सत्यमेव जयते

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

STRENGTHENING THE DISTRICT HOSPITAL

FOR

MULTI-SPECIALTY CARE AND AS A SITE FOR TRAINING

2017

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2017

MINISTRY OF HEALTH AND FAMILY WELFARE
GOVERNMENT OF INDIA

सी.के.मिश्रा
सचिव
C.K.Mishra
Secretary

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health & Family Welfare

PREFACE

As we begin our journey towards achieving the Sustainable Development Goals and implementing the National Health Policy 2017, strengthening District Hospitals (DH) is a critical step to accelerate the progress towards good health and wellbeing for all. District Hospitals have been the backbone of our district health system, providing accessible and affordable curative services at the district level, and should be able to respond to the changing morbidity patterns and expectations of the population. District Hospitals should be capable of providing not only curative but also provide leadership to district health system including preventive and promotive aspects of health.

The NHM Framework for implementation and IHPS envisage a wide range of services to be provided by the DH, wherein it is able to provide all basic speciality services and gradually develop super-speciality services. However, the demand for services at secondary care hospitals are not satisfactorily catered to due to factors like inadequacy of human resource, critical equipment, infrastructure etc. Consequently, the tertiary care hospitals are burdened with high caseloads, due to less than desired number of functional specialities at DH and other secondary care hospitals.

The Ministry of Health and Family Welfare has prepared technical and operational guidelines for 'Strengthening District Hospital for Multi-speciality care and as a Site for Training'. To begin with, these guidelines prioritize certain critical services with a scope for expansion. One of the unique feature of the Guideline is empowering Patient Welfare Committee of the DH with flexibility for filling critical gaps. This also gives guidance to the State and District program officers for initiating various medical and paramedical courses at DH, which shall eventually enhance our trained health workforce besides improving quality of services.

I wish to record my appreciation for the technical experts who gave their time and support in developing the document. I hope the State adopt and follow the gudielines which will facilitate the process of strengthening of DHs as envisaged under National Health Mission.

(C.K. Mishra)

Tele : (O) 011-23061863, Fax : 011-23061252, E-mail : secyhfw@nic.in
Room No. 156, A-Wing, Nirman Bhavan, New Delhi-110 011

Arun Kumar Panda
Additional Secretary &
Mission Director, NHM
Tele : 23063155, Fax : 23063156
E-mail : asmd-mohfw@nic.in

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य एवं परिवार कल्याण विभाग
निर्माण भवन, नई दिल्ली-110011
GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
DEPARTMENT OF HEALTH & FAMILY WELFARE
NIRMAN BHAVAN, NEW DELHI - 110011

FOREWORD

Since the launch of NRHM in 2005, the utilization of public health services has increased manifold, as reflected in OPD and IPD footfall at various levels of health facilities. Entitlements under several new schemes and initiatives launched under NHM such as JSY, JSSK, free diagnostics and drugs, assured referrals and many more played a significant role in generating demand for government health services. In addition, access to diagnostics and drugs has led to a reduction in out of pocket expenditure on health of people.

District Hospital (DH) as a secondary level centre needs to play a critical role since district is the most effective unit for delivering health care services through various government health policies and establishing downward and upward referral linkages. Despite the flexibility given to the States, availability of basic and critical services remains a challenge due to various factors. Therefore, strengthening DH for specialized services and for sharing the burder of capacity building of the health workforce is the need of the hour.

The present effort of National Health Mission in preparing a set of guidelines for strengthening the DH and developing it as a centre for capacity development is a commendable step. This set of guidelines is aimed to empower and provide flexibility at the secondary level so that the gaps can be bridged within a defined timeline.

I deeply appreciate the efforts of the technical team at NHSRC in preparing these guidelines after a wide range of consultations with States and other stakeholders. I hope the guidelines will be useful for State and district program officers, public health officers in initiating quick and time bound actions in improving the quality and range of specialist services.

(Arun K Panda)

Manoj Jhalani
Joint Secretary & CVO
Telefax : 23063687
E-mail : manoj.jhalani@nic.in

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली-110011
GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
NIRMAN BHAVAN, NEW DELHI - 110011

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The NHM Framework for Implementation envisaged building an integrated network of all primary, secondary and a substantial part of tertiary care, providing a continuum from community level to the district hospital with, robust referral linkages to tertiary care. District Hospitals are envisaged as key institutions for continuum of care and are expected to provide full coverage in terms if secondary care services.

District hospitals are of paramount importance for imparting clinical training but this resource has not yet been fully tapped into. A detailed examination has indicated that even with the existing HR and services, some nursing and para-medical courses can be initiated at District Hospitals with only a few add-ons.

The Guidelines for Strengthening the District Hospital for Multispeciality Care & as a site for Training were envisaged to provide the much needed rejuvenation to the District Hospitals and to utilize the resources available for capacity building of the health work force.

These guidelines have been developed after thorough deliberations and sustained efforts of the NHM Division of the Ministry of Health and Family Welfare, NHSRC and other stakeholders. I would like to express my sincere gratitude to Mr. C.K. Mishra, Secretary Health, Mr. Arun Panda, AS & MD for therir encouragement, advice and administrative support in developing these guidelines.

I take this opportunity to acknowledge the contribution of Ms. Limatula Yaden, Director (NHM) for her inputs. I would like to thank the Indian Nursing Council for providing critical inputs in framing these guidelines.

My sincere thanks to the Public Health Administration Division at NHSRC, especially Dr. Himanshu Bhushan and Dr. Anilkumar Kandukuri for conceptualizing this idea and drafting these guidelines. I would also like to thank the program officers from the states who participated in the national cosultation for firming these guidelines. Their inputs have been very valuable.

It is my earnest request to all the State Mission Directors and Program Officers to take personal initiative in changing the outlook of District Hospitals as per the standards described in the guidelines and ensure that standard treatment protocols are followed in order to ensure quality service to every patient who comes to these health facilities.

(Manoj Jhalani)

LIST OF CONTRIBUTORS

MINISTRY OF HEALTH & FAMILY WELFARE

Mr. Manoj Jhalani, Joint Secretary (Policy)

Ms. Limatula Yaden, Director, NHM

Ms. Asmita Jyoti Singh, Sr. Consultant

Ms. Amita Chauhan, Consultant

Ms. Monmoyuri Dutta, Consultant

NATIONAL HEALTH SYSTEMS RESOURCE CENTER

Dr. Himanshu Bhushan, Advisor, PHA

Mr. Prasanth K.S, Sr. Consultant, PHA

Dr. Anilkumar Kandukuri, Consultant, PHA

Dr. Sonia Luna, Consultant, PHA

Mr. Ajit Kumar Singh, Consultant, PHA

STATE REPRESENTATIVES

Dr. Bimal Kumar Rai, Mission Director, NHM, Sikkim

Dr. Sushma Gupta, CMO, Haridwar, Uttarakhand

Dr. V. Bohra, PMS, HMG DH, Haridwar, Uttarakhand

Dr. Ram Pratap Singh, CMO, Aurangabad, Bihar

Mr. Kumar Manoj, DPM, Aurangabad, Bihar

Dr. S. N. Jha, CMO, Gumla, Jharkhand

Mr. Bulunath Sahu, DPM, Kandhamal, Odisha

Mr. Arun Kumar, HM, DHH, Kandhamal, Odisha

Dr. Rajani, Dy. Director, Karnataka

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LIST OF ABBREVIATIONS

ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
CHC	Community Health Centre
CS	Civil Surgeon
CSR	Corporate Social Responsibility
CSSD	Central Sterile Services Department
DH	District Hospital
DHS	District Health Society
EDL	Essential Drug List
GDMO	General Duty Medical Officer
GNM	Graduate Nurse Midwife
GR	Grievance Redressal
HDU	High Dependency Unit
ICU	Intensive Care Unit
IMEP	Infection Management and Environment Plan
INC	Indian Nursing Council
IPHS	Indian Public Health Standards
LR	Labour Room
LT	Lab Technician
MCH	Maternal Child Health
MLT	Medical Lab Technician
MS	Medical Superintendent
NHM	National Health Mission
NPCC	National Program Coordination Committee
NRHM	National Rural Health Mission
OOPE	Out of Pocket Expenditure
OT	Operation Theatre
PHC	Primary Health Centre
PIP	Program Implementation Plan
PNC	Postnatal Care
RCH	Reproductive Child Health
RKS	Rogi Kalyan Samiti
SN	Staff Nurse
SNCU	Special Newborn Care Unit

EXECUTIVE SUMMARY

India's Public Health System has been developed over the years as a 3-tier system i.e. Primary, Secondary and Tertiary level of health care. The World Health Organization (WHO) has over the time acknowledged the District Health System as the most practical and fundamental unit for implementation of wide variety of health policies, various public health programs, delivery of health care and management of health services for a defined geographic area. When NRHM was launched in 2005, it was recognized that strengthening and effectiveness of public health institutions including District Hospitals have positive consequences for all health programs as all programs are based on the assumption that a functioning public health system actually exists. The NRHM also recognized the need for equipping select district hospitals, for a variety of special courses to train medical officers in short term courses to handle a large number of essential specialist functions.

A District Hospital (DH) is a critical component of the district health system and envisaged to function as a secondary level health care facility to provide curative, preventive and promotive health services to the community in the District. District Hospitals are envisaged as key institutions for continuum of care and expected to provide full coverage for providing secondary care services. The NHM Framework for Implementation envisaged building an integrated network of all primary, secondary and a substantial part of tertiary care, providing a continuum from community level to the district hospital, with robust referral linkages to tertiary care.

Due to various government initiatives under NHM, growth in population, lack of comprehensive primary health care in lower level facilities, increase in awareness among community, emergence of sophisticated and advanced technology in diagnosis and treatment and constantly rising expectations of people regarding the quality of services, availability of wide range of services, District Hospitals are being utilized far more than their optimum level. Though they are meant to act mainly as sites of referral care, in practice however, since primary care in urban areas is weak, the district hospitals also serve as a primary care center, particularly for the urban poor. This in turn has resulted in overcrowding of District Hospitals impacting quality of care. With the launch of NUHM, primary health care in urban areas is being strengthened. Similarly, NHM is making a paradigm shift in focus to comprehensive primary care. To complement this, DH strengthening for providing multi-specialty care (as per the IPHS) and as a training site has been identified as a key priority under NHM.

DH should mandatorily provide all basic specialty services and should also aim to develop super-specialty services gradually. The NHM framework for implementation envisages a wide range of services to be provided at the DH. To being with, these guidelines prioritize certain critical services with a scope for expansion.

The DHs across the country need urgent strengthening, to address the availability, accessibility and quality of health care services as currently services are largely limited to clinical service delivery and further many basic specialties are not available in many DHs due to shortage of manpower, particularly specialists. Various steps have been taken by the government to augment the availability of manpower including strengthening of pre-service education in Medical Colleges & Nursing schools. Similar steps however, have not been taken at the DH level in many States to utilize its potential and capacity for imparting good clinical teaching and training. At present the DHs are providing some select in-service training programs. However due to shortage of clinical providers and their primary burden of rendering clinical services, the quality of trainings programs is sub-optimal. A detailed situational analysis indicates that even with existing HR and services, some clinical courses can be initiated at DH with only a few add-ons.

In the last few years NHM has been largely successful in improving access to healthcare in rural areas. The focus accordingly, in the last two years, has been to strengthen the Districts Hospitals for multi-specialty care by adding specialties and to develop them as training sites for training nurses, ANMs, paramedics and DNB/CPS courses for medical officers (MOs). This is to eventually assist the District Hospitals in developing them into training centers.

Against this backdrop, these guidelines have been prepared to facilitate and provide guidance to states for strengthening the District Hospitals, as envisaged, in a phased manner.

Phases of DH Strengthening:

1. Strengthening the Basic Service Delivery of the DH.
2. Strengthening DH by adding specialties for multi-specialty care.
3. Strengthening DH as a site for training so as to provide skill based in-service training and function as a clinical training site for nursing, para-medical staff and for DNB/CPS courses for MOs wherever possible.

DH, if strengthened, could perform the following major functions:

1. Provide all secondary and at least essential and critical special care services of tertiary care level - so that most morbidities can be addressed at DH level making it convenient to patients in relatively remote districts and reduce their OOPE besides resulting in decongestion of tertiary care hospitals.
2. Provide adequate referral support for clinical care at primary care levels.
3. DH as a site for training which is able to conduct specialty nursing programs, para-medical courses, GNM course and for DNB/CPS courses wherever possible and contribute to augmenting the much needed scarce human resource for health fairly economically.

STRENGTHENING DISTRICT HOSPITAL (DH) FOR MULTI-SPECIALTY CARE & AS A SITE FOR TRAINING

Background

The significance of District as a central point of public health service delivery

In India, a district is the basic administrative unit for revenue, police, health, education and other miscellaneous functions of Public Administration. The District is also the unit from where health education, preventive and promotive health programs are managed from, where the epidemiological and service delivery information is analyzed and used for public health action.

Population of a district and the population density within the state vary considerably (e.g. Average population of a district in West Bengal is 48, 00,000 and that of Arunachal Pradesh is 86,000) and this has a direct bearing on planning for the services and their utilization.

The District Hospital plays a major role in this context since district is the most effective unit for Implementation and management of public health programs particularly in rural and remote districts where the private sector is virtually non-existent. It has been widely accepted as the apex delivery point of health services in a district with only the Medical College Hospitals above it.

When it comes to health care service delivery, District Hospital performs the role of a secondary level referral centre responsible for a district of a defined geographical area having a defined population. Its objective is to provide comprehensive secondary health care services to the people in the district at an acceptable level of quality, being responsive and sensitive to the needs of community as well as of the referring centers. Every district is expected to have a district hospital. As the population of a district is variable, the bed strength also varies from 75 to 500 beds or more depending on the size, terrain and population of the district.

A District Hospital should be in a position to provide all basic specialty services and should aim to develop super-specialty services gradually. In addition, it should provide facilities for skill based trainings for different levels of health care workers. As per IPHS standards, the services that a District Hospital is envisaged to provide have been grouped as *'Essential'* (minimum assured services) and '*Desirable'* (which it should aspire to achieve). Besides the basic specialty services, due importance has to be given to Newborn Care, Psychiatric services, Physical Medicine and Rehabilitation services, Accident and Trauma Services, Dialysis services and Anti-retroviral therapy. Every district hospital should have Special Newborn Care Units (SNCU), Obstetric HDUs with specially trained staff. Provisions for Patient safety, Infection control and Health care workers' safety should also be taken care of. It is desirable that every District Hospital should have a Post-partum unit with dedicated staff to provide Post-natal services, all Family Planning services, Safe Abortion services and Immunization services in an integrated manner.

Several committees, including Bhore Committee in 1946, have advocated for strengthening of District Hospitals to meet the demand of changed geo-political and public health landscape of the Nation.

Some of the major changes in the Indian health scenario over past few decades:

- With the launch of NRHM in 2005, the OPD & IPD load has increased significantly, but the number of doctors and other clinical service providers (except those for RCH services) has not increased proportionally.
- Maternal and child deaths have declined over the past few decades, but we are still lagging behind international standards by considerable margin. The last mile in reaching international standards of maternal and child survival requires a much higher level of facility based and technology intensive management.
- There is much greater burden of non-communicable diseases now. Deaths due to trauma, NCDs - cardiovascular diseases, metabolic diseases and cancers have become leading contributors to current death rates.
- There is a much greater expectation by the communities both for range of services and quality of care.
- The cost of care has increased tremendously, partly due to the factors listed above and also due to restricted public expenditure on health and expansion of services and unregulated expansion of the private sector. In India, private expenditure on health (PvtHE) as a percentage of total expenditure on health (THE) is at 70% which is comparatively higher than that of Thailand (22.2%), Sri Lanka (43.9%) and China (44.2%). Out of pocket expenditure (OOPE) as a percentage of PvtHE in India is at 89.2%. Two features of private out-of-pocket expenditure (OOPE) are important to note. Outpatient treatment (not in-patient care) accounts for 74% of OOPE and within that medicines account for 72%. *(Data from 2014, WHO-Global Health Expenditure Database).*

Why it is pertinent now to focus our attention on strengthening of DHs as a site for training?

- The district hospital has the technical resources in terms of laboratories and skills to diagnose disease outbreaks and provide inputs for district level planning, data analysis and management etc. The district hospital can serve as a model for the quality of care with respect to patient amenities, patient safety and hospital management practices.
- At present the DHs are providing some select in-service training programs. However the quality is sub-optimal due to shortage of clinical providers and their primary burden of rendering clinical services.

Hence the district hospital could become the preferred site for both “in-service skill building” and for “pre-service educational programs” which are focused on developing skilled service providers to serve within the same district.

The current situation of DHs across India: Presently, most of the DHs across India are not in a position to take up the challenges as discussed above. The constraints for DHs in their service delivery are as listed below:

I. Gaps in clinical services delivery role of DHs

1. **Infrastructure:** Proper flow/lay out of service areas is lacking in many facilities; there is a need to make client friendly facilities with provision of basic patient amenities like patient/attendant waiting areas, seating arrangements, clean toilets and clean drinking water etc. HDUs, SNCUs should be created in the DHs.

2. **Human Resources:** Regular, sanctioned posts of specialists and staff nurses are vacant in many places. GDMOs to support and share the work load of specialists are also not available in many places. Optimum and rational utilization of existing HR (especially LTs, Nurses etc.) needs to be done.
3. **Quality Service Delivery:** Assured delivery of quality services is lacking. Privacy and dignity of patient are not considered a priority. Proper linkages for referral services are not always in place. All the diagnostic facilities required at DH level not being provided. Hospital Infection control measures E.g. Routine & methodical cleaning, hand washing, sterilization, autoclaving etc. needs improvement.
4. Prescription audits, death audits & other technical protocols are not taking place to improve the quality of services being rendered.
5. **Drugs & Equipment:** All the drugs required as per EDL are not always available in an assured manner. Indenting and inventory management needs improvement. AMCs are not in place for critical equipment.
6. **Ancillary Services:** Security, laundry, cleaning, waste management, kitchen services are lacking in many places.
7. **Governance:** The outsourcing of services (housekeeping, laundry, waste management) and absenteeism, performance monitoring need to be regulated.

II. Gaps in educational and training role of District Hospitals

a. Lack of lecture halls/seminar rooms and AV equipment.
b. Lack of hostel facility.
c. Lack of in-service and pre-service trainings, especially for most allied health professionals.
d. Lack of quality faculty /trainers.

What all services the DH should ideally be able to provide?

For a strengthened DH to be able to meet majority of the health requirements of the community at district level, services as per IPHS should be planned. The following is a broad indicative list of services which can be provided and adapted to meet the needs of population of individual districts.

In addition to the standard OPD, IPD and emergency services, the following secondary level care and tertiary level care services (optional) should be assured at the DH. Services that a District Hospital is expected to provide have been grouped in IPHS 2012 as Essential (Minimum Assured Services) and Desirable (which we should aspire to achieve).

ESSENTIAL	DESIRABLE
General Specialties • General Medicine • General Surgery • Obstetrics & Gynaecology • Paediatrics (including Neonatology and Immunization) • Orthopaedics • Anaesthesia • Ophthalmology • Radiology including Imaging • Otorhinolaryngology (ENT) • Psychiatry	**General Specialties** • Dermatology and Venereology (Skin & VD) • Radiotherapy • *10 bedded emergency ward* – for disaster management during natural calamities and other unforeseen emergencies. Ventilators in emergency ward (at least 1 for 2 beds) with round the clock on-call anaesthetist.

ESSENTIAL	DESIRABLE
• Dental Specialist • Dialysis Services • Family Planning services like Counselling, Tubectomy (Both Laparoscopic and Minilap), NSV, IUCD, OCPs, Condoms, ECPs, Follow up services • Emergency (Accident & other emergency) • *10 bedded emergency ward* – for RTA; poisoning; snake bite; dog bite; management of shock and haemorrhage; acute high fever; sepsis; dysentery • Health promotion and Counselling Services • Physical Medicine and Rehabilitation services • DOT centre • AYUSH • Integrated Counselling and Testing Centre; STI Clinic; ART Centre • Blood Bank • Disability Certification Services **Labour room** **Surgical Facilities - 6 operation theatres** • General Surgery -1 • Orthopedics – 1 • ENT & EYE – 1 • Trauma – 1 • Gynec & Obs – 2 (1 each) **Diagnostic and other Para clinical services** • Laboratory services including Pathology and Microbiology • Designated Microscopy centre • X-Ray • Sonography • ECG • Echocardiography • CT Scan (16-32 slice) • EEG • EMG • Endoscopy • Blood Bank and Transfusion Services • Physiotherapy • Dental Technology (Dental Hygiene) • Drugs and Pharmacy	• Critical care/Intensive Care (ICU) General ICU: 10 Beds Cardiac ICU: 5-10 Beds Pediatric ICU: 5 Beds Neonatal ICU: 5 Beds Trauma ICU: 10-15 Beds Gynec ICU: 10-15 Beds • Geriatric Services (10 bedded ward) • Allergy • De-addiction centre • Tobacco Cessation Services **Post-Partum Unit with following services in an integrated manner** • Post Natal Services • Safe Abortion Services • Immunization **Super Specialties** (May be provided depending upon the availability of manpower in State/UT) • Cardiology **Diagnostic and other Para clinical services** • Blood Bank with all allied facilities • MRI • NCV • VEP (visual evoked potential) • Muscle Biopsy • Angiography • Occupational therapy **Ancillary and support services** • Counselling services for domestic violence, gender violence, adolescents, etc. Gender and socially sensitive service delivery be assured. • Telemedicine • 24x7 ambulance with advance life support systems • Lift and vertical transport

ESSENTIAL	DESIRABLE
Ancillary and support services Following ancillary services shall be ensured: • Nursing Services • Medico-legal/post mortem • Ambulance services • Dietary services • Laundry services • Security services • Waste management including Biomedical Waste • Ware housing/central store • Maintenance and repair • Electric Supply (power generation and stabilization) • Water supply (plumbing) • Heating, ventilation and air-conditioning • Transport • Communication • Medical Social Work • CSSD - Sterilization and Disinfection • Horticulture (Landscaping) • Refrigeration • Hospital Infection Control • Referral Services **Administrative services** • Finance • Medical records (Provision should be made for computerized medical records with anti-virus facilities. Alternate record system should also be maintained) • Procurement • Personnel • Housekeeping and Sanitation • Education and training • Inventory management • Hospital Information System • Grievance redressal help desk	

What is the main purpose of the DH strengthening initiative?

1. **Increasing the number of specialty services being offered at the DH level:**

   If a DH is not able to provide a particular specialty clinical service – such services can be added by hiring additional specialists for that specialty.

2. **Improving the quality of existing clinical specialist services - by adding additional HR (specialists):**
    a. In specialties which are already overburdened (by case load and minimum performance of staff criteria).
    b. In DHs providing all basic specialties - adding daily/weekly/bi-weekly super-specialty clinics like - gastroenterology, cardiology, and nephrology etc. as per local demand.
3. **Developing DHs as training sites:**
    a. Once all the basic specialty services are ensured, the DH can be developed for running training courses in nursing, paramedical, DNB, Family Medicine etc.

Outcomes Envisaged

1. Provide all secondary and at least essential & critical special care services of tertiary level- so that most morbidities can be cured at DH level itself and also help in decongestion of tertiary care hospitals.
2. DH functioning as a training site will contribute and provide additional clinically trained HR to run SNCU, LR, OT and other critical care areas.
3. Reduction in out-referrals from DH located in remote and difficult areas.
4. Improvement in the quality of services being rendered.
5. Reduction in OOPE.

Accordingly these guidelines envisage addition of HR, equipment & infrastructure to address the concern of improving the specialty services at DH.

DH as a Site for Training

The current HR status in DHs across the country indicate the lack of nursing and para-medical staff to support the specialist services particularly in critical care areas like LR, OT, SNCU, HDU etc. This is resulting in sub-optimal service delivery in spite of the fact that most of DHs are having good infrastructure and equipment. Lack of key para-medical staff like – MLT, X-ray technicians is also leading to outsourcing of services.

So in developing the DH as a training site, the first and foremost emphasis is to be placed on initiating post-basic nursing and para-medical programs.

In some states if there are many DHs which meet the selection criteria - the State should prioritize not more than 5 DHs for initiating training programs in the first year or two, analyze the progress and outcome in these 5 DHs and if found satisfactory then it can be scaled up in more districts.

In addition to these programs, the DHs can also initiate other diploma courses approved by MCI, NBE (provided the DH meets the norms and regulations of these bodies). Some states have different autonomous bodies offering medical and allied health courses e.g. CPS in Maharashtra. The states can look into efficacy of such programs and their contribution in addressing the HR imbalance, improving service delivery before emulating such examples. However it is of paramount importance that the selection process for enrolling candidates under any training program must be transparent, impartial and follow a creditable process.

Process of undertaking/guiding principles for undertaking DH strengthening

1. A list of indicators has been developed which will help in selecting the DHs to be taken up for this initiative and is given at **Annexure 4**.
2. A road map given at **Annexure 5** needs to be followed for planning, budgeting and proposing in PIP for getting sanctions from GoI.
3. States are expected to identify the district hospitals based on the road map placed at **Annexure 5**, conduct a situational analysis and submit PIP for appraisal.
4. For strengthening DH for multi-specialty clinical service delivery & developing it as a training site for post-basic nursing, para-medical and other clinical courses for MOs, a lump sum grant will be provided based on States' proposal.
5. Once the State PIP is appraised by NPCC and approvals are issued, the States need to transfer the sanctioned fund to DHS/RKS for taking quick actions for gap filling and initiating the envisaged actions.

The process of strengthening of basic and add-on specialties at the DH, developing the DH a training site, the roll-out plan etc. are discussed in detail in the annexures. An indicative budget is placed below.

Budget

For strengthening the DH for multispecialty clinical service delivery

1. For strengthening such DHs which meet the selection criteria as per the roadmap placed at **Annexure 5,** the estimated cost is about Rs.5 crores. This is for ensuring at least 8 core specialties are functional.
2. This fund needs to be utilized against the heads indicated. It has to be ensured that the funds indicated for HR, equipment & infrastructure strengthening are utilized for improving clinical services only. E.g. A 10 bedded eye ward can be added if an ophthalmologist is available in the DH but is not able to perform surgeries due to lack of eye ward; a new dental chair can be procured if there is a dental surgeon available in the DH but is not able to deliver services due to lack of a proper dental chair etc.
3. The training aids, infrastructure are one time support & remuneration of HR is recurring expense.
4. The DHs where the core specialties already exist can plan to add other specialties.
5. A maximum of 40% of estimated cost can be spent on HR. The funds for HR should be utilized for hiring the staff required for delivering clinical services only.

For strengthening the DH as a training site for Nursing & Paramedical courses

6. The estimated cost for developing DH as a training site depending on the number and type of nursing/paramedical courses is about Rs. 1 crore.
7. This fund needs to be utilized against the heads indicated. The training aids, infrastructure are one time support & salaries of HR is recurrent.
8. 5% of the recurrent expenses shall be given to the DH and another 5% to the attached nursing/ paramedical institute for administrative and contingency expenses.
9. The proposal will be appraised by the NPCC under NHM.
10. States also needs to ensure a time-bound action plan for sanctioning the no. of specialties and teaching posts added under NHM support for continuity and sustenance.

Note: The proposal for initiating clinical courses for MBBS doctors can also be reflected in PIP after the gap assessment against the requirements indicated for the specific course/specialty

ANNEXURE 1:
STRENGTHENING THE CORE SPECIALTY SERVICES AT DH

Among the essential specialties listed earlier in the document, the following 8 core specialties are the absolute minimum for the proper functioning of DH. For the DH strengthening initiative, these 8 core specialties were decided based on the current situation and field realities of the DHs across India and also from the point of view of developing DH as a training site. Hence the initial emphasis has been placed on strengthening these 8 specialties to start with. Once the DHs are strengthened for 8 core specialties, the DHs should aim to strengthen the add-on specialties listed in Annexure 2.

Listed below are the core specialties along with the HR requirement for rendering the clinical services in a 200 bedded DH (In Annexure 2, the comprehensive list of core and add-on specialties required for the DH is provided).

Table below illustrates the minimum performance standards for each category of staff for service delivery. This will give a general idea on how to optimally utilize the existing HR before requesting for additional HR.

TABLE 1

S.No	Specialty	No. of Staff	Case load for each specialist	GDMOs Proposed	Total
1	General Physician	2	60 OPD/day, 20 IPD/day	2	4
2	General Surgery	2	60 OPD/day, 20 IPD/day, 7 major surgeries/week	2	4
3	OBGYN	3	60 OPD/day, 20 IPD/day, 7 major surgeries/week	3	6
4	Pediatrician	3	60 OPD/day, 20 IPD/day	3	6
5	Orthopedics	1	60 OPD/day, 20 IPD/day, 7 major surgeries/week	1	2
6	Anesthetist	2	As per the surgical requirement, in-charge of ICU and critically ill patients	2	4
7	Ophthalmologist	1	60 OPD/day, 20 IPD/day, 7 major surgeries/week	1	2
8	Pathologist	2			2
9	Medical Officers/ GDMOs **	13	75 OPD cases/day, assisting specialists in IPD rounds, emergency and other duties		13
	Sub-Total	29		14	**43**

S.No	Specialty	No. of Staff	Case load for each specialist	GDMOs Proposed	Total
10	Staff Nurse	70	As per INC norms		70
11	Lab Tech	9	100 tests/day		9
12	Pharmacist	6	120 Dispensations of Prescription/ day, maintaining stock registers, stores, inventory management		6
13	Radiographer	3			3
14	ECG Tech/Echo	2			2
15	O.T. Technician	6	Maintaining clean, sterile, protective zones, autoclaving of equipment, ensuring IMEP protocols		6
16	Ophthalmic. Asst.	1	Conducting auto refractions and other assigned tests and duties. 25 to 30 cases [@12-15 min/patient]		1
TOTAL		**126**			**140**

Note:

It is assumed that each surgical specialist would be having 3 OPD days and 3 OT days each week. Each surgical specialist is expected to perform at least 7 major surgeries in a week. For medical specialists with no OT duties, the OPD will be all days in a week. Both medical and surgical specialists are expected to make IPD rounds every day.

***One GDMO for each specialist has been proposed to strengthen the service delivery and also to support the specialists in teaching and training. These GDMOs will work only in that specialty for which they are hired for.*

ANNEXURE 2:
STRENGTHENING DH FOR MULTI-SPECIALTY CLINICAL SERVICE DELIVERY

To be able to meet the quality standards of service delivery and increased expectations of the clients, the infrastructure and HR needs to be bolstered in the DH. Explained below are the infrastructure requirements, beds and HR norms for the DH.

I. Infrastructure Strengthening

Requirement of Beds

The size of a district hospital is a function of the hospital bed requirement, which in turn is a function of the size of the population it serves. In India the population size of a district varies from 50,000 to 1,00,00,000 (Census 2011). For the purpose of convenience, in this document, the average population size of the district has been taken as 10 Lakhs.

For a district with a population of 10,00,000 the district hospital should be having 200 beds at least (assuming 80% bed occupancy). Listed below are the various norms for a 200 bedded hospital as per IPHS.

General HR and Bed Norms for Obstetric Cases

No. Deliveries/month	Requirement of Beds	Requirement of Labor tables	HR requirement – Staff Nurses
100 deliveries	10 beds	2 Labor tables	4 for LR 5 for ANC/PNC wards

Requirements of Operation Theatres

S.No	Item	No.
1	Elective OT-Major	2
2	Emergency OT	1
3	Ophthalmology/ENT OT	1
4	OB & GYN OT	2 (1 each)

II. Human Resource Planning for the DH

S.No	Specialty	Specialists	GDMOs	Total
I. Medical				
1	General Physician #	**2**	**2**	**4**
2	General Surgery #	**2**	**2**	**4**
3	OBGYN #	**3**	**3**	**6**
4	Pediatrician #	**3**	**3**	**6**
5	Orthopedics #	**1**	**1**	**2**
6	Anesthetist #	**2**	**2**	**4**
7	Ophthalmologist #	**1**	**1**	**2**
8	Pathologist #	**2**		**2**

S.No	Specialty	Specialists	GDMOs	Total
9	Radiologist	**1**		**1**
10	ENT	**1**	**1**	**2**
11	Dental specialist	**1**		**1**
12	Microbiologist	**1***	**1**	**2**
13	Dermatologist	**1***	**1**	**2**
14	Psychiatrist	**1**	**1**	**2**
15	Forensic specialist	**1**		**1**
16	Medical Officers	**13**		**13**
17	AYUSH doctors	**1**		**1**
18	Doctor trained in Dialysis	**1**		**1**
	Total	**38**	**18**	**56**
II. Nurses		**90**		
III. Paramedical Staff		**42**		
IV. Administrative Staff		**12**		
TOTAL		**178**		

 # 8 Core specialties

Once the core 8 specialties are ensured, additional specialties as mentioned in the table are to be added/made fully functional – preferably in the same order of priority from S.No 9 to 15. But it is the prerogative of the DH to prioritize the specialties as per the local situation and needs of the community it is catering to.

Nurses

The Staff Inspection Unit (S.I.U) is the unit which has recommended the nursing norms in the year 1991-92. As per these S.I.U norms the present nurse-patient ratio is based and practiced in all central government hospitals.

The nurse-patient ratio as per the S.I.U norms:

S.No	Department	Nurse : Patient (ratio)
1	General ward	1:6
2	Special ward (pediatrics, burns, emergency wards attached to casualty, neuro surgery, cardio-thoracic)	1:4
3	ICU	1:1
4	Labor Room	1:1 (1 per table)
5	OT	1:2 (Major OT) 1:1 (Minor OT)
6	Casualty a. Casualty main attendance up to 100 patients/day b. For every additional attendance of 35 patients c. Gynec/Obstetric attendance d. For every additional attendance of 15 patients	• 1 staff nurse per shift (3 staff nurses for 24 hours) • 1:35 • 1 staff nurse per shift (3 staff nurses for 24 hours) • 1:15

S.No	Department	Nurse : Patient (ratio)
7	Injection room OPD	• Attendance up to 100 patients/ day – 1 staff nurse • 120-220 patients: 2 staff nurses • 221-320 patients: 3 staff nurses • 321-420 patients: 4 staff nurses

Para-Medical Staff

S.No	Staff	Number
1	Lab Tech	9
	Renal dialysis technician	1
2	Pharmacist	6+1*
3	Storekeeper	1
4	Radiographer	3
5	ECG Tech/Eco	2
6	Opth. Asst.	1
7	Dietician	1
8	Physiotherapist	1
9	O.T. technician	6
10	CSSD Asst.	1
11	Social Worker	3
12	Counsellor	1
13	Dental Technician	1
14	Darkroom Asst.	3
15	Rehabilitation Therapist	1
16	Biomedical Engineer**	1
	Total	**43**

** For AYUSH, ** Desirable*

Administration

S.No	Staff	Number
1	Medical Superintendent	1
2	Hospital Manager	1
3	Medical Records Officer	1
4	Medical Record Asst.	1
5	Accounts/Finance	2
6	Admn. Officer	1
7	Office Asst. Gr I	1
8	Office Asst. Gr II	1
9	Ambulance Services	Centralized call centre
	Total	**12**

** Manpower for the services which should preferably be outsourced are not shown here i.e. services like Gardening, Linen washing, Waste handling, Aaya, Peon, OPD Attendant, Ward Boys, Parking attendant, Vehicle drivers, Security and Sanitary workers etc. should be outsourced.*

III. Ancillary Services for the DH

The following ancillary services should be ensured at the DH for comprehensive service delivery.

1. GR Help Desk
2. Security Staff
3. CSSD & Laundry Services
4. Kitchen services
5. Cleaning/housekeeping services
6. Gardening services
7. Record keeping

ANNEXURE 3:
UPGRADING THE DH AS A SITE FOR TRAINING

Once DH is strengthened for providing routine and core specialist services it could be upgraded as training and teaching site particularly for clinical learning.

This up-gradation should only be undertaken once the DH is strengthened to provide core services as listed in Annexure 1 and the infrastructure, beds and HR norms have been met as listed in Annexure 2. Once these two criteria are satisfied, and with addition of few additional HR, the DH could be upgraded as a training site for post-basic diploma courses and any other specialized courses for MOs/MBBS doctors.

Specialty nursing courses like **Neo-natal nursing**, **Midwifery nursing**, **O.T room nursing**, **Orthopedic & Rehabilitation nursing**;

Para-medical courses like **MLT, X-ray/CT technicians, Renal dialysis technician, OT technician, Ophthalmic assistant** etc.

These courses could be initiated in government nursing and para-medical institutions affiliated to the DH. The affiliated institution should comply with the norms of INC and State nursing councils, Paramedical University with regard to staffing, infrastructure, teaching and training aids.

These courses could be initially offered to the existing nursing and para-medical staff currently working in the DH so that their skills are enhanced and they in turn can provide additional hands for specialist departments. The state may plan to strengthen initially only those departments which are essential for running a particular course. To create interest for such courses, successful candidates ought to be provided increments or given higher contractual remuneration.

Similarly if the state would like to initiate DNB/CPS courses for MOs then the criteria for training institute & also training as defined under respective programs needs to be met. It is pertinent to note that if states wish to initiate CPS like courses then they must be recognized by the respective state medical councils and be included in schedule III of Indian Medical Council Act, 1956.

All the above courses can be initiated concurrently or in phases depending on the capacity of DH in terms of fulfilling the HR & Infrastructure requirements under respective councils.

Specialty Nursing Programs at DH**

To start the one year specialty nursing courses recognized by INC, following requirements are to be met by the DH:

Neonatal Nursing in SNCU

- General Physician
- Gynecologists & Obstetrician
- Anesthetist
- Pathologist
- Support Staff like SN, GNMs, L.Ts
- Functional L.R, O.T & SNCU
- 250-500 beds and level II/III NICU facility, NICU beds: ≥ 10

Operation Theatre Nursing

- Gynecologist & Obstetrician
- Pediatrician
- General Surgeon
- Orthopedician
- Ophthalmologist
- ENT Specialist
- Anesthetist
- Support Staff like SN, GNMs, L.Ts
- Pathologist
- Functional Emergency and Elective O.T
- 250-500 bedded Hospital

Orthopedic & Rehabilitation Nursing

- Orthopedician
- General Surgeon
- Anesthetist
- Support Staff like SN, GNMs
- 250-500 bedded Hospital, which has a 50 orthopedic beds & rehabilitation units

Midwifery Nursing

50 bedded hospital having:

- Gynecologist & Obstetrician
- Pediatrician
- Support Staff like SN, GNMs
- Mother and Neonatal units
- Case load of minimum 500 deliveries per year
- 8-10 level II neonatal beds.
- Affiliation with level III neonatal beds

*** A supplementary guideline explaining the process of initiation of post-basic nursing diploma programs at the DH has also been developed. That document can be referred to- for more details regarding the steps for initiation of these nursing courses at the DH, steps for taking INC approvals, responsibilities of the DH and State governments.*

Para-medical Courses at DH

Additional requirement for starting MLT course @ DH

Staff	HR already in place	Additional requirement above the basic HR	Total HR required
Medical Pathologist (M.D/M.Sc)	1	0	1
Medical Microbiologist (M.D/M.SC)	0	1	1
Haematologist (M.Sc)	0	1	1
GDMO (M.B.B.S)	0	2	2

So in addition to the basic HR already in place, 1 Medical Microbiologist, 1 Hematologist and 2 GDMOs are required.

Additional requirement for starting Radiographer (CT/MRI technician)/X-ray technician course @ DH

Staff	HR already in place	Additional requirement above the basic HR	Total HR required
Radiologist (MD/DMRD/M.Sc Radio-diagnosis)	1	1	2
Radiation Physicist (M.Sc Radiation Physics)	0	1	1
Visiting Faculty *	0	1	1
MBBS Doctor (GDMO)	0	2	2

**Persons with recognized qualification in diagnostic Radiography, Sonography, CT Technology, MR Technology, Mammography and Nuclear Medicine*

Additional requirement for starting Renal Dialysis Technology course @ DH

Staff	HR already in place	Additional requirement above the basic HR	Total HR required
Nephrologist (DM/MD)	0	1	1
Haematologist	0	1	1
Sr. MO (M.B.B.S)	0	1	1
GDMO (M.B.B.S)	0	1	1

Additional requirement for starting OT technician course @ DH

Staff	HR already in place	Additional requirement above the basic HR	Total HR required
General Surgeon (M.S)	2	0	2
Anaesthesiologist (M.D/D.A)	2	0	2
Sr. MO (M.B.B.S)	0	1	1

Additional requirement for starting Paramedical Ophthalmic Assistant/vision technician course @ DH

Staff	HR already in place	Additional requirement above the basic HR	Total HR required
Ophthalmologist (M.S)	1	1	2
GDMO (M.B.B.S)	0	1	1

- For all the above programs, the core 8 specialties need to remain functional. In case there are no additional specialists available, then need based short-term hiring can also be undertaken to fulfill the criteria.
- For running all the courses indicated above, institutional arrangement & linkages with Nursing and Paramedical institutions are essential depending upon the type of course being initiated

Note: All the specialty nursing programs, Para-medical courses suggested in the document are meant to be of one year duration.

Budget and Revenue Generation

Estimated Cost for Strengthening DH

I	**HR**				
	Type of Staff	No. of Staff	Salary/Month (in Rs.)	Total (in Rs.)	Total/Year (in Rs.)
1	Specialists	5	1,00,000	5,00,000	60,00,000
2	GDMOs	10	50,000	5,00,000	60,00,000
3	Staff Nurses	10	30,000	3,00,000	36,00,000
	Technicians (Radiology/Ophthalmic/ECG etc.)	3	12,000	36,000	4,32,000
				TOTAL	**1,60,32,000**
II	**Equipment**				**2,00,00,000**
III	**Infrastructure**				**1,40,00,000**
				TOTAL	**5,00,32,000**

Note:

1. *The above tentative numbers for staff have been proposed keeping in mind the additional requirement for developing DH as a training hub in addition to fulfilling the staff requirement for rendering basic specialty services. The salaries for different categories of staff are indicative only for purpose of estimation.*
2. *For outsourcing of specialists, the state may utilize RKS funds and set some arrangements for their services like hourly, weekly basis. In this regard, state may refer to the D.O letter No.7 (162)/2015-NRHM-1 dated 03.02.2016 by AS&MD, NHM. A guidance note is attached with the D.O letter for 'Strengthening Specialist Support in Public Health Facilities'.*
3. *Retired specialists or those working in private sector can also be hired. Hiring of anesthetists (or) surgeons on a case to case basis can be done as per the local situation. To overcome shortage of specialists in the periphery, a panel of specialists may be created with a nominal retention fee who can be contacted over phone/email and necessary advice be taken so that primary treatment can be started and the specialist can attend, when available.*
4. *The specialists hired to fulfill the criteria for Strengthening DH as training site & for starting post-basic nursing & para-medical courses need to be recruited on full-time basis.*
5. *The salaries indicated above are indicative only and are given for the purpose of calculating the funds required for additional hiring.*
6. *For the specialists who are hired on full time basis, the salaries should be at par with the state's existing rules under NHM for contractual hiring. The salary indicated for the SN (Rs. 30,000) is for M.Sc qualified nurses.*
7. *Once the 8 core specialties are ensured then the district can utilize the budget indicated above for adding any other specialty as per their local situation.*
8. *However the budget proposed for HR should not exceed 40% of the total budget indicated above.*
9. *GDMOs should only be hired against the specialty where they are needed and not to be rotated.*
10. *The budget indicated above is indicative. In case the state needs budget for support areas and services like guards, cleaning staff, CSSD, laundry etc. then the need based budget needs to be reflected separately in the PIP.*
11. *Procurement of equipment should be undertaken only after ensuring the availability of the specialty and for strengthening the envisaged services.*
12. *The fund for infrastructure is for undertaking minor repairs and renovations of critical service areas like O.T, L.R, SNCU etc. and also for any critical work of wards.*
13. *Funds for equipment and infrastructure is a onetime support.*

Tentative cost for strengthening the affiliated Nursing Institute

I	**HR**				
	Type of Staff	No. of Staff	Salary/Month (in Rs.)	Total (in Rs.)	Total/Year (in Rs.)
1	Nursing faculty	8	60,000	4,80,000	57,60,000
2	Administrative/office assistant	2	15,000	30,000	3,60,000
				TOTAL 'A'	**61,20,000**
3	Institutional Charge 10% of Total 'A'				
	5% to the DH				3,06,000
	5% to the attached institute				3,06,000
II	**Teaching and training aids**				**10,00,000**
III	**Infrastructure**				**25,00,000**
				TOTAL	**1,02,32,000**

Note:

1. *2 faculty for each of the proposed 4 post-basic diploma nursing programs*
2. *2 administrative assistants to support the 4 post-basic diploma nursing programs*

Tentative budget for strengthening the affiliated Para-medical Institute

I	**HR**				
	Type of Staff	No. of Staff	Salary/Month (in Rs.)	Total (in Rs.)	Total/Year (in Rs.)
1	Paramedical faculty	6	60,000	3,60,000	43,20,000
2	Administrative/office assistant	2	15,000	30,000	3,60,000
				TOTAL 'A'	**46,80,000**
3	Institutional Charge 10% of Total 'A'				
	5% to the DH				2,34,000
	5% to the attached institute				2,34,000
II	**Teaching and training aids**				**10,00,000**
III	**Infrastructure**				**25,00,000**
				TOTAL	**86,48,000**

Note:

1. *8 and 6 no.s of HR have been calculated under the nursing and paramedical budget with the assumption that all 4 nursing and 5 paramedical courses will be functional. The number of faculty hired should be based on the number of courses functional and hiring should be done not exceeding 2 HR for each course.*

Guidelines for running the Diploma Courses

The courses are open for all candidates who meet the eligibility criteria (both Govt. and Pvt.). 50% of the total seats should be reserved for Govt. in-service candidates. The RKS of the DH can decide the fee structure and will be responsible for collecting the fees. The fees collected from these courses should be deposited in the RKS account.

- Onetime expenses for seminar rooms, library, mannequins etc. required for running the courses can be borne from RKS/other such grants.
- DHS should also explore CSR funding for strengthening DH and initiating Nursing and Paramedical courses under this program.

- Rest of the amount for running the course can be met either through State or NHM support.
- Good IEC, assured job, specialist designation, incentivizing for additional qualification, respecting the suggestions given by the qualified personnel etc. are the few modalities for creating market value for the course.
- Ensuring quality in teaching and training is another pillar for creating value for these courses. So close technical monitoring through respective councils and states, OSCE method of skill based assessment, good qualified teachers need to be ensured while running these courses.
- The administrative activities for running the courses like advertisement of the courses, taking admissions etc. shall be the responsibilities of the attached nursing/paramedical colleges.

Sample program and fee structure of Neo-natal nursing post basic diploma

Course duration: 1 year
No. of Students: 10 (5 Govt. + 5 Pvt.)
Fees:

	No. of Students	Tuition Fee (in Rs.)	Total Fees Generated (in Rs.)
Govt. Students	5	10,000	50,000
Pvt. Students	5	28,000	1,40,000
		Total	**1,90,000**

Sample program and fee structure of Ophthalmic Technician course

Course duration: 1 year
No. of Students: 10 (5 Govt. + 5 Pvt.)
Fees:

	No. of Students	Tuition Fee (in Rs.)	Total Fees Generated (in Rs.)
Government Students	5	13,000	65,000
Private Students	5	30,000	1,50,000
		Total	**2,15,000**

Approximate fee generated for the different diploma programs put together

Nursing	Name of the course	Fees Generated (in Rs.)
1	Post Basic Diploma in Neonatal Nursing	1,90,000
2	Post Basic Diploma in Operation Room Nursing	1,90,000
3	Post Basic Diploma in Orthopaedic & Rehabilitation Nursing	1,90,000
4	Post Basic Diploma in Midwifery Nursing	1,90,000
Para-medical		
1	MLT course	2,15,000
2	Radiographer (CT/MRI technician)/X-ray technician	2,15,000
3	OT Technician	2,15,000
4	Ophthalmic Assistant/Vision technician course	2,15,000
5	Renal Dialysis Technology	2,15,000
	Total	**18,35,000**

Note: The figures quoted above are for reference only. States have the liberty to decide upon the fee structure based on consultation of stakeholders – State nursing and paramedical councils, Govt. and Pvt. institutes offering these programs etc.

Based on the above estimates, approximately Rs. 18-20 lakh rupees can be generated by these courses in 1 year. The revenue generated should be transferred to the RKS/HDS and should be utilized in Strengthening the DH (for need-based hiring of specialists, nursing and paramedical staff; infrastructure improvement; procurement of equipment and other needs).

Incentivizing the Staff

It will be prudent to incentivize the existing staff that complete training in specialist courses while being employed in the DH. Special increment for completing training may be given if the incumbent continues to work in the same department for which training has been given. States can design different strategies for incentivizing staff based on local conditions and availability of funds e.g. Instead of fixed increments, the staff can be incentivized if the performance level exceeds the expected service delivery output. Further, the contractual staff can also be incentivized if they acquire a specialized and certified skill.

This will motivate the staff to acquire new skills and perform their duties better. These staff can be given incentives in the form of increments in their salary. An example is given below:

S.No.	Staff	Specialist training acquired	No. of increments
1	Nurses	Neo-natal nursing / O.T nursing/ Orthopedic & rehabilitation nursing/ Midwifery nursing	2
2	Lab Technician	MLT course	1
3	Radiographer	Radiography course	1
4	Specialist Doctors	4 CMEs in an year	1

ANNEXURE 4:
INDICATORS FOR SELECTING THE DISTRICT HOSPITALS FOR STRENGTHENING

Part-A

Indicators for selecting the District Hospitals for Strengthening

	Name of the DH: **District:** **State:** **Pin Code:**	
	Name of M.S or I/C of DH: **Mobile No:** **email:**	
1	Bed strength of the District Hospital (DH)	Number
2	Bed occupancy rate	%
3	No. of Specialties present in the DH	Number
	List of all the specialties in the DH	Names
	Beds in each of the Specialty (if demarcated)	Number
4	No. of core specialties present in the DH	Number
	Medicine	Yes/No
	Surgery	Yes/No
	Obs & Gyn	Yes/No
	Anesthesia	Yes/No
	Pediatrics	Yes/No
	Orthopedics	Yes/No
	Ophthalmology	Yes/No
	Radiology	Yes/No
	Nephrology	Yes/No
	ENT	Yes/No
	Psychiatry	Yes/No
	Dental	Yes/No
	Pathology/Microbiology/Biochemistry	Yes/No
5	Labor room	
	No.of functional Labor rooms present in the DH	Number
	No. of Labor tables present in the DH	Number
	No. of deliveries/month in the LR	Number
	No. of staff posted exclusively for LR	Number
	M.O/LMO	Number
	Nurses	Number
	ANMs	Number
	LTs	Number

Indicators for selecting the District Hospitals for Strengthening

6	OT	
	No.of O.T.s present in the DH	Number
	No. of major surgeries/month	Number
	No. of Cesarean sections/month	Number
7	SNCU	
	No. of SNCU beds present in the DH	Number
	Bed occupancy rate of SNCU	%
	No. of staff posted exclusively for SNCU	Number
	M.O/LMO	Number
	Nurses	Number
	ANMs	Number
	LTs	Number
8	Whether Pediatric ICU present in the DH or not?	Yes/No
9	Whether Blood Bank is present in the DH or not?	Yes/No
	Whether Blood Component Separation Unit is present or not? (if transfusions are > 3000 units)	Yes/No
10	No. of Govt. Nursing & Paramedical teaching institutes attached to the DH	Number
	ANM	Number
	GNM	Number
	Para-medical	Number
	The list of para-medical courses being offered at each institute	Names
12	Any other teaching institutes with in the dist. which can be attached to the DH	Yes/No
	If Yes, how many?	Number
13	Whether residential facility available in the following teaching facilities or at DH?	
	Govt. ANM institute	Yes/No
	Govt. GNM institute	Yes/No
	Govt. Para-medical institute	Yes/No
	DH	Yes/No
	If Yes to any of the above - How many Male, Female students can be accommodated in that facility?	Number
14	Training infrastructure & faculty available in the DH	
	No. of staff available (if any)	Number
	Seminar room	Yes/No
	Training aids (AV aids, mannequins etc.)	List
15	Whether the DH campus has space & scope for constructing new buildings?	Yes/No
16	The existing infrastructure/buildings have capacity to add more floors	Yes/No
	If Yes, how many floors	Number
17	Whether the DH has uninterrupted power supply or not?	Yes/No
18	Whether the DH has uninterrupted water supply or not?	Yes/No

Part-B

Analyze the status of DH on the following critical criteria

S.No	Criteria	Yes/No
1	Bed strength > 200 beds	
2	Bed occupancy > 75%	
3	8 core specialties	
4	Functional LR	
5	> 2 O.Ts	
6	Functional Blood Bank	
7	Functional SNCU with 24 Beds	
8	At least one Govt. ANM, GNM school attached to DH	
9	At least one Govt. para-medical institute attached to DH	
10	Residential facility (either in the DH or affiliated institute)	
11	Functional District training centre	
12	DH has scope for building new infrastructure	
13	Uninterrupted electric supply	
14	Uninterrupted water supply	

Note:

1. *The DHs need to fill Part-A of Annexure 4, followed by analysis of Part-B of Annexure 4 for selecting the DHs for strengthening.*

ANNEXURE 5:
ROADMAP

Strengthening District Hospital and Developing it as a Training Site

States may select those DHs where there is high footfall but lack of essential range of specialist services. States may also select the facilities under DH strengthening initiative in three categories:

1. Few DHs may be selected for ensuring availability of all the 8 core specialties after prior need assessment.
2. Few DHs may be selected for increasing the range of services where the core services are already available with justified service utilization.
3. Few DHs may be selected for developing them as training sites where the essential core specialties along with the other required range of services are available with the quality of services ensured.

If large number of DHs are proposing for DH strengthening, and also if they are found eligible, then State needs to prioritize the DHs in the hard to reach areas. So, prior mapping & need assessment of eligible districts will help in selection and prioritization of the DHs.

As per NSSO 71st round, India is having high prevalence of infectious diseases, cardiovascular, respiratory, gastro-intestinal, psychiatric diseases etc. But this disease burden may vary from State to State. Therefore such local disease profile should be considered by States while putting in place specialist services in different DHs.

1. Identification of District Hospitals which can be taken up for Strengthening:

Timeline - 2 months
(Based on analysis as per Annexure 4)

The criteria for selection:

1. Bed strength > 200 beds (> 100 beds in case of North Eastern States)
2. Bed occupancy rate > 75%
3. Having at least 4 out of the 8 core specialties in place
    a. Medicine
    b. Surgery
    c. Obs & Gyn
    d. Anesthesia
    e. Pediatrics
    f. Orthopedics
    g. Ophthalmology
    h. Pathology
4. Functional labour room

5. Functional O.T
6. Functional Blood Bank
7. A Govt. Nursing institute and Paramedical institute attached to the District Hospital.

2. After identifying the DHs, strengthening them by addressing the needs of hiring specialists, infrastructure and equipment:

Timeline – 6 months

a. Situation analysis - Assessing the functionality of different departments in terms of case load, available HR and required equipment & finding gaps

- Assess the no. of specialists required (based on minimum performance criteria given in the Annexure 1 of the guideline).
- Assess the no. of GDMOs required (One GDMO for each specialist has been proposed in the guideline to address the issues of strengthening the service delivery and also that specialists can devote time for teaching and training of nursing and para-medical students).
- Assess the infrastructural requirement - like O.T, indoor beds & other patient service areas required for the specialty (ideally one DH should have 5 O.Ts as given in Annexure 2).
- Similarly assess the number and types of instruments & equipment required for ensuring the functionality of the specialty (e.g. One separate autoclaved set will be required for conducting any surgery (major & minor).

b. Developing a proposal

- Situation analysis of the DH.
- Preparing a proposal along with justification & expected outcomes of strengthening.
- While preparing a proposal, funds lying with the RKS are also need to be factored into, in a suitable manner.
- Submission of the proposal in the PIP for approval at central & state level and ensure that it is included in DHAP.

c. Budgeting

- Estimating the budget for HR, equipment and infrastructure.
- Submission of the budget at the appropriate authority at district level for approval.

d. Filling the Gaps

- Initiate the process of approvals & identification of budget for HR, requirement (ensure transparency and participatory approach).
- Hiring of HR.
- The district shall be given flexible funds for hiring contractual/part time HR (Specialists/ GDMOs).

e. Monitor the performance

- Assess the performance on a set indicators after the strengthening process is completed.

3. Once strengthened, starting post-basic nursing diploma courses and paramedical courses can be started at the District Hospital:

Timeline – 6 months to 1 year

Before initiating a course, State should do a pre-assessment considering the available resources. The courses to be started in the DH should be as per the requirements of the state health system. So, an assessment of required category of staff should be done before deciding which diploma courses to start. For example, some states might have less number of LTs, some might have a crunch of radiographers or O.T technicians etc.

The requirements of the District Hospital to initiate training programs:

- A DH having ≥ 200 beds (≥ *100 beds in case of North Eastern States*)
- Having th.e 8 core specialties
  - Medicine
  - Surgery
  - Obs & Gyn
  - Anesthesia
  - Pediatrics
  - Orthopedics
  - Ophthalmology
  - Pathology
- Functional labour room
- At least 2 O.Ts
- Functional SNCU
- A Govt. Nursing institute and Paramedical institute attached to the District Hospital

Which courses can be started?

The following post-basic nursing diploma courses and paramedical courses can be started with DH as a training site, provided they meet the requirements of specialists and infrastructure as listed in the guideline

1. Neonatal nursing
2. Operation theatre nursing
3. Midwifery nursing
4. Orthopedic & rehabilitation nursing
5. OT technician
6. Paramedical Ophthalmic Assistant
7. Renal Dialysis technician
8. MLT
9. X-ray/CT/MRI technician

Note:

If the specialist and infrastructure requirement is met for a particular diploma course then the process of initiation of these courses can start simultaneously during the DH strengthening phase.

The diploma courses can be initiated at Govt. GNM and Para-medical institutes with DH as the training site. These institutes should be having affiliation to the local board/university/councils so that these courses are recognized. The institutes have to meet the specifications of the respective councils. If, there is a need for strengthening these institutions in terms of HR and infrastructure, similar exercise as mentioned above needs to be undertaken in these institutions. The diplomas will be awarded by these institutes.

DHs which do not have attached nursing and paramedical institutes can plan and propose for Strengthening of DH for multispecialty clinical service delivery alone.

ANNEXURE 6:
INITIATING GNM COURSE AT THE DH

Additional requirement for Starting GNM course at DH (for 40 students)

Specialists	HR already sanctioned	Additional requirement above the basic HR	Total HR required
General Physician	2	3	5
General Surgeon	2	0	2
Obstetrician & Gynecologist	3	0	3
Pediatrician	2	0	2
Orthopedician	1	0	1
Ophthalmologist	1	0	1
ENT Specialist	1	0	1
Cardiologist	0	1	1
Neurologist	0	1	1
Nephrologist	0	1	1
Principal	0	1	1
Vice-principal	0	1	1
Nursing Tutors (B.Sc Nursing/ Diploma in Nursing Education and Administration)	0	12	12

- The above table is indicative only & for the DH to take a decision whether a GNM course can be initiated once at least the above staff requirement is ensured (either full time/part time). Later the other requisites like infrastructure, library, seminar room, skills lab etc. needs to be placed as per INC guidelines.
- For ensuring quality in teaching and training in the specialties of nursing courses, paramedical courses and GNM College an additional HR requirement of 10% will be required for each clinical department.
- In case there is no additional specialists available, then need based short-term hiring can also be undertaken to fulfill the criteria. MBBS doctors can also be multi-skilled.

ANNEXURE 7:
CONVERTING THE EXISTING DISTRICT HOSPITALS TO MEDICAL COLLEGES

The requirements for a Medical College as per MCI norms for 50 M.B.B.S admissions annually shall have the following departments, namely

1. Human Anatomy
2. Human Physiology
3. Biochemistry
4. Pathology including blood bank
5. Microbiology
6. Pharmacology
7. Forensic Medicine including Toxicology
8. Community Medicine
9. Ophthalmology
10. E.N.T
11. Medicine
12. Surgery
13. Pediatrics
14. Obstetrics and Gynecology
15. Psychiatry*
16. Dermatology, venereology and Leprosy*
17. Tuberculosis and respiratory diseases*
18. Orthopedics*
19. Radio therapy*
20. Radio diagnosis*
21. Dentistry*

** For 100 admissions annually*

Requirement of Beds and Units for Clinical Departments in the Hospital

The number of beds required for 50 admissions annually is 350. They may be distributed for the purposes of clinical teaching as under:

MEDICINE AND ALLIED SPECILITIES:

		No. of Beds	No. of Units
1.	General Medicine	90	3
2.	Pediatrics	30	1
3.	Tuberculosis & Respiratory diseases	10	1
4.	Dermatology, Venereology & Leprosy	10	1
5.	Psychiatry	10	1
	Total	**150**	**7**

There shall be a well-equipped and updated intensive Care Unit (I.C.U.), Intensive Coronary Care Unit (I.C.C.U.), Intensive Care Pediatric beds and preferably Intensive care in Tuberculosis and Respiratory Disease.

SURGERY AND ALLIED SPECILITIES:

		No. of Beds	No. of Units
1.	General Surgery	90	3
2.	Orthopedics	30	1
3.	Ophthalmology	10	1
4.	Otorhinolaryngology	10	1
	Total	**140**	**6**

OBSETETRICS AND GYNAECOLOGY

		No. of Beds	No. of Units
1.	Obstetrics	30	1
2.	Gynecology	30	1
	Total	60	2

HR Requirement

	Prof	Asso. Prof	Asst. Prof	Tutors	Technicians	Sr. Resident	Jr. Resident
Anatomy	1	1	1	2	1		
Physiology	1	1	1	2	1		
Biochemistry	1	1	1	2	2		
Pathology	1	1	2	3	4		
Microbiology	1	1	1	2	7		
Pharmacology	1	1	1	2	1		
Forensic Medicine	1		1	1	2		

	Prof	Asso. Prof	Asst. Prof	Tutors	Technicians	Sr. Resident	Jr. Resident
Community Medicine	1	1	3	2	1		
General Medicine	1	2	3			5	9
T.B & Resp Dis	1	1				2	3
Skin, Venereology & Leprosy	1	1				2	3
Psychiatry	1	1			2	2	3
Pediatrics	1	1	2		1	3	6
Gen. Surgery	1	2	3		3	5	9
Orthopedics	1	1	2		1	3	6
E.N.T	1	1				2	3
Ophthalmology	1	1	1		1	2	3
Obs & Gynec	1	1	3	2	2	3	6
Radio Diagnosis	1	1			8	3	1
Radiotherapy	1	1	2	3	2		

ANNEXURE 8:
LABORATORY SERVICES TO BE RENDERED AT THE DISTRICT HOSPITAL

S.No	Specialty	Diagnostic Tests/Services
1.	**Clinical Pathology** a. Hematology	Haemoglobin estimation TLC, DLC Absolute Eosinophil count Reticulocyte count Platelet count Total RBC count E. S. R. Bleeding time Fibrinogen Degradation Product Clotting time Prothrombin time Peripheral Blood Smear Malaria/Filaria Parasite Packed Cell volume Blood grouping Rh typing Blood Cross matching ELISA for HIV, HCV, HBs Ag ELISA for TB APTT ANA/ANF, Rheumatoid Factor Immunoglobulin Profile (IgM, IgG, IgE, IgA)
	b. Urine Analysis	Urine for Albumin, Sugar, Deposits, bile salts, bile pigments, acetone, specific gravity, Reaction (pH)
	c. Stool Analysis	Stool for Ova cyst (Ph), Hanging drop for V. Cholera Occult blood Bacterial culture and sensitivity
	d. Semen Analysis	Morphology, count
	e. CSF Analysis	Analysis, Cell count etc.
2	**Pathology**	
	a. PAP smear	Cytology
	b. Sputum	Sputum cytology
	c. Histopathology	All types of specimens

S.No	Specialty	Diagnostic Tests/Services
	d. Haematology	Bone Marrow Aspiration Immuno-haematology Coagulation disorders Sickle cell anaemia Thalassemia
3	**Microbiology**	Smear for AFB, KLB (Diphtheria) Culture and sensitivity for blood, sputum, pus, urine etc. Bacteriological analysis of water by H2S based test Stool culture for V. Cholera and other bacterial entero-pathogens Supply of different media* for peripheral Laboratories Grams Stain for Throat swab, sputum etc.
4	**Serology**	RPR Card test for syphilis Pregnancy test (Urine gravindex) ELISA for Beta HCG Leptospirosis, Brucellosis WIDAL test Elisa test for HIV, HBsAg, HCV DCT/ICT with Titre RA factor
5	**Blood Bank**	Services as per norms for the blood bank including services for self component separation
6	**Biochemistry**	Blood Sugar Glucose Tolerance Test Glycosylated Hemoglobin Blood urea, blood cholesterol Serum bilirubin Icteric index Liver function tests Kidney function tests Lipid Profile Blood uric acid Serum calcium Serum Phosphorous Serum Magnesium CSF for protein, sugar Blood gas analysis Estimation of residual chlorine in water Thyroid T3 T4 TSH CPK Chloride (Desirable) Salt and Urine for Iodine (Desirable) Iodometry Titration
7	**Cardiac Investigations**	ECG Stress tests ECHO

S.No	Specialty	Diagnostic Tests/Services
8	**Ophthalmology**	Refraction by using Snellen's chart Retinoscopy Ophthalmoscopy
9	**ENT**	Audiometry Endoscopy for ENT
10	**Radiology**	X-ray for Chest, Skull, Spine, Abdomen, Bones Barium swallow, Barium meal, Barium enema, IVP MMR (chest) HSG Dental X-ray Ultrasonography, CT scan
11	**Endoscopy**	Oesophagus, Stomach Colonoscopy Bronchoscopy Arthroscopy Laparoscopy (Diagnostic) Colposcopy Hysteroscopy
12	**Respiratory**	Pulmonary function tests

ANNEXURE 9:
PIP GUIDE NOTE FOR DISTRICT HOSPITAL STRENGTHENING

Government of India through the NHM-State PIPs would support those District Hospitals that meet the defined criteria so that service delivery is strengthened and these institutions are able to initiate training in Nursing and Paramedical courses. The budget support for this proposal is capped at 5 crores. Additional funds up to 1 crore can be proposed for the DH depending upon the type of nursing/paramedical courses that are planned with DH as the training site. The budgetary requirements for the proposal can be indicated under FMR code B4.1.1. & B.30.

While submitting the proposal the following things are to be shared as an annexure:

1. The State has to provide the gap analysis regarding HR, Equipment and Infrastructure for each individual DH.
2. A base line of services being offered in different departments also needs to be shared.
3. The proposal should indicate how many specialties will be strengthened by the addition of specialists and GDMOs in each DH.
4. The proposal should also indicate the expected outcomes after the Strengthening exercise - in terms of service delivery, improvement in quality etc.

The comprehensive proposal with the total budgetary requirement needs to be shared in the annexure. However, in the final PIP budget sheet, the financial components needs to be reflected in the respective FMR codes as indicated below:

FMR Code

B.4.1.1	District Hospitals (As per the DH Strengthening Guidelines) – The infrastructure and equipment component should be reflected under this FMR code.
B.30	The HR component for DH strengthening i.e Specialists, MOs. SNs, LTs etc. (should be reflected under respective sub-categories of B.30, while mentioning in the remarks that it is for DH strengthening initiative.

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