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## **UNIT 4 INTRODUCTION TO RASHTRIYA BAL SWASTHYIA KARYAKARAM**

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### **4.0 INTRODUCTION**

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In Unit 1 and 2 you have learnt about essential new born care in Unit 1 and common problem of new born and children in Unit 2. In order to improve the health of mother and children the Government of India launches various programmes and schemes from time to time to prevent and reduce maternal, newborn and childhood mortality and morbidity. Rashtriya Bal Swasthya Karyakaram (RBSK) is one of the such initiative. In this unit you will learn about the concept, aims and benefits of Rashtriya Bal Swasthya Karyakaram (RBSK), target group under child health screening and magnitude of the problems. You will also learn about the health conditions to be screened and Implementation Mechanisms under Rashtriya Bal Swasthya Karyakaram (RBSK). District early Intervention Centre (DEIC), Training and Institutional Collaboration and Reporting and Monitoring also covered in this unit.

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## 4.1 OBJECTIVES

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After completing this unit, you should be able to:

- explain the concept of Rashtriya Bal Swasthya Karyakaram ;
- list the benefits of the ‘Child Health Screening and Early Intervention Services’ ;
- enumerate the Target Group under Child Health Screening and Intervention Services ;
- discuss the magnitude of the Problem among children ;
- list the Health conditions to be screened under RBSK ;
- explain the Implementation Mechanisms of RBSK ;
- discuss the role of District Early Intervention Center in RBSK ; and
- explain the Reporting and Monitoring system under RBSK.

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## 4.2 CONCEPT OF RASHTRIYA BAL SWASTHYIA KARYAKRAM

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For ensuring healthy, dynamic future for all children and negating the impact of adversities on the development, Ministry of Health and Family Welfare, Government of India under NRHM launched Rashtriya Bal Swasthya Karyakaram (RBSK) in 2013. Under RBSK, health screening of children, a known intervention of the School Health Programme is expanded to cover all children from birth to 18 years of age. It is estimated that about 270 million children in the age group from birth to eighteen years including the newborn babies and those attending aanganwadi centres and government schools will be benefitted by this programme in a phased manner.

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## 4.3 AIMS AND BENEFITS OF THE ‘CHILD HEALTH SCREENING AND EARLY INTERVENTION SERVICES’

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It aims to improve the quality of life with special focus on improving cognition and survival outcome for ‘at risk’ children. It has a systemic approach of prevention, early identification and management of 30 health conditions distributed under 4Ds: Defects at birth, Diseases in children, Deficiency conditions and Developmental Delays including Disabilities prevalent in children from birth to 18 years.

**Benefits of the ‘Child Health Screening and Early Intervention Services’** are as follows :

- Timely intervention halts the condition to deteriorate.
- It reduces the out-of-pocket (OOP) expenditure of the poor and the marginalised population in the country.
- It will also provide country-wide epidemiological Data on the 4 Ds (i.e., Defects at birth, Diseases, Deficiencies and Developmental Delays including Disabilities).
- Such a data is expected to hold relevance for future planning of area specific services.

## 4.4 TARGET GROUP UNDER CHILD HEALTH SCREENING AND INTERVENTION SERVICES

The target group include following :

- Children of 0-6 years of age in rural areas and urban slums
- Children enrolled in classes 1st to 12th in Government and Government aided Schools

**Table 4.1: Age group estimated coverage of child**

Categories	Age Group	Estimated Coverage
Babies born at public health facilities and home	Birth to 6 weeks	2 crores
Preschool children in rural areas and urban slums	6 weeks to 6 years	8 crores
Children enrolled in classes 1st to 12th in Government and Government aided schools	6 to 18 years	17 crores

### Check Your Progress 1

- 1) What are the benefits of the 'Child Health Screening and Early Intervention Services'?

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## 4.5 MAGNITUDE OF THE PROBLEM

We shall focus on magnitude of problem under birth defects, deficiencies, diseases and developmental delays and disabilities as given below.

### 4.5.1 Birth Defects

Out of total births, globally about 6% (7.9 million) of children are born annually with a serious birth defect of genetic or partially genetic origin. At least 3.3 million children under-five years of age die from birth defects every year and another 3.2 million of those who survive may be disabled for life. More than 90 per cent of all infants with serious birth defects are born in low and middle income countries. In India out of total 26 million babies born annually, about 1.7 million babies are born with birth defects. The study conducted by National Neonatology Forum, reports that the congenital malformations are the second commonest cause (9.9%) of mortality among stillbirths and the fourth commonest cause (9.6%) of neonatal mortality and that accounted for 4 per cent of under-five mortality.

### 4.5.2 Deficiencies

In India, almost half of children under age 5 years (48%) are chronically malnourished. More than 47 million children under 5 years are stunted. About 43 per cent of children under age 5 years are underweight for their age. Over 6 per cent of children less than -5 years of age suffer from Severe Acute Malnutrition (SAM). Anaemia prevalence is as high as 70 per cent amongst under-5 children largely due to iron deficiency. During pre-school years, children continue to suffer from adverse effects of anaemia, malnutrition and developmental disabilities, which ultimately affects their performance in the school.

### 4.5.3 Diseases

Reports of different surveys indicate that in India the prevalence of dental caries among school children varies between 50–60 %. Rheumatic heart disease is reported at 1.5 per thousand among school children in the age group of 5–9 years and 0.13 to 1.1 per thousand among children aged 10–14 years. The prevalence of reactive air way disease including asthma among children is reported to be 4.75 %.

### 4.5.4 Developmental Delays and Disabilities

Globally, 200 million children do not reach their developmental potential in first 5 years because of poverty, poor health, nutrition, lack of early stimulation. Poverty and childhood stunting indicators are closely associated with poor cognitive and educational performance in children and failure to reach optimum developmental potential. Approx. 20% of babies discharged from health facilities are found to suffer from developmental delays or disabilities at a later age as reported by Special Newborn Care Units (SNCU) Technical Reports.

## 4.6 HEALTH CONDITIONS TO BE SCREENED

The following 30 selected health conditions are covered under RBSK for Screening, early detection and free management as given in Table 4.2 and Table 4.3.

**Table 4.2: Birth defects and deficiencies**

Birth Defects	Deficiencies
<ul style="list-style-type: none"> <li>• Neural Tube Defects</li> <li>• Downs Syndrome</li> <li>• Cleft Lip and Palate</li> <li>• Talipes (CTEV)</li> <li>• Development dysplasia of Hip</li> <li>• Congenital Catract</li> <li>• Congenital deafness</li> <li>• Congenital Heart disease</li> <li>• Retinopathy of Prematurity</li> </ul>	<ul style="list-style-type: none"> <li>• Anaemia especially Severe Anaemia</li> <li>• Vitamin A Deficiency (Bitot spot)</li> <li>• Vitamin D Deficiency (Rickets)</li> <li>• Severe Acute Malnutrition</li> <li>• Goitre</li> <li>• Childhood Diseases</li> </ul>

**Table 4.3: Developmental delays and disability**

Developmental Delays	Disabilities
<ul style="list-style-type: none"> <li>• Skin conditions (Scabies, Fungal Infection and Eczema )</li> <li>• Otitis Media</li> <li>• Rheumatic Heart Disease</li> <li>• Reactive Airway Disease</li> <li>• Dental Caries</li> <li>• Convulsive Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Vision Impairment</li> <li>• Hearing Impairment</li> <li>• Neuro-Motor Impairment</li> <li>• Motor Delay</li> <li>• Cognitive Delay</li> <li>• Language Delay</li> <li>• Behaviour Disorder (Autism) Learning Disorder</li> <li>• Attention Deficit Hyperactivity Disorder Congenital Hypothyroidism, Sickle Cell Anaemia, Beta Thalassemia (Optional)</li> </ul>

**Check Your Progress 2**

Mention the Health conditions to be covered under RBSK .

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**4.7 IMPLEMENTATION MECHANISMS**

According to the GOI guidelines the following mechanism is used to reach all the target groups of children for health screening:

**4.7.1 Newborn**

This include following mechanism.

**i) Facility based newborn screening at public health facilities, by existing health manpower.**

This includes screening of birth defects in institutional deliveries at public health facilities, especially at the designated delivery points by ANMs, Medical officers / Gynaecologists. Existing health service providers at all designated delivery points will be trained to detect, register, report and refer birth defects to the District Early Intervention Centers (DEIC) in District Hospitals.

**ii) Community based newborn screening (age 0–6 weeks) for birth defects during home visits.**

Accredited Social Health Activists (ASHAs) during their home visits for newborn care are required to screen the babies born at home and the institutions till 6 weeks of age. They need to make six visits in case of institutional deliveries on day 3, 7, 14, 21, 28 and 42. Seven visits are required in case of home deliveries

on day 1, 3, 7, 14, 21, 28 and 42. In addition, ASHA is also responsible for the following.

### Responsibilities of ASHA

- Identification of birth defects among 0–6 weeks old babies
- Providing help to mothers for early stimulation of children of 0–6 weeks
- Explaining the screening programme to parents/caregivers of children upto 6 years and mobilise them to attend the screening camps by the dedicated mobile health team at local Anganwadi Centers.
- Helping parents in referral services, if required.

ASHAs are trained with simple tools for detecting gross birth defects. For performing the above tasks, she is equipped with a tool kit consisting of a pictorial reference book having self-explanatory pictures for identification of birth defects. Suitable performance based incentive is also to be provided to ASHAs.

### 4.7.2 Children 6 Weeks to 6 Years

Children in the age groups 6 weeks to 6 years of age will be examined in the Anganwadi Centers by the dedicated Mobile Health Teams.

### 4.7.3 Children 6 Years to 18 Years

Children between the age group of 6 to 18 years are screened at Government and Government aided school by dedicated Mobile Health Teams. At least three dedicated Mobile Health Teams in each Block are engaged to conduct screening of children. Villages within the jurisdiction of the Block are distributed amongst the mobile health teams. The number of teams may vary depending on the number of Anganwadi Centers, difficult to reach areas and children enrolled in the schools. The screening of children in the Anganwadi Centers is to be conducted at least twice a year and at least once a year for school children.

#### i) Composition of Mobile health Team

Now let us see what the composition of mobile health teams is. The mobile health team consists of the following members. (Table 4.4)

**Table 4.4: Mobile Health Team**

Member	Number
Medical officers (AYUSH) 1 male & 1 female atleast with a bachelor degree from an approved institution	2
ANM/Staff Nurse	1
Pharmacist with proficiency in computer for data management	1

In case a Pharmacist is not available, other paramedics such as lab Technician or Ophthalmic Assistant with proficiency in computer for data management may be considered.

For implementation of the health screening process, vehicles are hired for movement of the teams to Anganwadi Centers, Government and Government aided schools. A



tool kit with essential equipment for screening of children is also provided to the Mobile Health Team members.

### ii) **Roles and Responsibilities of Mobile Health Team**

- Preparation of a calendar of visit schedule in consultation with other team members and by involving representatives from WCD and Education departments at the block level.
- Screening children at level of Anganwadi center and at Government & Government aided schools.
- Conducting anthropometry measurement of children, record findings in the screening tool cum referral card & enter observations in register for record and follow up.
- Maintaining inventory of drugs.
- Maintaining quality of referrals and emphasise importance of early screening and timely intervention to the parents/caregiver.
- Generating monthly reports and update Mobile Health Team registers.

### iii) **Composition of Tool Kit for Mobile Health Team**

The tool kit for mobile health team includes age appropriate equipments for screening the developmental delays & for anthropometric measurements.

#### **Equipments for Screening Including developmental Delays:**

##### **For 6 weeks to 6 years**

- Bell, rattle-to attract infant's attention and check the response to sound
- Torch-: for examination of eyes and ears one inch cubes- to check transfer of objects and different type of grasps
- Small bottle with raisins- for checking pincer grasp
- Squeaky toys
- Coloured wool, crayons-for naming colours etc.

##### **For 6 to 18 years**

- Vision charts- measures the Visual Acuity in children and adolescent, reference charts.
- BP apparatus with age appropriate cuff size of atleast 2 sizes –paediatric (13–20 cm) and small adult (26–35 cm) for measuring blood pressure.
- Manual and a card specific to each age with age appropriate developmental check list to record milestones to identify developmental delays (6 weeks–9 years).

#### **Equipments for Anthropometry:** Age appropriate Equipments are used such as

- Weighing scale (mechanical newborn weighing scale , standing weighing scale)
- Height measuring – Stadiometers for measuring height in older children while standing / Infantometers for measuring length in young infants (lying down).
- Mid arm circumference tape/ bangle- for assessing nutritional status and identification of SAM.

- Non stretchable measuring tape for head circumference- to assess development of the brain.

### Check Your Progress 3

List the roles and responsibility of mobile health team.

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## 4.8 DISTRICT EARLY INTERVENTION CENTER

The early intervention centers have been established at the District Hospital level across the country as District Early Intervention Centers (DEIC) for the following purposes.

### 4.8.1 Purposes of District Early Intervention Center

- Providing referral services to referred children
- Visiting all newborns delivered at the District Hospital for screening
- Ensuring that every child born sick or preterm or with low birth weight or any birth defect is followed up at the District Early Intervention Center
- Follow up and record maintenance of all the referrals for developmental delay.
- Screening the children for inborn errors of metabolism and other disorders at the District level
- Ensuring linkage with tertiary care facilities through agreed MOU.

District Early Intervention Center has a team consisting of Pediatrician, Medical officer, Staff Nurses, Paramedics for providing services including referral. This team promptly responds to and manages all issues related to developmental delays, hearing defects, vision impairment, neuro-motor disorders, speech and language delay, autism and cognitive impairment. Children and students presumptively diagnosed to have a disease/ deficiency /disability/ defect and who require confirmatory tests or further examinations are referred to the designated tertiary level public sector health facilities through the DEICs. The funds are provided under NHM for management at the tertiary level at the rates fixed by State Governments in consultation with Ministry of Health & Family Welfare.

### 4.8.2 District Early Intervention Center Team

The composition of district early intervention centre team are given in Table 4.5.



**Table 4.5: Intervention Center Team Composition**

Professionals	Number
Medical Professionals (Paediatrician -1, Medical Officer 1, Dental Doctor -1)	3
Physiotherapist	1
Audiologist & Speech Therapist	1
Psychologist	1
Optometrist	1
Early Interventionist cum Special Educator cum Social Worker	1
Lab Technician	2
Dental Technician	1
Manager	1
Data Entry Operator	1

## 4.9 TRAINING AND INSTITUTIONAL COLLABORATION

A 'cascading training approach' is adopted in order to ensure free flow of skills and knowledge at all levels and to maximise skill distribution. Standardised training modules have been developed to impart training. Based on the number of Block level teams required for the programme, an estimate of the training load is made for each year and appropriate budgets is included in the State's Annual Programme Implementation Plan (PIP) under the 'trainings head'. Cost of translation and printing of modules and formats and supportive supervision through the Regional Collaborating Center, is also included in the annual PIP.

The following collaborative centers in different regions of the country (Table 4.6) are identified to

- Coordinate, mentor, provide supportive supervision and train health workers of various cadres,
- Review data from blocks and health facilities to estimate the incidence/prevalence of various health conditions in the states, and
- Support them in establishing data base of children screened and diagnosed with specific disease, disorders, and disabilities that require long term follow up and treatment.

**Table 4.6: Institutes Medical Colleges Hospitals and States/UTs**

1) AIIMS	Delhi
2) Chandigarh, PGIMER	Jammu and Kashmir, Punjab, Haryana, Chandigarh, Himachal Pradesh, Rajasthan, Uttarakhand
3) SGPGI, Lucknow	Uttar Pradesh, Bihar
4) IPGMER, Kolkata	West Bengal and all North East States
5) KEM, Mumbai	Maharashtra, Goa
6) CDC, Trivandrum	Kerala
7) NIMH, Hyderabad	Andhra Pradesh
8) AYJNIHH, Mumbai	Maharashtra
9) AIISH, Mysore	Karnataka
10) MAMC, New Delhi	Delhi, Jharkhand
11) KSCH, New Delhi	Delhi, Odisha
13) CMC, Vellore	Tamil Nadu, A and Nicobar, Puducherry
14) ICH, Chennai	Tamil Nadu, Dadar and Nagar Haveli
15) Shankar Netralaya, Chennai	Tamil Nadu, Daman and Diu, Lakshadweep
16) LVPEI, Hyderabad	Andhra Pradesh
17) DIEC, Hoshangabad	Madhya Pradesh, Chhattisgarh

## 4.10 REPORTING AND MONITORING

Programme monitoring is done by the identified nodal office at the State, District and Block level. The Block is the focal point of activity for all Child Health Screening and Early Intervention Services activities. The block programme manager assists the CHC Medical Officer in programme supervision and monitoring. The 'Child Health Screening Card' is filled up by the Block Health Teams for every child screened during the visit. The health care providers at all delivery points screen the newborns and fill the same card, if referral is required.

The birth defects detected by ASHAs during home visits are referred to DH/DEIC for further management. All children detected are referred to the District Early Intervention Center for further management at the district or identified tertiary level health institution. A 'Health Camp Register' and a tour diary is maintained by the Mobile Block Health Teams.

The Early Intervention Center at the District level also conducts screenings, manage the cases and maintain a 'DEIC Register'. The Monthly Reporting Form is filled by Mobile Health Teams, staff posted at District Early Intervention Centers, preferably

by healthcare providers at the health facilities where deliveries take place. The same monthly format is used for data compilation by Block Health Manager, District Nodal officer and State Nodal Officer. The State Nodal Officer sends this report on a monthly basis to the Child Health Division of the Ministry of Health and Family Welfare.

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## 4.11 LET US SUM UP

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In this unit we discussed about the details of Rsshtriya Bal Swasthya Karyakaram. RBSK is a programme started under the aegis of NRHM in February 2013. It was initiated by MOHFW to reduce child mortality and to improve the overall quality of the life of children. It enables a systematic approach to Child health screening and early intervention. It covers children from birth to 18 years. This programme aims at early detection and management of “4Ds” that are Defects at Birth, Deficiencies, Diseases, Developmental delays including Disabilities. The services aim to cover children of 0–6 years of age in rural areas and urban slums in addition to children enrolled in classes 1st to 12th in Government and Government aided Schools. Child Health Screening and Early Intervention Services under RBSK envisages to cover 30 selected health conditions for Screening, early detection and free management through interventions for newborns, children from 6 weeks to 6 year and 6 yr to 18 yr at facilities like PHC/CHC/DH, by medical officers & nurses, home visits by ASHA, screening by mobile health teams at Angawadis using age appropriate tools and referral to the DEIC if required. The DEIC promptly responds to and manages all cases referred to it related to developmental delays, hearing defects, vision impairment, neuro-motor disorders, speech and language delay, autism and cognitive impairment through the team of health care professionals. Monthly reporting and monitoring is important for evaluation of progress of the programme.

### Check Your Progress 4

List the Purposes of District Early Intervention Center DEIC.

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## 4.12 MODEL ANSWERS

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### Check Your Progress 1

The benefits of the ‘Child Health Screening and Early Intervention Services’ are given below.

- Timely intervention halts the condition to deteriorate.
- It reduces the out-of-pocket (OOP) expenditure of the poor and the marginalised population in the country.
- It will also provide country-wide epidemiological Data on the 4 Ds (i.e., Defects at birth, Diseases, Deficiencies and Developmental Delays including Disabilities). Such a data is expected to hold relevance for future planning of area specific services.

### Check Your Progress 2

The following 30 selected health conditions are covered under RBSK for Screening, early detection and free management.

Birth Defects	Deficiencies
<ul style="list-style-type: none"> <li>• Neural Tube Defects</li> <li>• Downs Syndrome</li> <li>• Cleft Lip and Palate</li> <li>• Talipes (CTEV)</li> <li>• Development dysplasia of Hip</li> <li>• Congenital Catract</li> <li>• Congenital deafness</li> <li>• Congenital Heart disease</li> <li>• Retinopathy of Prematurity</li> </ul>	<ul style="list-style-type: none"> <li>• Anaemia especially Severe Anaemia</li> <li>• Vitamin A Deficiency (Bitot spot)</li> <li>• Vitamin D Deficiency (Rickets)</li> <li>• Severe Acute Malnutrition</li> <li>• Goitre</li> <li>• Childhood Diseases</li> </ul>

Developmental Delays	Disabilities
<ul style="list-style-type: none"> <li>• Skin conditions (Scabies, Fungal Infection and Eczema )</li> <li>• Otitis Media</li> <li>• Rheumatic Heart Disease</li> <li>• Reactive Airway Disease</li> <li>• Dental Caries</li> <li>• Convulsive Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Vision Impairment</li> <li>• Hearing Impairment</li> <li>• Neuro-Motor Impairment</li> <li>• Motor Delay</li> <li>• Cognitive Delay</li> <li>• Language Delay</li> <li>• Behaviour Disorder (Autism) Learning Disorder</li> <li>• Attention Deficit Hyperactivity Disorder Congenital Hypothyroidism, Sickle Cell Anaemia, Beta Thalassemia (Optional)</li> </ul>

### Check Your Progress 3

List the Roles and Responsibilities of Mobile Health Team

- 1) Preparation of a calendar of visit schedule in consultation with other team members and by involving representatives from WCD and Education departments at the block level .
- 2) Screening children at level of Anganwadi center and at Government & Government aided schools.
- 3) Conducting anthropometry measurement of children, record findings in the screening tool cum referral card & enter observations in register for record and follow up.

- 4) Maintaining inventory of drugs.
- 5) Maintaining quality of referrals and emphasise importance of early screening and timely intervention to the parents/caregiver.
- 6) Generating monthly reports and update Mobile Health Team registers.

#### **Check Your Progress 4**

Purposes of District Early Intervention Center DEIC

- Providing referral services to referred children
- Visiting all newborns delivered at the District Hospital for screening
- Ensuring that every child born sick or preterm or with low birth weight or any birth defect is followed up at the District Early Intervention Center
- Follow up and record maintenance of all the referrals for developmental delay
- Screening the children for inborn errors of metabolism and other disorders at the District level
- Ensuring linkage with tertiary care facilities through agreed MOU.

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### **4.13 REFERENCES**

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- 1) Cabinet Committee on Economic Affairs release 24th Sept, 2012.
- 2) District Information System for Education 2010-11: Flash Statistics, NUEPA & DSEL Directorate of School Education and Literacy, MOHRD, GOI. and State Report Cards: 2010-11 Secondary education in India, National University of Educational Planning and Administration.
- 3) Elementary Education in India, 2012.
- 4) Lancet series on Child Development.
- 5) March of Dimes global report on birth defects 2006.
- 6) National Family Health Survey – 3 (NFHS-3), 2005-06.
- 7) Operational Guidelines: Rashtriya Bal Swasthya Karyakaram (RBSK) 'Child Health Screening and Early Intervention Services' MOHFW, GOI, February 2013.
- 8) Participants' manual for mobile health teams, Ministry of Health & Family Welfare, Government of India, July 2014.
- 9) Resource Material: Rashtriya Bal Swasthya Karyakaram (RBSK) 'Child Health Screening and Early Intervention Services' MOHFW, GOI, February 2013.
- 10) Technical reports on Operational Status of SNCUs in India, 2012.