



OPERATIONAL GUIDELINES



Rashtriya Bal Swasthya Karyakram (RBSK)

Child Health Screening and
Early Intervention Services under NRHM



**Ministry of Health & Family Welfare
Government of India**

FEBRUARY, 2013

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Message

Rashtriya Bal Swasthya Karyakram (RBSK) is a new initiative aimed at screening over 27 crore children from 0 to 18 years for 4 Ds - Defects at birth, Diseases, Deficiencies and Development Delays including Disabilities. Children diagnosed with illnesses shall receive follow up including surgeries at tertiary level, free of cost under NRHM.

The task is gigantic but quite possible, through the systematic approach that RBSK envisages. Implemented in right earnest, it would yield rich dividends in protecting and promoting the health of our children. I sincerely hope that the States would accord utmost priority to it and thereby improve both survival and development of children.

NRHM exemplifies a strong partnership between Central and State Governments and together we must ensure that flexibility to funding under the Mission is well utilized for prioritizing high impact health interventions. RBSK also signals a leap forward in the direction of universal health care with precedence accorded to those segments of population who need it first of all.

I am confident that RBSK together with several other reproductive and child health initiatives under NRHM would bring long term health benefits to women and children.

Ghulam Nabi Azad
Union Minister of Health & Family Welfare
Government of India
New Delhi

Foreword

Significant progress has been made in reducing mortality in children. Further gains are possible by extending early detection and management of health conditions in children. With improvements in health care and intensive care facilities, the incidence of survival of infants with birth defects and inborn errors of metabolism is now showing an upward trend. Moreover, burden due to non-communicable diseases, many of which set in early in life, is projected to increase substantially in India unless timely and appropriate interventions are made.

The Ministry of Health & Family Welfare under the National Rural Health Mission has launched the Child Health Screening and Early Intervention Services, a systemic approach of early identification and link to care, support and treatment to meet these challenges. It is estimated that about 270 million children including the newborn and those attending Angawadi Centers and Government schools will be benefitted through this programme.

Any effective health intervention will reduce both direct costs and out-of-pocket expenditure. Child Health Screening and Early Intervention Services also aims at reducing the extent of disability, at improving the quality of life and enabling all persons to achieve their full potential.

The key feature of the Services is the continuum of care extending over different phases of the life of a child over the first 18 years. The framework highlights in detail the roles and responsibilities of all functionaries involved in the programme across different levels. It is imperative that these roles and responsibilities are diligently followed in order to achieve the desired outcome not only in terms of improved collective human potential of the nation but also in reducing individual risk factors, morbidity and mortality.

These 'Operational Guidelines' have been evolved to serve as a handbook and a resource for Program Managers for effective planning and implementation. I am certain that these guidelines will prove to be useful at the Block level which is deemed to be the hub of the programme.

Keshav Desiraju

Secretary, Health & Family Welfare

Government of India

New Delhi

Preface

We owe it to the children of our country to protect and promote their health. Rashtriya Bal Swasthya Karyakram (RBSK) is a new initiative in this direction which seeks to put together a systematic approach to child health screening and early intervention. It is well-known that the early years of a child's life are most critical for both survival and development and yet currently, there is no approach to screen structured children, identify health conditions warranting medical attention and ensure early intervention.

There is an unacceptably high incidence of birth defects, deficiencies, diseases specific to childhood and developmental disorders including disabilities in India and it is high time we started to pay attention to their early detection and intervention.

As per available estimates, 6% of children are born with birth defects, 10% children are affected with development delays leading to disabilities. This translates into more than 15 lakh new-borns with birth defects annually. Further, 4% of under-five mortality and 10% of neonatal mortality is attributed to birth defects.

Needless to say, that dividends of early intervention would be huge including improvement of survival outcome, reduction of malnutrition prevalence, enhancement of cognitive development and educational attainment and overall improvement of quality of life of our citizens. Bringing down both out of pocket expenses on belated treatment of diseases / disabilities (many of which become highly debilitating and incurable) and avoidable pressure on health system on account of their management are among obvious benefits.

Rashtriya Bal Swasthya Karyakram aims to roll out to over 27 crore children from 0-18 years of age. Screening of the new-born, both at public health facilities and at home, is an important component of the strategy. Regular health screening of pre-school children upto 6 years of age using Aganwadis as a platform is another essential component. Moreover, children from 6 to 18 years of age studying in Government and Government aided schools would also receive regular health check-ups. All those children who may be diagnosed for any of the 30 illnesses would receive follow-up referral support and treatment including surgical interventions at tertiary level free of cost under this programme.

There is no doubt that early identification of select health conditions and their linkage to care, support and treatment through child health screening and early intervention services will help us achieve equitable child health care. In the long run, the programme would bring social and economic gains, particularly for the poor and marginalized, by reducing out of pocket expenditure, burden of diseases, improving health awareness among community, improving professionalism in service delivery and finally strengthening the public sector hospitals. This would thus lead to promotion of health among children which is of fundamental value and an end in itself.

These 'Operational Guidelines' seek to provide guidance for effective planning and systematic implementation of a programme of gigantic magnitude. The guidelines dwell on the process of identification and management of select prevalent conditions of huge public health significance in India.

I am confident that RBSK would turn out to be a milestone in quest for child health and that States/UTs would do all that is necessary to ensure its implementation in right earnest.

Anuradha Gupta

Additional Secretary & Mission Director
National Rural Health Mission
Ministry of Health & Family Welfare
Government of India
New Delhi

Prologue

The National Rural Health Mission is launching a new initiative of Rashtriya Bal Swasthya Karyakram, a Child Health Screening and Early Intervention Services Programme to provide comprehensive care to all the children in the community. The objective of this initiative is to improve the overall quality of life of children through early detection of birth Defects, Diseases, Deficiencies, Development Delays and Disability. The high burden of these childhood ill health contributes significantly to child mortality, morbidity and out of pocket expenditure of the poor families.

Child Health Screening and Early Intervention Services envisage to cover 30 identified health conditions for early detection, free treatment and management through dedicated mobile health teams placed in every block in the country. The teams will carry out screening of all children in the pre-school age enrolled at Anganwadi centres at least twice a year besides screening of all children studying in Government and Government aided schools, whereas the newborns will be screened for birth defects in health facilities by service providers and during the home visits by ASHAs. District Early Intervention Centres are planned to be set up as first referral point for further investigation, treatment and management. Tertiary care centre would be roped in for management of complicated cases requiring high-end medical care and treatment. This herculean effort is ultimately targeted to benefit more than 27 crore children annually in a phased manner in the country.

I am confident that the well-conceived operational guidelines on Child Health Screening and early Intervention Services will prove to be a step towards achieving Universal Health Coverage in the country.

I wish success and pledge my unstinting support towards implementation of this initiative.

Dr. Rakesh Kumar
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Abbreviations

AWC	Anganwadi Center
AWW	Anganwadi Worker
ANM	Auxillary Nurse Midwife
ASHA	Accredited Social Health Activist
CDH	Congenital Dysplasia of Hip
CHC	Community Health Center
CHD	Congenital Heart Disease
CTEV	Congenital Talipes EquinoVarus
DDH	Developmental Dysplasia of the Hip
DEIC	District Early Intervention Center
DH	District Hospital
DLHS	District Level Household Survey
FBNC	Facility Based Newborn Care
F-IMNCI	Facility Based Integrated Management of Neonatal and Childhood Illnesses
FRU	First Referral Unit
G6PD	Glucose 6 Phosphate Dehydrogenase
HBNC	Home Based Newborn Care
IAP	India Academy of Pediatrics
IEC	Information Education and Communication
IFA	Iron Folic Acid
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
JSSK	Janani Shishu Suraksha Karyakram
JSY	Janani Suraksha Yojana
LBW	Low Birth Weight
MBHT	Mobile Block Health Team
MDG	Millennium Development Goal
MOHFW	Ministry of Health and Family Welfare
NBCC	Newborn Care Corner

NBSU	Newborn Stabilization Unit
NFHS	National Family Health Survey
NIPI	Norway India Partnership Initiative
NMR	Neonatal Mortality Rate
NNF	National Neonatology Forum
NRC	Nutrition Rehabilitation Center
NRHM	National Rural Health Mission
NSSK	Navjaat Shishu Suraksha Karyakram
OPD	Out Patient Department
ORS	Oral Rehydration Solution
PHC	Primary Health Center
PIP	Programme Implementation Plan
PNC	Post Natal Check-up
RBSK	Rashtriya Bal Swasthya Karyakram
RCH II	Reproductive and Child Health Programme Phase II
RF	Rheumatic Fever
RHD	Rheumatic Heart Disease
ROP	Retinopathy of Prematurity
RSBY	Rashtriya Swasthya Bima Yojana
SAM	Severe Acute Malnutrition
SDH	Sub District Hospital
SNCU	Special Newborn Care Unit
SRS	Sample Registration System
TOT	Training of Trainers
UNICEF	United Nations Children Fund
VHND	Village Health and Nutrition Day
VHSNC	Village Health Sanitation and Nutrition Committee
WHO	World Health Organization

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1. Introduction and Rationale

In a vast country like India, the need for ensuring a healthy and dynamic future for a large populace and creating a developed society, agile and able to compete with the rest of the world, stands as of paramount importance. The dream of such a healthy and developed society can be achieved through concerted efforts and initiatives undertaken in a systematic manner at all levels. Equitable child health, care and early detection and treatment can be the most pragmatic initiative, or rather solution, at this juncture!

The 'Child Health Screening and Early Intervention Services' Programme under National Rural Health Mission initiated by the Ministry of Health and Family Welfare, therefore, aims at early detection and management of the 4Ds prevalent in children. These are Defects at birth, Diseases in children, Deficiency conditions and Developmental Delays including Disabilities.

Health screening of children is a known intervention under the School Health Programme. It is now being expanded to cover all children from birth to 18 years of age. The Programme has been initiated as significant progress has already been made in reducing child mortality under the National Rural Health Mission. However, further gains can be achieved by early detection and management of conditions in all age groups.

Out of every 100 babies born in this country annually, 6 to 7 have a birth defect. In Indian context, this would translate to 1.7 million birth defects annually and would account for 9.6 per cent of all newborn deaths¹. Various nutritional deficiencies affecting the preschool children range from 4 percent to 70 percent. Developmental delays are common in early childhood affecting at least 10 percent of the children. These delays, if not intervened timely, may lead to permanent disabilities with regard to cognition, hearing and vision.

There are also groups of diseases which are very common in children e.g., dental caries, otitis media, rheumatic heart disease and reactive airways diseases which can be cured if detected early. It is understood that early intervention and management can prevent these conditions to progress into more severe and debilitating forms, thereby reducing hospitalisation and resulting in improved school attendance.

The 'Child Health Screening and Early Intervention Services' will also translate into economic benefits in the long run. Timely intervention would not only halt the condition to deteriorate but would also reduce the out-of-pocket (OOP) expenditure of the poor and the marginalised population in the country. Additionally, the Child Health Screening and Early Intervention Services 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.

¹March of Dimes Report 2006

2. Target Group

The services aim to cover all children of 0-6 years of age group in rural areas and urban slums, in addition to older children upto 18 years of age enrolled in classes 1st to 12th in Government and Government aided schools. It is expected that these services will reach and benefit about 27 crore children in a phased manner.

Target Group under Child Health Screening and Intervention Services		
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 <i>(Data Source: CCEA release 24th Sept, 2012)</i>	6 weeks to 6 years	8 crores
Children enrolled in classes 1st to 12th in Government and Government aided schools <i>(Data Source : Elementary Education in India, 2012, DISE 2010-11: Flash Statistics, NUEPA & DSEL, MoHRD, GOI. and State Report Cards: 2010-11 Secondary education in India, NUEPA)</i>	6 to 18 years	17 crores

3. Magnitude of Birth Defects, Deficiencies, Diseases, Developmental Delays and Disabilities in Children

a) Defects at Birth:

Globally, about 7.9 million children are born annually with a serious birth defect of genetic or partially genetic origin which accounts for 6 percent of the total births. Serious birth defects can be fatal at times. For those who do not receive specific and timely intervention and yet survive, these disorders can cause irreversible life-long mental, physical, auditory or visual disability. 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 percent of all infants with a serious birth defect are born in low and middle income countries. Cutting across countries and their economic status, 64.3 infants per thousand live births are born annually with birth defects. Of these, 7.9 have cardiovascular defects, 4.7 have neural tube defects and 1.2 have some form of hemoglobinopathy, 1.6 have Down's Syndrome and 2.4 have G6PD deficiency² (All figures are in per thousand).

With a large birth cohort of almost 26 million per year, India would account for the largest share of birth defects in the world³. This would translate to an estimated 1.7 million babies born with birth defects annually. In the study conducted by National Neonatology Forum, congenital malformations were 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.

Preliminary reports of metabolic studies from five zonal centers covering 5 lakh newborns has revealed an incidence of congenital hypothyroidism of 1 in 1000 live births⁴. Messages emerging from this study connote that diagnosis is often delayed due to lack of awareness among the professionals and ignorance about the technical expertise required to handle such cases of birth defects.

A similar prevalence rate of 1 in 1000 was reported for Down's Syndrome in India⁵. There are several reports of the incidence of beta thalassemia trait from different parts of the country which varies from less than 1 percent to as high as 17 percent⁶ making it imperative to have a policy on universal screening in selected geography and population groups.

²March of Dimes Report, 2006

³March of Dimes Report, 2006

⁴Indian Council for Medical Research (ICMR)

⁵Verma et al, 1998

⁶Verma et al 1998

b) Deficiencies:

Evidence suggests that almost half of children under age five years (48%) are chronically malnourished⁷. In numbers it would mean that more than 47 million children under five years are stunted, 43 percent of children under age five years are underweight for their age and about 20 percent of children younger than five years of age are wasted. Over 6 percent of children less than five years of age suffer from Severe Acute Malnutrition (SAM). However, recent survey conducted in 100 worst affected districts showed SAM prevalence of 3 percent in children less than five years of age. Anaemia prevalence has been reported as high as 70 percent amongst under five children largely due to iron deficiency. The situation has virtually remained unchanged over the past decade. During pre-school years, children continue to suffer from adverse effects of anaemia, malnutrition and developmental disabilities, which ultimately also impact their performance in the school.

c) Diseases:

As reported in different surveys, the prevalence of dental caries varies between 50-60 percent among Indian school children. 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 10-14 years. The median prevalence of reactive air way disease including asthma among children is reported to be 4.75 percent.

d) Developmental Delays and Disabilities:

Globally, 200 million children do not reach their developmental potential in the first five years because of poverty, poor health, nutrition and lack of early stimulation. The prevalence of early childhood stunting and the number of people living in absolute poverty could be used as proxy indicators of poor development in under five children. Both of these indicators are closely associated with poor cognitive and educational performance in children and failure to reach optimum developmental potential⁸. Further, Special Newborn Care Units (SNCU) Technical Reports have reported that approximate 20 percent of babies discharged from health facilities are found to suffer from developmental delays or disabilities at a later age⁹.

⁷National Family Health Survey – 3 (NFHS-3), 2005-06

⁸Lancet series on Child Development

⁹Technical reports on Operational Status of SNCUs in India, 2012

4. Health Conditions Identified for Screening

Child Health Screening and Early Intervention Services under NRHM envisage to cover 30 identified health conditions for early detection and free treatment and management. Based on the high prevalence of diseases like hypothyroidism, sickle cell anaemia and beta thalassemia in certain geographical pockets of some States/UTs, and availability of testing and specialized support facilities, these States and UTs may incorporate them as part of this initiative.

Identified Health Conditions for Child Health Screening and Early Intervention Services	
<p>Defects at Birth</p> <ol style="list-style-type: none"> 1. Neural Tube Defect 2. Down's Syndrome 3. Cleft Lip & Palate / Cleft Palate alone 4. Talipes (club foot) 5. Developmental Dysplasia of the Hip 6. Congenital Cataract 7. Congenital Deafness 8. Congenital Heart Diseases 9. Retinopathy of Prematurity 	<p>Deficiencies</p> <ol style="list-style-type: none"> 10. Anaemia especially Severe Anaemia 11. Vitamin A Deficiency (Bitot spot) 12. Vitamin D Deficiency (Rickets) 13. Severe Acute Malnutrition 14. Goiter
<p>Childhood Diseases</p> <ol style="list-style-type: none"> 15. Skin conditions (Scabies, Fungal Infection and Eczema) 16. Otitis Media 17. Rheumatic Heart Disease 18. Reactive Airway Disease 19. Dental Caries 20. Convulsive Disorders 	<p>Developmental Delays and Disabilities</p> <ol style="list-style-type: none"> 21. Vision Impairment 22. Hearing Impairment 23. Neuro-Motor Impairment 24. Motor Delay 25. Cognitive Delay 26. Language Delay 27. Behaviour Disorder (Autism) 28. Learning Disorder 29. Attention Deficit Hyperactivity Disorder
<p>30. Congenital Hypothyroidism, Sickle Cell Anaemia, Beta Thalassemia (Optional)</p>	

5. Implementation Mechanisms

The Operational Guidelines outline the following mechanism to reach all the target groups of children for health screening-

1. For new born:

- Facility based newborn screening at public health facilities, by existing health manpower.
- Community based newborn screening at home through ASHAs for newborn till 6 weeks of age during home visitation.

2. For children 6 weeks to 6 years:

- Anganwadi Center based screening by the dedicated Mobile Health Teams

3. For children 6 years to 18 years:

- Government and Government aided school based screening by dedicated Mobile Health Teams.

5.1.a Facility based newborn screening:

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 in District Hospitals.

5.1.b Community based newborn screening (age 0-6 weeks) for birth defects:

Accredited Social Health Activists (ASHAs) during home visits for newborn care will use the opportunity to screen the babies born at home and the institutions till 6 weeks of age. ASHAs will be trained with simple tools for detecting gross birth defects. Further ASHAs will mobilise caregivers of children to attend the local Anganwadi Centers for screening by the dedicated Mobile Health Team.

For performing the above additional tasks, she would be equipped with a tool kit consisting of a pictorial reference book having self-explanatory pictures for identification of birth defects. Suitable performance based incentive may also be provided to ASHAs.

Responsibility of ASHA under Child Health Screening and Early Intervention Services

1. Identify birth defects among 0-6 weeks old babies through home visits
2. Provide help to mothers for early stimulation of children of 0-6 weeks
3. Explain 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.
4. Help parents in referral services, if required.

In order to ensure improved and enhanced outcome of the screening programme by Mobile Health Teams, ASHAs would particularly mobilise the children with low birth weight, underweight and children from households known to have any chronic illness (e.g., tuberculosis, HIV, haemoglobinopathy etc.). Line lists maintained by the ANMs and AWWs would also be used to mobilise children.

5.2 Screening of children aged 6 weeks till 6 years attending Anganwadi Centers:

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.

5.3 Screening of children enrolled in Government and Government aided schools:

For children in the age groups 6 to 18 years, who will be screened in Government and Government aided schools, the Block will be the hub of activity for the programme. At least three dedicated Mobile Health Teams in each Block will be engaged to conduct screening of children. Villages within the jurisdiction of the Block would be 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 would be conducted at least twice a year and at least once a year for school children to begin with.

The Mobile Health Team will consist of four members - two Doctors (AYUSH) one male and one female, with a bachelor's degree from an approved institution, one ANM/Staff Nurse and one Pharmacist with proficiency in computer for data management.

Suggested Composition of Mobile Health Team

S. No	Member	Number
1	Medical officers (AYUSH) - 1 male and 1 female at least with a bachelor degree from an approved institution	2
2	ANM/Staff Nurse	1
3	Pharmacist* with proficiency in computer for data management	1

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

Teams will screen all the children upto 6 years of age registered with the Anganwadi Centers and all children enrolled in Government and Government aided schools. In order to facilitate implementation of the health screening process, vehicles will be hired for movement of the teams to Anganwadi Centers, Government and Government aided schools. A tool kit with essential equipment for screening of children will also be provided to the Mobile Health Team members.

Composition of Tool Kit for Mobile Health Team	
6 weeks to 6 years	6-18 years
1. Equipments for Screening including Developmental Delays	
<ul style="list-style-type: none"> Bell, rattle, torch, one inch cubes, small bottle with raisins, squeaky toys, coloured wool 	<ul style="list-style-type: none"> Vision charts, reference charts BP apparatus with age appropriate calf size
<ul style="list-style-type: none"> 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) 	
2. Equipments for Anthropometry	
Age appropriate-	
<ul style="list-style-type: none"> Weighing scale (mechanical newborn weighing scale , standing weighing scale) Height measuring – Stadiometers/Infantometers Mid arm circumference tape/ bangle Non stretchable measuring tape for head circumference 	

There is also a provision for engaging a Block Programme Manager for providing logistic support and for monitoring the entire health screening process. The Block Programme Manager is also expected to ensure referral support and manage compilation of the data. The Block teams will work under the overall guidance and supervision of the CHC Medical Officer. The Block Programme Manager will chalk out a detailed screening plan for all the three teams in consultation with schools, Anganwadi Centers and CHC Medical Officer. A tour diary will be maintained by Block Health Teams. A log book will also be maintained for movement of hired vehicles. The teams will submit monthly report using standard formats on various indicators like the number of children screened, number of children referred etc. (Annexure I). The formats are enclosed in Annexures. This data will be digitized and made online for monitoring and follow up at higher levels. Integration with the existing MCTS will also be achieved.

5.4 District Early Intervention Center (DEIC):

An Early Intervention Center will be established at the District Hospital. The purpose of Early Intervention Center is to provide referral support to children detected with health conditions during health screening. A team consisting of Paediatrician, Medical officer, Staff Nurses,

Paramedics will be engaged to provide services. There is also a provision for engaging a manager who would carry out mapping of tertiary care facilities in Government institutions for ensuring adequate referral support. The funds will be provided under NRHM for management at the tertiary level at the rates fixed by the State Governments in consultation with the Ministry of Health and Family Welfare.

The proposed team composition at the District Early Intervention Center (DEIC) is as below:

Composition of Team at District Early Intervention Center	
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

Role of District Early Intervention Center:

1. Providing referral services to referred children for confirmation of diagnosis and treatment
2. Screening children at the "District Early Intervention Center"
3. Visit all newborns delivered at the District Hospital, including those admitted in SNCU, postnatal and children wards for screening all newborns irrespective of their sickness for hearing, vision, congenital heart disease before discharge
4. Ensure 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
5. All the referrals for developmental delay are followed and records maintained
6. The Lab Technician of the DEIC would screen the children for inborn error of metabolism and other disorders, at the District level depending upon the logistics and local epidemiological situations
7. Ensure linkage with tertiary care facilities through agreed MOU.

Children and students presumptively diagnosed to have a disease/ deficiency/disability/ defect and who require confirmatory tests or further examination will be referred to the designated tertiary level public sector health facilities through the DEICs.

The DEIC would promptly respond to and manage all issues related to developmental delays, hearing defects, vision impairment, neuro-motor disorders, speech and language delay, autism and cognitive impairment. Beside this, the team at DEICs will also be involved in newborn screening at the District level. This Center would have the basic facilities to conduct tests for hearing, vision, neurological tests and behavioural assessment.

The States/UTs would conduct mapping to identify public health institutions through collaborative partners for provision of specialized tests and services. Private sector partnership/NGOs providing specialised services can also be explored in case services at public health institutions providing tertiary care are not available. Accredited health institutions will be reimbursed for the specialised service provided as per the agreed cost of tests or treatment packages.

Contract rates as per existing norms at the District Hospitals, Medical Colleges and any insurance schemes or CGHS approved rates can be used as a reference guideline. Process costs required for management of ailment is to be budgeted under NRHM.

Synergy would be ensured through strong convergence with ongoing schemes of the Ministry of Woman and Child Development, Ministry of Human Resource Development (School Education) and Ministry of Social Justice and Empowerment.

The States have been supported by patient transport network under NRHM and this facility may be used to transport sick children to higher facilities on a priority basis.

A three-part referral card is to be provided to parents/caregivers/students with clear instructions and address of the specified facility to be visited in the District. Preliminary observations should also be recorded in the referral card by the Medical Officer of the Block level Health Team.

Primary Screening Level						Action
	Selected Health Condition	Health Facility (at birth)	Home by ASHA (0-6 weeks)	Block Health Team (6 weeks and above)	DEIC	
A	Children in 0-6 weeks:					
1	Neural Tube Defect	YES	YES	-	-	Surgery, tie up with Tertiary Public Hospital
2	Down's Syndrome	YES	YES	-	-	Management at DEIC
3	Cleft Lip & Palate	YES	YES	-	-	Surgery, tie up with Tertiary Public Hospital including 'Smile Train'
4	Club Foot	YES	YES	-	-	Surgery, tie up with Tertiary Public Hospital including 'Smile Train'
5	Developmental Dysplasia of the Hip	YES	-	YES	-	Management at DH
6	Congenital Cataract	YES	-	YES	YES	Management at DH
7	Congenital Deafness	YES	-	-	YES	Surgery, tie up with Tertiary Public Hospital
8	Congenital Heart Diseases	YES	-	YES	YES	Tie up with Tertiary Public Hospital
9	Retinopathy of Prematurity only for preterm babies	-	-	-	YES	Tie up with Tertiary Public Hospital/ NGO
B	Children 6 weeks-18 years					
10	Anaemia especially Severe Anaemia	-	-	YES	-	Management at DH
11	Vitamin A Deficiency (Bitot Spot)	-	-	YES	-	Management at CHC
12	Vitamin D Deficiency, (Rickets)	-	-	YES	-	Management at CHC
13	Severe Acute Malnutrition , SAM/Stunting	-	-	YES	-	Management at CHC
14	Goiter	-	-	YES	-	Management at DH
15	Skin conditions (Scabies, Fungal Infection and Eczema)	-	-	YES	-	Management at CHC/ DH
16	Otitis Media	-	-	YES	-	Management at CHC/ DH
17	Rheumatic Heart Disease only at school	-	-	YES	-	Surgery, tie up with Tertiary Public Hospital
18	Reactive Airway Disease	-	-	YES	-	Management at CHC
19	Dental Caries	-	-	YES	-	Management at CHC
20	Convulsive Disorders	-	-	YES	-	Management at DH
21	Vision Impairment	-	-	YES	-	Management at DH
22	Hearing Impairment	-	-	YES	-	Management at DH
23	Neuro-motor Impairment (CP)	-	-	-	YES	Management at DEIC
24	Motor Delay	-	-	-	YES	Management at DEIC
25	Cognitive Delay	-	-	-	YES	Management at DEIC
26	Language Delay	-	-	-	YES	
27	Behaviour Disorder (Autism)	-	-	-	YES	
28	Learning Disorder (6 years to 9 years)	-	-	YES	YES	
29	Attention Deficit Hyperactivity Disorder (6 years to 9 years)	-	-	-	YES	
30	Others	-	-	-	YES	
*Only at District Hospital						

6. Training and Institutional Collaboration

Training of the personnel involved in Child Health Screening and Early Intervention Services is an essential component of the programme as it would be instrumental in imparting necessary information and skills required for child health screening and enhancing the performance of all the personnel involved in the health screening process at various levels.

A 'cascading training approach' would be adopted in order to ensure free flow of skills and knowledge at all levels and to maximize skill distribution. Standardized training modules/tools would be developed in partnership with technical support agencies and collaborative Centers as their technical knowledge and expertise will contribute to making the training process all comprehensive.

Based on the number of Block level teams required for the programme, an estimate of the training load will be made for each year and appropriate budgets will be included in the State's Annual Programme Implementation Plan (PIP) under the 'trainings head'. Cost of translation and printing of tools and formats and supportive supervision through the Regional Collaborating Center, should also be factored in the annual PIP.

It is proposed to identify Collaborative Centers in different regions of the country. These Centers will 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. It is proposed that the following Collaborative Centers in the public sector shall extend support to the States/UTs.

S. No.	Institute/ Medical College/ Hospital	States/UTs
1	AIIMS	Delhi
2	PGIMER, Chandigarh	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	KEM, Pune	Maharashtra, Gujarat
7	CDC, Trivandrum	Kerala
8	NIMH, Hyderabad	Andhra Pradesh
9	AYJNIHH, Mumbai	Maharashtra
10	AIISH, Mysore	Karnataka
11	MAMC, New Delhi	Delhi, Jharkhand
12	KSCH, New Delhi	Delhi, Orissa
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

7. Reporting and Monitoring

A Nodal Office at the State, District and Block level will be identified for programme monitoring. The Block will be the hub of activity for all Child Health Screening and Early Intervention Services activities. The Block Programme Manager will assist the CHC Medical Officer in programme supervision and monitoring.

The 'Child Health Screening Card' (Annexure I) is to be filled up by the Block Health Teams for every child screened during the visit. The health care providers at all delivery points will screen the newborns and fill the same card, if referral is required. These children should be issued unique identification number from the Mother and Child Tracking System (MCTS). The birth defects detected by ASHAs during home visits are to be referred to DH/ DEIC for further management.

All children detected should be referred to the District Early Intervention Center for further management at the District or identified tertiary level health institution.

A 'Health Camp Register' is to be maintained by the Mobile Block Health Teams (Annexure II). The Early Intervention Center at the District level would also conduct screenings, manage the cases and maintain a 'DEIC Register' (Annexure III). The Monthly Reporting Form (Annexure IV) is to be 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 to be used for data compilation by Block Health Manager, District Nodal Officer and State Nodal Officer. The State Nodal Officer will send this report on a monthly basis to the Child Health Division of the Ministry of Health and Family Welfare.

8. Roll-Out Steps for Child Health Screening and Early Intervention Services

- Identification of State Nodal Persons for the Child Health Screening and Early Intervention Services.
- Dissemination of 'Operational Guidelines' to all Districts.
- Estimation of the State/ District magnitude of various diseases, defects, deficiencies, disabilities as per available national estimates.
- State level orientation meeting.
- Recruitment of District Nodal Persons.
- Estimation of the total requirement of dedicated Mobile Health Teams & recruitment of the Mobile Health Teams.
- Mapping of facilities/institutions (public and private for treatment of specific health conditions).
- Establishment of DEIC at the District Hospital.
- Procurement of equipment for the Block Mobile Team and District Hospital (as per the list provided in the 'Operational Guidelines').
- Translation of tools, training packages, printing of formats, training material.
- Training of Master Trainers.
- Block micro-plan for school and community visits monthly outreach plan based on the mapping of educational institutions and Anganwadis and enrollment in them.
- The schedule of visits of the Block Mobile Teams should be communicated to the school, Anganwadi Centers, ASHAs, relevant authorities, students, parents and Local Government well in advance so that required preparations can be made.
- Anganwadi Centers and school authorities should arrange for prior communication with parents and motivate them to participate in the process.

Annexures

Annexure I

Screening and Referral Card

Child Health Screening Card (AWC/ School/ Delivery Point)			
Name of Child		Name of Mother/ Father/ Guardian	
Gender (M/F)		Age/ DOB, if available	
MCTS no.		AWC/ School no.	
Date of Visit		Name of the ASHA & Mob no.	
AWC/ School (address & contact detail)		Mobile Health Team ID	
Weight (in Kg.)	Height (in cm)		
Circle as Applicable			
Defects at Birth	Deficiencies	Childhood Diseases	Developmental delay and disability
1. Neural Tube Defect 2. Down's Syndrome 3. Cleft Lip & Palate 4. Talipes (club foot) 5. Developmental Dysplasia of Hip 6. Congenital Cataract 7. Congenital Deafness 8. Congenital Heart Disease 9. Retinopathy of Prematurity (only at DH)	10. Anaemia 11. Vitamin A Deficiency (Bitot Spot) 12. Vitamin-D Deficiency, (Rickets) 13. SAM/Stunting 14. Goiter	15. Skin Conditions 16. Otitis Media 17. Rheumatic Heart Disease 18. Reactive Airway Disease 19. Dental Caries 20. Convulsive Disorders	21. Vision Impairment 22. Hearing Impairment 23. Neuro-Motor Impairment 24. Motor Delay 25. Cognitive Delay 26. Language Delay 27. Behaviour Disorder (Autism) 28. Learning Disorder 29. Attention Deficit Hyperactivity Disorder 30. Others
Referral (Y/N)			
Facility where referral made- (Circle as applicable)			
1. CHC 2. DH 3. NRC 4. SNCU 5. DEIC			
Remarks (1 st visit)	Name of Doctor & Sign (1 st visit)		
Date and Remarks (2 nd visit)	Name of Doctor & Sign (2 nd visit)		

(To be filled by mobile health team/ health care provider at delivery points)

Annexure V

ACTION PLAN FORMAT (MICRO PLANNING)

National Rural Health Mission - Child Health Screening and Early Intervention Services															
Action Plan of Year _____															
State -		District -			Taluka -										
Education Department				Woman & Child Department				Dedicated team UID							
Name of B.E.O. :-				Name of CDPO. :-				Details of Dedicated team Staff							
Mob. No.				Mob. No.				Name		Designation					
Office No.				Office No.											
								Off. Phone-							
Sr. No.	Name of Institution	School/Anganwadi	Anganwadi code	School Code	Category of School	Category of standard	Number of children in institution			School Contact No.	Visit Date	Day			
							Male	Female	Total			Monday			
												Tuesday			
												Wednesday			
												Thursday			
												Friday			
												Saturday			
												Sunday			
Note:															
1	Plan for a daily average screening of 110/120 children in school. Thus more than one day visit to school may be required if the enrolment to the school is beyond 110/120.														
2	Advance plan to be developed for the whole year.														
3	Date of visit to be informed to parents through school/Anganwadi/ASHAs														
4	Mark Sunday/holiday in red and don't plan for clinic or screening. On School holidays Anganwadi visit plan is to be made.														



Ministry of Health & Family Welfare
Government of India
Nirman Bhawan, New Delhi