



सत्यमेव जयते

**NITI Aayog**



**Guidelines for  
Public-Private Partnership  
for Non-communicable Diseases**



# FOREWORD

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India has achieved significant economic growth over the past decades, but the progress in health has not been commensurate. Although there has been major improvements in some health indicators such as life expectancy at birth, IMR, TFR and MMR, Non-Communicable Diseases (NCDs) have emerged as the leading cause of morbidity and mortality, contributing to 55 percent of the overall disease burden and more than 62 percent of deaths in the country. 5.8 million Indians die every year from heart and lung diseases, strokes, cancer, and diabetes, according to a report published by WHO in 2015. Therefore, tackling NCDs by all its aspects have become a priority, which includes detecting, screening, and treating these diseases, alongside providing access to palliative care for people in need.

The Ministry of Health and Family Welfare launched the National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS) in October 2010 to institutionalize the response to the disease burden posed by NCDs. NPCDCS seeks to reinforce state level efforts through the creation and integration of NCD Cells embedded within the National Health Mission paradigm. However, this has been unable to cater to the demand for medical care, several gaps remain in provisioning of hospitalized care for NCDs in particular due to budget limitations, dearth of infrastructure and human resources, particularly at the level of specialists.

The nature of India's mixed health system wherein private sector handles a dominant share of hospitalized cases (Rural: 58.1% and Urban : 68.0%), has a localized bias in the availability of private health care which is disproportionately skewed towards Tier-1 cities requiring patients to travel long distances for availing of these services whereas mofussil towns and rural areas are largely underserved. The National Health Policy of 2017 states "there are many critical gaps in public health services which would be filled by "strategic purchasing". Such strategic purchasing would play a stewardship role in directing private investment towards those areas and those services for which currently there are no providers or few providers" (Para 13.6.1).

This is all the more so that despite attempts to increase the Govt. health spending, over the years the Govt. health expenditure to total health expenditure has been in the range of 1-1.2%. Large number of district hospitals have not been able to provide services for NCDs, District Hospitals as an institution needs strengthening particularly to shift focus from reproductive and child health services and communicable diseases to provide services for NCDs by leveraging the private sector particularly in underserved areas.

As a beginning, Ministry of Health & Family Welfare has already rolled out the Pradhan Mantri National Dialysis Programme that envisages provision of dialysis services under National Health Mission in Public Private Partnership (PPP) mode. In the past it has been seen that if well-crafted Model Concessionaire Agreements (MCAs) are in place it is easier for States to use these templates and modify them appropriately to invite bidders.

In order to have a robust, scalable and a sustainable PPP model for providing services for NCDs from the private sector by the district hospitals, NITI Aayog, MoH&FW, and the World Bank Group acting as a technical partner have jointly worked to develop a comprehensive MCA for the provision of prevention and treatment services for non-communicable diseases (Cardiac Sciences, Oncology, and Pulmonary Sciences) at the district level, especially in tier 2 and 3 cities, This has been done after wider consultations with the States, the Industry and other relevant stakeholders.

I am delighted to present the draft MCA and Guidelines for the provision of prevention and treatment services for NCDs. These guidelines could be adapted and customized by each state to ultimately develop appropriate strategies in accordance with the requirements provided in these documents.

I will like to acknowledge the excellent technical support from the World Bank Group Team comprising of Ms. Sheena Chhabra, Task Team Leader and Senior Health Specialist; Dr. A. Venkat Raman, Senior PPP Consultant; Mr. Rajesh Jha, Senior PPP Consultant; Dr. Pranav Mohan, Investment Officer; Mr. Rahul Pandey, Operations Officer; Mr. Siddharth Rao, Legal Consultant; Ms. Manveen Kohli, Consultant; and the peer reviewers Dr. Rekha Menon, Practice Manager; Mr. Andreas Seiter, Global Lead, Private Sector; Mr. Jorge A. Coarasa, Senior Economist; Dr. Patrick Lumumba Owese, Lead Health Specialist; Dr. Ajay Tandon, Lead Economist; Mr. John D. Blomquist, Program, Leader; Dr. Owen Smith, Senior Economist, and Belinda Kamar. I will also like to acknowledge the industry participants and State Govts. for contributing in the consultative process and providing their valuable inputs. Special thanks to my colleagues Sh. C. K. Mishra, former Secretary, H&FW, Ms. Preeti Sudan, Secretary, H&FW, Sh. Manoj Jhalani, AS&MD, MoH&FW for providing their complete support in addition to their valuable inputs that have gone into finalizing the framework. I would also like to acknowledge Sh. Arvind Panagriya, former VC, NITI; Dr. Rajiv Kumar, VC, NITI, Dr. Vinod K Paul, Member, NITI for steering the project with full spirit. The entire project was executed by Health Division team headed by Sh. Alok Kumar, Adviser (Health), Sh. Sumant Narain, former Director, Dr. Dinesh Arora, former Director, Ms. Jyoti Khattar, Senior Research Officer (Health) and Dr. Rimy Khurana, Research Assistant (Health).



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## Abbreviations

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ALOS	Average Length of Stay
BPL	Below the Poverty Line
CCU	Cardiac Care Unit
CGHS	Central Government Health Scheme
CHC	Community Health Centre
CII	Confederation of Indian Industries
CMC	Contracts Management Cell
COPD	Chronic Obstructive Pulmonary Disease
CSSD	Central Sterile Supply Department
CVD	Cardio-Vascular Disease
EPC	Engineering, Procurement and Construction
GoI	Government of India
GRC	Grievance Redressal Cell
GSHIS	Government Sponsored Health Insurance Scheme
HMIS	Hospital Management Information System
ICU	Intensive Care Unit
IPD	In-patient Department
IRR	Internal Rate of Return
KPI	Key Performance Indicator
MoHFW	Ministry of Health and Family Welfare, Government of India
NA	Not Applicable
NABH	National Accreditation Board for Hospitals and Healthcare Providers
NCD	Non-Communicable Disease
NGRO	Nodal Grievance Redressal Officer
NHM	National Health Mission
NHPS	National Health Protection Scheme
NPCDCS	National Programme for Prevention and Control of Cancer, Diabetes, Cardio-Vascular Disease and Stroke
NPV	Net Present Value
NSSO	National Survey Sample Organization

OPD	Out Patient Department
PCC	Project Coordination Committee
PDT	Project Design Team
PHC	Primary Health Centre
PPP	Public Private Partnership
PSC	Project Steering Committee
QA	Quality Assurance
QAT	Quality Assurance Team
RSBY	Rashtriya Swasthya Bima Yojana
SDG	Sustainable Development Goal
SOP	Standard Operating Procedure
SPV	Special Purpose Vehicle
TOR	Terms of Reference
VGF	Viability Gap Funding

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# Introduction

# 1. Introduction

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There is a growing recognition that Universal Health Coverage (UHC) is the foundation for achieving the Sustainable Development Goal (SDG) 3 that intends to “ensure healthy lives and promote well-being for all at all ages”. One of the key targets of SDG 3 is one-third reduction in premature mortality from non-communicable diseases (NCDs) through prevention and treatment and promotion of mental health and well-being by 2030. Non-communicable diseases (NCDs) are emerging as the leading cause of morbidity and death for adults, contributing to 55 percent of all disease burden and more than 62 percent of deaths in the country (GBD 2016). The emergence of NCDs poses a renewed threat to the financial protection of the population, which is not only due to the high costs of treatment, but also compounded by the long duration of treatment for what are often chronic illnesses or long term disabilities.

The National Programme for Prevention and Control of Cancer, Diabetes, Cardio Vascular Disease and Stroke (NPCDCS), launched by the Ministry of Health and Family Welfare (MoHFW), Government of India (GoI) in October 2010, aims at institutionalizing the response to NCDs and supplementing state efforts through setting up of NCD Cells at the state level and integrating it within the National Health Mission (NHM) framework. The NPCDCS revolves around the entire continuum of care covering promotion, prevention and treatment. In recent years, services under the NPCDCS have gradually expanded. Attendance at NCD clinics witnessed a 118 percent year-on-year increase from 2014-15 (59.24 lakhs) to 2015-16 (129 lakhs) (MoHFW, 2016). As of December 2016, State NCD Cells have been reported to be set up in all 36 States and Union Territories, 356 districts in the country have established District NCD Cells. Besides, there are 1871 NCD clinics at the Community Health Centre (CHC) level and 103 Cardiac Care Units (CCU) have been set up<sup>1</sup>.

## 1.1 Challenges

Despite concerted efforts at the national and state levels over the last few years in establishing the NCD service delivery network, the system continues to remain constrained with several systemic issues. Constrained fiscal space within states to allocate increased resources for health care including NCDs, large infrastructure gaps especially in rural areas, and significant gaps in human resources especially at the level of specialists are some of the key challenges. Shortage of infrastructure and human resources for health has led to 72 percent of the population in rural areas and 79 percent in urban areas to seek out-patient services from the private sector; correspondingly 58 percent of people from rural areas and 68 percent in urban areas seek in-patient services in the private sector<sup>2</sup>. This has only exacerbated the economic distress among the poor households as majority of people are uninsured and pay out-of-pocket for the services at the private sector. The government needs to develop a multi-pronged response to augment not only its own capacity, but also mobilize the private health sector to respond to the rapidly growing challenge of NCDs, especially at the secondary levels. This will improve access to specialist care services within the district as well as decongest tertiary facilities at the state level.

## 1.2 Addressing the challenges

Continuing with its efforts to strengthen the national response to NCDs and addressing the gaps as

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<sup>1</sup> MoHFW. Initiatives and Achievements of Ministry of Health and Family Welfare: A Year End Review, 2016. <http://pib.nic.in/newsite/PrintRelease.aspx?relid=155854>

<sup>2</sup> NSSO. Key Indicators of Social Consumption in India - Health: NSS 71st Round, June 2014: Ministry of Statistics and Plan Implementation, Government of India.

referred above, GoI is providing technical and financial support to the states. It is also exploring options of leveraging the private health sector, to deploy resources and infuse greater efficiencies, in its response to the growing challenge of NCDs. Innovative options of engaging the private sector would enable improved access to NCD services in the government hospitals, delivered through the private provider. It will also augment the operational capacity of district level facilities to deliver NCD services in the medium and long term.

NITI Aayog, GoI's premier "think-tank" is mandated to provide the Centre and states with strategic and technical advice on evidence-based policy-making in various sectors including health. In line with this mandate, NITI Aayog is collaborating with the MoHFW, GoI and exploring opportunities to enhance private sector engagement through public-private partnerships (PPPs) for addressing the growing burden of NCDs in the country.

The World Bank has been appointed to provide technical assistance for identifying various PPP options for the delivery of NCD care services at the district hospitals. Based on extensive, multi-stakeholder consultations led by NITI Aayog and MoHFW, and based on a review of various PPP options, the World Bank has developed the Guidelines and a model concession agreement (MCA) for engaging the private sector under Co-location (Build, Operate and Transfer) Model of PPP.

The process followed for developing the framework is annexed (Annexe). The Government of India, through NITI Aayog and MoHFW, is providing the Guidelines for Co-location (Build, Operate & Transfer) Model of PPP for NCD care at district hospitals (hereinafter referred to as the "NCD Care Facility").

## **2. Purpose and structure of the guidelines**

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The purpose of this document is to provide an overview of the proposed model of PPP for a NCD care facility co-located at the district hospital in terms of its rationale, objectives, scope of services, intended beneficiaries, roles and responsibilities of partners, partnership structure, principles of financial model, governance and management structure, supervision and monitoring; including steps to be taken for implementing the guidelines for Co-location (BOT) Model of PPP for NCD care at district hospitals. The guidelines and model concession agreement is not intended to be prescriptive but only indicative in nature. States are required to use appropriate assumptions and adapt these guidelines and develop suitable strategies in accordance to the contextual requirements.

## **3. Rationale for adopting the PPP approach**

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Despite concerted efforts at the national and state levels over the last few years in establishing service delivery network for the provision of NCD services, the public health system continues to remain constrained due to inadequate funding, inability to attract and retain specialist human resources, infrastructure gaps, and weak management capacity. Overcoming these systemic deficiencies in the public health system requires long term perspective. But these constraints cannot continue to be the barriers for equitable access to quality care, and cause



for catastrophic consequences on the poor and the vulnerable sections of the population. It is therefore critical for the government to explore alternate strategies including opportunities to engage the private sector through public private partnership (PPP) in the provision of NCD services and ensure access to quality NCD services, within the government hospitals.

The PPP approach will address some of these challenges by:

- a. Making specialized NCD services available and accessible at the district level.
- b. Ensuring availability of specialists at the district level.
- c. Leveraging upon private sector management efficiencies in providing quality NCD care for a set of identified specialties.

## 4. Scope and objectives

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To improve access to quality screening, diagnostic, and treatment services related to cardiology, oncology and pulmonology, including managing related co-morbidities, in district hospitals through public private partnerships.

It is expected that the NCD care facility co-located at the district hospital will contribute towards:

- a. Improving access to the above mentioned NCD services at the government hospitals at the district level.
- b. Decongesting tertiary facilities at the state level that are stressed beyond capacity to meet the huge demand for NCD services.
- c. Reducing out-of-pocket expenditure as a guiding principle of the project for those accessing services at the NCD care facility in terms of cost of diagnosis, treatment, and care for NCD services<sup>3</sup>.

## 5. Potential PPP models for meeting objectives

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Engaging the private sector in providing NCD services, under public private partnerships, should be a well-considered policy decision. The state governments may decide to strengthen the capacity of its own health facilities - infrastructure, human resources and service delivery capacity. Alternatively, the government may, in select district hospitals, seek collaboration with the private sector for a short to medium term to leverage upon their strengths and expertise to overcome their own capacity constraints to deliver NCD services.

Decision of the state government for engaging the private sector for delivery of NCD services may depend up on several factors including: a) government's capacity to hire and retain specialists and other

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<sup>3</sup> It is recommended that state governments may explore appropriate methodological tools to estimate out-of-pocket expenditure for patients accessing the services at the district hospitals and drawing comparisons with those who seek services elsewhere.

healthcare providers in the district hospital; b) its ability to deploy adequate resources, infrastructure, and equipment within a short span of time to meet the growing demand for NCD services at the district facility; c) volume of patients seeking/ requiring NCD services in the district hospital and the capacity of the hospital to deliver such services; and d) availability of spare built up space that is sub-optimally utilized in the district hospital. If the state government is unable to deploy and retain human resources, equipment and infrastructure but receives a large number of patients requiring specialist care (in the shortlisted NCD specialties) and has spare built up space, it may consider PPP as an option.

If the state government decides to engage the private sector, under public private partnerships, a range of PPP models are available for delivering specialized NCD services from a government health facility (district hospital). Some of the possible PPP models for delivering hospital based clinical services are:

- a. Management contract
- b. Purchasing of services
- c. Build, operate and transfer model
- d. Co-location model in conjunction with built, operate and transfer approach

The following tables provide a summary of each model.

## a. Management Contract

State Government	Private Partner	Financing/ Payment	Time Duration
Either has ready to use built-up space or will build infrastructure through its own investment.	Invest in equipping the facility, hiring human resources and manage and operate the facility.	<ul style="list-style-type: none"> <li>- Government will reimburse fee per procedure as agreed in the contract for eligible beneficiaries.</li> <li>- Government may ensure minimum volumes or a fixed monthly availability payment to avoid recurring liabilities of the Private Partner.</li> </ul>	10-15 years
Conditions for adopting this approach: <ul style="list-style-type: none"> <li>• Adequate ready to use built-up space is available within the premise of the district hospital (estimated at 600 square feet per in-patient bed for a minimum of 50 beds).</li> <li>• State Government should have adequate budget for ensuring fixed monthly payments.</li> <li>• Government should be able to handover the physical space/ infrastructure within the agreed time frame.</li> </ul>			

## b. Purchasing of Services

State Government	Private Partner	Financing/ Payment	Time Duration
<ul style="list-style-type: none"> <li>- Identify medical and surgical procedures.</li> <li>- Empanel private providers against set eligibility criteria.</li> <li>- Determine the package rates.</li> </ul>	<ul style="list-style-type: none"> <li>- Provide services to eligible beneficiaries at their own facilities.</li> <li>- Get reimbursed by the government at agreed rates.</li> </ul>	<ul style="list-style-type: none"> <li>- Government will pay/ co-pay the premium.</li> <li>- Payment administration either through the insurance model or direct reimbursement by a special purpose vehicle or trust set up by the state government.</li> </ul>	1-3 years or more
Conditions for adopting this approach: <ul style="list-style-type: none"> <li>• Mechanism for registering eligible beneficiaries, empanelment of private providers, co-payment collection, referring patients to the empaneled facilities, systems for pre-authorization of procedures, reimbursement of claims from the private providers, and verification of claims should be in place.</li> <li>• Strong presence of private providers offering the identified services/ package at the geographical area where the government wants the services to be available to the beneficiaries.</li> <li>• State government should have technical and managerial capacity and systems for managing purchasing of services.</li> </ul>			

### c. Build, Operate and Transfer Model

State Government	Private Partner	Financing/ Payment	Time Duration
<ul style="list-style-type: none"> <li>- Offer vacant land to offset high project cost.</li> <li>- Take facility ownership at the end of concession period.</li> </ul>	<p>Will build, finance, operate, and manage the facility for the entire duration of the agreement.</p>	<ul style="list-style-type: none"> <li>- Private partner finances the project.</li> <li>- Government may offer viability gap funding; may reimburse part of capital costs and possibly recurrent costs.</li> <li>- Payment is made either in terms of annuity or fee for services (for target beneficiaries).</li> <li>- User fee revenue generation is allowed.</li> </ul>	<p>30 years +</p>
<p>Conditions for adopting this approach:</p> <ul style="list-style-type: none"> <li>• If the state government intends to set up a stand-alone multi-specialty hospital for NCDs.</li> <li>• Government land is available and is ready to lease out on a long-term basis.</li> <li>• Will require a minimum of 24-36 months as preparatory period for the inception of the Project itself, for civil construction, and equipping and commencing operations.</li> </ul>			

### d. Co-location Model (a hybrid of Built, Operate and Transfer and Management Contract)

State Government	Private Partner	Financing/ Payment	Time Duration
<p>Allow setting up of a separate facility through private investment within an existing government hospital premise.</p>	<p>Invest in repairing, building, upgrading, expanding and equipping the facility; hire human resources; and manage and operate the facility.</p>	<ul style="list-style-type: none"> <li>- Fee per procedure/package of services as determined through competitive bidding (at the time of selection of Private Partner) and reimbursed to the Private Partner on behalf of the referred beneficiaries.</li> <li>- User fee revenue generation is allowed.</li> </ul>	<p>Around 15 years with renewal option</p>
<p>Conditions for adopting this approach:</p> <ul style="list-style-type: none"> <li>• Adequate built-up space is available within the premises of the district hospital (estimated at 600 square feet per in-patient bed).</li> <li>• The State Government does not intend to enter into any fixed or periodic contingent liability for payments; intends to share demand risk with Private Partner; and pays only for the services sought/ rendered for those patients referred by the Government.</li> <li>• The Project inception period could be from 18 to 24 months depending on the extent of refurbishment or civil works required for setting up the facility in the existing district hospital.</li> </ul>			

Appropriateness of the above mentioned models is contingent on several factors, including but not limited to the following:

- Existence of a state health insurance scheme or program that covers or proposes to cover NCD services, including the scope of services mentioned in this NCD care facility Guidelines.
- Availability of adequate built-up space and infrastructure including contiguous vacant space, if required, giving an opportunity to develop specialty ward/ unit either by the state government on its own or in collaboration with the Private Partner.
- Presence of private healthcare providers and the range of services they offer in the geographical area where the state government intends to collaborate.

- d. Duration for which the state government intends to enter into a collaboration with the Private Partner: short term (1-3 years), medium term (10-15 years), long term (15-30 years).
- e. How quickly the state government would like to offer NCD services to the beneficiary population in the area; and how soon the state government is in a position to mobilize and deploy required resources to provide NCD services on its own in the district hospital.

The state government should take a considered decision on whether private sector engagement for provision of NCD services is appropriate for expanding NCD services at the district hospital and may undertake a feasibility study to examine options before choosing the most suitable public private partnership option.

The focus of this document is to provide guidelines pertaining to the co-location model for the proposed PPP for NCD services and provides a detailed description of the co-location model. The following section will enable a clearer understanding of the co-location model of PPP for provision of select NCD services.

## 6. Co-location model (in BOT mode)

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Under this model, the NCD care facility will be co-located within the premises of an existing District Hospital. It is recommended that the State Government may select the district hospital(s) that can offer adequate spare physical space within the structure of the hospital for establishing the NCD care facility (hereinafter referred to as the 'Assigned District Hospital'). However, if the built-up space is inadequate, additional vacant land contiguous to the existing structure of the district hospital may have to be allocated for the NCD care facility. This will imply new construction (building) in addition to upgrading the space allocated in the existing hospital premises. Refurbishing the allocated structure or additional construction will be the responsibility of the Private Partner with its own investments. The Private Partner will manage and operate the NCD care facility and will ultimately transfer the facility to the State Government at the end of the concession period. Hence this model is called a "co-location model" in Build, Operate and Transfer (BOT) mode.

### 6.1 Salient features of the model

- a. Depending on the on local epidemiological considerations, access and availability of services in the catchment area, estimated patient load, and spare physical infrastructure (i.e. built-up space) available in the Assigned District Hospital, the State Government may set up a minimum of 50-bed<sup>4</sup> NCD care facility. This can be increased subsequently depending upon the expansion capacity of the district hospital.
- b. All services in the NCD care facility will be offered by a single entity, be it a trust, company, consortium etc., under PPP arrangement. All categories including trusts, companies, etc. to be allowed to bid for the project and no restrictions may be imposed on any of the above categories.
- c. The Private Partner will invest in upgrading/ building, equipping the facility, deploying human resources; and will be responsible for operational management and service delivery.
- d. It is envisaged that the State Government will:
  - (i) Provide the required physical space (built-up area and/ or vacant land if the built-up space is

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<sup>4</sup> Less than 50 beds for three NCD specialties may not be financially feasible; and if the need is less than this, other PPP options should be considered.

- insufficient within the hospital premises) and other infrastructure in as-is-where-is condition.
- (ii) Provide Viability Gap Funding (VGF), if required, on milestone basis and in accordance with the DEA, Gol guidelines (this will be the bid parameter).
  - (iii) Establish referral linkages with sub-district public health facilities, NCD clinics and screening services, to refer patients to the NCD care facility, to the extent possible.
  - (iv) Ensure smooth functioning, overall coordination, monitoring and oversight of quality of services, and will assist in payment administration.
  - (v) Provide support facilities and hospital amenities (as agreed).
- e. It is suggested that the tariff structure for the services offered under this NCD care facility may be linked to the existing state/ central government health insurance scheme, provided the scheme covers the entire range of procedures envisaged under this PPP NCD care facility. Alternatively, states can opt for the tariffs as per the proposed National Health Protection Scheme of the Government of India as and when it is launched. In the absence of both above, the State Governments may consider benchmarking the tariff to the Central Government Health Scheme (CGHS) package rates applicable for that city for benchmarking purposes. In case a Government Health Insurance Scheme is introduced in a State after adoption of CGHS tariff, tariff rates should be revised to the newly introduced scheme in the state, on the same date or within a timeframe decided by the state.

Table 1 provides a snapshot of the salient features of the model.

Table 1: Salient Features of the Co-location Model

No.	Features	Details	
1	PPP Model	Co-location Model (Build, Operate and Transfer) in the Assigned District Hospital.	
2	Duration	Around 15 years. This can be more specific based on detailed financial analysis of the NCD care facility, specific to each Assigned District Hospital and based on the results of breakeven analysis and sensitivity analysis. Such analysis will be part of the financial model to be developed by State Governments prior to the launch of the NCD care facility. Duration can be reviewed/ renewed based on terms and conditions set out in the agreement.	
3	NCD Services	Cardiology, oncology and pulmonology including managing associated co-morbidities	
4	Beneficiaries and revenue sources (Patient categories)	a) Government referred patients	Government reimburses the provider on behalf of the users.
		b) Government insurance scheme patients	Insurer reimburses the provider for service; Government pays the premium.
		c) Self-paying patients	Pay directly to the provider at the same rate as the Government referred patient.
<b>Infrastructure and Facilities</b>			
5	Space Required	Approximately 400 square feet per in-patient bed.	
6	Greenfield or Brownfield	Mainly Brownfield: The proposed NCD care facility will be co-located in an existing District Hospital. However, there is a possibility for additional construction if spare built-up space is inadequate.	
7	Facility Size	Minimum 50 beds <sup>5</sup>	

<sup>5</sup> Less than 50 beds for three NCD specialties may not be financially feasible; and if the need is less than this, other PPP options may be considered.

No.	Features	Details
8	OPD Facility	Yes: (6 days per week or as per the District Hospital schedule/ timings)
9	IPD Facility	Yes, minimum 35 beds (70 percent)
10	ICU	Yes, minimum 15 beds (30 percent)
11	Operation Theatre	2 OTs
12	Cath Lab	1 Cath Lab
13	Laboratory Services	Yes
14	Radiology Services	Yes
15	Ambulance Services	Yes
16	Pharmacy	Yes, only for those drugs not listed under State Essential List
17	Shared Services with Assigned District Hospital	Yes, only non-critical support services (hospital security <sup>6</sup> , mortuary, parking and ambulances when Private Partner's ambulances are on call, water treatment plant and sewerage treatment plant)
<b>Financials</b>		
18	Capital Expense	Private Partner responsible.
19	Viability Gap Funding	Yes, if required, will need to be provided by the State Government-may be as per DEA, GoI guidelines.
20	Tariff Options	Linked to or benchmarked with any of the following: a) existing central/ state government health insurance scheme provided such a scheme covers the entire range of procedures envisaged under this NCD Care Facility; or b) the proposed National Health Protection Scheme of the Government of India as and when it is launched; or c) In the absence of both above, benchmarking with the Central Government Health Scheme (CGHS) package rates as applicable for that city.
		In case a Government Health Insurance Scheme is introduced in a State after adoption of CGHS tariff, tariff rates should be revised to the newly introduced scheme in the state, on the same date or within a timeframe decided by the State.
		Uniform tariff for all patients.
		Tariff revision: Yes, as per the revision in package rates of the relevant scheme adopted insurance scheme/ CGHS (escalation may also be linked, if the State desires, with results against key performance indicators).
21	Timeline/ Milestones	NCD care facility inception and development: 12-24 months from the date of signing the\ Concession Agreement. Commencement of service delivery: From the date of completion of NCD care facility development.
<b>Selecting the Private Partner</b>		
22	Bid Parameter	Percentage of total capital cost sought as VGF.

## 6.2 Beneficiaries

- a. Services under the NCD care facility will be available and accessible to all patients who want to access these services from the facility without any discrimination, based on their socio-economic status, HIV status, etc.
- b. Exclusively from the point of view of the revenue sources and payment administration, beneficiaries will be classified into three categories. These categories are explained in Table 2 below.

<sup>6</sup> On payment basis, if required



Table 2: Beneficiary Types and Source of Provider Payment

Beneficiary category	Description	Who pays for services at the NCD PPP facility?
<b>Government Referred Patients</b>	Patients who are identified, authorized, and referred by the State Government to receive cashless services under this NCD care facility and on whose behalf the State Government will reimburse the Private Partner at the rates fixed in Sr. No 20, section 6.1 above. Prior authorization for such patients will be done by the designated government official(s) in the District Hospital.	State Government
<b>Government Insurance Scheme Patients</b>	Patients who are enrolled by the State Government under a relevant central or state government health insurance scheme where the government is paying the premium. The State Government will empanel the NCD care facility for insured patients. The State Government will ensure uniform tariffs between the NCD care facility and the insurance scheme.	Insurance Company or the Trust designated for the GSHIS
<b>Self-paying Patients</b>	All patients, who do not fall in the above two categories, can receive services at the NCD care facility against direct payments. All such patients will be referred to as 'self-paying patients'. They will be charged at the same tariff as the above two categories.	Direct User Fee Payment

- c. 'Government referred patients' can be citizen of India irrespective of the district/ State where the PPP NCD care facility is set up and no patient would be refused the services. The State Government would need to develop patient referral and authorization<sup>7</sup> processes for all beneficiaries based on existing mechanisms or propose new mechanisms, if required.
- d. In order to ensure equity in access, the NCD care facility will have a uniform tariff structure across all the category of beneficiaries/patients, thereby ensuring that the same quality of clinical and non-clinical services is provided irrespective of the beneficiary category. Differential tariffs can lead to adverse selection or preference of patients or delivering differential quality of services to different patients. Uniform tariff is also easy to administer.
- e. For all government insured patients, the Private Partner will abide by the pre-authorization guidelines and adherence to third party administrator (TPA) verification protocols put in place by the State Government for such insurance schemes.
- f. The State Government will have the right to refer as many patients, keeping in view the capacity in the NCD care facility. However, the State Government will not commit to any 'volume guarantee' to the Private Partner.

## 6.3 Scope of services to be offered

### 6.3.1 Service delivery continuum

<sup>7</sup> Through this process the State Government will issue advance authorization to patients for seeking services at the NCD Care Facility for whom the State Government will reimburse the Private Partner.



- a. WHO has defined health services as a set of interventions aimed at contributing to improved health across the continuum of care, including health promotion, disease prevention, diagnosis, treatment, rehabilitation, and palliation. The NPCDCS service package at the sub-center, CHC and district levels is expected to follow this continuum.
- b. Services under the proposed NCD care facility are designed in a manner that fits within this continuum of care and augments the NCD treatment response capacity of the Assigned District Hospital. Table 3 indicates services under NPCDCS and how the services under the NCD care facility, focusing primarily on treatment, are embedded within this continuum.
- c. State Governments have established NCD clinics at the CHC level for NCD screening and related services. In due course, it will also scale up population based screening programs. While the state government will continue to play a key role in screening, health promotion and palliative services, the Private Partner under the NCD care facility shall deliver comprehensive services focusing on treatment, prevention and health promotion services at the NCD care facility in the District Hospital.

If the State Government desires and deems necessary, it may collaborate with the Private Partner for screening, diagnosis, prevention, and health promotion activities even at the CHC/ PHC level health facilities. Such arrangement, however, will require a more detailed strategy. The following table (Table 3) provides a summary of care continuum and responsibilities of the state government and the Private Partner. Further details related to the linkages and referrals from sub-district level health facilities to the NCD care facility in the Assigned District Hospital are provided in Section 6.4.

Table 3: NCD Services: Care Continuum and Responsibilities under the NCD Care Facility and under NPCDCS

Scope of Care Continuum	Level of Service Delivery <sup>8</sup>		
	Sub-center	PHC/ CHC	District Hospital
Prevention and Promotion	Government	Government	Private Partner & Government
Screening	Government	Government	Private Partner & Government
Laboratory Investigations		Government	Private Partner
Advanced Laboratory Investigations			Private Partner
Diagnosis & Management		Government	Private Partner
Surgical/ Invasive Procedures			Private Partner
Follow-ups		Government	Private Partner
Rehabilitative Care		Government	Private Partner
Palliative Care (hospital-based)		Government	Private Partner
Palliative Care (home-based)		Government	Government <sup>9</sup>
Referrals to Higher Facilities	Government	Government	Government & Private Partner

<sup>8</sup> Grey cells indicate services not planned at that level under the NPCDCS.

<sup>9</sup> The State Government may engage the Private Partner to train staff at CHCs and PHCs on home based palliative care. These trained staff can follow up with the discharged patients under the guidance of the treating doctor at the NCD care facility.

- d. As mentioned in the objectives, the NCD care facility will focus on services related to cardiology, oncology and pulmonology within the Assigned District Hospital. Besides, services related to management of other co-morbidities associated with the three identified specialties can also be provided.
- e. Since the intent of the PPP is to leverage the technical and managerial capacity of the private healthcare providers, the scope of services for the Private Partner is focused and limited to services within the NCD care facility at the Assigned District Hospital.

### 6.3.2 Services to be offered under NCD care facility

The scope of services will include NCD services through the continuum of care from screening to treatment. At a minimum, the following services will be offered<sup>10</sup>:

- a. Clinical and clinical support services related to oncology, cardiology and pulmonology. Clinical services at the minimum will include:
  - (i) General and specialist Out-Patient consultation (OPD) at least as per the OPD timings of the Assigned District Hospital. In addition, the Private Partner may, depending on the need and demand, operate OPD services even outside such hours.
  - (ii) In-Patient admissions (IPD).
  - (iii) Emergency management services as well as surgical and non-surgical services related to the specialties mentioned above; round the clock for all 365 days in a year.
  - (iv) Stabilization of patients with co-morbidities associated with the three specialties to the extent possible within the NCD care facility; referrals for advanced clinical care.
  - (v) Critical Care Unit, Intensive Care Unit (ICU), emergency beds, pharmacy<sup>11</sup>, pathology/ laboratory services, and radiology.
  - (vi) Apart from the above services, the facility will also undertake all responsibilities of a typical NCD Clinic in the Assigned District Hospital, as per the NPCDCS guidelines.
- b. Associated non-clinical support services including but not limited to (exclusive to the NCD care facility):
  - (i) At least one dedicated Advanced Life Support (ALS) and one dedicated Basic Life Support (BLS) Ambulance on call around the clock for all 365 days a year.
  - (ii) Pharmacy within the NCD care facility functional around the clock for all 365 days a year.
  - (iii) Access to blood bank.
  - (iv) Kitchen (food and beverage) services.
  - (v) Housekeeping and security services.
  - (vi) Laundry services.

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<sup>10</sup> Minimum services to be offered under the District Hospital was determined through a series of intensive consultations over a period of three months with two Working Groups constituted by NITI Aayog: one on clinical services and the other on diagnostic services. The working groups consisted of members from private healthcare providers, specialists from government hospitals, representatives of state governments, MoHFW, and NGOs working in specialist clinical area. Four regional workshops were organized by the Confederation of Indian Industries (CII) with representatives of the MoHFW, select state governments, local private providers and district hospitals. While determining the list of minimum services, apart from the need for such services, feasibility of offering these services at the District Hospital level were also taken into consideration (e.g. availability of healthcare providers especially specialists, infrastructure and equipment requirements, patient load, etc.).

<sup>11</sup> Only for those drugs which are not covered under List of Essential Medicines, preferably generics

- (vii) Central Sterile Supply Department (CSSD).
  - (viii) Infection control system and utilities management and all such services required for functioning of the facility.
  - (ix) IT support and office management.
- c. Minimum package of services for the three specializations under the NCD care facility shall be:

Table 4: NCD Services: Minimum Package of Services under the NCD Care Facility

Specialization	Minimum Services
<b>Cardiology</b>	Emergency management, up to coronary angiography and angioplasty
<b>Oncology</b>	Diagnostics Emergency management Surgical (up to laparoscopy surgery, palliative surgery) -Optional Medical (chemotherapy, hormone therapy and growth inhibitors)
<b>Pulmonology</b>	Emergency management and referrals, up to interstitial lung disease management, Chronic Obstructive Pulmonary Disease (COPD) and bronchial asthma management

- d. For a detailed, indicative list of screening, diagnostic and treatment services for all the three specialties, refer to Annex 1. The State Government may add to this list of services depending on the local epidemiological considerations and availability of services; and develop a comprehensive list of service packages under the identified specialties to ensure that the NCD care facility is responsive to the local needs.
  - e. The State Government may consider including related palliative and rehabilitative services.
  - f. The services proposed under the NCD care facility is (and should be) aligned to support the NPCDCS program at the District Hospital level. Refer to Annex 2.
- 6.3.3 Shared services at the assigned district hospital
- a. It is recommended that during the PPP design phase and/ or prior to bidding, the State Government should identify and develop a list of services that could be shared with the NCD care facility, and, identify those services that may possibly overlap between the NCD care facility and the Assigned District Hospital. This is possible only on the basis of a detailed facility survey of the Assigned District Hospital. A detailed plan for sharing services should be developed and clearly specified by the State Government at the time of the bid which would serve the purpose of providing clarity on the services that will be shared and develop Standard Operating Procedure (SOP) for accessing the support services and use of shared services. This would avoid possible conflicts for shared services.
  - b. One or more of the following support services may be shared with the Assigned District Hospital in which it is co-located. The shared services may include, but not be limited to, the following:

- (i) Ambulance services (this is additional to the dedicated Advanced Life Support (ALS) and Basic Life Support (BLS) Ambulance and only if Private Partner's ambulance is unavailable)
  - (ii) Mortuary services
  - (iii) Parking facilities
  - (iv) Sanctioned electrical load
  - (v) Water supply
  - (vi) Effluent Treatment Plant
  - (vii) Water Treatment Plant
- c. Wherever PPP arrangements already exist in Assigned District Hospitals, structuring of the new PPP Project and the Concession Agreement should take into account the services already offered through existing PPP arrangements in such hospitals, undertake due diligence on scope for additional services and, develop hospital specific strategies.

## **6.4 Integration with the public health system: upward and downward linkages**

- a. To ensure that the NCD care facility is closely integrated with the public health system and is optimally utilized to provide continuum of care, the State Government will need to establish strong referral linkages with the public health facilities below the district hospital such as the CHCs, PHCs, and the sub-centers (i.e. downward linkages) as well as with higher level health facilities such as the government tertiary hospitals, government medical colleges, and private health facilities (i.e. upward linkages) that are empaneled/ will be empaneled for providing treatment under any government health insurance scheme (national or state) or other relevant national/ state programs including the NPCDCS.
- b. Through downward linkages, the State Government would be able to ensure optimal continuum of care (prevention, promotion, screening, diagnosis, and treatment) for populations requiring NCD services. With downward linkages, the NCD care facility is likely to be fully or optimally utilized, making it more efficient, and ensuring availability of continuum of care for the local population in the catchment area.
- c. It is envisaged that the State Government will be responsible, either on its own under the NPCDCS program or with the help of the Private Partner, for all activities related to community mobilization, health promotion, screening, and early detection of NCDs, at the level of sub-health centers, PHCs and the CHCs including the NCD clinics at the CHCs. Based on the screening and early detection (at the Sub Center, PHCs and CHCs), patients needing diagnostics and treatment will be referred to the NCD care facility in the Assigned District Hospital. Patient referrals also include referrals from within the Assigned District Hospitals (OPD or IPD or the Emergency Department) to the NCD care facility or referrals from district hospitals/ public health facilities of other districts.
- d. It is recommended that for ensuring continuum of care, the State Government should develop a referral protocol including appropriate forms and formats, delineating how referrals from government health facilities (PHCs, CHCs, and DH) will be made to the NCD care facility. Some of the key questions that need to be answered while developing the referral protocol include, but are not limited to:
  - (i) Can a sub-center or PHC in District A refer patients directly to the NCD care facility in District A bypassing the government run NCD clinics at the CHC level?

- (ii) Can a NCD Clinic at the CHC level in District B of State X directly refer a patient to the NCD care facility in District A bypassing the CHC or District level NCD Clinics in District B? If yes, what will be the point of first contact for such patients in the Assigned District Hospital in District A? How would the Medical Superintendent of the Assigned District Hospital determine the eligibility of the patient to be treated as a government patient at that district NCD care facility?
  - (iii) How would the Medical Superintendent of the Assigned District Hospital in District A determine the eligibility of the patient to be a government referred patient if such a patient comes from any location outside the state, even if the patient holds registration and other clinical documents from public health facilities from the neighboring state or other states? What are the procedures that such a patient will have to follow?
  - (iv) How the referral authorization could be validated and by whom, for the purpose of submission of payment claims?
  - (v) How should an insured patient be referred or treated, if the insurance cover is inadequate or exhausted?
- e. Upward linkages with higher level facilities for treatment of conditions not covered under the NCD care facility and/ or complicated cases which need further specialized care beyond the scope of the facility. Such referral facilities will be either to government tertiary hospitals, or government medical colleges or private health facilities that are empaneled by the State Government for providing treatment under any government reimbursement health schemes. Appropriate protocols for upward referrals including the order of facilities for referrals, should be prepared at the time of commencement of the PPP.
- (i) In the first instance, all referrals to higher facilities for complicated cases that cannot be managed at the NCD care facility or not covered under the scope of services under the NCD care facility shall be to a government hospital or a government medical college or to a private facility empaneled by the State Government under any health insurance scheme (preferably in the order indicated).
  - (ii) In all such cases, the Private Partner will forward the case for decision on upward referral to a Medical Referral Board. For this purpose, it is recommended that the State Government should constitute a Medical Referral Board at the Assigned District Hospital consisting of clinical specialists.
  - (iii) The Medical Superintendent/ Head of the Assigned District Hospital may develop a mechanism to help such patients by linking them with any of the existing government schemes and/ or dedicated funds such as the Chief Minister Wellness Fund/ illness assistance fund, etc.
  - (iv) The Private Partner will be responsible for ensuring timely transportation of all such referral cases.

## 6.5 Roles and responsibilities of the partners

### 6.5.1 Roles and responsibilities of the Private Partner

During site, up-gradation and NCD care facility inception

- a. Undertake facility survey of the Assigned District Hospital, prepare detailed design, and plan for up-gradation and expansion of the facility, including renovation and new construction, if required. The plan should include, but not be limited to:
  - (i) Architectural drawings including civil, electrical and plumbing specifications and an implementation schedule.
  - (ii) Bio-medical equipment plan along with load specifications including details of procurement,

- installation and testing, maintenance, downtime of equipment, and alternate plan for service delivery during downtime to ensure continuity of services to patients at no additional cost.
- (iii) Plan for supervision, quality control, and inspection of works during up-gradation/ new construction.
  - (iv) Plan for securing the perimeters (ring-fencing and protection façade) of the proposed NCD care facility at the Assigned District Hospital, prepared in consultation with the Project Coordination Committee to ensure non-disruption to the normal delivery of services being offered at the Assigned District Hospital during the construction/ renovation work and also prevent spillage of debris from the renovation site to the main hospital.
  - (v) Detailed human resources deployment plan, including composition and number of medical, para medical, administrative, and support staff that the Private Partner proposes to deploy.
- b. Refurbish/ upgrade the allocated space as per approved plan and commission the NCD care facility within the prescribed time for start of service delivery operations.
  - c. Set up all clinical and clinical support services as per Scope of Work in Annex 1.
  - d. Set up non-clinical support services as required including pharmacy (only for those drugs which are not covered under List of Essential Medicines, preferably generics) bio-medical and non-medical waste management, sewage/ effluent treatment facility, firefighting system, air conditioning, plumbing, medical gas pipeline, security and all other support services as required.
  - e. Recruit and orient all human resources<sup>12</sup> within the agreed time frame, but before the commencement of services. The indicative composition of human resources required for the NCD care facility is provided in Annex 3. It is expected that the Private Partner will:
    - (i) Ensure that all staff have the minimum qualifications as per standard industry practices and possess relevant skills and experience.
    - (ii) Make provisions of in-house training and continued medical education to ensure that staff are well trained, skilled and regularly updated to handle the assigned responsibilities.
  - f. Establish referral linkages with government health facilities at the sub-district levels within the catchment area (downward linkages) and with tertiary facilities (upward linkages) within and/or outside the state for referral of cases for services not offered under the NCD care facility, in consultation with appropriate district level health officials. The private partner would be responsible for upward linkage of the critical patients only. During NCD care facility operations and management
  - g. Be responsible for entire operations and management of the NCD care facility including monitoring and quality control of all services rendered under the NCD care facility.
  - h. Be responsible for the delivery of specified NCD clinical services, and management of non-clinical support services.
  - i. Be responsible for maintenance of infrastructure and equipment to ensure continuity of high quality

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<sup>12</sup> The State Government shall, at the time of finalizing the agreement with the Private Partner, include a list of minimum human resource requirements that the Private Partner will be required to deploy. The minimum requirements for each category of human resources will be determined based on the feasibility study of the District Hospital and estimated volume of OPD and IPD cases for each of the NCD specialties included under the NCD care facility. The number and composition of the human resources required in the NCD care facility may change over the years, depending on the volume of patients. Government employees who may wish to be employed with the Private Partner for rendering services under the NCD care facility shall abide by the existing civil service rules (with respect to leave, deputation, in-lien, etc.) for employment of government staff in the private sector as applicable in that state.



services. This may include replacement of medical and non-medical equipment as and when required to ensure that quality of services is constantly maintained.

- j. Maintain medical records with utmost confidentiality as per the applicable laws and Electronic Health Record Standard 2016 of the MoHFW, Gov.
- k. Design and maintain a Management Information System for the NCD care facility that is compatible with the hospital management information system and submit periodic reports to the State Government as per the agreement.
- l. Ensure around the clock security of the NCD care facility; ensure fire-fighting and emergency evacuation of patients including operational readiness of such systems; maintain cleanliness and hygiene of the NCD care facility.
- m. Undertake community mobilization and other innovative outreach activities to generate awareness and demand for services beyond the government referred/ government insured patients.
- n. The Private Partner can be allowed to set up or sub-contract other commercial services that add value to beneficiaries in the NCD care facility (such as cafeteria, ATM etc.) subject to explicit prior approval of the State Government.
- o. Ensure appropriate insurance cover (against theft, fire, and other damages) for the entire NCD care facility, including equipment and other assets.

#### **6.5.2 Roles and responsibilities of the State Government During site up-gradation and NCD care facility inception**

- a. Review and approve up-gradation plan submitted by the Private Partner as listed in Section 6.5.1.(a).
- b. Identify and allocate built-up space and/ or contiguous vacant land (if required) to the Private Partner as per the renovation/ up-gradation plan within the agreed time frame. The allotted space should be without any access barriers, free of all encumbrances, and without any movable assets of the government.
- c. Provide access to amenities and support services at the Assigned District Hospital as per the agreed plan referred in Section 6.3.3 'Shared Services with the District Hospital'.
- d. Fix eligibility criteria for the patients who would be referred by the State Government for cashless services under the NCD care facility and protocol / system for pre-authorization of such patients.
- e. Develop and implement referral protocols and facilitate referral linkages with sub-district level facilities (downward linkages) and with tertiary level facilities for advanced care (upward linkages) as described in Section 6.4. Ensure that government health facilities at sub-district levels refer NCD care patients to the NCD care facility to ensure optimal utilization of services.
- f. Set up the governance and management structures, such as monitoring/ coordination committees at different levels (facility level to state level) for smooth functioning of the NCD care facility and for timely redressal of grievances, resolving conflicts or disputes.
- g. Provide Viability Gap Funding in the form of capital grant as determined through the bidding process, if required.
- h. Enter into an Escrow Agreement between the State Government and the Private Partner.  
During NCD care facility operations and management
- i. Undertake verification of all reimbursement claims made by the Private Partner within the agreed time frame.

- j. Adhere to agreed time schedule for reimbursement of payments on behalf of government referred patients treated at the NCD care facility.
- k. Ensure adherence to the terms of the Escrow Agreement that will be signed between the State Government and the Private Partner for managing the Escrow Account.
- l. Regular review of Escrow account and timely allocation/ release of adequate funds as and when needed.
- m. Ensure smooth coordination between the Assigned District Hospital authorities, Private Partner and other entities such as the District NCD Cell, State NCD Cell, and the Contract Management Cell.
- n. Overall NCD care facility monitoring, quality control, periodic clinical and medical audits, including prescription audit, verification of medical records, etc. Ensure compliance to clinical quality control including external audit.

## **6.6 Duration of the agreement, renewal, and exit**

- a. The State Government may determine the exact Concession period of the PPP NCD care facility after undertaking the feasibility study, and based on due diligence and financial modelling appropriate to the District Hospital where it intends to set up the NCD care facility. The duration of the Concession Period could be between 10 and 15 years.
- b. For determining the Concession Period, the State Government should bear in mind that the duration of the Concession needs to be commensurate with the investments required for the NCD care facility and the financial viability of any such investments. This should therefore be determined based on a detailed financial modelling and due diligence. Some of the parameters that will form the basis of arriving at the concession period will include: projected patient volumes by specialty and services, capital investment, VGF required, tariff level, escalation in tariff, extent of readily available built-up space versus new construction required for the NCD care facility (brownfield versus greenfield), debt equity ratio, cost of capital, and many other factors. For details refer to Section 6.7.2.
- c. Subject to satisfactory performance against the KPIs and other indicators, the State Government will have the option to renew the concession period of the Private Partner. The terms and duration of renewal will be specified in the Bid Document.
- d. Similarly, based on a transparent and periodic review of the functioning of the NCD care facility and the achievement against the KPIs, on account of unsatisfactory performance, the State Government will also have the option to terminate the agreement prior to the Concession Period. The terms and conditions for termination will be specified in the Bid document and the Concession Agreement.

## **6.7 Financial structure of the PPP**

### **6.7.1 Principles**

- a. The NCD care facility will maintain uniform tariff for all patients. Although differential tariffs (higher tariffs for self-paying patients) may help cross subsidize the poor patients referred by the government and allow for greater revenue receipts for the private sector, it may lead to differential treatment of self-paying patients and government referred patients. Uniform tariff would promote equity, uniform quality, facilitate easy monitoring and supervision, and simplify operational management of the NCD care facility. The NCD care facility also does not envisage quota of reserved beds for any patient category. Quota system often leads to discrimination and denial of services and in the absence of



closer supervision creates disputes. Therefore, the NCD care facility does not envisage differential tariffs or quota system for any category of patients to ensure that all the patients receive the same standards of clinical and non-clinical care.

- b. The State Government can refer as many patients as it can up to the capacity available in the NCD care facility.
- c. The State Government will reimburse the Private Partner for the patients referred/ approved by designated authority in the Assigned District Hospital.
- d. For patients under the government health insurance, the Private Partner will be reimbursed as per the insurance package rates and as per the reimbursement mechanisms under such insurance programs. The State Government may develop and issue appropriate guidelines for handling all such patients who have exhausted their risk cover under a central / state government health insurance program or their available sum insured is not adequate to cover the costs of further treatment.

#### **6.7.2 Guidance for developing the financial model**

- a. A detailed financial model is important for arriving at some of the key decisions related to the PPP for the NCD care facility like optimal concession period and the quantum of capital support that may be needed from the State Government to make the NCD care facility viable at different tariff levels.
- b. State Governments need to bear in mind that the detailed financial model will be specific to the district hospital selected for PPP and depending on available capacity can be developed either in-house or with the support of Transaction Advisors, if hired, for structuring the PPP for the NCD care facility.
- c. For developing the financial model, the State Government will need to arrive at a set of assumptions (indicative list provided in Annex 4) which will be used to generate the following<sup>13</sup>:
  - (i) Area schedule: this will include detailed calculations of the available space, area allotted for upgradation, area for new construction if any, estimation of areas for engineering, procurement and construction (EPC) and other related aspects.
  - (ii) Estimation of the EPC costs and its detailed scheduling over time (preferably on a monthly or a quarterly basis).
  - (iii) Medical and non-medical equipment schedule including costs.
  - (iv) Estimation of the total NCD care facility cost including interest during construction.
  - (v) Detailed schedule of capital costs indicating capital outflow, preferably monthly during the NCD care facility development phase.
  - (vi) Detailed NCD care facility financing schedule indicating fund sources.
  - (vii) Debt repayment schedule.
  - (viii) Asset schedule including depreciation.
  - (ix) Operational revenue schedule.
  - (x) Operational expenditure schedule.
  - (xi) Equity schedule including opening balances, additional infusion of funds during the year and closing balance of equity capital. This will also include the reserves and surplus schedule.

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<sup>13</sup> This is an illustrative list.

- (xii) Projected profit and loss statements.
  - (xiii) Projected balance sheets.
  - (xiv) Projected cash flow statements.
  - (xv) NCD care facility's net operating income statements.
  - (xvi) Valuation of the NCD care facility indicating Project Internal Rate of Return (IRR), Equity IRR and Net Present Value (NPV) of the NCD care facility.
- d. These essential components in the financial model will then help the State Government undertake analysis of different possible scenarios to identify the values of assumptions at which the NCD care facility is likely to be financially viable. It will also provide a rationale for determining the optimal concession period for the NCD care facility.

### **6.7.3 Capital and operational expenditure**

- a. Total capital cost of the NCD care facility shall vary from district to district and will be determined by the State Government only after detailed feasibility study of the Assigned District Hospital. Capital cost will depend on but not be limited to:
  - (i) Cost of civil works: This will depend on the extent of built-up space allocated by the State Government in the existing structure of the District Hospital and the extent of new construction needed in the contiguous vacant land provided for construction.
  - (ii) Cost of medical and non-medical equipment including cost of setting of operation theatres, Cath lab and ambulances.
  - (iii) Equipment replacement cost (if applicable) during the life cycle of the Agreement.
  - (iv) Cost of setting up the IT infrastructure including hardware and software.
- b. All capital investment will be done by the Private Partner.
- c. The State Government may support the Private Partner through viability gap funding as capital grant at the stage of renovation/ up-gradation/ new construction of the NCD care facility site. VGF may be in accordance with the DEA, GoI guidelines. The viability gap funding will be determined through a competitive bidding process.
- d. The Private Partner will be responsible for all costs/ expenditures related to complete management, operations and maintenance of the NCD care facility through the revenues generated from permissible sources as mentioned in Section 6.7.5 below.

### **6.7.4 Tariff structure**

- a. As stated in the principles (Section 6.7.1(a)), the NCD care facility will have a uniform tariff structure, wherein the self-paying patients will be charged the same rate at which the State Government will reimburse the Private Partner on behalf of the government referred patients or government insured patients.
- b. The tariff for services offered under the NCD care facility will be linked to the package rate of procedures for NHPS/ RSBY (whichever is applicable) or the state level government health insurance scheme if NHPS/ RSBY is not being implemented in the state.
- c. If there are no such ongoing health insurance scheme in the state, the rates for procedures and packages under this NCD care facility may be benchmarked against the Central Government Health Scheme (CGHS) rates as applicable in that district/ State.

- d. The State Government needs to bear in mind the need for reasonable, periodic revision of tariffs in a predictable manner, due to cost escalation that will accrue on account of human resource costs and other operational costs depending on market conditions. It is important that the tariff is revised periodically based on revision in insurance package rates to account for inflation. It is recommended that part of the tariff revision (adoption of revised package rates) could be linked, if the State desires, against the achievement of key performance indicators measured on a periodical basis.

### 6.7.5 Revenue sources

- a. For services rendered under this NCD care facility, the Private Partner will have the following sources of revenues:

Table 5: NCD Services: Types of Patients and Sources of Revenue

Types of Patients	Revenue Source
Government referred patients Government insurance scheme patients Self-paying patients	From the State Government on behalf of the users. From the Insurance Company/ Trust on behalf of those insured and for whom the government has paid the premium. Directly from the patients

- b. **Reimbursements from the State Government:** The State Government will ensure reimbursement to the Private Partner on behalf of patients referred by the State Government through one of the following options:

For patients not enrolled under the NHPS/ RSBY or any other State government health insurance scheme but are eligible to be government referred patients under this NCD care facility:

- (i) The Medical Superintendent of the District Hospital or her/ his authorized representative will, as per the provisions under this Scheme, authorize and refer all such cases to the Private Partner based on the authorization protocol put in place by the State Government for the purpose of this NCD care facility mentioned in Section 6.5.2(d).

For patients enrolled under the NHPS/RSBY or any other State government health insurance scheme:

- (i) The NCD care facility would be necessarily/ deemed to have been empaneled under the NHPS/RSBY or State Government Health Insurance Scheme. Reimbursements for such enrolled patients (up to available sum insured under the insurance scheme) will take place either through the contracted Insurance Company or the Trust set up by the State Government for such scheme(s). The Private Provider shall follow all guidelines related to pre-authorization and claims submission.
- (ii) For clinical services that are not covered under the insurance scheme/ package but are available in the NCD care facility, the State Government shall issue appropriate instructions as a part of the referral protocol and authorization protocol mentioned in Section 6.5.2(d).
- (iii) The State Government may issue guidelines regarding those patients who have already exhausted the sum assured under the insurance scheme or falling short on the available insurance cover (the sum available is either nil or insufficient). It may consider linking up such cases with existing welfare funds / other schemes in the state at its disposal.

- c. The State Government should earmark sufficient budgetary provisions for the payments related to the reimbursement of government referred patients under the NCD care facility. The government should also periodically review the sufficiency of budgetary provisions as per the projected and actual demand for services in the NCD care facility to ensure availability of sufficient financial resources for reimbursement of claims on behalf of government referred patients. Separate budget allocation may need to be earmarked specifically for this purpose.
- d. **Directly from Self-paying Patients:** All self-paying patients will directly pay for services out of pocket at the agreed rates. Appropriate institutional mechanism for payment collection and its withdrawal should be developed by the Private Partner and the State Government as part of the agreement.

#### **6.7.6 Payment administration**

##### **6.7.6.1 Payments to the Private Partner shall be made under the following streams:**

- a. Viability gap funding (VGF): The State Government will transfer a capital grant as determined through the bidding process. This payment can be made at the time of NCD care facility inception and commencement of operations or milestone based and the VGF may be in accordance with the DEA, GoI guidelines (refer to Section 6.7.6.2).
- b. Reimbursement of payments for government referred patients for the services received.
- c. Revenues collected from self-paying patients.
- d. Payment for government insured patients to be reimbursed by the insurance companies.

All the payments will be administered through a strong MIS module

##### **6.7.6.2 Administration of VGF payment**

- a. If Private Partner's capital contribution is through a mix of equity and debt: The State Government will disburse the VGF only after the Private Partner has fully expended the equity contribution required for the NCD care facility; thereafter, the VGF will be released in proportion to debt disbursements.
- b. If Private Partner's capital contribution is through 100 percent equity, no debt: The State Government will disburse the VGF only after the Private Partner has expended 100 percent of its capital contribution required for the NCD care facility and will be released in full within 15 days of receiving the request from the Private Partner.
- c. If Private Partner's capital contribution is through 100 percent debt: The State Government will disburse the VGF in proportion to debt disbursements.
- d. Delays in release of VGF by the State Government:
  - (i) For delays in receipt of the VGF, the State Government will pay a penal interest equivalent to State Bank of India's prime lending rate (Commercial) applicable at that point in time plus 2 percent penal charges<sup>14</sup> for every one month of delay or part thereof.
  - (ii) The Private Partner will not be held responsible for any delays in NCD care facility commissioning in the event that there are delays in the release of VGF by the State Government, provided the delay is not on account of the Private Partner's non-compliance to any of the terms and conditions of the Concession Agreement.

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<sup>14</sup> State Government may decide on the quantum of penal interest to be levied.

#### **6.7.6.3 Administration of payments on behalf of government referred payments**

- a. The State Government will reimburse the payments to the Private Partner on behalf of all patients referred by the State Government who received services at the NCD care facility.
- b. For ensuring transparency, accountability, and timeliness of payments to the Private Partner, reimbursement of payments for services provided to the patients, will be administered through an Escrow Account.
- c. An Escrow Agreement shall be developed stating the terms of payment, maintenance of minimum balance of funds, withdrawal rights, limits and eligibility conditions. The State Government will ensure a credit level balance equivalent to three months of estimated revenue in the Escrow Account.
- d. The Private Partner will raise monthly invoices against services rendered to all government referred patients within the fifth business day of the next calendar month.
- e. The State Government will release 75 percent of the monthly invoiced amount within 10 days of receiving the claim each month. The state government shall undertake a quarterly review (once in 3 months) of the services rendered by the NCD care facility against key performance indicators (KPIs). The remaining 25 percent withheld in each of the three months in the preceding quarter will be released within 45 days of the end of the quarter after review of claims, admissibility of claims, and verification of KPIs and performance against KPIs as measured through a composite KPI score. If the quarterly review indicates any deficiency in services, errors in billing, over invoicing appropriate deductions will be made or penalties will be levied.
- f. In the event of any default or delay in payment by the State Government beyond 30 days for the 75 percent of claim and beyond 45 days of the end of the quarter for the claims withheld over the last three months, the Private Partner can withdraw such amount from the Escrow Account with due notice, but only after the expiry of the due date. In such an eventuality, the State Government will replenish the Escrow Account within 30 days of such withdrawal.
- g. If the State Government does not comply with the terms of the Escrow Agreement, the Private Partner will have the right to escalate the matter directly to the Project Steering Committee and exercise other options based on the provisions of the Concession Agreement.

#### **6.7.6.4 Administration of payments collected by the State Government from the self-paying patients**

- a. All the payments received from the self-paying patients will be entered into a separate account head under the revenue receipt module of the Hospital Management Information System and receipts generated from the software. The Private Partner will allow uninhibited access to this data base to the hospital authorities for monitoring purpose.
- b. At the NCD facility, either the Private Partner can collect the revenue or the State Government can collect the revenue. Both have some advantages and some limitations. The State Government needs to consider these to take a decision in this regard. If the Private Partner collects the revenue, it ensures operational efficiency and has a positive impact on the cash flow of the NCD care facility that helps to ensure continuity of services. However, in this event, the State Government needs to ensure that there is a strong MIS in place to reflect all cash receipts. If the State Government decides to collect the revenue (less preferred option), though the State Government will be fully aware of all the cash receipts, there may be likely delays in the government transferring funds to the Escrow Account and may result in operational inefficiencies and interrupted service delivery.

## 6.8 Institutional framework for governance and management

### 6.8.1 Structures

For effective governance and management of the NCD care facility co-located within the district hospital, the following structures are proposed to be set up:

- a. Project Steering Committee (PSC)
- b. Contracts Management Cell (CMC)
- c. Project Coordination Committee (PCC)

The state governments will prepare list of members, terms of reference, responsibilities, and powers of above mentioned committees/ cell. It will also develop coordination and reporting mechanisms between these committees.

### 6.8.2 Project Steering Committee (PSC)

- a. The State Government will set up a PSC as the highest body providing governance, leadership and oversight to the NCD care facility. The PSC will be the authority for all policy decisions related to allocation of resources, overall monitoring of services (volume, quality, etc.), disputes resolution, etc.
- b. The PSC will be chaired by the Additional Chief Secretary or the Principal Secretary of the Department of Health and Family Welfare and will have members which may include but not be limited to the Head of the State NCD Cell, Director General Medical/ Health Services, and Principal/ Director of the apex Medical College in the state. The PSC may also include representatives from select Private Partner as members.
- c. The PSC will meet quarterly.
- d. The PSC may constitute a Quality Assurance Team (QAT) to monitor the volume, case mix, and quality of services offered by the Private Partner and to also monitor patient satisfaction levels.
- e. The QAT shall report directly to the PSC. The QAT may work in close coordination with an independent agency hired directly by the State Government or through a panel of independent experts who will have core competencies in the area of medical / clinical audits, hospital administration, hospital maintenance (civil engineering and bio-medical equipment engineering) and conducting patient satisfaction surveys. The agency or panel of experts will act as Independent Monitors for the NCD care facility and shall work with the QAT.
- f. The PSC will also determine the composition of the Medical Referral Board from time to time for deciding on referral of critical cases from the NCD PPP facility to higher tertiary level facilities.

### 6.8.3 Contracts Management Cell (CMC):

- a. The State Government will set up a dedicated CMC at the State level.
- b. The CMC will be headed by the Director Health Services/ Director Medical Services, State Program Officer of the State NCD Cell, and the District Program Officer of the concerned District NCD Cell. The State Government will also appoint consultants or independent experts, if and when required, as members to provide expert advice on: (i) contracts management; (ii) NCD care facility management and monitoring; (iii) financial management; and (iv) legal issues.
- c. The Chairperson of the CMC will be a member of the PSC, in order to report and provide information about the NCD care facility to the PSC.
- d. The CMC will:



- (i) Coordinate with the NCD care facility co-located at the district level and sub-district level facilities (CHCs and PHCs) to ensure referrals.
- (ii) Monitor compliance to the terms and conditions of the Concession Agreement including equal access to services for all patients in a timely manner, quality and volume of services, smooth functioning of referral linkages, payment administration, etc.
- (iii) Undertake verifications of claims.
- (iv) Monitor the overall functioning of the NCD care facility.
- (v) Resolve complaints/grievances from Private Partner on NCD care facility coordination, access to shared services, and other issues related to the Assigned District Hospital or against hospital authorities. If and when required, the CMC will escalate grievances to the PSC.
- e. The Medical Superintendent of the Assigned District Hospital or her/ his authorized representative will liaison with the CMC as and when required.
- f. The Private Partner and the CMC will receive training on the technical and managerial aspects of the PPP model.
- g. The CMC shall prepare a Standard Operating Procedure or an operational manual for effective supervision and management of the NCD care facility.

#### **6.8.4 Project Coordination Committee (PCC)**

- a. The State Government will set up a Project Coordination Committee (PCC) at each of the Assigned District Hospital, where the NCD care facility is operational.
- b. The primary responsibility of the PCC is to supervise and monitor the day-to-day functioning of the NCD care facility and shall be responsible for coordination between the NCD care facility and various departments of the Assigned District Hospital.
- c. It is recommended that the PCC is chaired by the Medical Superintendent/ Head of the Assigned District Hospital and include Heads of Departments of select specialties of the Assigned District Hospital. The PCC should also include the PPP facility manager, representative of the Private Partner, Heads of the Departments of the NCD care facility, and a representative from the District NCD Cell.
- d. One external expert (from at least one of the specialties covered under the NCD care facility) should be a member of the PCC. This expert could be from a government medical college or a government tertiary care hospital in the state.

#### **6.8.5 Grievance redressal mechanism**

- a. A grievance redressal mechanism will be established at the NCD care facility to handle all complaints and grievances in a timely manner.
- b. For grievance redressal of the patients (like under-quality of services/ non-availability of services/ overcharging for services/ refusal of services, etc.), first appeal may be to the PCC after examination by NGRO. Authorized representative of the Head of the PCC will be designated as the Nodal Grievance Redressal Officer (NGRO).
- c. In case the aggrieved is not satisfied, he may lodge his grievances to a Grievance Redressal Committee headed by the retired District Judge. This committee may be provided with only a sitting fee and no salary/ perquisites and a timeline may be prescribed for deciding on the issues.

### **6.8.6 Independent Monitors**

Independent Monitors will have an important role to play throughout the Concession Period. However, the skills mix needed for the Independent Monitors team will vary for the Project Inception Phase (that is from the time of signing the agreement with the private partner till the time of starting the service delivery) and for the Service Delivery phase (that is, from the start of services until the end of the Concession Period).

For the Inception Phase, the Independent Monitors may primarily consist of architect with experience in design of similar hospitals, civil engineer, bio-medical engineer, hospital administrator / planner and Quality Assurance specialists.

During the Service Delivery phase, the Independent Monitors may primarily consist of Clinical Specialists (for all three specialties), Quality Assurance specialists, specialists experienced in clinical audits, microbiologists, biomedical engineer / the maintenance engineer. Other experts may be called in as and when needed.

It may be noted that different Independent Monitors may be needed at different points during the Concession Period and all of them will not be required at all times. The State Government may develop a schedule of the requirement of Independent Monitors at the time of structuring the NCD care facility.



## 6.9 Risk management

In this NCD care facility, there are six major risks anticipated that are discussed below in Table 6 along with details of how the design of the NCD care facility needs to address these risks and suggestions that State Governments should bear in mind.

Table 6: Risk Assessment and Management Strategies

No.	Risk	Management Strategy
1	Demand risk: This risk arises when the NCD care facility receives less number of OPD and IPD patients than anticipated and assumed in the financial plan of the NCD care facility.	The Private Partner will take proactive measures to publicize and market the services available at the NCD care facility in order to increase the demand, as the State Government is not assuring any minimum volumes under this NCD care facility. Likewise, the State Government will need to ensure that referrals are made from the PHCs, CHCs, and other district hospitals to the NCD care facility as per the guidelines stated in the section on 'downward linkages' in Section 6.4. The State Government also needs to ensure that no patient is referred to any private sector provider (other than the PPP Private Partner) for the services available in the NCD care facility.
2	Risks emanating from weak governance and management capacity and also coordination issues between the Private Partner and the Assigned District Hospital authorities.	Ineffective supervision, weak monitoring and oversight and poor contracts management or non-adherence to contract commitments can lead to premature closure or sub-optimal results from most of the PPP projects. This risk has been addressed through institutional structures such the Project Steering Committee, Contracts Management Cell and the Project Coordination Committee. However, it is important to develop capacity of all these committees/ cell in order to be able to effectively manage the NCD care facility. Refer to Section 7.7.d for details.
3	Delays in handover of the NCD care facility site to the Private Partner free of all encumbrances.	It is recommended that all clearances for handover of the NCD care facility site from relevant authorities should be taken by the Health Department preferably prior to release of the tender but not later than screening of bids. In any case, the timelines would commence from the date of handing over of the site, free from all encumbrances.
4	Delays in payments to the Private Partner on behalf of government referred patients.	Delays in release of reimbursements/ payments from the State Government to the Private Partner is one of the major reasons for PPP projects to fail. Delayed payment constitutes a major risk to project liquidity and finances. It is recommended that the State Government should ensure allocation of sufficient budgetary resources for the PPP project(s) before the operational commencement of the project. Delays in the release of payments is being addressed through penal interest for delays in capital grant in the form of VGF; and Escrow Account Mechanism for settling reimbursement claims for services offered to government referred patients. Refer to Section 6.7.6 for details.

No.	Risk	Management Strategy
5	Delays in payments to the Private Partner for government insured patients.	Evidently in many states, delayed payment of insurance premium by the government has resulted in significant delays in the release of payment from the insurance companies to empaneled hospitals against their claims. It is expected that the volume of patients in this category under the NCD care facility will be significantly high. Therefore, it is incumbent upon the State Government to develop mechanisms for timely payment of premium to the Insurance Company(ies) to ensure that the Private Partner's claims under the NCD care facility are settled within the prescribed time.
6	Revision of tariffs and escalation in tariff rates not compensating for the rate of inflation.	The principle of periodic revision of tariffs needs to be agreed and incorporated in the NCD care facility design. These may be revised periodically based on revision in insurance package rates to account for inflation. It is also recommended that part of the tariff revision (adoption of revised package rates) could be linked against the achievement of key performance indicators measured on a periodical basis.

## 6.10 Supervision, monitoring, reporting and MIS

The State Government will be responsible for overall monitoring of the NCD care facility and set up the required structures for monitoring. The State Government will need to develop a strong MIS based platform for monitoring the delivery of services, management of contract, payment administration and other issues.

### 6.10.1 Scope and process

- a. Monitoring and verification for the NCD care facility will be based on the principles of measuring outputs/ results including monitoring quality of services and patient satisfaction, as per the Key Performance Indicators (KPIs) referred to in Section 6.10.3.
- b. Overall responsibility of monitoring and verification will vest with the CMC. However, day-to-day supervision and onsite monitoring of the NCD care facility will be the responsibility of the Project Coordination Committee (PCC) set up at the NCD care facility.
- c. The PCC will meet at least once in a month or as frequently as required, to review the functioning of the NCD care facility and discuss and address all operational issues. The PCC and CMC should meet more frequently in the initial stages of implementation.
- d. The State Government should develop a robust MIS for the NCD care facility. All information in this MIS should be accessible to the PCC and CMC. Updating the data online will be the responsibility of the PPP facility manager who will submit a monthly report to the PCC for verification. The PCC will submit a monthly monitoring report to the CMC.
- e. The PSC should be convened at least once in a quarter. The CMC will submit quarterly monitoring report to the PSC for record as well as for resolving any outstanding unresolved issues or for taking decisions for future.
- f. The State Government or the PSC will have the flexibility to conduct (on its own or through a third party), periodic external audits of the NCD care facility, and the services rendered by the Private Partner from the NCD care facility. The audits may be along the following line, as per the indicated periodicity:

- (i) Overall NCD care facility (Hospital) audit: every six months.
  - (ii) Medical audit: every six months.
  - (iii) Beneficiary audit (during hospitalization): 5 percent of randomly chosen hospitalized cases every quarter, to be divided across the medical specialties based on IPD admission ratio for that quarter across the specialties.
  - (iv) Beneficiary audit (post hospitalization): 60 beneficiaries every quarter (20 each month) to be divided across the medical specialties based on IPD admission ratio across the specialties for that quarter.
- g. If adverse audit observations and/ or patient dissatisfaction continue for two consecutive audit periods and/ or not rectified by the Private Partner during the time specified by the State Government, it will result in penalties. The penalties could be either in the form of a lump sum amount commensurate with the seriousness of adverse observations as determined by the PSC or proportionate deduction in the rate of periodic tariff revision. The State Government may develop detailed modality for any decision related to the nature of penalty at the time of detailed feasibility study and structuring the NCD care facility at the Assigned District Hospital. The penalties may also be levied on a graded basis, each subsequent penalty being severe than the previous one.
- h. Monitoring will be undertaken by the State Government against a set of KPIs and agreed process indicators (refer to Section 6.10.3) on a quarterly basis.
- i. Monitoring results will be discussed with the Private Partner in a participatory way and corrective actions shall be initiated by the Private Partner as and when required within the rectification period stated by the CMC.
- j. Disagreements or disputes related to monitoring reports, audit reports, beneficiary feedback, will be sent to the PSC for appropriate redressal.

### **6.10.2 Quality assurance**

- a. As per the agreement, the Private Partner will develop an internal Quality Assurance (QA) Plan and adhere to the same. The QA Plan and the manuals developed under the plan shall be modelled around and may comply with the latest prescribed standards of the National Accreditation Board for Hospitals and Healthcare Providers (NABH).
- b. The CMC and PCC will have the right to inspect and monitor the implementation of the QA Plan by the Private Partner.

### **6.10.3 Monitoring and measuring performance**

- a. The State Government, through the CMC or PSC, will regularly monitor the NCD care facility performance against a set of clearly defined analytic (dash board) indicators derived from a robust MIS system. Data on NCD care facility will be updated daily, and will be available to the PCC and CMC on real time basis. Data for all performance indicators will be based on and extracted from a web-based Hospital Management Information System (HMIS).
- b. An illustrative list of NCD care facility performance indicators for monitoring are as follows:
  - (i) Number of patients treated
  - (ii) Percentage of government referred patients to total in-patients
  - (iii) Percentage of government referred patients to total out-patients
  - (iv) Number of repeat visits in the OPD for the same illness
  - (v) Average Length of Stay (ALOS) disaggregated by disease specialties

- (vi) ALOS of government referred patients and of self-paying patients
  - (vii) Rate of unscheduled returns to the operation theatre
  - (viii) Elective surgery cancellations
  - (ix) Leave/ discharge against medical advice
  - (x) Out-patient/ in-patient conversion rate
  - (xi) Emergency/ IP conversion rate
  - (xii) In-patient mortality rate
  - (xiii) Complaints redressal rate of government referred patients and of self-paying patients
- c. Patient satisfaction index, along 'Mera Aspatal' of MoH&FW Govt of India, which may include but not be limited to service availability and waiting time, hygiene and cleanliness, behavior and promptness of hospital staff, facilities, amenities and infrastructure, doctor patient communication, will be developed.
  - d. Besides the monitoring indicators, as indicated above, the State Government will develop a set of Key Performance Indicators (KPIs) (see Annex 5) that will have threshold levels of performance expected. Performance below the specified threshold level will attract stringent penalties such as deductions in payments or consequences of rate of revision of tariffs, as detailed in the Concession Agreement.
  - e. As a part of monitoring, the State Government will undertake audits as stated in Section 6.10.1(f).

#### **6.10.4 Record keeping, MIS and reporting**

- a. The Private Partner will generate, manage and maintain all records as per statutory requirements, as required by the State Government at all times in compliance with the Electronic Health Records 2016 Standards of the MoHFW, GoI and any related latest standards notified by the MoHFW, GoI.
- b. At its own cost the Private Partner will develop a web-based Hospital Management Information System (HMIS) with respect to the NCD care facility, with full access rights to the State Government. The HMIS will provide a dashboard of analytic information, as a visual interface against key indicators. All the NCD care facility data will be captured in the HMIS maintained by the Private Partner.
- c. The Private Partner would generate periodic reports from the HMIS, as per the format and schedule prescribed by the State Government. The State Government will provide a list of indicators and the format in which the reporting will be required.
- d. The State Government may, either directly or through a third party, undertake audit and verification to assess the quality of data being entered in the HMIS.
- e. The Private Partner will submit monthly reports of all unusual occurrences<sup>15</sup>. The Private Partner will also submit details of all such occurrences as and when they occur.

### **6.11 Selection of the private partner**

- a. The State Government will select the Private Partner for the NCD care facility based on a single stage bidding with two-step selection process:
  - (i) Step 1: Screening of Technical Qualification Bid
    - Only the technical and qualification documents will be reviewed for compliance to minimum eligibility criteria, experience, etc.

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<sup>15</sup> (i) death or injury to any person; (ii) episode of sexual assault or rape; (iii) suicide of a patient or staff; (iv) transfusion reactions; (v) surgery on wrong patient or wrong body part; (vi) smoke or fire; (vii) unintended retention of foreign object in the body of a patient after surgery or other procedure; (viii) any other incident similar to these.

- (ii) Step 2: Assessment of Financial Bid
  - Financial bids of only the qualified bidders (from step 1 above) shall be opened.
- b. The minimum eligibility requirements for Private Partners to bid for the NCD care facility will include relevant experience in setting up and managing a similar sized facility which is NABH accredited, offering similar sets of clinical services. The eligibility will also include parameters such as financial strength of the applicant. A desirable eligibility could be a prior experience of the Private Partner in setting up/ managing similar facility(ies) under PPP mode.
- c. Bid parameter will be, percentage of estimated capital cost sought by the bidder from the State Government as VGF. Bidder seeking the least VGF support will be considered as the preferred bidder; subject to all other terms and conditions of the tender document being fulfilled, be declared as the Successful Bidder.
- d. The State Government will thereafter enter into a Concession Agreement with the Successful Bidder.

## **7. Next steps: operationalizing the guidelines to roll out the NCD care facility**

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### **7.1 Adapt NCD PPP guidelines to state requirements**

- a. The State Government may constitute a 'Project Design Team' (PDT) at the state level.
- b. The PDT should consist of senior officials from the Health Department of the State Government and may include, but not be limited to, the Head of the apex government medical college in the state, Head of a state level government tertiary hospital, Heads of at least two large District Hospitals (preferably where the pilots will be implemented), and in-charge of the State NCD Cell. The PDT should also include a PPP expert who could advise the PDT on the financial, legal, operational, and managerial aspects.
- c. The PDT may, if required, modify the Guidelines to suit the requirements of the state and determine the number of district hospitals where the state intends to initiate the PPP.
- d. The PDT should ensure that the final NCD care facility PPP Guidelines have a 'buy-in' of the key stakeholders at different levels within the DoHFW, the Private Sector, other health sector interest group; and the approval of highest decision making authority (Chief Secretary/ Principal Secretary of the Department) or highest body responsible for Public Private Partnership in the state.
- e. The PDT should finalize the broad contours of the NCD care facility, including the scope of services, duration of the concession, tariff plan, management structure, policy, legal and institutional framework, selection of district hospitals, financing of the NCD care facility, and other details before seeking approval from concerned authorities in the state.

### **7.2 Shortlist district hospitals**

- a. The PDT shall shortlist district hospital/s where it intends to initiate the NCD care facility through PPP.
- b. In order to make the NCD care facility feasible, the State Government may consider the following conditions as a criterion while selecting the 'Assigned District Hospital'.
  - (i) Decision to select a District Hospital could be based on epidemiological considerations, local



disease burden, and demand and supply gap analysis. Alongside it is recommended that the District Hospital have around 250-300 functional beds with an average OPD footfalls of 800 to 1000 patients per day. It should also have adequate built-up, spare space to allocate a minimum of 600 square feet of space per in-patient bed for setting up the proposed NCD care facility.

- (ii) Adequate built-up, spare space within the existing building of the Assigned District Hospital would not only reduce the NCD care facility cost (new construction), but will also help hasten the readiness of the proposed facility. It is therefore recommended that only those District Hospitals that have most of (if not all) the required space available within the existing built-up structure may be selected for the NCD care facility for operationalizing this PPP model. If any additional building/ construction is needed, vacant land contiguous to the existing structure of the Assigned District Hospital (within the same campus) will need to be allocated.
  - (iii) These are indicative criteria and the purpose is to ensure that the District Hospital has a reasonable patient load and space for the NCD care facility to be feasible. The district hospitals meeting the above criteria may be considered for implementing the proposed NCD care facility and selected as the 'Assigned District Hospital'.
- c. District Hospital(s) thus shortlisted merely indicate that such hospital(s) meet the eligibility criteria; however, decision to go ahead with the PPP for NCD care facility will be subject to detailed feasibility assessment. Final decision on selecting a District Hospital needs to be taken only after considering all parameters.

Notwithstanding the availability of 'ready to use built-up space' and 'patient load', the State Government should also consider factors such as the geographical location of the district hospital vis-à-vis the 'catchment area', ease of access, ability to attract and retain human resources, morbidity conditions of the population, and other operational aspects.

### **7.3 Undertake feasibility study and identify district hospital(s)**

- a. For each shortlisted District Hospital, the PDT will, either in-house or through external consultant, commission a detailed feasibility study.
- b. The feasibility study will broadly include, but not be limited to, assessing the existing physical structure and spare built-up space in the shortlisted district hospital, current patient volume, market analysis for service demand in select specialties, availability of similar services in the catchment area (from other private providers), service delivery gaps in the district hospital, and suitability of the location vis-à-vis connectivity, infrastructure, and other social amenities for attracting and retaining human resources as well as enabling optimal referral linkages.
- c. Conduct broad financial analysis for the shortlisted District Hospital(s).
- d. It is recommended that the State Government organizes a consultative meeting with private providers (potential investors) based within the state and from outside, to share and discuss the government's intent, broad contours of the proposed PPP and seek their views. Such consultation would help in facilitating the NCD care facility design to be responsive to the private sector, as well as generate awareness among potential investors.
- e. Based on the (b), (c) and (d) above, the PDT will recommend the District Hospitals where the PPP for NCD care facility is feasible.
- f. It is important to reiterate that the District Hospitals chosen for the PPP should have a 'buy-in' of the key

stakeholders including the district level officials, health officials at the state (DoHFW), key officials in the state (Chief Secretary/ Additional Chief Secretary/ Principal Secretary of the DoHFW) and the agency responsible for PPPs in the state.

## **7.4 Prepare technical and financial structuring report for the NCD care facility**

- a. The PDT will, based on the feasibility report, ensure that for each Assigned District Hospital a detailed technical and financial plan is developed.
- b. The detailed plan could be modelled as per the 'partnership principles' and the approach outlined in the Guidelines.
- c. The technical plan should include, but not be limited to:
  - (i) Finalizing the scope of services: Although the scope of services is provided in the Guidelines, the scope should be further validated by the State including developing a detailed list of packages, procedures and investigations.
  - (ii) Shared Services: Finalize the list of services in the assigned District Hospital that could be shared with the Private Partner. This list should be validated and adapted to the respective Assigned District Hospital.
  - (iii) Referral linkages: The PDT should also finalize and recommend mechanisms for forward and backward patient referral linkages.
  - (iv) Construction/ renovation work: The PDT should finalize a detailed list of works in terms of civil construction, electrical and plumbing work related to renovation, rehabilitation, up-gradation, and/ or new construction, with respect to each assigned hospital. The technical plan should also prepare a broad estimation of the investment needed for renovation/ up-gradation. This should be done through on-site inspection of the district hospital by a team of quality civil and structural engineers along with a hospital architect.
  - (v) NCD care facility implementation schedule: Prepare timelines for the NCD care facility implementation including milestones and the time needed for renovation, rehabilitation, up-gradation, and/or new construction from the date of inception till the commencement of services under this NCD care facility, in the Assigned District Hospital.
- d. Validate the critical assumptions and variables in the financial model as mentioned in the Guidelines and modify the final plan accordingly, to the specific hospital.
- e. Based on the financial model specific to the concerned Assigned District Hospital, determine the concession period that will yield a rate of return to be reasonably acceptable and attractive for the Private Partner to invest in the NCD care facility. Before finalizing the financial model and the duration of the concession period, the PDT will need to arrive at the following:
  - (i) Decide the tariff plans using appropriate benchmarks relevant to the state.
  - (ii) Decide on the mix of patients in terms of proportion of government referred patients, government insurance patients, and the self-paying patients.
  - (iii) Determine the total NCD care facility cost and the maximum percentage of the total NCD care facility cost that the government is willing to finance in the form of Viability Gap Funding to make the NCD care facility viable at the prescribed tariff rates.
- f. As indicated earlier, the technical and financial structuring report for the NCD care facility should have a buy-in and/ or approval of the key stakeholders at different levels within Health Department and

other relevant departments of the State Government. The buy-in is important as the decision will imply ensuring budget allocations as per the plan for the VGF support as well as towards recurring financial commitment of the State Government in reimbursing the Private Partner.

## **7.5 Prepare bid documents for selection of private partner for the NCD care facility**

- a. The PDT will need to develop bid/ tender documents (Request for Proposals - RFP) for selecting the Private Partner. The bid/ tender documents will be in three parts:
  - (i) Part 1: Instruction to Bid
  - (ii) Part 2: Project Information Memorandum
  - (iii) Part 3: Concession Agreement
- b. The PDT will ensure that each of the three parts of the RFP are responsive to the requirements of the NCD care facility site as determined through feasibility study.
- c. Ensure that the tender documents are approved by the relevant authorities in the DoHFW and other Departments, such as legal, finance, and planning.
- d. After approval, the State Government should publicize the NCD care facility project and publish the tender notice to ensure maximum visibility.

## **7.6 Set up governance and management structures**

- a. Governance and management structures recommended for providing stewardship, management support, and monitoring of the NCD care facility is as provided in Section 6.8.
- b. It is recommended that the State Governments need to ensure formation of the relevant structures / committees, and empowers them with appropriate authority, government orders. It is also recommended that these committees and structures are created well in time, but not later than the date of signing the Concession Agreement with the selected Private Partner.
- c. It is also recommended that the members of committees at various levels, including key officials in DoHFW, district hospital, NCD cell and others are given training on PPP, more specifically on the nuances of the project and contract management.

## **7.7 Essential points for consideration by the State government**

- a. It is recommended that the State Government provides an enabling environment for PPP in health sector within the state and undertake measures that may include but not be limited to:
  - (i) Having a health sector specific PPP policy or legal framework or guidelines for PPP in place, if one does not already exist. This will provide a policy continuum to PPP and ensure that the State Government is implementing the PPP for NCD care facility with a clear road map. It will also instill confidence among potential Private Partners vis-a-vis the State Government's intent and commitment to public private partnerships.
  - (ii) Develop technical and managerial capacity among key officials of DoHFW, district hospital, NCD cell officials to design and manage public private partnerships. Capacity includes not only the skills needed to conceptualize, design, manage, and monitor PPP contracts but also institutionalize governance structure and leadership at different levels to steward PPP projects. (Refer to Section 7.7d below).



- (iii) Ensure adequate financial (budgetary) commitment to the PPP project through its proposed duration (life-cycle). Allocate sufficient resources for institutional structures including staff to manage the PPP projects, from the Department of Health.
- b. The State Government may exercise its discretion to determine the number of District Hospitals where it intends to initiate the PPP for NCD care facility in the first phase and adapt and scale it up later throughout the state. It will depend on factors such as demand for services in the hospital, availability of spare built up space, fiscal space for payment, willingness of the private sector players, etc.
- c. To ensure timely commencement of service delivery after the Concession Agreement is signed, it is recommended that all preparatory work related to handing over of the required space within the Assigned District Hospital is initiated at the time of publishing the tender notice itself. This will allow the State Government adequate time to prepare the facility/ space for handover in a manner that existing services of the Assigned District Hospital are not affected.
- d. Capacity development: Possessing adequate technical and managerial capacity to manage and monitor a PPP contract, among key officials of the health department at various levels, is extremely crucial for the success of the NCD care facility. Capacity includes a clear understanding of various clauses of the PPP contract, ensuring smooth coordination, reviewing and monitoring the implementation of the contract as per the scope of services and key performance indicators, verification and settlement of claims, timely release of payment, etc. Besides the technical and managerial capacity, the State Government also needs to ensure appropriate institutional structures, Standard Operating Procedures, and systems to manage the contract. A set of officials (human resources) need to be deployed to implement and manage the PPP for NCD care facility. Three critical elements of capacity are briefly described below:
- (i) Institutional structures: The institutional structures that are required at different levels have been detailed in Section 6.8. Each committee needs to be empowered and should have the mandate along with the required authority to execute its tasks. Such mandate shall be accorded through issuing relevant government orders so that their roles and responsibilities are clearly laid down and known to all stakeholders.
- (ii) Systems and procedures: It is recommended that the State Government develop terms of reference and Standard Operating Procedures (SOPs) for the CMC and PCC, clearly delineating their tasks during the life cycle of the NCD care facility. The SOP will also include required templates and checklists.
- (iii) Human resources and skills: The State Government will ensure that the CMC is adequately staffed with expertise on contracts management, claims review and settlement, legal expertise, hospital planning and management and financial management within Government. Besides the management skills, the committees will have clinical specialists possibly from the Medical Colleges or tertiary hospitals within the state for all matters related to quality of services and for purposes of clinical and medical audit and oversight.

It is reiterated that the State Government need to ensure sufficient budgetary provisions for the operations of all the committees/ cell and for developing systems and procedures, preparation of manuals, commissioning of feasibility reports, and staff training (including refresher training).



# Annexures

## **Annex 1: Scope of services**

## Annex 1: Scope of services

For each NCD specialties, the minimum set of screening, diagnostic and treatment services are provided below.

### **Scope of Services related to Oncology**

ONCOLOGY SERVICES		
Screening	Diagnostic	Maximum Treatment
<ul style="list-style-type: none"> <li>- Pap smear</li> <li>- Mammography</li> <li>- Clinical examination</li> <li>- FNAC</li> <li>- Biopsy (CT and USG guided)</li> </ul>	<ul style="list-style-type: none"> <li>- X-ray</li> <li>- Colonoscopy</li> <li>- CT scan (16 slice)</li> <li>- Upper GI endoscopy</li> <li>- Ultrasonography</li> <li>- Pathology, histopathology, cytology, hematology and biochemistry</li> </ul>	<ul style="list-style-type: none"> <li>- Excision of benign tumour</li> <li>- Laparoscopy</li> <li>- Tracheostomy</li> <li>- Palliative management</li> <li>- Medical Oncology (chemotherapy, hormone therapy and growth inhibitors)</li> </ul>

### **Scope of Services related to Cardiology**

CARDIOLOGY SERVICES		
Screening	Diagnostic	Treatment
<ul style="list-style-type: none"> <li>- Body Mass Index</li> <li>- BP estimation</li> <li>- Clinical examination</li> </ul>	<ul style="list-style-type: none"> <li>- Hematology and biochemistry</li> <li>- ECG</li> <li>- X-ray</li> <li>- ECHO</li> <li>- TMT</li> <li>- Troponin T</li> <li>- USD (with Doppler)</li> <li>- CT (16 slice)</li> <li>- Coronary angiography</li> </ul>	<ul style="list-style-type: none"> <li>- Coronary angioplasty</li> </ul>

### **Scope of Services related to Pulmonology**

PULMONOLOGY SERVICES		
Screening	Diagnostic	Treatment
<ul style="list-style-type: none"> <li>- Clinical examination</li> <li>- Spirometry</li> <li>- Sputum examination</li> </ul>	<ul style="list-style-type: none"> <li>- Pathology, histopathology, cytology, hematology and biochemistry</li> <li>- X-ray</li> <li>- USD (with Doppler)</li> <li>- CT (16 slice)</li> <li>- PFT</li> <li>- Bronchoscopy</li> </ul>	<ul style="list-style-type: none"> <li>- Emergency management of acute syndromes</li> <li>- Tracheostomy</li> <li>- COPD management</li> </ul>

#### Other Services

- a. Diabetes management
- b. Diagnosis and management of hypertension
- c. Other co-morbidities

Using the facilities and services set up above, undertake all responsibilities of the NCD Clinic in the Assigned District Hospital as per the NPCDCS guidelines.

**Annex 2:**  
**Alignment of services under the**  
**NCD care facility with the NPCDCS**

## Annex 2: Alignment of services under the NCD care facility with the NPCDCS

No.	Services at District Hospital Level under NPCDCS <sup>16</sup>	Services proposed under NCD-care facility
1	Diagnosis and management of cases of CVDs	✓
2	Diagnosis and management of cases of Diabetes	✓
3	Diagnosis and management of cases of Stroke	✓
4	Diagnosis and management of cases of Cancer	✓
5	OPD for 1 to 4 above	✓
6	IPD for 1 to 4 above	✓
7	Intensive care for 1 to 4 above	✓
8	Emergency services for myocardial infarction	✓
9	Emergency services for stroke	✓
10	Laboratory investigations and diagnostics: Blood sugar, Lipid Profile, KFT, XR, ECG, USG ECHO, CT Scan, MRI etc.	✓
11	Referral of complicated cases to higher health care facility	✓
12	Health promotion for behavior change and counselling	✓
13	'Opportunistic' screening of NCDs including common cancers (oral, breast and cervix)	✓
14	Follow up chemotherapy in cancer cases: 2-beds (day care)	✓
15	Rehabilitation and physiotherapy services	✓
16	Provide guidance to develop skills for home-based palliative care for chronic and debilitating patients.	✓
17	4 bedded Cardiac Care Unit (CCU) will be established/ strengthened in identified District Hospitals	✓
18	Training of CHC level human resources	✓

<sup>16</sup> [1] NPCDCS Operational Guidelines 2013-17, MoHFW, GoI, 2013: Section 2.1 package of Services (pages 8-9) and Section 2.5.4 (page 24).

**Annex 3:**  
**Indicative human resource requirements**  
**from the private partner**



## Annex 3: Indicative human resource requirements from the private partner

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The list of indicative core competencies that are needed in the human resources deployed under the NCD care facility are provided below.

The State Government will ensure that a detailed assessment of the catchment area is done to estimate demand for services related to the identified disease specialties, based on which the minimum numbers of staff/ consultants for each of the positions can be estimated (part-time/ full time) and specified in the bid/ tender document.

1. General Surgeons
2. Onco-surgeon
3. Clinical Cardiologist
4. Pulmonologist
5. Internal Medicine Specialist
6. ICU Intensivist
7. OT Anesthetist
8. Radiologist
9. Pathologist
10. Staff for ICU and Emergency Room
11. Junior Residents
12. ICU Nurses
13. Nurses trained in OT
14. OT Technicians
15. Cath Lab Technicians
16. Perfusionist
17. Radiology Technicians
18. Pharmacist
19. Pharmacy Assistance
20. Onco-Pharmacist
21. Front Office Staff
22. Management Staff
23. Other Administrative Staff (Accounts, HR, IT, etc.)

**Annex 4:**  
**Assumptions for financial model (illustrative)**

## Annex 4: Assumptions for financial model (illustrative)

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*This list of assumptions is merely indicative aimed at providing State Governments with an idea about the kind of assumptions that would need to be made for preparing a robust financial model.*

- a. Project duration assumptions:
  - (i) Number of inpatient bed
  - (ii) Number of ICU beds
- b. Area assumptions
  - (i) Total area allotted within the existing structure of the District Hospital (brownfield component)
  - (ii) Total contiguous area allotted within the existing structure of the District Hospital (brownfield component)
  - (iii) Permitted floor space index for greenfield component
- c. Facility size assumptions
  - (i) Number of inpatient beds
  - (ii) Number of ICU beds
- d. Service utilization assumptions
  - (i) Number of OPD patients per day referred from the District Hospital
  - (ii) Number of self-paying OPD patients per day
  - (iii) Bed occupancy rate
  - (iv) Annual increase in OPD patients and bed occupancy rate until the facility capacity gets saturated
  - (v) Share of IPD patients by disease specialty
- e. Engineering, Procurement and Construction (EPC) work phasing and unit cost assumptions
  - (i) Percentage of total project development time within which different components of the EPC work will be executed
  - (ii) Unit cost per square feet for each part of the EPC work.
  - (iii) EPC cost escalation
- f. Capex payment (to EPC contractors) assumptions
  - (i) Advance money as a percentage of total EPC costs
  - (ii) Start and end dates of recovery of advance money
- g. Assumptions related to means of finance
  - (i) VGF as a percentage of total project cost
  - (ii) Debt Equity Ratio
  - (iii) Cost of equity
  - (iv) Risk free rate of return
  - (v) Market risk premium on equity investment
  - (vi) Interest rate on debt

- (vii) Weighted average cost of capital (to be computed from the above and in addition certain other market assumptions)
- h. Term loan date assumptions
  - (i) Moratorium after project development completion
  - (ii) Repayment period
- i. Operating Revenue assumptions
  - (i) Tariff rates for procedures
  - (ii) Annual inflation factor for tariff revision
- j. Operating expenditure assumptions
  - (i) Human resource costs
  - (ii) Medical supplies and consumable costs
  - (iii) Repair and maintenance costs
  - (iv) Administration and overhead costs
  - (v) Insurance expenses
  - (vi) Annual inflation factor for each of the above

## Annex 5: Indicative key performance indicators (KPIs)

It is suggested that the KPIs may constitute seven critical indicators as suggested in the table below. These KPIs are summary measures of the performance of the NCD care facility. However, the States may consider adding/ modifying the KPIs, threshold level, and its relative weightage. The thresholds and weightages are only indicative and the States may amend it as required.

S.No	Category	Indicator	Numerator (N)	Denominator (D)	Calculation (C)	Threshold	Weightage (W)
1	Human resources	Availability of service providers- specialists in the Project Facility (against required)	Total number of person days (FTEs) of specialists present in the Project Facility	Total number of specialists to be present (as per plan) X number of days in the month (as per plan)	$(N / D) * 100$	Minimum 85%	20%
2		Availability of support staff/ Nurses in the Project Facility (against required)	Total number of person days (FTEs) of nurses present in the Project Facility	Total number of nurses to be present (as per plan) X number of days in the month (as per plan)	$(N / D) * 100$	Minimum 90%	10%
3	Quality of care	Unscheduled visits post discharge	Number of patients making unscheduled revisit to the NCD care facility within 48 hours after discharge	Total number of discharges in the month	$(N / D) * 100$	Minimum 5%	10%
4		Rate of unscheduled returns to the operation theatre (OT)	Number of unscheduled returns to the OT in the month	Total number of surgeries in the month	$(N / D) * 100$	Minimum 5%	15%
5	Financials	Patient satisfaction levels	Number of beneficiaries with $\geq 85\%$ satisfaction score from an app-based survey such as 'Mera Aspatal'	Total beneficiaries who responded to the app-based mobile survey	$(N / D) * 100$	Minimum 85%	25%
6		Timely submission of claims	NA	NA			10%
7	Facility maintenance	Number of adverse observations related to adherence to rectification/ remedial measures/ incidents of defaults in the quarterly O&M Inspection Report	NA	NA	NA	No adverse observations	10%
						<b>Total</b>	<b>100%</b>

## Process followed

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- During the review of health sector by the Hon'ble PM (March, 2016), it was decided to create Model Concessionaire agreements for PPP in health sector (including tertiary care).
- World Bank provided technical assistance for preparing the Model Concession Agreement (MCA) to foster PPP at district hospital level with a focus on tier II/ tier III cities for Prevention, Diagnosis and Treatment of select NCDs in the area of Cardiac Sciences, Oncology and Pulmonary Sciences.
- As a part of the exercise, an initial Option Paper was developed and circulated to the Industry, NGOs, Civil Society, States and Ministry of Health & Family Welfare for their inputs and thereafter, consultation was held (December, 2016).
- Working Groups with representatives from Industry, MoHFW and States were constituted to provide inputs on developing model concession agreements for the provision of prevention and treatment services for Non-Communicable diseases at the district level on PPP mode.
- These Working Groups constituted subgroups/Committees comprising of health experts such as Dr. Randeep Guleria, Dr. Naresh Trehan etc. for providing inputs for MCA as well as had wider consultations with CMOs of various hospitals.
- The draft reports of these Working Groups were discussed in detail and these Working Groups submitted their final reports which were used as an input for finalizing the MCA.
- A meeting under the co-chairmanship of Secretary (Health) and CEO, NITI was held (March, 2017) to seek a strategic direction from CEO and Secretary (H&FW) for drafting the MCA.
- Based on the decisions taken in the meeting, MCA and guidelines were framed and shared with the States and MoHFW for their comments. These were also hosted on NITI's website for the public consultation.
- After extensive deliberations the MCA and the guidelines have been finalized (November, 2017).





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**NITI Aayog**