The portal is being regularly updated. This initiative was well appreciated by Joint Review Mission, GOJ&K, MoHFW & GOI

Program Impact

The data on various parameters uploaded on the web portal has helped in data analysis, performance mapping with workload & availability of manpower. This has helped in identification of gaps in service delivery due to lack of human resource or other infrastructure. The web portal also helps in rational planning of the resources among facilities through performance review of indicators i.e. OPD, Admissions, Surgeries done, Institutional and other deliveries including LSCS, various investigations including Ultrasound, X-Rays ,ECG & Lab. Tests done, deaths, referrals, revenue generated and expenditure.

The database is used for Annual Professional Audit, where infrastructure and human resource gaps are identified and an action plan is prepared. Action plan also prioritises the gaps and allocates resources to fill those gaps immediately. With the help of J&K Web Portal the Annual Performance Audit has become powerful tool for performance review, monitoring, planning and management.

Scalability

The System has been successful in providing timely information to the administrators and program managers at all levels. The system requires limited resource inputs as it functions on very basic technology. As an individual system it has enabled state in documenting key information required for program management. The concept of putting information in one place/ integrated information can be replicated in other states where such systems are not present.

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SECTION 5: COMMUNITY PROCESSES

COMMUNITY PROCESSES

One of the key strategies of the NRHM was to increase community participation by deploying a community health worker in every village, setting up platform for involving community in management of primary health programmes and establishing mechanisms to provide flexibility to the community to promote local initiatives. Community Processes under NRHM include the following -

a. Deployment of a trained community health worker known as ASHA. ASHA is a woman selected by the community, resident in the community, who is trained and supported to function in her own village to improve the health status of the community
b. Constitution of Village Health Sanitation and Nutrition Committee in every village for convergent planning and action on social determinants of health at local level.
c. Community based monitoring to enable community and community based organizations to participate in improved functioning of the public health system.

The ASHA programme was first launched in the 18 high focus states and tribal areas of other states in the year 2006. In response to popular acclaim and demand, the programme was later expanded in early 2009 to the entire country. Today the programme exists in 31 states and Union Territories except in two small states (Himachal Pradesh and Goa) and three Union Territories (Puducherry, Daman & Diu and Chandigarh). Currently there are 8, 63,506 ASHAs working across these states.

Till date seven training modules have been rolled out for ASHAs in the country, of which first five modules were part of the induction training. Module 6 &7 covers skills in areas of Maternal and Child care, communicable diseases and malnutrition etc and are transacted in four rounds of five day each. Module 6 &7 have been rolled out in all states except Kerala, where state has developed a state specific module for training the ASHAs. Training of round one of Module 6 &7 is underway in all high focus states. Of these, states like Jharkhand, Bihar, Madhya Pradesh and Orissa have also initiated round two training while Uttrakhand has completed three rounds. All North eastern states except Assam have completed two to three rounds of training. In Non high focus states training are underway in all states and sates like Karnataka, Punjab, Gujarat and Karnataka having completed training in two rounds.

Community Processes initiatives need to be supported at National, State, District, block and Sub block level to be effective. Status of support structures is good in all high focus and north eastern states which have set up such mechanisms at least at three levels. In Non High focus , support structures at a minimum of three levels is available in Haryana,Gujarat, Karnataka, Maharashtra and Punjab while in remaining states dedicated staff for Community Processes have been put up at only one level.

Reports of various evaluations and reviews have consistently described ASHAs as vibrant and enthusiastic. Most ASHAs are functional in promotion of institutional deliveries, immunization and family planning services. However their role as community level care provider is yet to be strengthened with

regular drug and equipment supply and good referral linkages.

Over 5 lakh VHSNCs have been constituted across the country. However high levels of functionality of VHSNCs have been reported only from states where ASHAs have been given a leadership role in the committee. States have lagged behind in strengthening VHSNCs through adequate training and timely fund flows. Community Monitoring was launched in nine states across three – four districts in each state. Performance of states in implementing community monitoring varies across states and is largely dependent on the presence of civil society and support provided to the VHSNCs and ASHAs.

Many states have developed strategies to strengthen the programme in accordance to their context, experiences and expertise. Some of these strategies have yielded positive results and strengthened the community participation at local level. This section presents some of the successful best practices designed and implemented by states under NRHM to strengthen the community processes in the intervention area.

MITANIN SUPPORT AND CAREER PROGRESSION IN CHHATTISGARH

Problem Statement

Chhattisgarh state was carved out of Madhya Pradesh in year 2000 inherited a Public Health system having a huge shortage of Health Human Resources including ANMs. It needs around 6,000 new ANMs for fulfilling the two ANM per sub-centre norm. The problem of recruiting and retaining ANMs is more severe for tribal and remote areas.

Government of Chhattisgarh started Mitanin Programme in 2002. Mitanins are Community Health Volunteers selected by community at hamlet level. Mitanins have received 56 days of residential training along with active field level on-the-job training and support. External evaluations have found them to be effective in areas like home-based newborn care, management of childhood illnesses, counselling for child nutrition, mobilisation of communities on prevention of diarrhea and malaria. It was necessary to create career avenues and social security for Mitanins to augment and sustain their motivation as a volunteer workforce.

Programme Description

Studies have shown that the health-staff who have cultural affinity to local areas are more likely to stay in backward locations. Therefore with an aim to augment the availability of trained nurses and ANMs, especially in remote areas, Chhattisgarh started a Career Development Programme for Mitanins under NRHM. The idea was to recruit Mitanins from remote areas into ANM schools and send them back to serve as ANMs in their native areas.

Experience of sponsoring Mitanins for ANM Training course:

In 2009, Mitanins having 12th (Science) qualification were sponsored by NRHM for BSc (Nursing) courses. In 2010, it was decided to sponsor Mitanins for ANM courses in private ANM schools as Government controls 50% quota in private ANM schools. This opportunity was given to 310 Mitanins from the tribal districts (Bijapur, Dantewada, Narayanpur, Bastar, Kanker, Jashpur, Koriya, Kwardha and Korba). Government paid fees of Rs.38000 per candidate per annum and provided Rs.2000 p.m. as stipend to each Mitanin for food and hostel expenses. Around 300 Mitanins completed their ANM course in mid-2012. It provided an opportunity to fill the vacant ANM posts in backward districts.

Reservation for Mitanins in ANM courses:

In 2011, a significant policy decision has been taken by the Government in order to institutionalise this initiative. 40% of the seats in Govt. ANM Training schools were reserved for Mitanins. In this, first preference is given to 12th pass Mitanins. Around 400 Mitanins have got enrolled in Govt. ANM schools in 2011 and 2012. This has created a sustainable mechanism for Career Development of Mitanins. It has also solved the problems of paying stipends etc. as expenses of stay, food and studies in these institutions are directly covered by Government.

Other Career Development Initiatives

- **Mitanins selected as Mitanin Trainers**: Mitanin Trainers who provide supportive supervision to Mitanins are selected out of the Mitanins of the concerned cluster.
- **Mitanins selected as Help Desk Facilitators:** Chhattisgarh has set up Help Desks in District and Block Hospitals to provide guidance and navigation support to patients coming to these facilities. These facilitators are recruited from amongst the Mitanins residing close to the concerned facility.
- **Mitanins elected into PRIs:** The number of Mitanins deciding to fight elections has grown. They are allowed to continue as Mitanins after getting elected. Apart from being members or Presidents of Gram Panchayats, many Mitanins have also got elected into Block and District Panchayats.

2.4 – Social Security Support to Mitanins through instituting a Mitanin Welfare Fund:

- **LIC life insurance cum scholarship scheme coverage:** It provides life insurance cover of Rs.50,000 to Mitanin in event of death of Mitanin's husband. It also provides Rs.1200 scholarship per annum to Mitanin's children studying in standard 9-12th standard.

- **Support for education of Mitanins:** Mitanins are being given cash incentives to encourage them to study further. Any Mitanin who passes 8th standard after the commencement of the scheme is being awarded Rs.2,000. Mitanins passing 10th standard and 12th standard get Rs.5,000 and Rs.10,000 award respectively.

- **Swavalamban Pension Fund Scheme**: Around 60,000 Mitanins were enrolled in this pension fund scheme last year. They received Rs.1000 each in their pension fund accounts and central govt. (PFRDA) has also contributed a matching amount. This will enable Mitanin to earn an average monthly pension of around Rs.1000 per month once she crosses age of 60.

Program Impact

The ANM training programme has already provided 500 trained ANMs to the state. Each year, another 250 Mitanin ANMs get added. It provided an opportunity to fill the vacant ANM posts in backward districts. This can help in inducting manpower with higher levels of motivation into the health system.

Around 1500 Mitanin Trainers have been selected from amongst the Mitanins. It has also helped the quality of supportive supervision in Mitanin programme as Mitanin having undergone several rounds of training gets inducted in this role. Around 400 Mitanins have been inducted into role of Help Desk Facilitators. 2,500 Mitanins are currently also functioning as elected representatives of PRIs.

Mitanin Welfare fund has provided scholarships to 13,000 children of Mitanins. 160 Mitanins have received the insurance amount of death claims. Around 3000 Mitanins receive education support benefit each year. Around Rs. 21 Crores has been accumulated in Mitanin Swavalamban pension fund covering 61,000 Mitanins.

Scalability

There are around 10,000 Mitanins who are 10th pass. ANM Training Centres need to be set-up in all Districts to fill the gap in ANM availability everywhere. Reservations for ASHAs in ANM training courses and other career progression mechanisms can be replicated by most states. Mitanin Welfare Fund activities already cover 60,000+ Mitanins and other states can replicate it for ASHA. It requires computerised database of ASHAs. Ministry of Health and Family Welfare (GoI)

has already advised all states to enroll ASHAs in Swavalamban Pension Fund scheme**.**

Conclusion

The potential of ASHAs can be utilised to bridge the gap in availability of ANMs. It can help in sustaining motivation of ASHAs. They need to be supported for this through career progression initiatives and social security support.

Contact

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ASHA RADIO PROGRAM: CROSSING BOUNDARIES WITH TECHNOLOGY IN ASSAM

Problem Statement

Under the National Rural Health Mission about 28,172 ASHAs have been selected and trained in the state of Assam. ASHAs play the perfect interface between the community and the health care system helping the community in accessing health care services, creating awareness about their health entitlements and providing community level care. However there were challenges and gaps observed in dissemination of information about the existing and new schemes/ programmes to the ASHAs. This resulted in a lack of awareness amongst ASHAs about the recent developments and new initiatives.

Programme Description

Keeping in mind the profile of ASHAs in Assam and the need to effectively reach out to them on a regular basis with information in the language and format they can understand, the NRHM, Assam decided to explore the use of the Radio. The ASHA Radio programme was launched on 8th October'2007. The ASHA Radio is seen as a channel which has the potential to reach out to ASHAs with any information relevant to her and also to provide her a platform to share her doubts, complaints and ideas. The All India Radio was selected as the media of communication as state has provided radios to all ASHAs and the reach of AIR programme is throughout the state.

The initiative is funded by NRHM and executed by AIR. The responsibility for the publicity of the programme is of the Marketing Division of AIR along with the IEC/BCC division of NRHM. The contents of the programme are supplied by NRHM to AIR one month ahead of the scheduled broadcast of the programme. The initiative is also supported by UNICEF, as two programme coordinators have been posted by UNICEF in the state to coordinate and assist in development of content for the programme

The content of the programme includes updating the ASHAs with new developments and also informing them about the practices related to health and hygiene for improving the health status of the community, particularly promoting the healthy environment for mother and child. The messages in the programme focus on the specific issues affecting the local community which can help ASHAs in their interaction with the community. It reinforces the key messages and aids in increasing the effectiveness of ASHAs. The initiative also

helps in connecting with ASHAs and making them feel an integral part of the system.

The methodology used is infotainment, which means information with entertainment that includes discussion with a subject matter specialist from the health department, songs and play. Further, thematic issues are also discussed to provide information, e.g. before the immunization week information & discussion on this is done. Similarly, before any specific day/ event the topic related to that event/ day is discussed in the programme.

The duration of the Radio Programme is 30 minutes per episode and the target audience are both the ASHAs as well as the general public. The programme is aired twice in a week, in two languages: Assamese and Bengali. The ASHA Radio Programme schedule is as follows:

	Time of Broadcast			
Day	**AIR Guwahati**	**AIR Dibrugarh**	**AIR Tezpur (Relay centre)**	**AIR Silchar**
Wednesday	12:30 pm	12:30 pm	7:15 pm	12:00 noon
Sunday	11:00 am	12:30 pm	8:10 pm	12:00 noon

The programme is a two way process, meaning feedbacks and suggestions are taken from the ASHAs. For this pre paid post cards with printed address of office of the AIR, Guwahati along with health messages for IEC are provided to ASHAs through Block Programme Managers. No postal charge is taken for using these post cards. Each ASHA is given 12 postcards and in case of further requirement, they can collect the same from the Block Programme Manager of the respective Block. The AIR, Guwahati is given the responsibility to sort the letters and the queries that need special attention and are sent to the office of the Mission Directorate. On the basis of the queries received from the ASHAs reply is also being given from the office of the Mission Directorate either though the programme or communicated though the Block Programme Managers. Till now over 12,000 letters from the ASHAs have been received and responses have also been broadcasted through the ASHA Radio Programme

Impact and Scalability

The ASHA radio programme has emerged as a successful innovation under NRHM. The usefulness of the programme can be elucidated during interactions with the ASHAs as it has increased their awareness about various health related programmes and issues.The positive response of the ASHA radio programme in Assam has also contributed in designing the ASHA Radio programme in states like Manipur, Chattisgarh and West Bengal. ASHA radio programme has the potential to be scaled up to across other states specifically in geographically difficult areas viz, hilly, forest and island areas. In line with the 'Kalyani' programme of the Doordarshan which is quite popular among the rural community, similar programme can be started fortnightly where the health related issues can be discussed more vividly with more active participation of ASHAs.

ARTICLE 5.3

ORGANISING ASHA TRAINING IN BIHAR – IMPLEMENTING THE NGO MODEL

Problem Statement

ASHA programme is a critical component of National Rural Health Mission (NRHM), and includes several processes which aim to actively engage communities in improving health status. The National ASHA Guideline stipulate that all ASHAs must receive 23 days of training in first year covering the first five modules and subsequently receive 12 days of refresher training every year.

Till the year 2010-11, the state of Bihar grappled with the issue of poor quality and slow pace of ASHA training. Thus by March, 2010 out of 79,952 selected ASHAs, only 52859 ASHAs were trained in combined Module of 2, 3 and 4 covering only 12 days training. By this time, most of the other states had completed ASHA Training in Module 5, covering 23 days of training and were in the preparatory phase to roll out training of skill based ASHA Module 6 and 7. ASHA training was initially conducted by the SIHFW and subsequently it was outsourced to PRANJAL, a training institution set up by Public Health Engineering Department. However the issue of slow pace, inconsistent training methodology and poor quality of training were highlighted by several evaluations and reviews.

Programme Description

The poor quality and slow pace of training advocated the need of revamping the institutional mechanism. State Health Society, Bihar entered in to partnership with NGOs to address the issues pertaining to ASHA training in the state. Thus Bihar became the first state to involve NGOs and community based organization in ASHA Training at state and district levels. State conducted the selection of the State training agencies with the help of National Health Systems Resource Centre based on open tendering and specific transparent criteria. Four NGOs were selected as State Training Agencies by this process (Population Foundation of India; JANANI; CARITAS INDIA; Public Health Resource Network). **E**ach organization was given the responsibility to implement training in 7-12 districts of Bihar each depending on availability of resources and presence of organizations in that region. The State training agency carried out the selection of District training agencies to conduct the training in each districts. The process of selection involved was identical to the one followed in the selection of State agencies. This led to the creation of four state training sites in the state operated by four reputed National NGOs and 14 District Training Sites being run by State NGOs.

To further speed up the roll out of training for ASHAs, state devised the strategy to club Module 5, 6 & 7 training in consultation with NHSRC and State training agencies. Thus content of Module 5 is also covered along with the training of ASHA Module 6 and 7. This practice increased the duration of ASHA training of Module 6 &7 from 20 days (five days per round) to 24 days (six days per round).

Program Impact

Till date total pool of 23 district trainers and 802 ASHA trainers has been created. As on April, 2013, 63120 (75%) ASHAs have been trained in Round I and 26638 (31.54%) have been trained in Round II of ASHA Module 5, 6 and 7. Out of 3946 selected ASHA Facilitators, 2916 ASHA Facilitators trained have also been trained by a joint team of trainers from State and District pool in Handbook for ASHA Facilitators.

ASHA Training in Koshi and Tirhut Region, Bihar Module 5, 6 and 7



Creation of permanent pool of Trainers: The strategy to involve NGOs in ASHA Training helped the state to create a pool of permanent trainers who are exclusively available for training of ASHAs and provide continuous support to the training process.

Supportive Supervision: State trainers placed in the state training agencies provide supportive supervision during ASHA training and stay at district level sites for the entire training duration. This provides an opportunity to identify the gaps and take corrective actions. The State and District Training Agencies also maintain a detailed data base of training, profile of trainers and ASHAs, their performance and need of refresher or retraining of ASHAs. This helps the training agencies to monitor the quality of training and plan for refresher training.

Establishment of Institutional Mechanism: Engagement of NGOs enabled state to establish strong institutional mechanism for ASHA Training through coordination between State Health Society, State Training Agencies, District Training Agencies and National Health System Resource Centre. This has created a strong base of training institutes and trainers in the state which can serve as a useful resource for future training needs of ASHA, ASHA Facilitators and VHSNC.

Scalability

The partnership model with NGOs in Bihar has proved to be a boon in resolving the crisis of ASHA training and helped the state in addressing acute shortage of trainers and training institutes. Dedicated training agencies and trainers at state and district level ensure quality of training and eventually provide high levels of skills of the ASHAs and ASHA facilitators. Such a Public Private Partnership Model involving State Health Society and NGOs having experience of training or working with community health workers, can also be a useful strategy for other states, especially in states which face the issue of limited resources and find it difficult to complete the ASHA training effectively.

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COMMUNITY BASED MONITORING AND PLANNING IN MAHARASHTRA

Problem Statement

The National Rural Health Mission (NRHM) has aimed to bring about architectural corrections and strengthening of the rural public health system, to improve health services for the rural population. While 'supply side' reforms by NRHM aim at strengthening public health services, it is recognised that these may not be sufficient to improve utilization of Public health facilities, since in many areas Government health services do not fully enjoy people's confidence. **Therefore 'Supply side' inputs and 'Demand side' processes must complement each other**. In this context, communitisation processes have been envisaged as part of NRHM to increase people's involvement in public health services, while promoting these services as a right and making these accountable.

Programme Description

Community based monitoring and planning (CBMP) of health services under NRHM was launched on a pilot basis in nine states of India in mid 2007, Maharashtra was one of these states. A State nodal NGO (SATHI-CEHAT in case of Maharashtra) coordinates the CBMP activities across districts, in collaboration with the district and block nodal NGOs; all activities are carried out with support from the State health department. Village Health, Nutrition, Water supply and Sanitation Committees form the base of the activity, and further multi-stakeholder CBMP committees have been formed in implementation areas at PHC, Block, District and State levels. The multi-stakeholder monitoring and planning committee at each level collates the findings from the level below, monitors the health system at its own level, and passes these results up to the next level one or two times a year.

CBMP was first implemented in five pilot districts, (Amaravati, Nandurbar, Osmanabad, Pune and Thane) initially covering 15 blocks and 225 villages. Given the positive experiences of the emerging CBM process, in 2009 the State NRHM extended the process to additional blocks and villages, so that currently *CBMP process is covering over 600 villages across 13 districts* where nearly 30 nodal civil society organisations are involved in collaborative implementation of this process.

Key Processes –

1. **Expansion / formation and capacity building of community based committees-** Multi-stakeholder Community based monitoring and planning committees (Village Health, Nutrition, Water supply and Sanitation Committees (VHNWSCs)) have been formed from PHC to State level in CBMP areas with inclusion of Panchayat members, Health officials, civil society representatives and certain delegates

from lower level committees. Members of these committees have been given training related to health services in context of NRHM, health rights and

entitlements, CBMP processes and promoting people's participation.

2. **Community data collection and filling health report cards-** Based on orientation, Village committee members are involved in filling up Village health report cards, with active guidance from facilitators on selected indicators like - village level disease surveillance services; maternal and child health services and use of village untied funds etc. Committee members rate health services as either 'Good', 'Partly Satisfactory' or 'Bad'. The village report cards are then displayed in a prominent place in the village, and a copy is sent to the SHC/PHC/ CHC level monitoring committee for further dialogue and action.

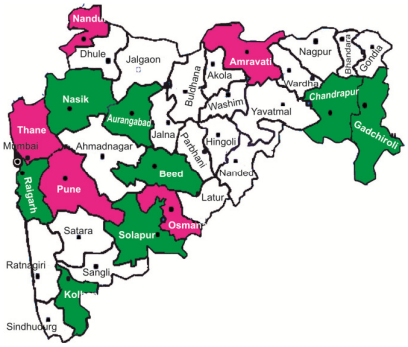
3. **Organising Jan sunwai or Jan samva-** Jan sunwais are mass events with participation by community members, people's organisations, NGOs and

government officials. People are invited to report their experiences of health services and findings included in the health report cards. The Health officials then respond to these testimonies and findings, stating how the problems will be addressed. As part of CBMP in Maharashtra, nearly two hundred public hearings have been organised so far as part of the CBMP process.

4. **Periodic state level dialogues -**As part of the CBMP process, officially mandated dialogues between the state health officials, district and block health officials, and civil society representatives are organised on an annual basis. These dialogues help to address issues that have not been resolved at lower levels and reinforce the commitment of the entire health department.
5. **Community based planning -** Decentralized community based planning of health services has been initiated in 5 districts since 2011. Workshops for Monitoring and Planning Committee members including Panchayat representatives, as well as RKS members on community based planning were organised

Program Impact

Combined with NRHM related improvements



'from above', CBMP processes have provided a matching yet critical 'pull from below' to help ensure that desired changes are actually implemented at ground level. Due to such synergy, these changes are seen in practically all those CBMP areas in Maharashtra where the process has been underway since a few years.

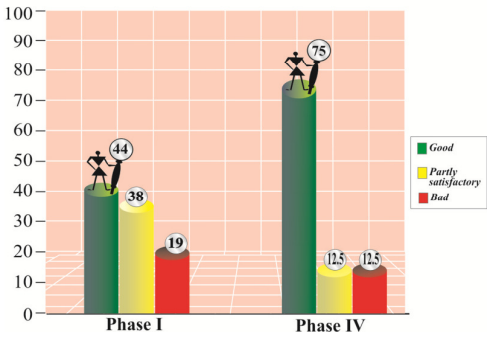
1. Several hitherto closed or dysfunctional sub-health centers have been reopened and have become fully functional, due to demand and momentum of the community monitoring process.

2. Beneficiaries are now getting the full benefit due to them under Janani Suraksha Yojana
3. Certain Medical officers and staff who were not staying in the PHC / CHC campus despite availability of quarters have begun to stay at headquarters.
4. Prescribing medicines to be purchased from private medical shops has practically stopped in CBMP areas.
5. Behaviour of staff towards patients in PHCs has definitely improved in most CBMP areas.
6. Doctors and health center staff have stopped demanding additional charges for services in all CBMP areas.
7. Frequency of visits by ANMs to villages, including remote hamlets, has improved.
8. Rogi Kalyan Samiti funds are being utilized more appropriately, based on community priorities being communicated through the CBMP process.
9. Linked with organised and articulated demand of people, ambulance services have become regularly available in practically all PHCs.
10. The number of outpatients, inpatients and deliveries in PHCs in most CBMP areas have significantly increased.

While some such increase is seen in all areas due to NRHM improvements, this increase is significantly higher in CBMP areas.

Four rounds of assessment of Village level health services were undertaken by the respective committees till 2010 by collecting information in 195 villages and 32 PHCs from 4 pilot districts.

■ *Ratings for PHC services in 4 districts : change from phase I to IV*



- Analysis of information compiled through the village report cards shows an increase in 'Good' rating in successive rounds; in the first round (mid-2008), 50% of the services were given 'Good' rating, this increased to 63% by Phase 4 (end-2010). There has been major improvement in 'Good' ratings to certain services from first to fourth rounds, like Antenatal care (58 % increased to 72%) and immunisation (65% increased to 89%).
- Rise in utilization of PHC services: evidence from Thane district - Between 2007-08 and 2009-10, the average increase in OPD attendance for PHCs in entire Thane district was 17%, whereas increase in OPD utilization in CBMP covered PHCs was significantly higher at 34%. Similarly during 2007-08 to 2009-10, the average increase in inpatient admissions for PHCs in the entire district was 50%, whereas the increase in CBM covered PHCs was significantly higher at 73%. In the period 2007-08 to 2009-10, the average increase in deliveries in PHCs in entire Thane district was 48%, whereas the increase in deliveries in CBMP covered PHCs in the district was significantly higher at 101%.

Community based planning leads to major improvements in Nasarapur PHC

Nasarapur PHC in Bhor block of District Pune had low level of utilization due to various gaps in services. However, based on issues identified during Community monitoring, capacity building of RKS members, several issues were addressed following initiation of community based planning:

- A water storage tank with inbuilt water filter has been installed to address the issue of unavailability of drinking water to patients
- To make the laboratory properly functional, a tank for water storage was purchased and new pipe line for the laboratory was constructed.
- People complained that it used to be difficult for any new patient to find the PHC since there was no board displaying its name. Now an appropriate board has been displayed through RKS funds.
- Vacancy of the post of sanitation worker was leading to lack of cleanliness. Hence the RKS committee has now locally appointed a sanitation worker leading to a clean PHC.
- Workshops on 'Right to Health' and 'role of adolescents in village development' are now being conducted for groups of adolescents in nearby villages, with support from the RKS fund.

Scalability

The experience of Community based monitoring and planning in Maharashtra shows that the process has been enabling for people to become involved in reviving the public health services. The results also indicate that by restoring people's confidence in the public health system and reorienting public health services, it is possible for people to 'reclaim' and help to transform the public health system. Within the period of four years, CBMP was scaled up from five districts to 13 districts in the state owing to the positive outcomes of the initiative. It can be concluded that CBMP has the potential of being scaled up across other districts and states but with prerequisite of existing network of dedicated NGOs working on right based approach at local level and overall support provided from the State health department.

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AN INITIATIVE FOR COMPREHENSIVE SOCIAL SECURITY FOR MITANINS IN CHHATTISGARH

Problem Statement

Mitanins have shown sterling performance as voluntary Community Health workers in rural habitations of Chhattisgarh. Reports from evaluations and reviews have shown that owing to the voluntary nature of the programme and positioning of Mitanins at the every habitation level, the average incentives earned by Mitanins are very low i.e, ranging between Rs.300-500 per month. In order to provide social security to Mitanins, state has created Mitanin Wefare Fund or the Mukhyamantri Mitanin Kalyan Kosh (MKK). The purpose of MKK is to recognize the social contribution made by Mitanins and to help them in being more empowered.

Programme Description

The process of designing of MKK was very participatory. Consultations were held with more than 500 Mitanins during 14 meetings in Bastar and Sarguja divisions in April 2011 to collect the suggestions from Mitanins. Considering the voluntary nature of Mitanin Trainers and Block Coordinators, it was decided that they should also be covered under MKK along with Mitanins.

The components of MKK are:

A. Social security support for all Mitanins
B. Health related Livelihoods Skills for Mitanins
C. Social Recognition

A. Social Security Measures:

- ***LIC life insurance cum scholarship scheme coverage***: It provides life insurance cover of Rs.50,000 to Mitanin in event of death of Mitanin's spouse. For Mitanins who do not have a spouse, Mitanin herself has been insured. Along with life insurance, this scheme provides Rs.1200 scholarship per annum to Mitanin's children studying in standard 9-12th standard. The premium charged by LIC is Rs.150 per Mitanin. This scheme is a combination of Aam Admi Bima Yojana and Janashree Bima Yojana of GoI. It allows benefits of around Rs. 240 lakh (Rs. 168 lakh as scholarships to around 14000 children and Rs.72 lakh as insurance claim for around 180 deaths) per annum to reach Mitanins. Against these benefits, the annual cost of this entire activity is around Rs.92 lakh. State Health Resource Centre acts as the nodal agency for this scheme. SHRC has compiled a computerized Mitanin Database which has been used to cover all Mitanins under this scheme with effect from 1st July 2011. So far around 13,000 children of Mitanins have received scholarships and more than 160 Mitanins have received the insurance amount of death claims.

- ***Support for education of Mitanins:*** Mitanins are being given cash incentives to encourage them to study further. Any Mitanin who passes 8th standard after the commencement of the scheme is being awarded Rs.2,000. Mitanins passing 10th standard and 12th standard get Rs.5,000 and Rs.10,000 award respectively. So far around 3000 Mitanins have received this benefit.
- ***Maternity Benefit for Mitanin Trainers:*** There was no provision of leave for this set of workforce because they are considered as volunteers compensated for wage loss for each day of work done by them. Therefore maternity benefit of Rs.15, 000 has been included in MKK to allow maternity leave of around 6 months.
- ***Emergency support:*** An emergency support fund has been set up under MKK for Mitanins and their families. It covers

emergencies like serious illnesses or disasters. Mitanins are also actively supported to take benefit of existing schemes of Government e.g. children of two Mitanins have been successfully operated for heart ailments under the CM's Heart Protection Scheme. Around 50 Mitanins have benefited from this component.

- ***Swavalamban Pension Fund Scheme***: Around 60,000 Mitanins were enrolled in this pension fund scheme last year. Mitanins receive Rs.1000 each in their pension fund accounts and central government also contributes a matching amount. This would enable Mitanins to earn an average monthly pension of around Rs.1000 per month once she crosses age of 60. So far, around Rs. 21 Crores has been accumulated in this pension fund.

B. Health & Nutrition related Livelihoods skills for Mitanins:

The purpose of this initiative is to create opportunities for Mitanin to earn their livelihood through activities which contribute to better health and nutrition outcomes for their communities. Therefore vocational training is provided to interested Mitanins and facilitating the required linkages. So far around 400 Mitanins have learnt mushroom and vegetable cultivation and have started production in their villages. Some Mitanins have also learnt backyard poultry, fruit cultivation etc.

C. Social Recognition Measures – Mitanin Samman Diwas (Mitanin Day)

23rd November has been declared as the Mitanin Day across the state in honour of Mitanins completing one decade of active contribution. An appeal was issued by the Chief Minister and Health Minister of Chhattisgarh to all PRIs to honour the Mitanins on this day. On 23rd November 2011, more than 6300 functions were organized through PRI contributions across the state in which thousands of Mitanins were honoured by their respective PRIs and other public representatives. This has helped in providing social recognition to Mitanins. The second Mitanin Samman Diwas was organized on 23rd November 2012 in which around 7,500 out of the total 9800 Gram Panchayats organized and funded this event voluntarily and honoured Mitanins by giving Saris etc.

A state level steering committee has been formed under leadership of the Health Minister of Chhattisgarh. SHRC has been given the responsibility of managing the funds and day to day operations of MKK with a dedicated cell for MKK. The current average annual budget requirement is about Rs. 10 Crores. In 2011-12 and 2012-13, funds were allocated by State Government but this year, some of components have been proposed under NRHM PIP 2013-14.

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ARTICLE 5.6

CAPACITY BUILDING OF GAON KALYAN SAMITI: EFFORTS TO PROMOTE EFFECTIVE COMMUNITY LEVEL INITIATIVES TO ADDRESS ISSUES RELATED TO HEALTH AND SOCIAL DETERMINANTS OF HEALTH

GKS members mobilised community to take ownership of making this drain clean ...Household wise manual/cost contribution & supervision by GKS members

Problem Statement

Rayagada is one of the high focus districts of Odisha with its inherent difficulties; in terms of its hilly terrains, left wing extremism, low literacy, poor status of health, sanitations and nutrition indicators etc. The outbreak of epidemics has been one of the huge problem for the district administration in recent years. About 2297 Gaon Kalyan Samits were formed in the district.

However district faced the challenge to train the GKS members and equip them adequately to fulfil the roles and responsibilities of the committee in order to address the local public health issues

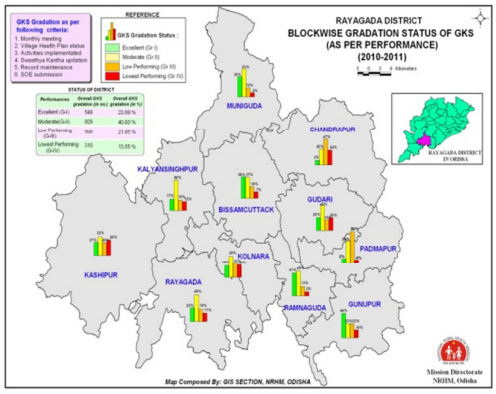
Programme Description

The State entered in to a partnership with CARE India, Odisha in the year 2010, to act as the Nodal agency in eight high focus districts for strengthening of GKS with involvement of local NGO partners. Raygada was identified as a pilot district for this model. Four members of 14760 GKS in 8 districts were trained through local NGOs on their roles & responsibilities, preparation of need based village health plan, implementation and monitoring of the plan, fund utilization, mobilization of resources, proper and record maintenance.

*In Raygada district, local NGO partners were selected and oriented to select trainers for GKS members on **"SURABHI"** Module developed by NRHM, Odisha. To ensure quality of training, locally based training venues and local trainers who could conduct the training sessions in local language and adopting adult learning principles were selected by the NGOs.*

Concrete achievements...

- 44 Block level Resource Persons were trained on GKS training & Hand-Holding support
- 9188 GKS members of 11 blocks trained in SURABHI Module
- 70% of GKS prepared Village Health Plan which reflected in extended activity implementation.
- Regular SOE submission by GKS reached up to 60% against 30% of pre-training phase
- GKS gradation/Assessment Exercise



The GKS members were trained comprehensively on all the aspects of the GKS functioning. Simultaneously, GKS wise gradation exercise process was initiated by filling up the 'Ama Samiti O- Ame Keunthi' – Oriya format for each of the GKS during the training. The block wise GKS Gradation process indicated the low & lowest performing Gaon Kalyan Samiti (Gr-III & IV) where as the better performing GKS were also marked under Excellent & Moderate Group (Gr-I & II) . This process allowed identification of GKS which belonged to Grade III and IV categories, which were then provided more intensive hand holding and support through the local NGOs.

Program Impact

As a result of the capacity building and support provided by NGOs, GKS of Guakana village of Kolanara Block in Raygada district made the village health plan in consultation with the community members and field functionaries. After the detailed analysis, the members found that village drain was one of the important factors contributing to high incidences of malaria and diarrhoea in the village. To address this issue, the GKS members decided to clean the drain and not to use the water of the drain for any domestic purpose. As planned, the drain was cleaned by the villagers themselves, 29 people contributed for the cause and the task was completed in four hours.

Scalability

Similar success stories have also emerged from other villages showing a positive outcome of the concerted effort of GKS capacity building and strengthening programme in the eight high focus districts. This indicates the feasibility of scaling up the model of State and District health departments working in partnerships with local NGOs to strengthen the community engagement through the platform of GKS.

Thus with more number of GKS striving to achieve the objective of transforming their village as "Sustha Gaon", the dream of "Sustha Odisha" can be achieved.

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VILLAGE HEALTH SANITATION AND NUTRITION COMMITTEE AND VILLAGE HEALTH PLANNING - THE CHHATTISGARH EXPERIENCE

Problem Statement

Since the launch of NRHM, about 18706 VHSNCs have been formed in the state at revenue village level. However in the initial four to five years the functionality of the VHSNCs was very limited. TO address this issue state has put in various efforts to support the VHSNCs and improve the effectiveness of the existing VHSNCs.

The state has, over the past four years worked to strengthen Village Health and Sanitation committees, and today it is perhaps the only state in which convergent planning of village level action on health, sanitation, nutrition and development issues is being undertaken at scale.

Programme Description

The focus of the monthly VHSC meeting is to identify gaps in health and health related areas and plan to resolve these gaps. The action-plan is defined in terms of the key tasks for the community, which also includes ensuring action by government at various levels. It is not a one-time exercise of drawing up a comprehensive plan for purposes of submission to the state. Utilising the untied grant is seen more as a facilitating factor, rather than as the sole purpose of the VHSC. The VHSC plans focus on gap assessment and resolution in health services, health status or health related behaviour, nutrition, food security, sanitation, gender, and livelihoods. In each monthly meeting, about two or three issues are discussed and plans for resolution are drawn up.

Inputs/support for Village Health Planning

Two rounds of five day trainings are held for the Mitanin and her facilitator. This includes three days jointly with PRI/VHSC members.

The facilitators (one for every 20 Mitanins) must attend and facilitate every VHSC meeting under her area (which is usually about 6 VHSCs), and the 'Fixed day plan of VHSC meetings' is matched and integrated with fixed day plan of the facilitators.

The Mitanin and female Ward level PRI representatives are joint bank signatories (and also the perceived leaders) of VHSC. This greatly helps the process.

The meeting process

Meeting of VHSC is held every month and apart from designated members of the VHSC, other residents are also encouraged to participate in these meetings. The discussion is facilitated by a facilitator (in the Chhattisgarh case it is the Mitanin Facilitator) by asking a series of questions to the assembly, and follows these steps:

Step1 - Identifying the problem: The facilitator leads the discussion by asking the group, "what are the main (health) problems in your habitation?". Sometimes there is an answer from some members, but in some meetings, no issue gets identified this way. In such cases the facilitator starts the discussion by using the list of 32 issues. (Table 1)

Step 2 - Identifying the habitation/s where the problem is more severe: The situation (with respect to the issue identified through the above step) of each hamlet in the village is discussed in order to finalize the habitations for which action needs to be planned immediately.

Step 3 – Analysing the problem - Identifying the main cause(s) of the problem: The facilitator asks further questions to enable the VHSC to identify the causes which need to be addressed to solve the problem. E.g. if a habitation has a big gap in immunization, the cause may be irregular VHND, distance, non-functioning Anganwadi, lack of information regarding dates of VHND etc

Step 4 - Deciding the solution: The solution is defined in terms of actions that the community can take to steer progress in the direction of a solution. E.g. if a habitation has a gap in immunization due to irregular VHNDs, the VHSC may decide to talk to the concerned ANM to resolve the issue. When the related service provider is present in the same meeting, it is often the case that the service provider commits to corrective action, and the issue gets resolved.

Step 4 – Deciding who is responsible: For each action decided, volunteers are called

Gap (weak aspect)	**Weak habitation** (where the gap is severe)	**Cause of the problem**	**Action** (that village would take)	**Responsible Person** (Person who volunteers to lead the action)	**Time Frame** (for completing the action recorded in previous column)	**Review** (in the next meeting – on progress made)

Reviewing the progress on items planned in previous/earlier meeting: In the subsequent meeting of the VHSC, the progress made on the actions planned in the last few months is reviewed. Usually, if a VHSC plans for three issues is a meeting, around one issue is successfully resolved in a month. In some cases, the planned action is taken but the outcome is not successful. In such cases, further planning is done to decide on the next action required to solve the issue. There are situations when the action is not even attempted. In such cases, the steps of fixing responsibility and time-frame are reviewed/re-decided. The facilitator keeps the attention of the VHSC on the success rather than on failures. This helps in keeping the morale of the group high.

Impact

Most VHSCs of the state have completed the training and about 1.15 lakh VHSC members have been trained (5-6 members from each VHSC). One block coordinator has been placed exclusively to coordinate this planning process, in each of the 70 blocks of state (of the total 145 blocks of state). As of now about 10,600 VHSCs are regularly conducting this process of monthly village planning, and then process has reached a stage of maturity in about 5000 VHSCs where regular meetings are held and follow-up actions are undertaken on a sustained basis. In the remainder incremental gains are being made.

Scalability

Chhattisgarh's community processes programme provides many valuable lessons for the rest of the country. It shows that by building up adequate support structures for VHSC at all levels, focused capacity building of the VHSC members and handholding of the VHSCs in planning process can provide positive outcomes for the VHSCs. The initiative also shows the potential of scaling up across the state where such support structures exist and state programme management is committed for increasing the participation of the community in the health planning process.

Table1: List of issues discussed for Village Health Planning

1	Fully immunized children of 12-36 month	12	Effectiveness of Mitanins in Neonatal and Child Survival	23	Rojgar Guarantee Yojana
2	Ante-natal care	13	Effectiveness of the Panchayat health Committee	24	Malnutrition
3	Institutional delivery (in sub-health center, primary health center, community health center, district hospital)	14	Effectiveness of Women's Health Committee	25	Low birth weight
4	Delivery at home assisted by qualified health personnel (Doctors/ Nurse/ ANM)	15	Stagnant Water	26	Under-Age marriage of girls
5	Weighing of newborn on the day of birth	16	Safe Drinking Water	27	Spacing of birth
6	Breastfeeding within half an hour	17	Use of Toilet	28	Family planning/ Access to sterilization
7	Supplementary food to children of 6-18 months	18	Anganwadi Coverage(Children from 6 months to 6 years old)	29	Still Birth
8	Availability of chloroquine	19	Midday Meals	30	Infant death
9	Use of mosquito net	20	Functioning of the Public Distribution System	31	Outbreak of water borne diseases
10	Effectiveness of Mitanin in Maternal Health	21	Antyodaya Yojna	32	Malnutrition amongst Adolescent girls
11	Incentives to Mitanins	22	School Enrolment		

SECTION 6 – HUMAN RESOURCES FOR HEALTH

HUMAN RESOURCES FOR HEALTH

The paucity of skilled human resources has been one of the major bottlenecks in achieving the progress towards Millennium Development Goals. The proportion of skilled health providers stands very low at 100 per lakh population as against the international minimum norm of 228 per lakh population to deliver basic maternal and child health services. Added to this, is the issue of skewed distribution of health workers towards the urban areas, which is evident from the fact that 60 percent of the health workforce in the urban areas, where only 28 percent of the country's population reside (Census India 2001). With the advent of NRHM, government has introduced various strategies to increase the availability of human resources in the rural and remote areas. These measures range from regulatory strategies and educational benefits to improved workforce management practices and incentive schemes to counterbalance the opportunities loss involved in working in rural and remote areas.

Bihar and Madhya Pradesh have taken up measures to specifically address the issue of uneven divide among the rural and urban areas, wherein the doctors and nurses have been preferentially posted at the block level to deliver the services in the peripheral areas. Other states such as Odisha, UP, Bihar, Assam, Chhattisgarh, Haryana, Rajasthan, Kerala and Punjab have introduced several incentive schemes for the attraction and retention of service providers at the rural and underserved areas. These incentives range from the difficult area allowances to the performance based benefits mainly linked to institutional deliveries, c-sections, sterilization and surgery among others. In the wake of attracting more health workforce Haryana, Gujarat, Bihar and Punjab have revamped the recruitment processes by using innovative methods like online application system, direct walk-in interviews. Some states have also attempted outsourcing of health facilities facilities as well as contracting-in of skilled human resources so as to fill the gaps in service delivery in difficult and remote areas.

Efforts have also been made to monitor and track availability of human resources across the facilities through implementation of Online Human Resource Management Information System (HRMIS) in Jharkhand, Odisha, Tamil Nadu, Assam and Bihar. HRMIS strives to do real time tracking of human resources and develop a real time database, which further facilitates in planning and

rationalization of health workforce in the state.

Regulatory measures like post-graduation rural service bonds and pre-post-graduation mandatory rural service are also followed by some states to enhance retention of doctors and specialists in the rural areas. The duration of bonds and the penalty amounts vary from state to state. Chhattisgarh and Assam have tried innovations in educational strategies by introducing 3-year courses to generate mid-level health care workers to provide primary healthcare services.

These strategies, complemented by large-scale employment of contractual workforce under NRHM, have contributed towards availability of healthcare providers in the difficult-to-access underserved areas.

IMPROVING WORKFORCE MANAGEMENT PRACTICES IN HARYANA

Problem Statement

Haryana despite being one of the leading states in terms of agricultural growth and per capita income had a high infant mortality rate of 42 and low levels of institutional deliveries in comparison to other states. Among all the gaps in delivering quality health services, the most difficult gaps to meet were the shortage of doctors. There were high levels of vacancies, especially for doctors, primarily due to poorly designed work force management policies and the lengthy recruitment process under Haryana Public Service Commission (HPSC). A shortfall of 211 specialist existed at the level of CHCs with only 45 in position against 256 sanctioned posts, while 350 MBBS doctors were in position against 580 sanctioned posts (a shortfall of 230) at the PHC level. The shortfall would increase manifold if the shortage at the District and Sub-District levels are taken into account. This problem was compounded by high levels of reported absenteeism among doctors posted at PHCs and CHCs in rural areas. Absence of any formal transfer and promotion policy in the state further added to the problems of retention of critical human resources within the system

REFORMS IN WORKFORCE MANAGEMENT

Recruitment & Placement Policy: Changing the recruitment policies solved the issue of prolonged recruitment process for regular MOs & Specialists, whereby recruitment for regular posts was taken out of the purview of the HPSC, and recruitment of generalists and specialists into permanent government service became an on-going process and applications were entertained all through the year. Appointment letters were generally issued within a week of selection and the time span between advertisement of post & joining of selected candidates reduced from an average of 18 months to just about one month

The recruitment process is now fully web based thus the advertisement for the posts, applications, list of shortlisted applicants and finally the list of selected candidates is available on the website of the Haryana Health Department.

This was complemented by a revised placement policy under which posting of specialists was done only at District Hospitals and at the few CHCs that provide comprehensive emergency obstetric care such that the skills of specialists are utilized mainly towards performing tasks related to their specialty. Flexible approach adopted to post the candidates at the preferred location wherever feasible and no transfers would be made until three years of term is completed at one center of posting. This flexibility has also attracted candidates from the neighboring states of Rajasthan, Punjab and Uttar Pradesh, who doctors opted for health facilities in the border districts.

Enabling Work Environment: Specialists were given a bigger role in decision-making process related to facility development with the government making efforts to meet the demands for necessary logistics in terms of infrastructure & equipment. Disciplinary actions were taken against doctors with poor performance who fail to deliver even in a

facility with the required infrastructure & equipment and good performances rewarded with better promotion and transfer opportunities.

Revision of Salary Package: Compensation packages were revised for critical cadres like Specialists, MBBS & AYUSH doctors and paramedical staff with special packages for specialists posted in difficult areas categorized on the basis of their grade or category of difficult area

Remuneration of specialists posted in 'non-difficult areas' is now increased to Rs.32,000/- per month while salary packages for those posted in difficult areas have been hiked based on the grade or category of difficult area. Highest package is of Rs.60,000/- per month for serving in Grade I difficult area, followed by Rs. 50,000 per month for Grade II and Rs. 40,000 per month for Grade III areas. Six additional increments have also been introduced for post-graduate degree specialists and three for diploma post-graduates working in difficult areas.

Difficult Area Allowance: To encourage and attract critical professional service providers in the identified difficult areas, special incentives have been introduced under NRHM for specialists, allopathic MO, AYUSH MOs, staff nurses and para-medicals working in Community Health Centers and Primary Health Centers located in these areas.

Program Impact

One of the major and explicit achievements of these innovative strategies is the massive reduction in the number of vacancies of doctors at public health facilities of Haryana. The entire gamut of workforce management policies, a fast recruitment process, revised compensation package and incentives for regular government posts has made government service attractive for the doctors. The increased presence of skilled human resources in the facilities has also contributed to improved access and utilization of services in the state.

Scalability

This package of measures to attract and retain service providers is being implemented across the entire state. By adopting the sheer persistence with the approach and the administrative & political steer demonstrated by Haryana, these measures can be replicated in other states that are struggling to find healthcare providers to work in difficult-to-access areas.

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INCENTIVES FOR SERVING IN RURAL AREAS OF HIMACHAL PRADESH

Problem Statement

Availability of adequate number of human resources with suitable skill mix and their appropriate deployment at different levels of health care set-up are essential for providing an effective health care service for the population. In India, acute shortage of skilled health workers in rural and remote areas has had a negative consequence on the health outcome.

87% of the households Himachal Pradesh are in rural areas and the lack of availability, skills and performance of healthcare providers is one of the central problems in the state. There are no ANM posted in 380 out of 2067 Health Sub Centers (HSC) and 180 of them are without any health worker. Of the 1597 sanctioned Medical Officers (MO), only 834 posts are filled [including 153 on state contract and 287 on Rogi Kalyan Samiti (RKS) contract].

Program Description

To address the shortage of human resources (HR), the state has initiated systematic and integrated policy changes with relation to recruitment, placement and HR development for ensuring their availability high focus districts and difficult areas. Some of the key strategies adopted for ensuring availability of MOs and staff nurses in rural and remotest areas are (a) eligibility for post graduation (b) differential pay structure and (c) provision of incentives for rural areas. One of the key proposals in Program Implementation Plan (PIP: 2011-12) was provision of special incentives linked with performance for those serving in difficult-to-access areas.

Process Protocol: There are 2071 HSC, 449 PHC, 73 CHC and 12 DHs spread across 12 districts and 51 sub-divisions/talukas in the state. Different regions in the state have been classified into rural, difficult and most-difficult areas.

Classification of areas based on "accessibility"

Rural Areas	Difficult Areas	Most-Difficult Areas
Within the limits of Shimla Municipal Corporation; within the limits of Solan Municipal Committee & within Baddi-Barotiwala-Nalagarh Notified area.	Kinnaur District (except Pooh & Hangrang Sub Tehsil); Bharmour Sub Division of Chamba, Development Block of Chopal, Chohara (excluding Dodra Kawar) Sangrah, Seraj, Anni, Tissa, Chhota Bhangal of Multan Tehsil and Bara Bhangal Area (Baijnath Block); Development Blocks (Shillai, Jubbal-Kotkhai, Salooni, Rohru, Nankhari, Karsog)	Pangi Sub Division, Lahaul & Spiti District; Pooh area of Kiruraur District (Pooh & Hangang Tehsi /Sub Tehsil); Dodra Kawar Area of Shimla district

The incentives provided for Allopathic MOs, AYUSH MOs and specialists differ on the basis of accessibility and period of posting in these notified areas.

- Differential incentive (ranging from Rs. 3000/-pm, Rs.6000/-pm to Rs. 9000/-pm) over and above the monthly salary for Allopathic MOs (RKS Contractual) posted in difficult areas depending upon the place of the posting for serving a period of 2-5 years. The incentives have been further revised w.e.f. 1st July, 2012 (Rs.6,000 to Rs.10,000/-pm and Rs. 9,000 to Rs.15,000/-pm)
- Enhanced salary of Rs.80,000/-pm plus incentives for recruitment of specialists (Gynecologist, Anesthetist, Pediatrician, Surgeon) for high focus districts and tribal, hard areas (as notified by the State Government from time to time). The Incentives of Rs.5,000/-pm, Rs.10,000/-pm, and Rs.15,000/- pm for specialist has been revised to Rs.15,000/- pm; Rs, 20,000/-pm and Rs.25,000/- pm
- Provision to qualify for selection for Post Graduate Courses after completion of three years as an MO in a hard or difficult area, while only two years is enough to do so from a most difficult area
- Provision for posting the spouse of a PG student as Senior Resident or Junior Resident in the same Medical College

The financial incentives are paid out of NRHM funds and will be over and above the contractual salary already being paid.

Other initiatives undertaken by the State include provision to regularize the services of RKS Contractual MOs after they put in 6 years of service and to ensure stability of tenure, MOs and Staff Nurses are posted to an institution for an initial period of three years and are not transferrable during this period.

Challenges

There are delays and non -payment of dues or trivial grounds. Some doctors stated that it was not clear why incentives was first offered only for RKS Contractual MOs which was later extended to other contractual doctors, and why regular doctors were not getting the incentives. Although these schemes have been successful for availability of medical officers, they have made no dent in the availability of specialists. It was observed that though a sum of Rs.98,000/-pm is paid to specialists; the state faces difficulty in recruiting specialists in these areas. For example in Kinnaur district, there was no gynaecologist or paediatrician in the entire district in the public health system and only one gynaecologist in the private sector.

Along with incentives, support system such as semi-furnished accommodation for staff posted in difficult and hard-to-reach facilities is needed. Though there is a policy for incentivizing the health service providers on the basis of performance, due to lack of a differential financing based on performance, which needs to be inbuilt in the grant release, it is yet to be implemented in full spirit and on a timely manner.

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INNOVATIONS IN WORKFORCE MANAGEMENT IN KARNATAKA

Problem Statement

In India, the issue of shortage of human resources has been further compounded by a concentration of available human resource in urban health settings resulting in lack of staff in the peripheral health centers. Karnataka is facing shortage of human resource in most facilities, particularly at Health Sub Centers (HSC) and Primary Health Centers (PHC). For instance, as on March 2011, only 747 HSCs (8.4%) had two ANMs in place out of a total 8890 HSCs.

But an efficient health workforce management can bring forth improved performance and better health outcome within the available resources. Effective workforce management provides mechanism for employment, retention, support system and career development of health care personnel. In order to address the shortage and availability of health human resources, Karnataka has taken up many systemic changes and innovations including enacting of new acts (e.g. Transfer Act, 2011 etc.) and development of Human Resource Management System (HRMS) etc.

Program Description

- **Enactment of Act & Rules, 2011:** The Karnataka State Civil Services Act 2011 was enacted by the Karnataka State Legislature, Government of Karnataka and came into force on 2nd May 2011. This Act provides the regulation of transfer of medical officers and other staffs of the Department of Health & Family Welfare so as to ensure their availability in government health facilities in rural areas. It gives provisions for compulsory posting in rural areas, posting/transfer of MO/Specialists to appropriate posts, rationalizing the cadres/posts and need-based HR restructuring of the department. In similar lights, the KPME (Karnataka Private Medical Establishments) Act 2007 came into effect for mandatory registration/monitoring of private medical establishments, sharing of available relevant information on infrastructure/manpower by private sector.
- **Human Resource Management Systems (HRMS):** A health human resource information system is the backbone for an efficient and effective health workforce management. The Karnataka Government in collaboration with the NIC has developed a web enabled HRMS system for collection, compilation and updation of information/data related to institutions and the individual with respect to contact details, employment & types, deployment, service details, transfer & promotion, vacancy positions, trainings/deputations, payrolls, retirement and performance review etc.
- **Incentives for deployment & retention of HR:** Special remote area allowance has been budgeted in the state Program Implementation Plan (PIP) wherein incentive of Rs.300-Rs.8000 has been built in for various health personnel starting from Group D to doctors. The State is paying a substantially higher remuneration for specialist doctors on contract to ensure delivery of services.

- **Pre-service and In-service training for HR:** The state has adequate number of medical colleges, nursing and ANM schools run by government and private sector which imparts pre-service training. The in-service trainings are undertaken in District Training Center (DTCs) under Health & Family Welfare Department for skill up-gradation and multi-skilling of health care personnel. In 2011-12, the state had deployed the 53 EmOC and 67 LSAS trained MOs in FRUs/DHs for practicing their skills. The non-operating doctors who lacked confidence got deputed in District Hospitals under a senior gynecologists/anesthetist for a certain period of time for proper mentoring and supervision.
- **Human Resource Development Program:** Karnataka Health System Development & Reform Project (KHSDRP) under the aegis of Department of Health & Family Welfare, Government of Karnataka has undertaken many programs to bring in reforms in the area of Organization Development (OD) which envisages attitudinal change, development of better skills and knowledge, behavioral change communication to strengthen integrity, recognition & rewarding to promote better services, counseling for recruitment, transfer & promotion and refurbishing methods of accountability of health care services. As a part of the organization development, KHSDRP has conducted various capacity building programs, workshops, and consultancy services for enhancing the managerial capacity and to bring about attitudinal change among health care personnel towards provision of health care service.

Evidence of Success: On account of the development and regular use of HRMS data/information and implementation of the Karnataka State Civil Services Act, 2011, there has been evidence of success stories in the area of HRH reform/management in public health sector.

There has been **rational deployment** and in the last 1-2 years of NRHM; specialists have been redeployed in designated FRUs so as to operationalize them and 233 Doctors from PHCs having more than one MBBS doctors have been placed in PHCs having no MBBS doctors. There has also been a need-HR restructuring of the Health & Family Welfare Department with optimal deployment of health care personnel like doctors, paramedical staff at rural and remote facilities.

A **Specialist Cadre** has been created, whereby the state has amended recruitment rules which paved the way for direct recruitment of specialists (previously only GDMOs were recruited). The state is currently in the process of recruiting 600 specialists through Karnataka Public Service Commission (KPSC) and building up a public health cadre and has plans to provide comprehensive training to the doctors. There is direct appointment and promotion for specialist (regular) from March 2012.

There is also a process of assessment of **Training Needs** and **planning for Capacity Building** of manpower, using the data captured in HRMS in areas of training details of personnel by facilities and position

Scalability

Due to the improved manpower management, there has been positive changes and outcome in terms of access to better services delivery in the state. The quantum of changes and the impact on health service delivery after implementation of these innovations may be studied. As the Act has been in force for less than a year, it is too early to assess the impact of the Act.

The key barrier is the lack of a comprehensive national and state level HR policy, which will

facilitate in development of a systematic plan with allocation of adequate recourses, in partnership with other relevant Ministries/departments such as Education, Finance, Human Resources and Labour towards addressing the large human resource gaps and their management. The other barrier is the level of implementation of these Acts and in ensuring a more systematic and regular use of HRMS for decision making on various issues.

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ARTICLE 6.4

RURAL HEALTH PRACTITIONERS IN ASSAM: MID-LEVEL CARE PROVIDER FOR COMPREHENSIVE SERVICE DELIVERY IN SUB CENTERS

Problem Statement

With the launch of NHRM in 2005, more than 1 lakh additional skilled health workers has been deployed across the country but these numbers are not significant to fill the huge gap in human resource, in particular in the underserved and difficult-to-reach areas. One of the measures to tackle the challenges is to devise educational strategies with an aim to admit only those students who are likely to serve in under-services areas and mold education to retain the commitment.

In 2002, Chhattisgarh, with one of the lowest health human resource densities in the country, and perhaps in the world initiated the 3-year course to train medical professionals to serve in rural areas so to address the acute crisis of shortage of physicians. The initiative faced a fair share of hurdles including legal action by the Indian Medical Association and 3 major student strikes. This resulted in dropouts, lesser enrolments and finally closure of the course in 2008.

However, this unique one-time endeavor led to many PHCs, which had never over 50 long years ever been able to get a doctor, now had a qualified service provider in the form of Rural Medical Assistant (RMA) and for the first time the vacancies in PHCs were closed. Subsequent assessment revealed that their knowledge, skills and patient satisfaction were at par with MBBS doctor in delivering primary health care

Program Description

Much on same lines to fill human resource gaps, Government of Assam passed an act - The Assam Rural Health Regulatory Act in 2004 with the objectives of i) opening of Medical institutes for conducting the three year course namely Diploma in Medicine and Rural Health Care (D.M.R.H.C.) and ii) regulation and registration of DMHRC pass outs. The objective of the 3-year course was to select, train and deploy a mid-level care provider (Rural Health Practitioners) in the Sub Center, competent enough to provide public health services and primary health care at village level and complement the efforts of the first health worker - the Auxiliary Nurse Midwife.

The Rural Health Practitioner Course is clearly distinguished from the five year medical course; and open only to candidates selected from rural areas, and licensed only to those who would work in public service in rural areas.

Providing comprehensive Reproductive & Child Health (RCH) services including institutional deliveries at the sub center through the RHPs was one of the strategies undertaken by the state to address the high Maternal Mortality Ratio (381/1,00,000 live births; AHS 2011-12).

These RHPs have been delegated with the following responsibilities: attend OPD and emergency cases; treatment of minor illnesses/non-communicable diseases; conduct ANC/PNCs and identify and refer high risk pregnancies; management of LBW newborns; counseling of mothers on best MCH practices; Routine Immunization and Family Planning services

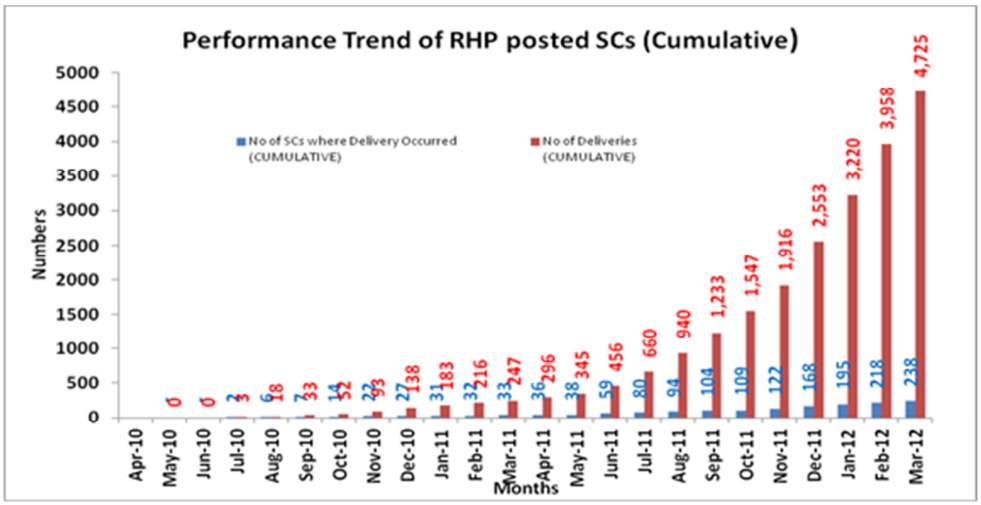
Learnings from the past experience led to a more sustainable effort and by March, 2012, 260 RHPs have been placed in Sub Centers, a majority of them in High Focus Districts,

thereby upgrading these centers to fully functional curative, preventive and promotive units.

Program Impact

These Sub Centers have shown substantial increments in quantum as well as range of service delivered. A total of 977,754 OPD cases were seen by RHPs and 4725 institutional deliveries took place at sub-centers with RHPs, during the period from April 2010 till March 2012.

Month-wise trend of deliveries conducted by RHPs at Health Sub-centers



Scalability

Experiences of Chhattisgarh and Assam on 3 years course studied and communicated appropriately have shaped the perception of policy makers in India, who now recommend a similar mid-level cadre nation-wide, through a 3-year Bachelor of Rural Health Care Degree Course.

If scaled up systematically and efficiently, this initiative has the potential, more than any other to make universal access to comprehensive health care a reality.

But some of the challenges in the initiative in Assam include:

- Developing a career progression path for RHPs to sustain morale and retain them in the public health system.Address the growing demand by serving RHPs and those currently pursuing studies, for converting the 3 years diploma course to a graduate course, which will facilitate their further studies towards Master's degrees.
- Continuing Medical Education to keep the RHPs updated on newer skills and knowledge to improve their performance and keep them motivated to continue serving in remote and underserved areas.

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CHHATTISGARH RURAL MEDICAL CORPS

Problem Statement

The shortage of human resources and the skewed distribution of scarce human resources in rural health facilities is one of the key challenges for effective health care service delivery in India. The density of health workers per 10,000 population in urban areas is almost four times that of rural areas. Acute shortage of skilled health workers in rural and remote areas for serving a significant size of about 72% of country's population has a negative consequence on the health outcome and poor performance of health sector.

Chhattisgarh, with one of the lowest health human resource densities in the country has also been facing severe shortage in almost all categories of health care providers. The state had 82 specialists in position at CHC against 592 sanctioned posts, which means a vacancy rate of 86%. The vacancy rate for doctors at PHC stands at 71.3%. Moreover, the sanctioned posts do not aligned to the staffing pattern of IPHS. For example, there are only 781 sanctioned posts of staff nurses against 1667 sanctioned posts of medical officers, which is much less than WHO standard norms of 3 nurses per 1 doctor.

In order to address the acute manpower crisis, the Government took an initiative to retain and motivate the service providers to work in difficult and remote areas under the scheme *"Chhattisgarh Rural Medical Corp (CRMC)"*. The CRMC was proposed in State Program Implementation Plan (PIP: 2009-10) with an objective of improving the health services especially at difficult and remote areas by taking the services of current and retired employees of Department of Health & Family Welfare as well as from private sector such as doctors, specialists and staff nurses in those identified health facilities.

Description of the CRMC

Key Features:

- Monthly incentive honorarium; Group insurance scheme
- Relaxation in qualifying service period for admission in PG course- & reservation of seats for those serving in CRMC after 3 years (normally 5 years)
- Retention of government accommodation in urban areas for their family
- Leave travel concession; Assurance of posting in general area after completion of tenure
- Automatic extension after retirement (only for clinical services)
- Transfer with mutual consent
- Compensation up to Rs.10 lakhs in the event of loss of life due to Naxalite attacks

Process Protocol: There are 26 District Hospitals (DH), 148 Community Health Centers (CHCs), 741 Primary Health Centers (PHC) and 5076 Sub Centers (SC) in the state. Under the CRMC, these health facilities have been categorized into accessible, difficult and most difficult.

Facility level	Grading of Accessibility			Total
	Accessible	Difficult	Most difficult	
District Hospitals	13	2	3	18
Community Health Centers	3	34	22	59
Primary Health Centers	45	200	106	351

Six cadres of healthcare providers (Specialist, PGMO, Doctors, Rural Medical Assistant, Nursing Sister and Staff nurse) are covered under CRMC with variations in terms of incentives provided according to zonal categorization of health facilities. Under the scheme, these personnel are required to serve four years with the department with two years of posting each in difficult and most difficult areas. Their tenure is increased by two more years if an individual is willing to serve further in these areas. In order to keep the staff motivated, they are being given extra incentives from NRHM apart from their fixed salaries. For example, specialists posted in 'most difficult' institutions in the 1st & 2nd year of service under CRMC gets Rs. 15,000/-pm as incentive while those serving in 'difficult' institutions gets Rs.10,000/-pm. In the 3rd and 4th year, the incentive increases to Rs. 18,000/-pm for 'very difficult' institutions and Rs.13,000/-pm for 'difficult' institutions.

Implementation: The priority to serve in these underserved areas is given to serving employees working in in easy-to-access areas, retired employees who meet qualification criteria and contractual staff as well. If individuals nearing retirement age opt to join CRMC, then application has to be submitted 3 months before retirement and they can work for another 4 years till 65 years of age. In such cases, incentives are fixed separately and appointments made by the Commissioner (Health) under CRMC.

Health Facilities in 'difficult areas' of Dantewada District (Source: 6th CRM, 2012)

Standardized performance evaluation of CRMC with minimum performance benchmarks is in place for service providers working in DH, CHC & PHC. If the performance does not meet the minimum benchmarks in 1st & 2nd years, no incentive is given in 3rd and 4th year of service in CRMC.

A one-month incentive has to be deposited to State Health Society (SHS), Chhattisgarh and under this; the general transfer rules of the state government are not applicable. If transfer is sought before completion of 4 years, permission of Commissioner (Health) is required followed by a notice period of three months. There is also a Termination Clause for non-achievement after 2 years of service under CRMC

Scalability

Despite better provisions and financial incentives offered through CRMC, the response of medical officers working in normal areas has been low because of poor awareness of scheme among targeted health staff. Acceptance even among those who are aware is low because incentives under schemes are not sufficient to motivate the health staffs to join this scheme. A systematic study to assess the impact of CRMC is underway which will have policy amendments leading to an integrated approach for large scale attraction and retention of health workforce in underserved areas

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INNOVATIONS IN WORKFORCE MANAGEMENT IN SIKKIM

Problem Statement

Sikkim as a State covers total population of 6.4 lakhs with 4 operational District Hospitals 24 Primary Health Centers and 147 Sub centres. These health facilities are all manned by Medical Officers/ANM and MPHW(M) stationed at the facilities. 24 PHC in the State has 28 MBBS doctors, 18 Dental Surgeons and 2 AYUSH doctors and 60 personals from Programme Management Unit. 147 sub centers are all manned by 1 ANM and some even 2 which include both regular as well as contractual ANMs under NRHM. The challenge before the state is to fill up the vacant post of about77 ANMs and 12 MPHW (M) required for the moment to meet the requirement.

As per NRHM guidelines, 28 health facilities are registered as Rogi Kalayan Samities, formation and operational 641 VHSNC are coordinated by 641 ASHAs in the districts and 25 Urban link workers in Gangtok are in place, therefore apart from available regular and in service workforce the health facilities are being catered by local stake holders and ASHAs as volunteers who are being paid Rs 3000/- on a monthly basis as honorium by the State Government.

Program Description

State is in the process of developing Health human resource policy which will then govern issues related to Human Resource both for regular as well as contractual manpower, by now state has issued couple of notifications in order to provide in service benefits to doctors working in the facilities as follows:

1. *Eligibility criteria for In- service post Graduation Studies.*
   A: Doctors need to be regular government employee.
   B: Doctors need to complete 3 years of compulsory rural posting (not attachment post) to available post graduate in service seat mentioned in the state health doctor's service cadre.
2. *Grant of Incentive to Doctor's possessing higher qualification:*
   State Government on the recommendation of the Forth Pay Commission in regard to grant of incentives to Doctors possessing higher qualification shall be granted an incentive additional increment namely
   A: Post Graduate Diploma – one increment
   B: Post Graduate Degree – two increment
   C: Post Doctoral Degree - Three increment
3. *Proposed issues related to Human Resource Development in the State:*

There is an urgent need to focus on Human Resource employed under Department of HC HS & FW in the state of Sikkim to cater to issues of recruitment, retention, in service training, transfers and rational deployment under HR division, these areas are extremely critical for improving Public Health Services and health outcomes.

There are certain GoI conditionality in the ROPs that are issued after the NPCC meeting.

A. As a part of the key conditionality of RoP 2013-14, approval is being granted for HR of all carder under NRHM for six months only and its continuation for the next six months would be contingent on compliance of the four conditionality:
   (a) Rational and equitable deployment of HR with the highest priority accorded to high priority districts and delivery points.
   (b) Facility wise performance audit and corrective action based thereon.
   (c) Performance measurement system setup and implemented to monitor performance of regular and contractual staff.
   (d) Based line assessment of competencies of all staff nurse, ANMs, Lab-technicians etc to be done and corrective action taken thereon.

State Government will be focusing its main thrust on these key 4 conditionalties laid by the NPCC and will be working on it to bring about correctional measures on Rational Human Resource Development in the year 2013-14.

Incentive For Deployment & Retention Of Hr:

A. Under the tribal RCH programme health workers MO/ANM/MPHW(M/F) was awarded with incentives upto Rs1000/- per delivery conducted by them especially areas covering under District North and West till 2012-13.
B. Hard to Reach or difficult area incentives have been proposed as Category I/II/III for doctors stationed in the facilities and rendering there services.

Pre-Service and Inservice Training For HR:

Regular in service training is imparted to all levels of health workers on routine basis in all the components of NRHM/RCH and NDCP Apart from these trainings ,specialized training to MO/IC outside State is encouraged on a yearly basis and accordingly rational posting are being done as per there qualification.

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