



Ministry of Health & Family Welfare
Government of India



OPERATIONAL GUIDELINES NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES (2023-2030)



Ministry of Health & Family Welfare
Government of India

2023

OPERATIONAL GUIDELINES

**NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF
NON-COMMUNICABLE DISEASES**

(2023-2030)





MESSAGE

In recent years, the burden of Non-Communicable Diseases (NCDs) has increased, accounting for almost 63% of all deaths in the country. The NCDs have outnumbered the communicable diseases, maternal and neonatal diseases in terms of mortality and morbidity. Changes in lifestyles, behavioral patterns, demographic profile, and socio-cultural environment are leading to sharp increase in the prevalence of NCDs.

Under the National Health Mission (NHM), the National Programme for the Prevention and Control of Non Communicable Diseases is implemented to cater to common NCDs, such as Cardiovascular diseases, hypertension, diabetes, cancers, chronic obstructive pulmonary disease and asthma, chronic kidney disease etc. Under Ayushman Bharat Health and Wellness Centres, the Population-Based Screening (PBS) of common NCDs and promotion of healthy lifestyle are being done.

The current operational guidelines have been drafted focusing on primary and secondary prevention, clinical support for NCDs, and programme management with an objective to integrate NCD care at various healthcare delivery levels to meet Sustainable Development Goal-3.4.

The Government of India, under the visionary leadership of Hon'ble Prime Minister, Shri Narendra Modi Ji, is committed to meet the health needs of the people of India. The programme managers at State/District NCD cells will find these guidelines useful in successfully implementing the interventions for management of NCDs in the country.

(Dr. Mansukh Mandaviya)



सत्यमेव जयते



The Government of India realise that the strategies of National Programme for the Prevention and Control of Non Communicable Diseases must be aligned to prevent the Non-Communicable Diseases (NCD) through health promotion, lifestyle changes, early diagnosis, and management of associated diseases.

Hon'ble Prime Minister Shri Narendra Modi ji has stated that India is at the forefront of initiatives that seek to prevent non-communicable diseases and further wellness seeking inspiration from him, recommendations in 2023-2030 operational guidelines are created with the goal of providing assistance for programme management and capacity building of health care practitioners at all levels of primary and secondary healthcare, given the importance of NCD care and prevention.

India is experiencing rising burden of NCD mainly Cardiovascular Diseases, Cancers, Diabetes, Chronic Obstructive Pulmonary Disease, Asthma and Chronic Kidney Diseases. These diseases share common behavioral risk factors and are influenced by wider determinants of health such as lifestyle, rapid urbanization, pollution, and the negative sides of globalization.

With these guidelines, healthcare providers will be able to make informed judgments about NCD care and referral to higher level health care facility including tertiary care institutions.

I am confident that these guidelines will be extremely beneficial to State and District officials in enhancing primary and secondary care in order to deliver effective NCD care throughout the country.

BP

(Dr. Bharati Pravin Pawar)

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Message

Non-Communicable Diseases (NCDs) such as Diabetes, Cardiovascular diseases, Cancer, COPD and Stroke account for more than 63% mortality in the Country and contribute significantly to Disability Adjusted Life Years (DALYs).

National Programme for Prevention and Control of Non Communicable Diseases is being implemented for interventions up to Health & Wellness Centres under the National Health Mission (NHM). Population level interventions for prevention, control, screening, and management of common NCDs are being implemented under National Health Mission (NHM), while NCD service delivery is one of the important components of services delivered by Health and Wellness Centres under Ayushman Bharat.

This guideline has been formulated based on inputs from subject & technical experts from apex institutions and programme managers. These operational guidelines have been evolved to serve as a handbook and a resource for Program Managers as well as for medical officers and health care providers at all levels of health care delivery system for effective planning and implementation. I am certain that these guidelines will prove to be useful at all levels of health care facilities.

(Rajesh Bhushan)

Date : 11th May, 2023

Place : New Delhi



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Preface

In India Non-Communicable Diseases (NCDs) account for more than 63% of total deaths of which over 55% are premature. National Program for Prevention and Control of Non Communicable Diseases being implemented under National Health Mission (NHM) envisages to set up infrastructure and provide support for interventions for the prevention and control of Cancer, Diabetes, Cardiovascular diseases, Stroke, COPD, CKD & NAFLD upto the level of health & wellness centre.

Common behavioural risk factors associated with NCDs are tobacco, alcohol, diet, lack of physical activity, and environmental degradation.

Under Ayushman Bharat, population level intervention for prevention, control, screening and management for common NCDs such as hypertension, diabetes, breast and cervical cancer are being implemented at all health care delivery system.

These operational guidelines have been drafted to ensure optimum program intervention with the aim of improving quality of NCDs care services including primary as well as secondary prevention.

These guidelines provide information about prevention and health promotion including setting up of infrastructure at district hospitals as well as downstream where opportunities as well as challenges exists. I trust these guidelines will be useful for both program managers and clinicians.

(Atul Goel)

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सत्यमेव जयते



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FOREWORD

Non-communicable disease, is one of the leading causes of morbidity & mortality in India. There could be Common behavioural risk factors for NCDs such as tobacco use, alcohol use, unhealthy diet, inadequate physical activity, and air pollution lead to raised blood sugar, high blood pressure, raised cholesterol levels, overweight and obesity.

The National Programme for Prevention and Control of Non Communicable Diseases was launched in the year 2010 under National Health Mission (NHM) to cater common NCDs such as hypertension, diabetes, and cancer (oral, breast, and cervical cancer). However, over the years, the newer elements like Chronic Obstructive Pulmonary Disease and Asthma , Chronic Kidney Diseases and Non-Alcoholic Fatty Liver Disease have been incorporated.

These operational guidelines are drafted for year 2023-2030 with the goal to provide assistance for programme management and capacity building of health care practitioners at all levels of primary and secondary healthcare, given the importance of NCDs care and prevention.

The programme evolve with these Guidelines of National Programme for Prevention and Control of Non Communicable Disease, we wish to further strengthen the core components of health promotion, early diagnosis, and appropriate treatment for NCDs.

I wish to congratulate all those involved in the development of these Guidelines. I am confident that these guidelines will be extremely beneficial to State and District officials in enhancing primary and secondary care in order to deliver effective NCDs care throughout the country.


(Vishal Chauhan)



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Message

With increasing morbidity and mortality due to Non-Communicable Diseases (NCDs) in the Country, the health delivery system is facing a major challenge to provide a set of services for the prevention and control of common NCDs.

The National Programme for Prevention and Control of Non Communicable Disease (NP-NCD) provides comprehensive services for early diagnosis, treatment, follow up and referral under the umbrella of National Health Mission (NHM).

Population level intervention for prevention, control, screening, and management of common NCDs such as hypertension, diabetes, and three cancers (oral, breast, and cervical cancer), Chronic Obstructive Pulmonary Disease (COPD) and Asthma, Chronic Kidney Diseases (CKDs) etc. is being implemented under the programme, while NCD service delivery is one of the important components of services to be delivered by Health and Wellness Centres under Ayushman Bharat.

The current operational guidelines have been drafted for year 2023-2030, focusing on primary and secondary prevention, health promotion, clinical support for NCDs, and programme management with an objective to integrate NCD care at various healthcare delivery levels to meet sustainable development goal.

I hope that these guidelines will be useful for programme managers at State/District level and below District for medical officers, specialists and staff for setting up and managing NCD care services throughout the country.

(Dr. Sudarsan Mandal)

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ABBREVIATIONS



AB-HWC	Ayushman Bharat Health and Wellness Centre
ABHA ID	Ayushman Bharat Health Account Identification Card
AERB	Atomic Energy Regulatory Board
AIIMS	All India Institute of Medical Sciences
AMRIT	Affordable Medicines and Reliable Implants for Treatment
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activists
AWW	Anganwadi Workers
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy
BCC	Behaviour Change Communication
BMI	Body Mass Index
BP	Blood Pressure
BPHC	Block Primary Health Centre
CAPD	Continuous Ambulatory Peritoneal Dialysis
CBAC	Community Based Assessment Checklist
CCU	Cardiac Care Unit
CDSS	Clinical Decision Support System
CHC	Community Health Centres
CKD	Chronic Kidney Diseases
CHO	Community Health Officer
CMO	Chief Medical Officer
CMHO	Chief Medical Health Officer
COPD	Chronic Obstructive Pulmonary Diseases
CoE	Centre Of Excellence
Covid	Coronavirus Disease
CPHC	Comprehensive Primary Healthcare Package
CRM	Common Review Mission
CSCU	Cardiac and Stroke Care Unit
CT	Computed Tomography
CTA	CT Angiography
CTD	Cumulative Trauma Disorder
CVD	Cardiovascular Disease
DALY	Disability Adjusted Life Years
DEO	Data Entry Operator
DH	District Hospital

DHAP	District Health Action Plan
DHS	District Health Society
DMU	District Management Unit
DMHP	District Mental Health Program
DNB	Diplomate of National Board
DNO	District Nodal Officer
DPI	Dry Powder Inhaler
DPM	District Program Manager
DPO	District Program Officer
Dte.GHS	Directorate General of Health Services
DVDMS	Drugs and Vaccine Distribution Management System
ECG	Electrocardiogram
ECHO	Echocardiogram
EHR	Electronic Health Record
ENT	Ear Nose Throat
EPC	Empowered Programme Committee
ESRD	End-Stage Renal Disease
FCTC	Framework Convention on Tobacco Control
FBS	Fasting Blood Sugar
FPC	Family Physician Concept
FMG	Financial Management Group
FMR	Financial Management Report
FoPL	Front-of-Package Warning Labelling
FSSAI	Food Safety and Standards Authority of India
FSS	Food Safety and Standards Act
GATS	Global Adult Tobacco Survey
GDMO	General Duty Medical Officer
GDP	Gross Domestic Product
GFR	Glomerular Filtration Rate
GNM	General Nursing and Midwifery
HIV	Human Immunodeficiency Virus
HR	Human Resources
HFSS	High in Fat, Salt and Sugar
HMIS	Health Management Information Systems
HWC	Health and Wellness Centres
ICMR	Indian Council of Medical Research
ICU	Intensive Care Unit
IEC	Information Education and Communication
IHCI	India Hypertension Control Initiative

I-TREC	Integrated Tracking Referral Electronic Decision Support and Care Coordination
IT	Information Technology
JAS	Jan Arogya Samiti
KFT	Kidney Function Test
LABA	Long-Acting Beta Agonists
LFT	Liver Function Test
MAS	Mahila Arogya Samiti
MDI	Metered Dose Inhaler
MHCA	Mental Healthcare Act
MLHP	Mid-Level Health Provider
MO	Medical Officer
MO I/c	Medical Officer In-Charge
MPW	Multi-Purpose Worker
MRA	Magnetic Resonance Angiography
MRI	Magnetic Resonance Imaging
NAFLD	Non-Alcoholic Fatty Liver Diseases
NAM	National AYUSH Mission
NCCT	Non-Contrast Computed Tomography Scan
NCD	Non-Communicable Diseases
NGO	Non-Government Organization
NIMHANS	National Institute of Mental Health and Neuro-Sciences
NPCDCS	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
NPCB&VI	National Programme for Control of Blindness and Visual Impairment
NP-NCD	National Programme for Prevention and Control of Non Communicable Diseases
NFHS	National Family Health Survey
NHM	National Health Mission
NLEM	National List of Essential Medicines
NMAP	National Multi-sectoral Action Plan
NMHP	National Mental Health Programme
NPCC	National Program Coordination Committee
NPHCE	National Programme for Health Care of Elderly
NTCP	National Tobacco Control Programme
NTEP	National Tuberculosis Elimination Programme
NUHM	National Urban Health Mission
NVBDCP	National Vector Borne Disease Control Programme
OHA	Oral Hypoglycaemic Agent
OOPE	Out-of-Pocket Expenditure
OPD	Out Patient Department

OVE	Oral Visual Examination
PBS	Population-Based Screening
PFT	Pulmonary Function Test
PG	Postgraduate
PHC	Primary Health Centres
PIP	Programme Implementation Plan
PMBJP	Pradhan Mantri Bhartiya Janaushadhi Pariyojana
PMJAY	Pradhan Mantri Jan Arogya Yojana
PMNDP	Pradhan Mantri National Dialysis Program
PMSSY	Pradhan Mantri Swasthya Suraksha Yojana
PPBS	Post Prandial Blood Sugar
PPP	Public Private Partnership
PRI	Panchayati Raj Institution
RBSK	Rashtriya Bal Swasthya Karyakram
RCH	Reproductive Child Health
RF	Rheumatic Fever
RFT	Renal Function Test
RHD	Rheumatic Heart Disease
RUCO	Repurpose of Used Cooking Oil
SCI	State Cancer Institute
SDG	Sustainable Development Goals
SDH	Sub-District Hospital
SHC	Sub-Health Centre
SHG	Self-Help Group
SHS	State Health Society
SHSRC	State Health Systems Resource Centre
SIRAS	Stroke Identification Rehabilitation Awareness and Stabilisation Program
SNO	State Nodal Officer
SNP	Supplementary Nutrition Program
SOP	Standard Operating Procedures
SPO	State Program Officer
STEMI	ST Elevated Myocardial Infarction
SWAAS	Step-wise Approach to Airway Syndromes Programme in Family Health Centres
TB	Tuberculosis
TCCC	Tertiary Care Cancer Centers
TeleMANAS	Tele Mental Health Assistance and Networking Across States
UHC	Universal Health Coverage

ULB	Urban Local Bodies
UNGA	United Nations General Assembly
UPHC	Urban Primary Health Centre
UT	Union Territories
VHSND	Village Health, Sanitation and Nutrition Days
VHSNC	Village Health, Sanitation and Nutrition Committee
VIA	Visual Inspection using Acetic Acid
WHO	World Health Organization
WHR	Waist-to-Hip Ratio

EXECUTIVE SUMMARY



- i. Health systems in India are evolving in alignment with shifting health needs and disease burden with expanded emphasis on Non Communicable Diseases. Realizing the role of prevention and control of NCDs in improving the overall health outcomes and addressing the three pillars of Sustainable Development Goals (SDGs) i.e., economic growth, social equity and environmental protection, it was identified as a prerequisite to accelerate sustainable development. The 2030 Agenda for Sustainable Development adopted by the United Nations in 2015 recognized NCDs as a major public health challenge and included SDG target 3.4 to reduce premature mortality from NCDs by one-third.
- ii. The National Health Policy (NHP), 2017 recognizes the pivotal importance of SDGs and highlighted the need to halt and reverse the growing incidence of chronic diseases including NCDs. The NHP 2017 defined this objective as “Improve health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with focus on quality.” Addressing the growing burden of NCDs and carving the route towards progressive attainment of Universal Health Coverage (UHC), the policy outlined indicative, quantitative goals and objectives for reducing prevalence and incidence for NCDs, aligned to achieve SDGs in keeping with the policy thrust.
- iii. The National Programme for Prevention and Control of Non Communicable Diseases (NP-NCD) erstwhile National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched in 2010 in 100 districts across 21 states with an objective to prevent and control major NCDs. The programme was scaled up in a phased manner and now covers all the districts across the country. The focus of NPCDCS was to enable opportunistic screening for common NCDs at District Hospital and Community Health Centres level, through the setting up of NCD clinics.
- iv. In order to expand the services and bring them closer to the community, Population Based Screening (PBS) for common NCDs was launched in year 2016. The PBS includes screening of individuals of 30 years and above age group for five common NCDs i.e., Hypertension, Diabetes, Cancers of the oral cavity, cervix and breast. The key components of this initiative include population enumeration, assessment of risk factors, mobilizing communities for screening at Sub-Centres (SC), Primary Health Centres (PHC) in rural and urban areas, health promotion, initiation of treatment at a PHC, referral to higher centres for further treatment, if required. Both upward and downward referral, follow up is provided under the programme to ensure continuum of care.

- v. Comprehensive Primary Health Care (CPHC) has an important role in the primary and secondary prevention of several disease conditions, including NCDs which today contribute to 63% of the mortality in India. The provision of primary health care reduces morbidity, disability and mortality at much lower costs and significantly reduces the need for secondary and tertiary care.
- vi. As a step towards ensuring provision of promotive, preventive, curative, palliative and rehabilitative aspects of Universal Healthcare, Government of India launched its flagship programme of Ayushman Bharat in 2018. Ayushman Bharat has two components to ensure Universal Health Coverage (UHC) viz Ayushman Bharat – Health and Wellness Centre and Ayushman Bharat – Pradhan Mantri Jan Aarogya Yojana (PM-JAY). This ensures Comprehensive Primary Health Care at the primary level and provision of financial protection for accessing curative care at the secondary and tertiary levels through engagement with both public and private sector.
- vii. In order to ensure primary health care which is close to the community, health facilities in urban and rural areas are being strengthened. At the SHC-HWC level, a new cadre of Community Health Officer (CHO) has been introduced to lead the HWC team and provide expanded range of twelve services. The Medical officer of the Primary Health Centre (rural and urban) would supervise the functioning of the HWC.
- viii. Focussing on the technology and IT based solution in healthcare, Ayushman Bharat Digital Mission (ABDM) was launched with an aim to strengthen the accessibility and equity of health services, including continuum of care with citizen as the owner of data. The initiative provides a platform for all existing and upcoming IT applications to function in an integrated approach, maintaining the interoperability. Ayushman Bharat Health Account (ABHA) is a unique identifier (self-declared username) that enables to share and access health records digitally. It serves as a common linkage between healthcare programmes.
- ix. Realizing the growing burden of NCDs, associated morbidities and mortalities, Government of India has identified other priority NCD conditions beyond common NCDs and widened the ambit of the programme by including Chronic Obstructive Pulmonary Disease (COPD) and Asthma, Chronic Kidney Disease (CKD), Non-Alcoholic Fatty Liver Disease (NAFLD), Pradhan Mantri National Dialysis Programme (PMNDP). Hence, the NPCDCS is now renamed as National Programme for Prevention & Control of Non-Communicable Diseases (NP-NCD).
- x. All the guidelines were shared with States/UTs for implementation by programme managers and other healthcare providers to strengthen health care services for the NCDs across all levels of care, and also to enable a continuum of care approach. The Additional Chief Secretary/Principal Secretary (Health), Mission Director (NHM), Director of Health Services of the States/UTs have to ensure proper implementation of the guidelines across India.





INTRODUCTION

Non Communicable Diseases:

Non Communicable Diseases (NCDs) are chronic diseases that are not transmissible from one person to another. Taking this definition into account, NCDs may thus include wide spectrum of medical disorders both acute and chronic like Cancers, Diabetes, Hypertension, Cardiovascular Diseases and Stroke, Chronic Kidney Diseases (CKDs), Chronic Obstructive Pulmonary Diseases (COPDs) and Asthma, Non-Alcoholic Fatty Liver Disease (NAFLD), and a gamut of other diseases.

As per WHO, the NCDs are collectively responsible for more than 74 percent of all deaths worldwide including heart disease, stroke, cancer, chronic respiratory diseases and diabetes.¹ These diseases have public health importance globally and in India. NCDs cause significant morbidity and mortality, both in urban and rural population and across all socio-economic strata, with considerable loss in potentially productive years of life. NCDs are also responsible for the maximum out-of-pocket expenditure on health.² The economic output lost due to NCDs excluding mental conditions is estimated to be \$ 3.55 trillion for India for the period of 2012-2030.³ Taking cognizance of these facts, Sustainable Development Goal 3 (Target 3.4) aims to reduce premature mortality from NCDs by one-third by 2030 in the world. SDG-3 also stresses on prevention and control of tobacco and alcohol use.^{4,5} The National Health Policy, 2017 also emphasises the need to halt and reverse the incidence of NCDs and seeks to focus on common NCDs.⁶

NCDs are emerging as a major public health challenge worldwide and people above the age of 30 years are most at risk of getting such diseases. India is also experiencing rapid demographic and epidemiological transitions with a steep rise in the burden of lifestyle related chronic NCDs. With rapid epidemiological transition with higher Disability-Adjusted Life Years (DALYs) and mortalities, prevention and control measures for NCDs are required to be accelerated to reduce the burden of NCDs in India.

Burden of Non Communicable Diseases

Global Scenario:

The global NCD burden remains unacceptably high. NCDs are responsible for 41 million of the world's annual deaths. 17 million of these deaths were premature (30 to 70 years). Burden is greatest within low- and middle-income countries, where 77 percent of all NCD deaths and 80% of premature deaths occurred.¹ Among NCDs, the four top killers that together account

for more than 80% of all premature NCD deaths annually include cardiovascular diseases (17.9 million), cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million).¹

Indian Scenario:

- As per the WHO – NCD India profile - 2018, NCDs are estimated to account for 63% of all deaths in country of which the cardiovascular diseases lead with 27% overall mortality cause followed by chronic respiratory diseases (11%), cancers (9%), diabetes (3%) and others (13%) (Figure 1).⁷

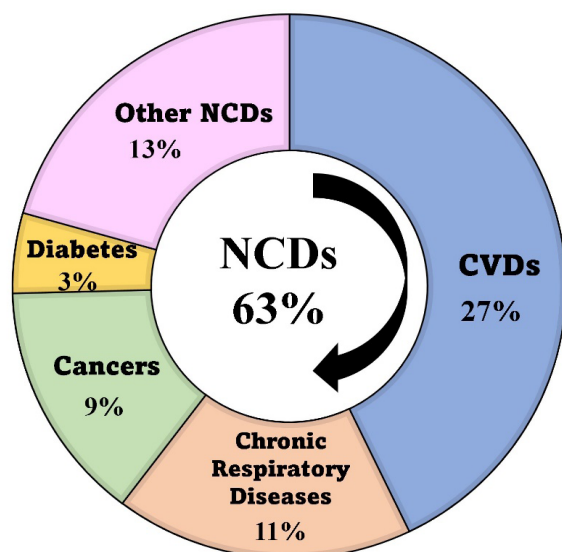


Figure 1: Mortality due to Non Communicable Diseases in India¹

- As per India State-Level Disease Burden Initiative CVD Collaborators - 2016, there were 54.5 million cases of cardiovascular diseases, 23.8 million cases of ischemic heart diseases, 6.5 million cases of stroke, 55 million cases of COPD, 38 million cases of asthma and 65 million cases of diabetes.⁸ In 2016, cardiovascular diseases were responsible for 28.1 percent deaths, while chronic respiratory diseases contributed to 10.9 percent deaths and cancers contributed to 8.3 percent deaths.⁷ Four common NCDs (Cardiovascular Diseases, Cancers, Chronic Respiratory Diseases and Diabetes) account for 23 percent of the total premature mortality in 30-70 years age group.¹

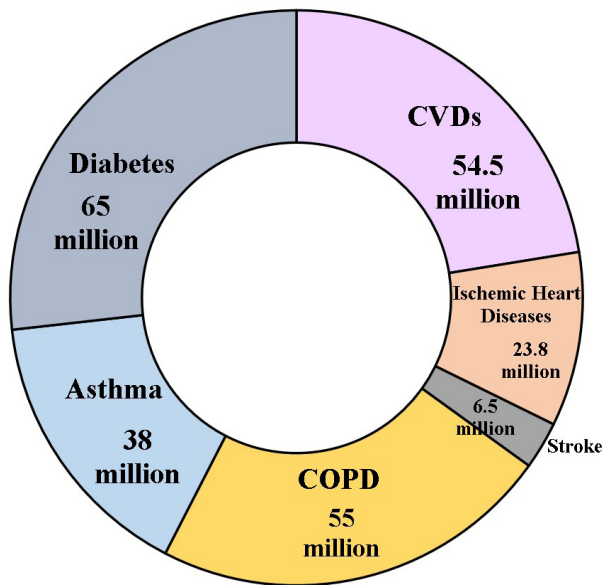


Figure 2: Burden of Non Communicable Diseases in India⁷

- As per the report of National Cancer Registry Program (2020), the incidence of cancer in India is 13.92 lakhs. Among males, cancers of lung, mouth, oesophagus and stomach are the leading sites across most of the registries. Among females, breast cancer is the commonest cancer followed by cervical cancer.⁹

Risk factors:

Most NCDs are strongly associated with major risk factors such as:

1. Tobacco use (smoking and smokeless)
2. Alcohol use
3. Unhealthy diets
4. Insufficient physical activity
5. Air pollution (indoor and outdoor)

If the above risk factors are not managed/modified, they may lead to the following biological risk factors:

1. Overweight/obesity
2. Raised blood pressure
3. Raised blood sugar
4. Raised total cholesterol/lipids

The other factors due to which an individual might develop NCDs are:

1. Stress
2. Hereditary factors

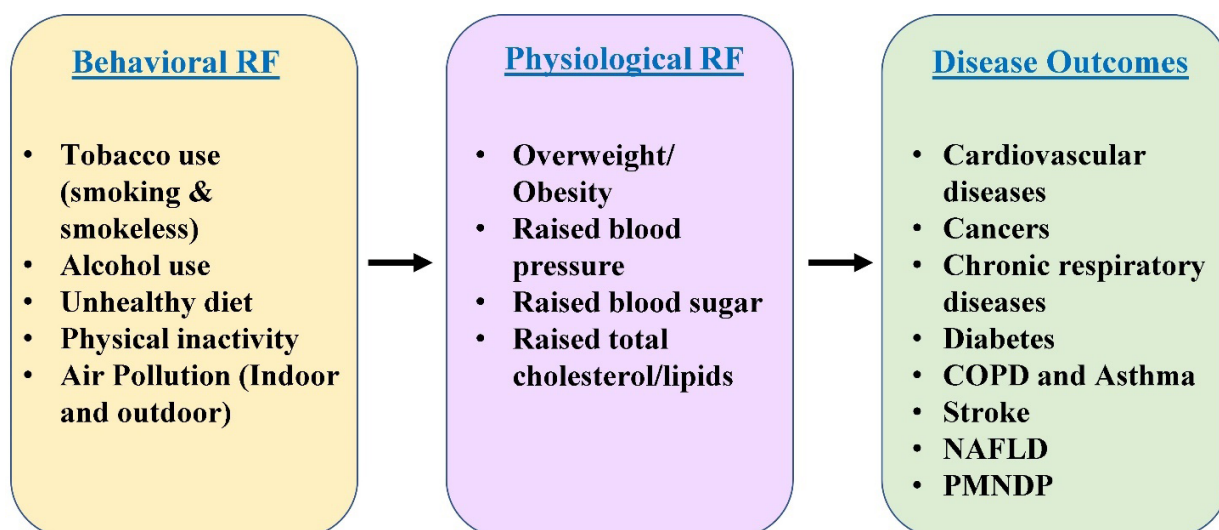


Figure 3: Behavioural and physiological risk factors associated with NCDs and the disease outcome

As per National NCD Monitoring Survey (NNMS), 2017-18, the prevalence of risk factors associated with NCDs amongst adults (18-69 years) such as current tobacco use, current alcohol use, inadequate intake of fruits and/or vegetables intake and insufficient physical activity are 32.8%, 15.9%, 98.4% and 41.3% respectively in India.¹⁰

However, as per the report of the 2nd round of the Global Adult Tobacco Survey (GATS-2) conducted in 2016-2017 among 15 years and above, there are 266.8 million tobacco users in India, i.e., around 28.6 percent of all adults use tobacco in any form (smoking or smokeless).¹¹

Evolution of National Programme for Prevention and Control of Non Communicable Diseases:

Government of India launched National Programme for Prevention and Control of Non Communicable Diseases (NP-NCD) erstwhile National Programme for Prevention and Control of Cancer, Diabetes, Cardio-vascular Diseases and Stroke (NPCDCS) in 100 districts of 21 states to combat NCDs in 2010 as per the 11th Five Year Plan. The rationale was to provide technical, financial and logistics support to the State Governments, and thereby supplement the efforts of the States towards the prevention and control of NCDs. The programme focuses on health promotion, screening, early diagnosis and management of individuals with NCDs along with addressing their risk factors.

During the 12th Five Year Plan, it was proposed to scale up the programme in a phased manner and cover all districts of the country. In 2013-2014, the programme was subsumed under the National Health Mission (NHM) for optimization of resources and provide seamless services to the patients, and for ensuring long term sustainability of the programme interventions. Thus, the institutionalization of the programme at state level and district level within the State Health Society (SHS) and District Health Society (DHS) respectively, sharing administrative and financial structure of NHM becomes a crucial programme strategy.

NCD Division was established at National, State, and District level to ensure planning, implementation, monitoring and evaluation of the programme activities.

Health facilities were strengthened at different levels for NCD service delivery. The NCD clinics are identified at the district (District Hospital) and Block (Community Health Centre) levels for opportunistic screening, diagnosis and management of common NCDs. Further, Cardiac Care Units and Day Care Centres were set up in selected District Hospitals to provide emergency cardiac care and cancer chemotherapy respectively.

The Population-Based Screening (PBS) of common NCDs as a part of Comprehensive Primary health Care (CPHC) was initiated in 2016, in selected districts across States/UTs, and was scaled up in a phased manner under the programme, and this intervention was scaled-up to cover more district in later stage in a phased manner. With the integration of the programme with Ayushman Bharat - Health and Wellness Centres, universal screening of common NCDs was identified as a functionality criterion for primary level facilities to be upgraded as HWCs. The key component of the initiative spanning community level risk assessment using Community Based Assessment Checklist (CBAC), followed by facility level screening activities and follow up activities towards continuum of care approach were included as an essential service under the Sub Health Centres-Health and Wellness Centres (SHC-HWC) and PHC-HWC and health promotion, management and referral services were strengthened.

There are several newer initiatives that have been included under the programme. From 2016 onwards, the National Multisectoral Action Plan (NMAP) is introduced to offer roadmap and policy options to guide multisectoral efforts involving other Ministries/Departments.¹²

There are several other disease interventions such as Chronic Obstructive Pulmonary Diseases (COPD) and Asthma, Chronic Kidney Diseases (CKD), Stroke, Non-Alcoholic Fatty Liver Disease (NAFLD) and ST-Elevated Myocardial Infarction (STEMI), which were included in phased manner under the programme. Further, the name of the programme is changed from NPCDCS to National Programme for Prevention and Control of Non Communicable Diseases (NP-NCD).

Objectives of National Programme for Prevention and Control of NCDs:

The objectives of NP-NCD are as follows:

1. Health promotion through behaviour change with involvement of community, civil society, community-based organizations, media and development partners.
2. Screening, early diagnosis, management, referral and follow-up at each level of healthcare delivery to ensure continuum of care.
3. Build capacity of health care providers at various levels for prevention, early diagnosis, treatment, follow-up, rehabilitation, IEC/BCC, monitoring and evaluation, and research.
4. Strengthen supply chain management for drugs, equipment and logistics for diagnosis and management at all health care levels.
5. Monitoring, supervision and evaluation of programme through proper implementation of uniform ICT application across India.

6. To coordinate and collaborate with other programmes, departments/ministries, civil societies.

Strategies of NP-NCD:

Following are the strategies of the programme:

- Health promotion for prevention of NCDs and reduction of risk factors.
- Screening, early diagnosis, management, referral and follow up of common NCDs.
- Capacity building of health care providers.
- Evidence based standard treatment protocols.
- Uninterrupted drug and logistics supply.
- Task sharing and people-centered care.
- Information system for data entry, longitudinal patient records.
- Monitoring, supervision, evaluation and surveillance including technology enabled interventions.
- Multi-sectoral coordination and linkages with other National Programmes.
- Implementation research and generation of evidences.

Some of the other health programmes related to NCDs where linkages with NP-NCDs is required⁵:

- National Mental Health Programme (NMHP)
- National Programme for Control of Blindness and Visual Impairment (NPCB&VI)
- National Programme for Prevention and Control of Deafness (NPPCD)
- National Programme for Prevention and Control of Fluorosis (NPPCF)
- National Programme for Health Care of the Elderly (NPHCE)
- National Programme for Tobacco Control and Drug Addiction Treatment (NPTCDAT)
- National Oral Health Programme (NOHP)
- National Programme for Prevention and Management of Trauma and Burn Injuries (NPPMTBI)
- National Organ Transplant Program (NOTP)
- National Programme for Palliative care (NPPC)
- National Iodine Deficiency Disorders Control Programme (NIDDCP)

This operational guideline for NP-NCD has been developed for policy makers of different levels, the Government officials, NGOs, peripheral health care providers and also other stakeholders with the purpose of providing an understanding of the promotive, preventive and curative approach to reduce morbidity and mortality due to NCDs. The document provides guidance to the programme managers for effective implementation of NCD strategies with purpose of significant improvement of various NCD indicators in the next seven years by 2030. However, the individual States/UTs can prepare the strategic plan according to the NCD situations and socio-demographic profile to achieve state-specific targets.





NON COMMUNICABLE DISEASES

– AN OVERVIEW

The common NCDs - Cardiovascular Diseases (CVDs), Cancers, Diabetes and Chronic Respiratory Diseases, share common modifiable behavioural risk factors such as tobacco use, unhealthy diet, lack of physical activity and alcohol consumption. Air pollution is also considered as one of the major risk factors for NCDs. These risk factors lead to overweight and obesity, raised blood pressure, raised blood sugar, and raised cholesterol, which in turn can contribute to occurrence of NCDs. A large proportion of NCDs are preventable.

Hypertension:

Blood pressure is the force exerted by circulating blood against the walls of the arteries of body. Hypertension is abnormally elevated blood pressure. It is a pathological condition in which there is increased workload on cardiovascular system. Blood pressure is measured as systolic and diastolic blood pressure. It is of two types such as a) Primary or Essential Hypertension and b) Secondary Hypertension. Hypertension is diagnosed when the measured systolic blood pressure is ≥ 140 mmHg and/or diastolic blood pressure is ≥ 90 mmHg on two different occasions.

Hypertension is a major cause of premature death worldwide. An estimated 1.28 billion adults aged 30–79 years have hypertension. Globally, prevalence of hypertension among adult aged 30–79 years is around 33%.¹³ Most often hypertension is asymptomatic, however, when blood pressure is very high it may manifest with headache, nasal bleeding, irregular heart rhythms, vision changes, fatigue, nausea etc. Hypertension is managed with drugs and maintaining healthy lifestyle. Reducing salt intake is one of the key interventions in management of hypertension. Hypertension if not controlled for a long time may result into heart attack, stroke, renal failure, retinal damage and other life-threatening conditions.

Diabetes:

Diabetes is a chronic disease in which the body does not produce or properly use the hormone insulin, which is required to convert sugar, starches and other foods into energy. It is classified into three types namely Type I diabetes, Type II diabetes and Gestational Diabetes.

- Type 1 Diabetes Mellitus (T1DM) results from the pancreas failure to produce enough insulin. This form was previously referred to as “Insulin-Dependent Diabetes Mellitus” (IDDM) or “Juvenile Diabetes”.
- Type 2 Diabetes Mellitus (T2DM) is the commonest type of Diabetes which occurs usually after thirties. It begins with insulin resistance, a condition in which cells fail to respond to insulin properly. As the disease progresses a lack of insulin may also develop. This form was previously referred to as “Non-Insulin-Dependent Diabetes Mellitus” (NIDDM) or “Adult-onset Diabetes”. Type 2 diabetes is primarily due to lifestyle factors and genetics. The primary cause is excessive body weight and inadequate physical activity.
- Gestational Diabetes (GD) Mellitus resembles Type 2 Diabetes in several aspects but occurs during pregnancy. It occurs in about 2–10% of all pregnancies and may improve or resolve after childbirth. However, after pregnancy approximately 5–10% of women suffering from Gestational Diabetes are found to have Diabetes Mellitus, most commonly type 2. Gestational diabetes is fully treatable but requires careful medical supervision throughout the pregnancy. Management may include dietary changes, blood glucose monitoring, and insulin administration, if needed.
- Pre-diabetes indicates a condition when a person’s blood glucose levels are higher than normal but not high enough for a diagnosis of Type 2 DM.

In 2019, diabetes was the direct cause of 1.5 million deaths and has prevalence of 9% among adults 18 years and above.¹⁴ Over the time the diabetes can damage the heart, blood vessels, eyes, kidneys and nerves. Simple lifestyle measures have been shown to be effective in prevention or delaying of diabetes. Early diagnosis can be done through blood sugar testing. Treatment of diabetes includes drugs, diet and physical activity to lower the blood glucose level and reduce the risk factors that can damage blood vessels.

Category	Fasting Plasma Glucose	Post Prandial Plasma Glucose	HBA1C	Random Plasma Glucose
Diabetes	≥ 126 mg/dl	≥ 200 mg/dl	≥ 6.5 %	≥ 200 mg/dl + diabetes symptoms
Pre Diabetes	110 -125 mg/dl (Impaired Fasting Glucose)	140 -199 mg/dl (Impaired Glucose Tolerance)	5.7 – 6.4 %	

Table 1: Bio Chemical Parameters to detect Diabetes

Cancer:

As per National Cancer Registry Program, the prevalence of cancer is estimated to be around 3.6 million. Nearly 800,000 persons die every year due to cancer in India.⁸ The most common cancers are oral cancer, breast cancer, and cervical cancer. Costs of care for cancer treatment are high, and studies show that almost three quarters of cancer expenditure in India is paid out of pocket.⁸ Cancer mortality is reduced when cases are detected and treated early. Therefore, screening of common cancers such as oral, breast and cervical was introduced in the programme with the aim to identify individuals with findings suggestive of any cancer or pre-cancer before they develop any symptoms. Treatment usually includes surgery, radiotherapy and/or chemotherapy. Palliative care is provided for relief rather than to cure the symptoms and suffering caused by cancer and to improve the quality of life of patients.

Stroke:

India accounts for 1.17 million cases and 7,00,000 deaths every year.^{15,16} Community awareness, telemedicine, timely medical intervention and lifestyle modification can prevent most of the stroke events. Increased public literacy in the BE FAST method (Balance Loss, Eyesight Change, Facial drooping, Arm weakness, Speech difficulty and Timely emergency service) can significantly reduce the incidence and impact of stroke. Stroke patients are treated with antiplatelet therapy, thrombolytics and surgery along with physiotherapy. More details are available in Technical Guidelines for Prevention and Management of Stroke.¹⁷

Chronic Kidney Disease (CKD):

Conventionally in medical terminology, chronic kidney disease (CKD) means kidney disease persisting for more than 3 months. CKD is progressive in nature (may be very slow at times) and it will ultimately go into End Stage Renal Disease “ESRD”. Globally, the burden of CKD is approximately over 690 million.¹⁸ In India, the population prevalence of CKD has been shown to be 8-17% in different surveys.¹⁹ Every year about 220,000 new patients of ESRD get added in India resulting in additional demand for 34 million dialysis every year.²⁰

Diabetes mellitus, hypertension, glomerulonephritis and tubulo-interstitial diseases are the most common causes of chronic kidney disease (CKD). For people at risk of CKD, it is important to abstain from smoking and alcohol consumption, focus on weight control, salt restriction and physical activities. Haemodialysis and Peritoneal dialysis are major modes of treatment for patients with ESRD. More details are available in Operational Guidelines for Pradhan Mantri National Dialysis Programme and Peritoneal Dialysis²⁰ and Medical Officer’s Manual for Prevention and Management of Chronic Kidney Diseases.²¹

Chronic Obstructive Pulmonary Disease (COPD) and Asthma:

Common chronic respiratory diseases are COPD, asthma, occupational lung diseases, interstitial lung disease. Among them, COPD and asthma are major public health problems, contributing to 251 million and 388 million cases respectively worldwide in 2016 and 3.17 million and 0.39 million deaths respectively in 2015 (i.e., both caused >5% of all deaths globally). Chronic respiratory diseases resulted in 10.9% of all deaths in India.²² Tobacco use,

air pollution, allergen, occupational agents, unhealthy diet, physical inactivity, obesity are few of the risk factors. Early detection, management, appropriate referral, and continuum of care for COPD and asthma patients under the NP-NCD programme is envisioned. Awareness for indoor air pollution should be the main priority. As tobacco cessation has been demonstrated to reduce mortality, every patient at every visit would be asked about their tobacco use status. Spirometry is considered to be the gold standard for diagnosis. Patients are managed with medications such as bronchodilators, steroids, or combinations, etc. More details are available in Medical Officer's Manual for Prevention and Management of Chronic Obstructive Pulmonary Disease and Asthma.²³

Non-Alcoholic Fatty Liver Disease (NAFLD):

Non-Alcoholic Fatty Liver Disease (NAFLD) is the build-up of extra fat in liver cells that is not caused due to alcohol consumption. It is estimated to afflict approximately 1 billion individuals worldwide. Various epidemiological studies from India suggest prevalence of NAFLD around 9% - 32% of the general population in India.²⁴ Obesity and Diabetes are the major risk factors for NAFLD. NAFLD interventions have been included within the broad structure of NP-NCD to guide a range of strategies including health promotion activities which are crucial to prevent NAFLD. An Operational Guidelines for the Integration of Non-Alcoholic Fatty Liver Disease (NAFLD) into NPCDCS²⁴ was developed and disseminated to enhance the capacity of the program managers at the state, district and sub- district level, to operationalize the introduction of NAFLD interventions under the overall ambit of NP-NCD programme.

ST Elevation Myocardial Infarction (STEMI):

It is estimated that about 28.1% people die due to cardiovascular diseases (CVDs) in India. Further, Ischemic Heart Diseases and Strokes account for 80% of all CVDs. Contribution of CVDs to Disability Adjusted Life Years (DALYs) is also highest at 14.1%, including 8.7% DALYs caused by ischemic heart diseases alone.²⁵ Myocardial Infarctions (MI) are clinically classified into ST elevation MI (STEMI) and non-ST elevation MI (NSTEMI), based on changes in ECG. STEMI accounts for about 40% of Myocardial Infarctions. Risk factors of MI include high blood pressure, smoking, diabetes, lack of exercise, obesity, high blood cholesterol, poor diet and excessive alcohol intake, among others. It is estimated that STEMI occurs about twice more often in men than in women.

For STEMI, timely intervention is critical in order to save lives by restoring blood flow to the heart. Therefore, interventions such as thrombolysis and Percutaneous Coronary Intervention (PCI) are required to be done in the shortest possible time. More details are available in Guidelines for Management of ST- Elevated Myocardial Infarction.²⁵





ORGANIZATIONAL STRUCTURE OF NP-NCD

The response of Government of India to NCD has been robust and aligned with political declaration conveyed in the high-level meeting on the prevention and control of NCDs at the United Nations General Assembly (UNGA) in 2011, 2014 and 2018.

The National Health Policy, which was published in 2017, recognized the need to halt and reverse the growing incidence of chronic diseases. It has supported an integrated approach where screening of the most prevalent NCDs with secondary prevention would make impact on reduction of morbidity and mortality. Also, it would be incorporated into comprehensive primary healthcare with linkages to specialist consultation and follow-up at the primary level.

The NP-NCD Programme has been expanded to cover the entire country. The integration of services at district level and below has been brought under the umbrella of National Health Mission.

NCD Division:

For effective management of the programme, the NCD divisions have been established at National, State and District headquarters to ensure planning, implementation, monitoring and evaluation of the programme activities. The details of each of these NCD Divisions are mentioned below:

National NCD Division:

The National NCD Division is headed by Joint Secretary (NCD), MoHFW and Deputy Director General (DDG) is the technical head at the Directorate General Health Services (Dte. GHS) along with officials, staffs and consultants from Ministry of Health & Family Welfare.

The roles and responsibilities of the National NCD Division are as follows:

- Nodal agency for implementation of NP-NCD in the country. Plan, implement, coordinate, monitor and support all the activities at the National and State level.
- Implementation of National Multi-sectoral Action Plan for Prevention and Control of NCDs.
- Develop Technical and Operational Guidelines, Standard Operating Procedures (SOP), Treatment Protocols, Training modules, Quality benchmarks, Monitoring and reporting systems and tools, IEC materials.
- Monitoring of the programme through collection, collation, compilation, and analysis of data. Review of reports generated from data of National NCD Portal and timely sharing with the States/UTs for action.

- Conduct or commission implementation research/evaluation studies.
- Joint Supportive Supervision Mission visit to the States/UTs.
- Release of funds as per State PIP approved in the NPCC meeting and monitoring of the same through key deliverable indicators.
- Capacity building through various well-designed training programmes.
- Integration with other related National Health Programmes.

State NCD Division:

The State NCD Division is headed by Mission Director, NHM. The technical support is provided by a senior-level officer from the health services, designated by the State Government as the State Nodal Officer/State Program Officer - NCD (SNO/SPO - NCD). The contractual staffs (State Programme Coordinator, Finance cum Logistics Consultant and Data Entry Operator) are hired under NP-NCD to support the program.

The roles and responsibilities of State NCD Division are as follows:

- Preparation of State action plan including physical and financial targets for implementation of NP-NCD.
- Implementation of National Multi-sectoral Action Plan.
- Ensure presence of identified key human resources [regular or contractual] for various facilities.
- Maintain district-wise epidemiological profile for identified NCDs.
- Ensure regular supply of drugs, diagnostics and logistics etc.
- Monitor implementation of NP-NCD through analysis of routine reports generated under National NCD Portal and/or other IT based solutions, field visits, review meetings and research etc.
- Designing IEC materials, media plan and its dissemination.
- Preparation of State PIP for submission to NHM. Release of funds to the districts as per the district PIPs. Ensure timely preparation and submission of Statement of Expenditure and Utilization Certificates.
- Organize state and district level trainings for capacity building of all cadres of human resources.
- Coordination with other related National Health Programmes.

District NCD Division:

The District NCD Division is usually located in the vicinity of the District Programme Management Unit (DPMU) of NHM, or any other space provided by the District CMO. It is responsible for overall planning, implementation, monitoring and evaluation of the different activities and achievement of physical and financial targets planned under the programme in the district.

One regular State government officer is designated as District Nodal Officer/District Programme Officer - NCD (DNO/DPO - NCD). The District NCD Division functions under the overall supervision of the DNO and is supported by the contractual staff hired under NP-NCD (District Programme Coordinator, Finance cum Logistics Consultant and Data Entry Operator).

The roles and responsibilities of District NCD Division are as follows:

- Preparation of District action plan (incorporating NP-NCD strategies) including physical and financial targets for implementation of NP-NCD.
- Ensure the presence of identified key human resources [regular or contractual] at various health facilities.

- Maintain district epidemiological profile for identified NCDs.
- Ensure regular supply of drugs, diagnostics and logistics.
- Monitor implementation of NP-NCD through analysis of routine reports generated under National NCD Portal and/or other IT based solutions, field visits, HMIS and review meetings.
- Prepare the media plan. Conduct health promotion and public awareness activities.
- Preparation of District PIP for submission to State NHM. Ensure timely preparation and submission of Statement of Expenditure and Utilization Certificates.
- Organize trainings for capacity building at all levels of human resources.
- Coordination with other related National and State Health Programmes.

Technical support group and committee:

Several support groups and committees have been formed to provide technical support to the programme. Through their guidance the programme progress is reviewed to ensure quality of implementation. The States also devise their own mechanisms for providing the State specific technical inputs for issues related to NP-NCD, from time to time.





OPERATIONAL STRATEGIES

Service delivery mechanism under NP-NCD

Service delivery framework consists of primary, secondary, and tertiary levels. Preventive, promotive, curative, rehabilitative and supportive services (core and integrated services) for common NCDs are being provided through various levels of government health facilities. Government of India's flagship programme of Ayushman Bharat-Health and Wellness Centres (AB -HWCs) has clearly laid out the activities covered across level of primary care i.e., HWC-PHC/UPHC, HWC-SHC and community. The secondary level facilities such as CHC/SDH and DH are also now being strengthened to respond to the growing burden of NCDs, and to function as the referral linkages for facilities below this level of care.

The range of NCD services includes health promotion, psycho-social counselling, screening, case management (out-and-in-patient), emergency cardiac and stroke care services, day care and palliative care services for cancer, as well as referral for specialized services, as needed.

Bi-directional referral linkages covering all levels of health care facilities shall be established to assure care both for NCDs and associated unforeseen emergencies and follow up care. Whenever feasible and appropriate, teleconsultation services with higher centres would be organized.

As needed, referral to specialists at the secondary or tertiary level is to be ensured. Such referrals shall be with specific instructions regarding facility name and location, day and time of visit, person to contact etc. Two-way referrals between various facility levels are to be ensured, which can be facilitated through established IT system or teleconsultation. The loop between the primary care medical provider and the specialist must be closed. This can be achieved when the specialists at district facility or higher are able to communicate to the medical officer about the adequacy of treatment, any change in treatment plans, and further referral action.

Package of services

Level of care	Package of services
Community level	<ul style="list-style-type: none"> Active enumeration of the eligible population and registration of the families, risk assessment of NCDs using Community Based Assessment Checklist (CBAC), Mobilization of community for screening of NCDs at nearest AB-HWC. Health promotion, lifestyle modification, follow up for treatment compliance and lifestyle modification.

Sub-centre / SHC-HWC	<ul style="list-style-type: none"> • Health education for awareness generation and behaviour change, organising wellness activities. • Screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical). • Referral of suspected cases to PHC/PHC-HWC or nearby health facility for diagnosis confirmation and management. SHC- HWC team to also facilitate the referrals and follow up on referred suspected patients. • Dispensing of prescribed medicines and follow up of patient for treatment compliance and lifestyle modification. • Teleconsultation services from SHC-HWC to HWC- PHC/UPHC. • Maintaining Electronic Health Records (EHR) and generation of ABHA IDs.
PHC / PHC- HWC/ UPHC- HWC	<ul style="list-style-type: none"> • Health promotion activities including wellness activities for behaviour change. • Screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and Asthma, CKD, NAFLD among OPD attendees. • Confirmation of diagnosis, treatment initiation, and management of common NCDs as per standard management protocol and guidelines. • Referral of complicated NCD cases to higher facilities. Bi-directional referral linkages to be established and follow up to be ensured. • Teleconsultation services and counselling services. • Maintaining Electronic Health Records (EHR) and generation of ABHA IDs.
CHC/SDH	<ul style="list-style-type: none"> • Health promotion including counselling. • Opportunistic screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical). • Screening of COPD and Asthma, CKD, NAFLD, STEMI among suspected cases. • Confirmation of diagnosis, treatment initiation, and management of common NCDs as per standard management protocol and guidelines. • Teleconsultation services and counselling services. • Maintaining Electronic Health Records (EHR) and generation of ABHA IDs. • Management of cases of common NCDs and regular follow-up. • Referral of complicated cases to District Hospital/higher healthcare facility.

District Hospital	<ul style="list-style-type: none"> • Opportunistic screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical). • Screening of COPD and Asthma, CKD, NAFLD, STEMI among suspected cases. • Diagnosis and management of cases of common NCDs: outpatient and inpatient care, including emergency care particularly for cardiac and stroke cases. • Management of complicated cases of common NCDs, or referral to higher healthcare facility. • Follow-up cancer chemotherapy and palliative care services for cancer cases, physiotherapy services for NCDs including Stroke patients, Dialysis facilities for CKD patients, etc. • Health promotion for behaviour change and counselling for NCD cases. IEC activities on important Health Days. • Bidirectional referral linkages and follow up mechanism to be established and ensured. • Teleconsultation services and counselling services. • Maintaining Electronic Health Records (EHR) and generation of ABHA IDs.
Medical College/ Tertiary Cancer Centres	<ul style="list-style-type: none"> • Diagnosis and management of complicated cases of common NCDs acts as tertiary referral facility. • Comprehensive cancer care including prevention, early detection, diagnosis, treatment, palliative care and rehabilitation at Tertiary Cancer Centres. • Support programme in capacity building of health staff. • Support programme in preparing standard guidelines and protocols. • Support in supervision, monitoring, evaluation and operational research. • Bidirectional referral linkages and follow up mechanism to be established and ensured. • Teleconsultation services and counselling services. • Maintaining Electronic Health Records (EHR) and generation of ABHA IDs

As per Indian Public Health Standard 2022, the details of tests performed and medicines available at each level of facility is placed as **Annexure 1.1 and 1.2** respectively.

Activities and interventions at various levels:

i. Individual/family/community level:

- a) Active enumeration of the eligible population and registration of families and maintenance of family folder which is done by ASHA.

- b) Risk assessment using Community Based Assessment Checklist (CBAC) for all individuals:

Through CBAC administration, a scoring is done for individuals, which is not a point of elimination but a means to highlight risk factors of NCDs and for customization of health promotional activities and prioritizing for screening. CBAC form, which is used for community-based assessment, is placed as **Annexure 2**, along with reporting formats for various levels of public health facilities under NP-NCD.

- c) Health promotion through appropriate and effective Information Education and Communication (IEC) and BCC strategies with special emphasis on prevention of NCDs and healthy lifestyle. Wellness activities including Yoga and integration with intervention like Fit India movement and Eat Right movement at the level of community.
- d) Educating community about healthy lifestyles. Family-centric care for sustainable acceptance of healthy lifestyle and ensuring treatment adherence.
- e) Community level forum like Village Health Sanitation and Nutrition Committee (VHSNC)/ Mahila Aarogya Samiti (MAS), Jan Aarogya Samiti (JAS), Self Help Groups (SHG) and local bodies in both rural and urban areas to be strengthened and established as a platform for community awareness and promotive and preventive care activities.
- f) Frontline workers, ASHA, Multiple Purpose Worker/Auxiliary Nurse Midwife (MPW/ANM) to be skilled for Primary, basic diagnostic and community level preventive care for NCD related problems.
- g) Community follow up of identified individuals to be carried out by ASHA making visits for behavioural changes, treatment compliances, and encouraging patients to go to the HWCs for regular check-up of BP/blood glucose.

- h) Counselling and appropriate referral of patients requiring medical interventions. ASHA would administer Community Based Assessment Checklist (CBAC) for all individuals of 30 years and above age group in the population. Through CBAC administration, a scoring is done for individuals, which is not a point of elimination but a score of 4 or more implies high risk. In addition, the tool includes questions related to symptoms of cervical cancer, breast cancer, oral cancer and Chronic Obstructive Pulmonary Diseases (COPD) and Asthma. All the identified individuals of age 30 years and above are referred for screening of common NCDs.

ii. SHC-HWC/U-HWC:

The following activities are carried out at the level of Sub Health Centre - Health and Wellness Centres (HWCs):

a) Health promotion:

Behaviour and life-style changes through health promotion is an important component of the programme at sub centre/SC -HWC level and to be carried out by the frontline health workers, ANMs and/or Multi-Purpose Worker (MPW) - Male/Female and Community Health Officer (CHO) for all age groups (preferably 18 years and above). Various approaches can be used such as organising camps, interpersonal communication (IPC), posters, banners, billboards, etc. to educate people at community/school/workplace settings. Health Promotion activities can be carried out at the community level during the Village/Urban Health, Sanitation and Nutrition Days (VHSND)/ Community based platforms and/or outreach activities including Annual Health calendar activities. Forty-two health calendar days are celebrated by each AB-HWCs apart from wellness-related activities like Yoga, Zumba, Meditation etc., which not only enable improved physical health but also mental wellbeing of the community. The health workers can discuss the various aspects of a healthy lifestyle and its benefits with the target groups, mobilise the community to get screened at nearest HWCs and motivate them to adopt a healthy lifestyle for prevention of common NCDs.

b) NCD screening activities:

Under CPHC, HWCs are functioning as the first point of contact for screening of NCDs and risk factors. Community Health Officers (CHO) would provide primary level care at the Health and Wellness Centres but a dedicated Medical Officer (MO) is posted at Urban HWCs (UHWCs) to undertake activities related to NCDs. The MO will screen NCDs along with primary management of conditions, following treatment protocols.

At the HWC level in rural areas, the CHOs and associated team (ANMs/MPWs) would be trained to undertake screening for HTN, DM, CRDs CA etc., thus enabling early identification, timely detection, and appropriate referral, if needed.

HWC team maintains a record of NCD patients in general OPD, camps and their subsequent referral to higher centres. The CHOs should be alert for the possibility of complications among the NCD patients.

c) Referral and Follow up:

The suspected cases for NCDs are referred to higher health facilities for further diagnosis, treatment initiation and management. The suspected cancer cases are referred to PHC / CHC / District Hospital for confirmation. The AB-HWCs provide teleconsultation services using e-Sanjeevani platform, whereby every level of service provider from CHO to medical officer can access higher level consultation, including with specialists in secondary and tertiary centres.

d) Drugs and Logistics Supply:

Medicines listed as per essential list of medicines for public health care facilities need to be ensured at respective facility. At least one month supply of medicine should be provided to the patients. Accordingly, one month medicine needs to be maintained as per patient load at the facility. The drug status is recorded by the CHO/ ANM/ MPW while dispensing the medicine.

For a patient suspected of a chronic disease, confirmation and initiation of treatment will be by the MBBS Medical Officer at the PHC or a higher referral centre. However, for continuation of treatment, medicines will be dispensed at SHC-HWCs by CHO to avoid patient hardship and ensure that the clinical condition is monitored regularly.

Any uncontrolled condition must be referred to MO for necessary management. CHO/ ANM/ MPW is undertaking the monitoring of the patients and then issue the next month's supply. Patients would be encouraged to come to the HWC so that their health status can be monitored. Home based distribution is recommended only for patients who are not able to travel.

e) Data recording and reporting:

The Ayushman Bharat-Health Account IDs (ABHA IDs) are generated through National NCD Portal by CHO/ANM/MPW at HWCs. She/he maintains NCD data record and register in prescribed digital formats on National NCD Portal. It is utilised to capture the real-time data on screening and management of NCDs. The CHO/ ANM/ MPW is using the tablet/ mobile/ laptop/ desktop for entering data into it. She/he cross checks 10% of CBAC format duly filled by ASHAs. Wherever the application/ devices are not available, the frontline health workers could maintain physical NCD screening and follow-up registers of 30 years and above beneficiaries and submit monthly reports to the MO (PHC-HWC/UPHC-HWC) on the last day of every month. Digitalization of the data from physical registers has to be done at the PHC-HWC/UPHC- HWC level.

f) Linkages:

Linkages have to be done with the NGOs/ Samitis/ Yuva Kendras etc., through support group meetings for health promotional activities. Linkages with the other Government departments, Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs) etc.. are to be done to facilitate access to entitled-Government welfare schemes for the benefit of the individual.

iii. Primary Health Centre (PHC-HWC/UPHC-HWC):

Primary Health Centre should be able to provide preventive, promotive and curative NCD services. Medical Officer of PHC/ PHC-HWC/ UPHC-HWC would implement the NCD services and supervise the activities of HWCs under the catchment area.

The following activities are carried out at this level:

a) Health promotion:

Health promotional activities for behavioural change is conducted to reduce risk factors for NCDs. The promotional activities are carried out by the frontline health workers for all age groups (preferably 18 years and above). They have the responsibility to disseminate the information for NCDs through IEC materials (Posters, banners, leaflets, billboards etc.) at different settings and gatherings such as educational institutes, workplace, religious festivals etc. to educate people. IEC activities can be carried out on special NCD day. MO would mentor ASHA, MPW and CHO to impart preventive and promotive NCD care.

b) Screening:

1. Population Based Screening:

After screening persons aged 30 years and above for Hypertension, Diabetes, Oral Cancer, Breast Cancer and Cervical Cancer, COPD & Asthma, Chronic Kidney Disease (CKD), Non-Alcoholic Fatty Liver Disease (NAFLD), the CHO/ ANM/ MPW refers suspected cases to the PHC Medical Officer to identify those individuals who have NCDs and warranting them further investigations, management and counselling. The Visual Inspection using Acetic Acid (VIA) for cervical cancer screening is also done by trained Staff Nurse/MO at PHC-HWC/UPHC-HWC.

2. Opportunistic Screening:

For persons of 30 years and above age who report directly in OPD of PHC, NCD screening should be carried out by a Medical Officer, aided by the PHC Nurse. Such screening involves history-taking (such as family history of NCDs, personal history of behavioural risks factors e.g. alcohol consumption, tobacco use, unhealthy dietary habits, physical inactivity etc.), general physical examination and calculation of BMI, blood pressure measurement, blood sugar estimation etc. to identify those individuals who have NCDs as well as those at risk of developing NCDs. The diagnosed individuals are counselled and put on lifestyle modifications and treatment.

a) Clinical diagnosis and management of common NCDs:

All those suspected NCD cases referred from the HWC or reported directly to the PHC-HWC/UPHC-HWC would undergo clinical examination and laboratory investigation for confirmation. Once the diagnosis of diabetes, hypertension, COPD and Asthma is established, then lifestyle modifications is done and appropriate treatment is initiated as per the standard treatment protocol and guidelines.

b) Drugs and Logistics Supply:

It is expected that above NCD patients must receive at least one month supply of medicines from the PHC. Once the condition is stable, three-month supply of drugs could be stocked with the CHO/ ANM/ MPW at SHC-HWC, to be given as per the State policy. Drug demand should be as per the State list of Essential medicines. Sufficient stock needs to be maintained at PHC-HWC/UPHC-HWC as per the patient load.

c) Referral and Follow-up of cases of common NCDs to CHC/DH:

The complicated cases of NCDs (diabetes, hypertension, COPD, asthma and CKD etc.) need to be referred to the CHC/ UCHC/ DH for specialist consultation, further management, and thereafter, once every year or sooner, if required. All the VIA positive cases have to be referred to higher facilities for confirmation of diagnosis and management with colposcopy and/or cryotherapy by specialists, wherever available. Individuals with suspected oral cancer/breast cancer has to be referred to higher facilities for confirmation through biopsy and further management. All suspected cases of NAFLD are referred to CHC/DH for further diagnosis and management. The follow-up instructions are to be carried out at the SC/SC-HWC respectively and undertake to refill drugs on a monthly basis. Any uncontrolled conditions needs to be referred to MO at PHC/PHC-HWC/UPHC-HWC/CHC. MO is responsible for maintaining upward referrals with concerned specialist at secondary level for management support and downward referrals with CHO at HWC for follow up and drug refills/counselling support.

d) Data recording and reporting:

The Ayushman Bharat-Health Account IDs (ABHA IDs) are generated through National NCD portal by MO. She/he maintains NCD data record and register in prescribed digital formats on National NCD portal. It is utilised to capture the real-time data on screening and management of NCDs. The MO and Staff Nurse is using the tablet/ mobile/ laptop/ desktop for entering data into it. Wherever the application/ devices are not available, the MO/Staff Nurse could maintain physical NCD treatment and follow up registers of 30 years and above beneficiaries and submit monthly reports to the CHC/UCHC on the fifth day of every month.

e) Linkages:

Linkages have to be done with the NGOs/ Samitis/ Yuva Kendras etc., through support group meetings for health promotional activities. Linkages with the other Government departments, Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs) etc., are to be done to facilitate access to entitled Government welfare schemes for the benefit of the individual.

iv. Community Health Centre/UCHC:

CHC/UCHC NCD clinics:

Under NP-NCD, the support is provided to all Community Health Centre (CHC)/UCHC for NCD clinic. The comprehensive management of patients is done, who are referred by lower health facilities. The Medicine Specialist and/or MO would run NCD clinic and implement the NP-NCD program. The CHC/UCHC NCD Clinic provides the following activities:

a) Prevention and health promotion:

The CHC is involved in promotion of healthy lifestyle through health education and counselling to the patients and their attendants at the time of their visit to CHC. The NCD Counsellor recruited under the programme counsels on the merits of healthy diet, importance of physical activity, harmful effects of tobacco and alcohol, warning signs of cancer, air pollution, obesity, importance of treatment adherence, etc. The promotional activities will be carried out by the frontline health workers, ANMs and/or Multi-Purpose Worker (MPW) - Male/Female and Community Health Officer (CHO) for 18 years and above.

b) Screening

1. Population Based Screening:

Identified NCD patients of age group of 30 years and above, who are screened and diagnosed with NCDs at HWCs (SHC/ PHC/ UPHC) when referred to CHC, would be examined and treated by the NCD Medical Officer with support of the NCD Nurse on priority at NCD clinics.

2. Opportunistic Screening:

The opportunistic screening of persons of all age groups who report to the NCD Clinic is carried out at CHC/UCHC. NCD screening should be carried out by a Medical Officer, aided by the designated staff nurse at CHC NCD clinic. Such screening involves history-taking (such as family history of NCDs, personal history of behavioural risks factors e.g. alcohol consumption, tobacco use, unhealthy dietary habits, physical inactivity etc.), general physical examination and calculation of BMI, blood pressure measurement, blood sugar estimation etc. to identify

those individuals who have NCDs as well as those at risk of developing NCDs. The diagnosed individuals are counselled and put on lifestyle modifications and treatment.

c) *Diagnosis and Management:*

Laboratory investigations and Diagnostics such as common blood examinations (CBC, FBS, LFT, KFT, LPT, etc.), spirometry, X- Ray, ECG, USG, etc. should be made available (may be outsourced, if not available). Once diagnosed lifestyle modifications needs to be done. Further, management of diabetes, hypertension, COPD, asthma, CKD, NAFLD, Stroke and STEMI along with counselling and follow-up to be undertaken by staff of NCD Clinic.

If VIA positive patients have been referred from PHC/ PHC-HWC/ UPHC-HWC, or if invasive pre-cancerous lesions of the cervix found in direct walk-in patients, then the CHC/UCHC could offer colposcopy and/or cryotherapy to them.

d) *Drugs and Logistics Supply:*

The NCD patients must receive at least one month supply of drugs from the CHC/UCHC. Once the condition is stable, three-month supply of drugs could be stocked at CHC to be given as per the State policy. Drugs for various common NCDs are made available as per State Essential Drug List. There is a regular update of drug inventory along with buffer stocks. Sufficient stock needs to be maintained at CHC as per the patient load.

e) *Referral:*

The complicated cases of NCDs are referred from CHC/UCHC to the District Hospital for further investigations and management. The cases which require biopsy for cancer confirmation are referred to the DH, or to the nearest tertiary centre for further management. Individuals with hypertension and/or diabetes under treatment/referred from PHC-HWC/UPHC-HWC for management at CHC may be referred to respective PHC-HWC/UPHC-HWC once their blood sugar/BP is under control.

f) *Data recording and reporting:*

The Staff Nurse would generate ABHA-ID through National NCD Portal. Medicine Specialist/ MO/ Staff Nurse maintains patient related NCD data and reports in prescribed formats on National NCD Portal. She/he is using the mobile phones/ laptops/ desktops for entering data into it. Wherever the application is not available, the Medicine Specialist/ MO/ Staff Nurse could maintain NCD register with individual diagnosis, treatment, follow-up and referral records, and submit monthly reports to the District NCD Division on the seventh day of every month.

e) *Linkages*

Linkages have to be done with the NGOs/ Samitis/ Yuva Kendras etc., through support group meetings for health promotional activities. Linkages with the other Government departments, Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs) etc., are to be done to facilitate access to entitled Government welfare schemes for the benefit of the individual.

v. District hospital:

District NCD Clinics have been set up at District hospitals for management of NCDs. This is further strengthened by setting up of Critical Care Unit [Cardiac Care Unit (CCU)/Cardiac Stroke Care Unit (CSCU)] and Day Care Centres, which offers specialised care. The DH would function as referral unit for all NCDs being identified at the lower level, i.e. CHC and HWCs.

District NCD Clinic:

a) Screening:

1. Population Based Screening:

Identified NCD patients of age group of 30 years and above, which are screened and diagnosed with NCDs at CHCs/SDH and HWCs (SHC/ PHC/ UPHC) when referred to DH, would be examined and addressed on priority at NCD clinics at DH for further management and counselling.

2. Opportunistic Screening:

The District NCD Clinics screen individuals of all age groups reporting directly to the Clinic, for common NCDs and NCD risk factors, and identify individuals at risk or with the disease.

b) Detailed investigation at District laboratory Facility:

Detailed investigation is done at District Hospital for persons screened positive in the NCD clinic, as well as for those referred from lower facilities. Diagnostic services at district hospitals are established/strengthened to provide necessary laboratory, pathology and radiology support. The indicative list for investigation of common NCDs are such as routine blood examination, blood sugar, blood lipid Profile, KFT, LFT, X-ray, ECG, USG, ECHO, CT scan etc. District hospitals may outsource certain essential laboratory investigations and diagnostics that are not available. The District Hospital should display the list of Laboratories in which these investigations are outsourced.

c) Out-patient and In-patient Care:

All District Hospitals would have dedicated NCD clinics which may be a separate space, with visible labelling. Persons with suspected or confirmed NCDs may be either referred from other OPDs or may come directly after hospital OPD registration. However, the NCD patients already on treatment may come directly to these NCD Clinics for regular follow-up for drugs or complications. The NCD Clinics would be provided with dedicated manpower and other necessary logistics for screening, diagnosis, lifestyle modifications, treatment, counselling, awareness generation, etc. for common NCDs such as diabetes, hypertension, oral cancer, cervical cancer and breast cancer, COPD, asthma, CKD, NAFLD, Stroke and STEMI under the programme.

If VIA positive patients have been referred from a lower health facility, or if invasive pre-cancerous lesions of the cervix found in direct walk-in patients, then the DH could offer colposcopy and cryotherapy. Facilities for specialist consultation with Medicine, Gynaecologists, Surgeons, ENT Surgeon or Dentist, Radiologist should be made available. Provision for fundoscopy and ophthalmologist consultation annually for diabetics and hypertensives should also be undertaken.

The complicated cases of NCDs are managed in IPDs and rehabilitation services could be provided to the patient with support of medicine specialists/MO and Counsellor.

d) Referral and Transport facility for serious patients:

Complicated cases shall be referred to the nearest tertiary health care facility with a referral card. The suspected or diagnosed cancer cases may be referred to concerned Tertiary Cancer Care Centre (TCCC) for further management. To ensure timely and emergency care for patients referred from distant CHC/ UCHC/ PHC/ PHC-HWC/ UPHC-HWC to DH, or for referral of serious cases from DH to the nearest tertiary level facility, there is fund provision for transporting the serious patients. NCD cell would provide facilitation support for referred cases to ensure that the individual get hassle free entry and is able to get specialist consultation with ease. Free transportation is to be made available to the patient using ambulance services.

e) Health promotion:

Apart from clinical services, district hospitals are also involved in promotion of healthy lifestyle through health education and counselling to the patients of 18 years and above and their attendants regarding prevention of NCDs and related risk factors. The international and National NCD health days as per Annual Health Calendar are celebrated. Posters, banners, hoardings etc. are displayed at important public gathering places to increase awareness in the communities. Health promotion activities has to be carried out regularly in different settings like school, workplaces and community setting etc.

f) Data recording and reporting:

The ABHA-ID can be generated through National NCD Portal by Staff Nurse. Medicine Specialist/MO/Staff Nurse maintains patient related NCD records and reports in prescribed formats on National NCD Portal. She/He is using the mobile phones/ laptops/ desktops for entering data into it. Wherever the application is not available, the Medicine Specialist/ MO/ Staff Nurse could maintain NCD register with individual diagnosis, treatment, follow-up and referral records, and submit monthly reports to the State NCD Division on the seventh day of every month.

g) Linkages:

The District Nodal Officer would plan for linkages of NP-NCD program with a) NGOs/ Samitis/ Yuva Kendras etc., for support group meetings and health promotion activities, b) referral and/ integrated/ coordinated care linkages with other national programs and c) Government Departments, Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs), etc., to facilitate access to schemes/programmes etc. He would facilitate the intersectoral coordination and better implementation of NP-NCD program with support health and non-health stakeholders.

DH should establish linkages with existing tobacco cessation centres and de-addiction centres in respective districts. All facilities under the DH should be made available with the list of such de-addiction centres for linking the identified individuals as and when required.

vi. Critical care units:

Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) includes Critical Care hospital blocks in all districts with a population of more than 5 lakhs, in State Government Medical Colleges/DH and in 12 Central Institutions. Under it, the support is provided for 50/75/100 bedded Critical Care Units [Cardiac Care Unit (CCU)/Cardiac and Stroke Care Unit (CSCU)] in 602 districts across all States/UTs. Under Emergency Covid Response Plan II (ECRP-II), the funds for Critical Care Units have also been provided.

The districts which are not covered under any of the above schemes, the funds are provided for establishing Critical Care Unit along with drugs and logistics under the programme. Six-bedded Critical Care Unit will be established/strengthened in the identified district hospital premises, wherever it is feasible, as per the availability of space and requirement. Priority for Critical Care Unit establishment may be given by States to the districts not having Medical College Hospitals and not covered under 'Scheme for Up-gradation of District Hospitals to Medical College Hospitals'.

Under the programme, there is provision for renovation and purchase of equipment such as ventilators, monitors, defibrillator, beds, portable ECG machine, etc., for cardiac and stroke care. This unit is supported by essential human resources on contract basis, in addition to existing human resources of the District Hospital. Special training is given to health professionals and nurses in handling the patients in Critical Care Unit. All identified district hospitals have to be supported for Integrated Public Health Laboratories, and in case the facility is not available in the district hospital, these investigations may be outsourced in Public Private Partnership (PPP) model/pattern or as per state policy/practice. Thrombolysis services for STEMI or Stroke could be provided through it and referred to higher centres for further management.

vii. Day care centres for cancer chemotherapy:

Day Care Centres are established for provision of continuation of simple chemotherapy regimens to cancer patients at the District Hospitals to support those already undergoing treatment at TCCC. Financial support is given under NP-NCD for infrastructure (four bedded units), necessary equipment such as IV stands, BP instruments, sterilizer etc. Human Resources (including health professional and nurse) are provided by District Hospital for smooth functioning of the centre.

Efforts should be made that once a cancer case has undergone diagnosis and initial management in a tertiary care hospital, the subsequent treatment and follow up of cases may be undertaken at district hospital itself, to minimise the discomfort to patients. The support for chemotherapy drugs should be provided to district hospitals as per the approved pattern of assistance and the mechanism laid down by respective State Governments. The District Hospital is linked with State Cancer Institute and Tertiary Care Cancer Centre wherever available, to ensure continuum of care.

Strengthening of tertiary cancer care centres facilities scheme:

To enhance the facilities for tertiary care of cancer, the Central Government is implementing 'Strengthening of Tertiary Cancer Care Facilities' Scheme. Under the scheme, support is provided to States/UTs for setting up of State Cancer Institutes (SCIs) and Tertiary Care Cancer Centres (TCCCs) in different parts of the country. The financial assistance is for procurement of radio therapy equipment, diagnostic equipment, surgical equipment, enhancement of indoor civil work and patient facility for cancer and such other purposes relevant for diagnosis, treatment and care of cancer. The maximum permissible assistance for SCI is Rs. 120 crores and for TCCC Rs. 45 crores. This is inclusive of State share of 40% (for North-East and Hill States 10%). Up to a maximum of 30% of the sanctioned amount will be permitted to be used for civil/electrical work (including renovation), and improvement of infrastructure. Till date

39 institutions (19 SCI and 20 TCCC) have been approved. 27 Regional Cancer Centres were financially assisted till 2004 under the earlier National Cancer Control Programme. These erstwhile RCCs continued the work in cancer care. As per the Cabinet Committee approval, the financial support from central government for the said scheme will be continued up to 31st March 2024.

India Hypertension Control Initiative (IHCI):

The India Hypertension Control Initiative (IHCI) is a multi-partner initiative between the Ministry of Health and Family Welfare, Indian Council of Medical Research, State Governments, World Health Organisation-India and Resolve to Save Lives (Technical Partner). The initiative aimed to accelerate progress towards the Government of India's NCD targets by supporting evidence-based strategies for strengthening the building blocks of hypertension management and control. IHCI was launched in November 2017 and was implemented in 25 districts across 5 States (Punjab, Kerala, Madhya Pradesh, Telangana and Maharashtra) in first year. The initiative included a Simple Application with following features: 1) Scanning of QR Code of Health ID Card for beneficiary identification. 2) Observe the progress rate of the Programme through a) number of patients on treatment and b) control rate. 3) Follow-up of beneficiaries through Call/SMS. and 4) Cohort monitoring to track a set of patients receiving treatment over a time.

Based on the positive experiences and lessons learnt from the IHCI sites, and the existing initiatives of MoHFW on prevention, screening and control of common NCDs since 2016 and CPHC rollout in 2018, Government of India has now decided to merge the simple application of IHCI with National NCD Portal to avoid duplication of efforts and ensure maximum utilisation of existing resources. A compilation of good practices under IHCI is placed as **Annexure 3**.

Centre of Excellence :

Centre of Excellence (preferably disease specific) needs to be established at State/National level. The activities may be planned as follows:

- Designing of training manuals
- Capacity building of master trainers
- Implementation of NP NCD Operational Guidelines/National Disease Specific Guidelines
- Development of IEC materials





HUMAN RESOURCES

The NP-NCD programme outlines and supports various Human Resources at National, State and District NCD Division and service providers at District and CHC NCD clinics. The tables below provide the details on the number of positions and requirements for these personnel. The following list is suggestive in nature. The State/UTs may plan for combined Programme Management Unit for NCDs. The State/UTs may make necessary changes as per their requirement.

It is also encouraged that available personnel be assigned appropriate tasks across the various initiatives to achieve the programme goals. Moreover, it is essential to utilise newer technologies like telemedicine and digital applications for capturing data on NCDs to improve the efficiency and patient care.

Human resources at National NCD Division:

At National level, Joint Secretary (NCD) will head the NP-NCD, who will be technically supported by Deputy Director General (NCD). Under DDG (NCD), the following officers will lead the program:

Sl. No.	Name of Post	No. of Posts
1.	Central NCD Division- Head (DDG Level)	1
2.	Deputy Program Manager (Diabetes, Hypertension, COPD and asthma, Stroke, STEMI, CKD, NAFLD, CVD) Addl. DDG/ADG Level	8
3.	Program Manager (Joint-Director Level)	16
4.	Assistant Program Manager (Deputy/Assistant Director Level)	16

The following contractual staffs are needed to support, strengthen and implement the NP-NCD programme.

Sl. No.	Name of Position/Post	No. of Posts
1.	National Programme Coordinator	1
2.	Epidemiologist	1
3.	Consultant (Training)	1
4.	Consultant (Monitoring and Evaluation)	1
5.	Consultant (Public Health)	2
6.	Consultant (Health Promotion/IEC)	2
7.	Consultant (Management Information System/e-Health)	1

8.	Consultant (Finance and Logistics)	1
9.	Accountant	1
10.	Logistics Manager	1
11.	Data Analyst	2
12.	Data Entry Operators	7
13.	Public Health Consultants (Regional/State based)	25

Terms of reference and remuneration structure of contractual staff would be as per NHM norms.

Human resources at State NCD Division

The staff positions supported at State NCD Division:

Sl. No.	Name of Post	No. of Posts
1.	State Programme Officer	1
2.	State Programme Coordinator/NCD Consultant	1
3.	Finance and Logistics Consultant	1
4.	Data Entry Officer	1

The remuneration structure of the contractual staff would be as per NHM norms. Terms of Reference for contractual staff under State NCD Division is as below:

State Programme Officer:

Essential Qualification: MBBS degree from institution recognized by National Medical Council (NMC), with Diploma/Master's in Public Health or MD/DNB in Preventive and Social Medicine/ Community Medicine/ Community Health Administration/ MBA (Health Care Administration)

Experience: Essential: At least 2 years of experience in Health Management/ Public Health Programme/ Health Services after obtaining post graduate degree/Diploma.

Desirable: Experience in Non Communicable Disease control program/projects.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Implementing NP-NCD and NMAP activities.
- Developing Programme Implementation Plan.
- Organizing review meetings and orientation workshops.
- Organizing regular capacity building workshops for human resources.
- Visiting districts and peripheral units to monitor, evaluate and surveil the NCD activities.
- Facilitating and reviewing programme implementation including IEC activities and National NCD portal at all levels.
- Planning and linking with other National Programmes.
- Collaborating with Centre, Medical colleges, Districts, NGOs and other sectors.
- Preparing and submitting monthly, quarterly progress report of NP-NCD to National NCD Division by using National NCD Portal. .
- Any other job assigned by concerned officers,

State Programme Coordinator/NCD Consultant:

- M.B.B.S with Master's in Public Health or
- BDS/ AYUSH/ Biosciences with Diploma/Master's in Public Health or MBA (Health Care Administration).

Experience: At least 1 year experience of working in Health Services/Public Health Programme in NCDs. Working Knowledge of operating computers and internet usage

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Assisting SNO/SPO in NP-NCD and NMAP planning and implementation.
- Developing Programme Implementation Plan.
- Organizing Regional level review meetings and orientation workshops.
- Organizing regular capacity building workshops for human resources.
- Visiting districts and peripheral units to monitor, evaluate and surveil the NCD activities as per the quarterly visit plan.
- Implementation of various guidelines, schemes under NP-NCD at State level.
- Coordinate standard treatment protocol consensus meetings at State level.
- Facilitating and reviewing programme implementation including IEC activities and National NCD portal at all levels.
- Planning and Linkaging with other National Programmes.
- Collaborating with States, Medical colleges, NGOs and other sectors.
- Preparing and submitting monthly, quarterly progress report for NP-NCD to SNO/SPO (NCD) using National NCD Portal.
- Any other job assigned by concerned officers.

Finance and Logistic Consultant:

Qualifications: Essential: Inter CA/ Inter ICWA/ M. Com or MBA (Finance/ Material Management) with knowledge of computers.

Desirable: At least 1 year of experience in State level in accounting including analysis, financial reporting, budgeting, financial software and reporting system.

Experience: Experience of working in Health Care Financing/ National Health Accounts

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

General:

- To support all matters relating to accounts, budgeting and financial matters and management of accounting procedures pertaining to NP-NCD in the State.
- To organize and maintain the fund flow mechanism from Centre to State and then from State to Districts.
- Accurate and timely submission of quarterly report on expenditure to Centre, annual audited statement of accounts and intensively monitoring the financial management in each District NCD Division.
- To support all matters related to logistics management (including purchases related to equipment and drugs under NP-NCD).
- Any other job assigned by concerned officers.

Specific:

- Preparing annual and quarterly budgets for the States.
- Ensuring that adequate internal controls are in place to support the payments and receipts.
- Ensuring timely consolidation of accounts/financial statements at the State/District.
- Training of Finance and Logistics Officer at State and District level in fund flow mechanism and filling up the reporting formats.
- Supporting the audit of the accounts of the State and District in accordance with the financial guidelines.
- Monitoring expenditure and receipt of Utilization Certificate (UC) and Statement of Expenditure (SOE) from the States and Districts.
- Reviewing the accounts and records of the State and District on a periodic basis.
- Preparing consolidated SOE of NP-NCD on a quarterly basis.
- Coordinating with the District to address the audit objection/internal control weaknesses, issues of disallowances, if any.
- Planning, Monitoring, Reviewing and Supporting the SNO/SPO in logistics management.

Data Entry Operator:

Qualifications: Graduate in any discipline, with a diploma in computer application. Typing speed of 40 wpm in English.

Experience: Minimum 1 year of relevant working experience preferably in health sector.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Ensure regular entry of all relevant data pertaining to various aspects of NP-NCD in a systematic manner to facilitate its analysis.
- Analyse data and compile reports by using National NCD Portal.

- Provide troubleshooting support to health facilities for data compilation.
- Assist in preparing district-wise report based on key performance indicators.
- Maintenance and upkeep of the computer and its accessories including virus defence.
- Any other job assigned by concerned officers.

Human Resources at District NCD Division:

Contractual staff positions supported at District NCD Division:

Sl. No.	Name of Post	No. of Posts
1.	District Programme Officer	1
2.	District Programme Coordinator/Senior Treatment Supervisor	1
3.	Finance and Logistics Consultant	1
4.	Data Entry Officer	1

The remuneration structure of the contractual staff would be as per NHM norms. Terms of Reference of contractual posts at District NCD Division.

District Programme Officer:

Essential Qualifications:

MBBS degree from an institution recognized by the Medical Council of India. With Diploma/ Master's in Public Health or MD/DNB in Preventive and Social Medicine/ Community Medicine/ Community Health Administration/ MBA (Health Care Administration).

Experience: Essential: At least 1 year of experience in Health Management/ Public Health Programme/ Health Services after obtaining post graduate degree/Diploma.

Desirable: Experience in Non Communicable Disease control program/projects.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Implementing NP-NCD and NMAP activities.
- Preparing Programme Implementation Plan (PIP).
- Organizing review meetings and orientation workshops.
- Organizing regular capacity building workshops for human resources.
- Visiting blocks and peripheral units to monitor, evaluate and surveil the NCD activities.
- Facilitating and reviewing programme implementation including IEC activities at field level.
- Linking with other National Programmes.
- Collaborating with Medical Colleges, NGOs and other sectors.
- Preparing and submitting monthly, quarterly progress reports for NP-NCD to the State NCD Division by using National NCD Portal .
- Any other job assigned by concerned officers.

District Programme Coordinator/Senior Treatment Supervisor

Essential Qualifications: M.B.B.S from institution recognized by Medical Council of India (MCI) or, Degree in Allied Health Sciences/Biosciences, with Diploma/Master's in Public Health or MBA (Health Care Administration)

Experience: Experience of working in Health Services/Public Health Programme in NCD. Working knowledge of operating computers and internet usage.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Implementing NP-NCD activities
- Preparing Programme Implementation Plan (PIP).
- Organizing review meetings and orientation workshops.
- Organizing regular capacity building workshops for human resources
- Visiting blocks and peripheral units to monitor, evaluate and surveil the NCD activities.
- Reviewing programme implementation including IEC activities at field level.
- Coordination and establish linkages with other National Programmes for prevention and control of NCDs.
- Collaborating with Medical Colleges, NGOs and other sectors.
- Preparing and submitting quarterly progress reports for NP-NCD to the State NCD Division by using National NCD Portal .
- Any other job assigned by concerned officers.

Finance and Logistic Consultant

Qualifications: Essential: Inter CA/ Inter ICWA/ M. Com or MBA (Finance/ Material Management) with knowledge of computers.

Desirable: At least 1 year of experience in accounting including analysis, financial reporting, budgeting, financial software and reporting system.

Experience: Experience of working in Health Care Financing/ National Health Accounts.

Age Limit: As per NHM guidelines.

Job responsibilities:

General:

- To support all matters related to accounts, budgeting and financial matters and management of accounting procedures pertaining to NP-NCD in the District NCD Division.
- To organize and maintain the fund flow mechanism from districts to health facilities.
- Accurate and timely submission of quarterly report on expenditure to State, annual audited statement of accounts and intensively monitoring the financial management in District NCD Division.
- To support all matters related to logistics management (including purchases related to equipment and drugs under NP-NCD).
- Any other job assigned by concerned officers.

Specific:

- Preparing annual and quarterly budget plans for the District.
- Ensuring that adequate internal controls are in place to support the payments and receipts.
- Ensuring timely consolidation of accounts/financial statements at the District facilities
- Training at District level on fund flow mechanism and filling up the reporting formats.
- Supporting audit of accounts of the District in accordance with the financial guidelines.
- Monitoring expenditure and receipt of Utilization Certificate (UC) and Statement of Expenditure (SoE) from CHC/PHC.
- Reviewing the accounts and records of the District on a periodic basis.
- Preparing consolidated SoE of NP-NCD on a quarterly basis.
- Coordinating with the State to address the audit objection/internal control weaknesses, issues of disallowances, if any.
- Planning, Monitoring, Reviewing and Supporting the DPO in logistics management.

Data Entry Operator:

Qualifications: Graduate in any discipline. 1 year diploma in computer application. Typing speed of 40 wpm in English.

Experience: Minimum 1 year of relevant working experience preferably in health sector.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Ensure regular entry of all relevant data pertaining to various aspects of NP-NCD in a systematic manner to facilitate its analysis.
- Analyse data and compile reports by using National NCD Portal.
- Provide troubleshooting support to health facilities for data compilation.
- Assist in preparing district-wise report based on key performance indicators.
- Maintenance and upkeep of the computer and its accessories including virus protection.
- Any other job assigned by concerned officers.

Human resources at District NCD Clinic:

Contractual staff positions supported at District NCD Clinic:

Sl. No.	Name of Post	No. of Posts
1.	Consultant (MD Medicine)	1
2.	GNM/Staff Nurse	1
3.	Physiotherapist	1
4.	Counsellor	1
5.	Data Entry Operator	1

The remuneration structure of the contractual staff would be as per NHM norms. Terms of Reference of contractual posts at District NCD Clinic.

Consultant (MD Medicine):

Essential Qualifications: MD (Medicine) from an institution recognized by the National Medical Council.

Experience: At least 1 year of experience of working in a Hospital.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- To examine and manage NCDs.
- To refer complicated cases to higher care facilities.
- To provide follow up care to the patients.
- To use National NCD Portal for recording and reporting.
- Any other job assigned by concerned officers.

GNM/Staff Nurse:

Qualifications: GNM qualification as recognised by Nursing Council of India.

Experience: At least one year of experience of working in a hospital.

Age Limit: As per NHM guidelines.

Job requirements / responsibilities:

- To assist Medical Officers in Management and follow-up of patients attending the NCD Clinic.
- To counsel patients and their family members about risk factors of NCDs.
- To provide home based care.
- To use National NCD Portal for recording and reporting.
- Any other job assigned by concerned officers.

Physiotherapist (NCD):

Essential Qualifications: Bachelor's degree in Physiotherapy (B.P.T.).

Experience: At least 1 year of experience of working in a Hospital.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Manage and follow up patients requiring physiotherapy services.
- To make domiciliary visits for providing physiotherapy services to bedridden patients.
- To counsel patients and their family about risk factors of NCDs.
- Any other job assigned by concerned officers.

Counsellor (NCD):

Essential Qualifications: Master's degree in social sciences or Degree/Diploma in counselling/ Health Education/ Mass Communication.

Experience: At least 1 year of experience of working as a counsellor in a healthcare facility.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- To provide counselling on lifestyle diseases and their risk factors to patients and their family members.
- To plan IEC activities vis-à-vis NCDs or lifestyle diseases.
- To make domiciliary visits for providing counselling to bed ridden cases and attendants.
- Any other job assigned by concerned officers

Data Entry Operator:

Qualifications: Graduate in any discipline. One-year diploma in computer application Typing speed of 40 wpm in English.

Experience: Minimum 1 year of relevant working experience preferably in health sector.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Ensure regular entry of all relevant data in the computer (including National NCD Portal) pertaining to various aspects of NP-NCD in a systematic manner to facilitate its analysis.
- Analyse data and compile reports.
- Maintenance and upkeep of the computer and its accessories including virus defence.
- Any other job assigned by concerned officers.

Human Resources at District Critical Care Unit [Cardiac Care Unit (CCU) and Cardiac and Stroke Care Unit (CSCU)]

Contractual staff positions supported at District Critical Care Unit

Sl. No.	Name of Post	No. of Posts
1.	Specialist- Cardiology / General Medicine	1
2.	GNM/Staff Nurse	4

The remuneration structure of the contractual staff would be as per NHM norms. Terms of Reference of contractual posts at District CSCU.

Specialist/General Physician:

Specialist – Cardiology/ Neurology/ General Medicine

Essential Qualifications: MD in Medicine or equivalent degree from institution recognized by Medical Council of India or, MBBS/MO with specialised training in Endocrinology, Neurology or Cardiology.

Age limit: As per NHM guidelines.

Job requirements/responsibilities:

- Overall Team Leader, Supervision and Monitoring of activities of CCU/CSCU.
- Mentoring of CHC and PHC staff/teleconsultation.
- To examine and manage including emergencies related to Diabetes, Hypertension, Cardiovascular diseases, Stroke and other co-morbidities.
- To do periodic follow up of such patients.
- To impart training to the health personnel of Community Health Centre as per guidelines issued by National NCD Division.

OR

General Physician:

Essential Qualifications: MBBS or equivalent degree from an institution recognized by the National Medical Council.

Experience: At least 2 years of experience of working in a Hospital Emergency Unit.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- To examine and manage emergencies.
- To refer complicated cases to higher care facilities.
- To provide follow up care to the patients.
- Any other job assigned by concerned officers.

GNM/Staff Nurse:

Qualifications: GNM qualification as recognised by Nursing Council of India.

Experience: At least 2 years of experience of working in a hospital, preferably in ICU.

Age Limit: As per NHM guidelines.

Job requirements / responsibilities:

- To assist Medical Officers in management and follow-up of patients attending the CCU/ CSCU.
- Any other job assigned by concerned officers.

Human resources at CHC NCD Clinic:

Contractual staff positions supported at CHC NCD Clinic

Sl. No.	Name of Post	No. of Posts
1.	MD Medicine/ Medical Officer (NCD)	1
2.	GNM / Staff Nurse (NCD)	1
3.	Counsellor	1
4.	Data Entry Operator	1

The remuneration structure of the contractual staff would be as per NHM norms. Terms of Reference of contractual posts at CHC NCD Clinic.

MD Medicine/Medical Officer (NCD):

Essential Qualifications: MD (Medicine) / MBBS or equivalent degree from an institution recognized by the National Medical Council.

Experience: At least 1 year of experience of working in a Hospital.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- To conduct comprehensive examination for diagnosis and management of the NCD cases.
- Participate in NP-NCD activities.
- Referral and back referral of cases.
- Maintenance of longitudinal records.
- To rule out complications or advanced stages.
- To refer complicated cases to higher care facility.
- To provide follow up care to the patients.
- Overall supervision of NCD Clinic.
- Assist in training of health personnel.
- To ensure joint activities under TB-Diabetes coordination.
- To use National NCD Portal for recording and reporting.

GNM/Staff Nurse (NCD):

Essential Qualifications: GNM qualification as recognised by Nursing Council of India.

Experience: At least 1 year of experience of working in a hospital.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- To conduct screening of common NCDs.
- To assist the Physician during the examination of patients.
- To explain the patient and family about risk factors of NCDs and promote Healthy Lifestyle.
- To assist in follow up care.
- To ensure completeness of referral card filled for suspected cases of TB.
- To ensure that patients referred from TB clinic is screened for diabetes and feedback shared.
- To use National NCD Portal for recording and reporting.
- Any other job assigned by concerned officers.

Counsellor (NCD):

Essential Qualifications: Master's degree in social sciences or Degree/Diploma in counselling/ Health Education/ Mass Communication.

Experience: At least 1 year of experience of working as a counsellor in a healthcare facility.

Age Limit: As per NHM guidelines.

Role of Counsellor

- To provide counselling on diet and lifestyle management.
- To assist in follow up care and referral.
- To ensure proper display of IEC materials.
- To conduct screening for TB symptoms in patients attending clinic.
- Any other job assigned by concerned officers.

Data Entry Operator:

Qualifications: Graduate in any discipline with a one-year diploma in computer application. Typing speed of 40 wpm in English.

Experience: Minimum 1 year of relevant working experience preferably in health sector.

Age Limit: As per NHM guidelines.

Job requirements/responsibilities:

- Ensure regular entry of all relevant data in the computer (National NCD Portal) pertaining to various aspects of NP-NCD in a systematic manner to facilitate its analysis.
- Analyse data and compile reports.
- Maintenance and upkeep of the computer and its accessories including virus defence.
- Any other job assigned by concerned officers.

Human Resources at PHC:

Under PBS, there is a provision of one staff nurse for NCDs.

Staff Nurse (NCD):

Essential Qualifications: GNM qualification as recognised by Nursing Council of India.

Age Limit: As per NHM guidelines.

Job requirements / responsibilities:

- To conduct screening of common NCDs.
- To assist the Physician during the examination of patients.
- To explain the patient and family about risk factors of NCDs and promote Healthy Lifestyle.
- To assist in follow up care.
- To ensure completeness of referral card filled for suspected cases of TB.
- To ensure that patients referred from TB clinic is screened for diabetes and feedback shared.
- To use National NCD Portal for recording and reporting.
- Any other job assigned by concerned officers.

HRH management and processes:***Recruitment:***

While the planning for NCD services lies in the domain of NCD unit, the overall assessment of HRH requirements and its planning is to be done in consultation with the HRH nodal and finalized by Mission Director NHM. Thereafter, the overall responsibility for HRH recruitment and their management, including salary disbursement and timely payment, should remain with the HRH cell in the State.

In case of vacancies at the State, District, or Sub-district level, the NCD cell should inform the Mission Director as well as the HRH cell about the vacancies. HRH cell should then complete the recruitment as soon as possible. However, the NCD cell should have a say in the decisions regarding the recruitment of the PMU staff. Once hired, the NCD cell should provide an in-depth orientation of the program (which is over and above any generic orientation), build the capacities to meet the program needs, provide mentoring support, and monitor the performance.

Performance Monitoring:

It is a good practice to keep an eye on the performance of the HRH and reward the good performers. It promotes ways to enhance productivity along with quality. In this direction, MoHFW has issued Minimum Performance Benchmarks for all HRH, especially the HRH looking after program management. The NCD division in consultation with the HRH division should review, and if need be, revise the benchmarks and monitor the performance.

Dos and Don'ts in HRH:

Dos:

- The guidelines from MoHFW are suggestive which the States/UTs need to adopt and adapt as their context.
- The focus of any resource including HRH has to be shifted from mere inputs to output and in the longer term to outcomes and impact.
- Restructure current Program Management Units at various levels to optimize resources, achieve better cohesion and coordination and deliver person-centered care.
- All HRH under all the programs in the State/UT under NHM to be governed by the same set of rules e.g., increment, periodic performance monitoring.
- Salaries of the HRH, both service delivery and program management, are to be based on educational qualifications, experience, skills, and workload. It should be the same for similar profiles.
- Encourage cross-divisional learning and joint monitoring between programs and major disease groups which are related.
- Prepare Terms of reference (including Job responsibilities and person specifications) for all the posts and communicate these to the HRH/incumbent.
- HRH under NHM would be governed by the HRH policy of the State. For guidance, one may refer to 'Guidelines for NHM HRH 2022' available in the public domain at: [https://nhsrcindia.org/sites/default/files/2022-04/Final Guideline on Human Resources for Health for NHM.pdf](https://nhsrcindia.org/sites/default/files/2022-04/Final%20Guideline%20on%20Human%20Resources%20for%20Health%20for%20NHM.pdf)

Don'ts:

- Do not disrupt any process/unit which is functional. Any change could be incremental. No necessary work should be stopped to start a new process or structure. Similarly, HRH already in place should not be discontinued (except for reasons of loss of relevance or duplication) in order to embrace a new structure. The vacant posts could be eliminated if required for restructuring.
- Do not create any standalone programmatic posts with narrow task profiles. Try integrating services and functions for the betterment of the system.

Details of HR supported under NP-NCD program is placed as **Annexure 4**.





COMMUNICATION STRATEGIES

A strategic and integrated communication approach for NP-NCD is essential to help communities identify risk factors, motivate them to adopt and maintain health seeking behaviours and practices, address misconceptions and fears, identify and mitigate risk factors, motivate for lifestyle modifications and usage of available NCD services. The most appropriate communication approaches, methods or channels should be developed based on evidence in order to achieve the national goal of creating “Swasthya Nagrik Abhiyan” a social movement for health.

Communication strategy must aim at creating an enabling environment in which high uptake of NCD services is achieved. Enabling the environment means there is positive support and discourse for achieving health goals. An enabling environment generates confidence in the NCD services being provided, and the uptake of health behaviours and practices.

National Health Policy 2017:

The National Health Policy 2017 articulates to institutionalize inter-sectoral coordination at national and sub-national levels to optimize health outcomes, through constitution of bodies that have representation from relevant non-health ministries. This is in line with the emergence “Health in All” approach as complement to Health for All. The policy identifies coordinated action on priority areas for improving the environment for health by promotion of balanced, healthy diets, regular exercise, addressing tobacco, alcohol and substance abuse, air pollution, reduce stress and improve safety in workplace pertaining to Non Communicable Diseases (NCDs).

The National Health Policy 2017 envisions the need for development for strategies and institutional mechanism in each of the priority area to create “Swasthya Nagrik Abhiyan” a social movement for health.

The policy focuses on collaborating with Non-Government Sector and engagement with private sector for specialized services. The policy advocates a positive and proactive engagement with the private sector for filling critical gap toward achieving national goals.

Key Objectives:

To achieve the above goal, key communication objectives are:

- Increasing awareness among the population to help identify risk factors, maintain healthy behaviours and practices, address misconceptions and fears.
- Behavioural change communication (BCC) for promotion of healthy life.
- Generating demand of NCD services at different levels.
- Self-care management and treatment adherence.

Key Strategies:

The communication activities to achieve these two objectives are broadly divided under the following key strategies, although they are closely linked to each other:

- Advocacy (Policy Advocacy, Program Advocacy, Media Advocacy)
- Communication (news media, entertainment, infotainment, print media, IPC)
- Social Mobilization
- Social Media
- Setting based approach
- Capacity Building and Training
- Innovations

A. Advocacy:

Advocacy refers to activities that seek to influence the decision makers to make NCDs core to public health agenda and create an enabling environment in support of NCDs. Advocacy fosters political will, increases financial and other resources on a sustainable basis, and holds authorities accountable to ensure that pledges are fulfilled, and results achieved. It's a coordinated efforts designed to place NCDs higher on the political agenda, strengthen government commitment and increase financial resources for NCDs. It can be defined under these categories:

- a) Policy advocacy* works with senior politicians and administrators on the impact of the issue at the national level and the need for action. Policy advocacy lobbies with national or local political leadership and administrators to increase funding for NCDs programs and formulate policy accordingly.
- b) Program advocacy* reaches out to decision-makers, stakeholders and community partners to boost their participation in actions and program decisions in support of NCDs services. Program advocacy is used at the local community level to convince opinion leaders about the need for local action and generating demand.
- c) Media advocacy* puts NCDs issues on the public agenda to generate support from governments and donors and validate the relevance of a subject. It encourages the media to cover NCDs related issues regularly and in a responsible manner to raise awareness. In the process, media advocacy helps in creating a more favourable environment for individual and community action to control NCDs.

B. Communication:

Communication is a process people use to exchange information about NCDs through media, including a combination of communication channels such as mass media, mid-media, and interpersonal communication (IPC). Most of the communication effort on NCDs is concerned with transmitting a series of messages to the people affected by NCDs through mass media and mid-media, which are necessary but not sufficient. Participation' and Dialogue' are required for effective communication where participatory or interpersonal communication (IPC) occupies the place. Communication may be categorized into following sub-groups:

- a) Mass media* includes channels and campaigns that reach a general audience or a larger target group, such as print, radio or television campaigns, Internet websites, and special events. Behaviour Change Communication (BCC) campaigns often fall into this category but can target smaller audiences as well.

- b) Mid media uses more targeted channels, like brochures, posters, mobile phones, photography, video, street theatre, and testimonials, to reach specific groups. These are often referred to as information, education, and communication (IEC) approaches.
- c) Interpersonal communication (IPC) includes counselling, one-on-one education sessions, skills trainings, and presentations often targeted at health workers/ community health worker/ Rogi Kalyan Samiti member/ Jan Arogya Samiti member/ and direct supporters of NCD patients and families.

C. Social mobilization:

Social mobilization is the process of bringing together different stakeholders and building partnerships to prevent, diagnose and manage NCDs and creating demand of NCDs related services. It targets different stakeholders of the targeted population, i.e. a village community, a ward, or other small groups. Social mobilization aims to:

- a) Increase awareness about NCDs, promoting healthy life and demand for diagnosis and treatment services.
- b) Expand service delivery through community-based approaches including formation of patients support groups.
- c) Enhance sustainability, accountability, and community ownership of NCD services.

In our response in prevention and control of NCDs, the program division visualizes two social mobilization strategies to mobilize community: one is Advocacy, Communication, Partnership and Social Mobilization (NCDNet) and other is Advocacy and Network with People Living with NCDs (PLNCDs).

Advocacy, Communication, Partnership and Social Mobilization:

Advocacy and cross-sector partnership may be need of the hour to enhance and accelerate sustainable engagement of stakeholders working on NCDs to create necessary awareness and help in promotion of healthy lifestyle to reduce the burden. Further, the National Health Policy 2017 advocates for collaborating with non-government sector or engagement with private sector for specialized services in pursuit of achieving the SDGs target.

Ministry of Health & Family welfare has already taken a lead in devising National Multi-sectoral Action Plan (NMAP) for NCDs brining 39 government ministries together to combat emergence of NCDs, reduce the risk factors and promote healthy lifestyle²³. The proposed consortium of advocacy and partnership network might be known as NCD Network India which could be supported by other Department/Ministry, international and national organizations. This consortium can play a vital role in promoting healthy lifestyle and help in increasing health literacy to get better outcome and reducing risk factors of NCDs.

Advocacy and Network with People Living with NCDs:

People living with NCDs are powerful agents of change, capable of leveraging their lived experience to reach others and help break down stigma and discrimination. Equipped with skills, networks and knowledge, they are active players in the response to NCDs at both individual and system levels. Some of the following objectives of this network may be as under:

- Discuss, evolve and define what is meant by “meaningful involvement” of people living with NCDs and compile and share a repository of good practices relating to the meaningful involvement of people living with NCDs.

- Draw out lessons learned from other social movements in the meaningful involvement of people directly affected by an issue, such as: HIV/AIDS, Polio, Covid, etc.
- Discuss strategies for furthering the Advocacy Agenda of People Living with NCDs and advocating meaningful involvement in national, regional, district and sub-district levels.
- Provide a space for discussions between key stakeholders interested in exploring and promoting the meaningful participation of people living with NCDs, distilling how they can contribute.
- Rogi Kalyan Samiti (RKS) and Jan Arogya Samiti (JAS) can play a critical role.

D. Social Media Strategies for NCDs:

Social media is defined as platforms that connect people online based on a common topic or goal. This definition focuses on the connection between people and the sharing of information through text, photos, or videos or info graphics. The popularity of social media lies in its accessibility: It is easy to use and is generally free. With the potential for people to connect, express, learn, engage, and act with the simple push of a button, the power of social media is undeniable. There is low or no monetary investment involved aside from users' time. And the potential for increasing reach of messaging is impressive. Social media provide implementers the ability to reach a large number of people over a broad geographic area with minimum human and financial resources.

In resource-limited settings, bandwidth is increasing, and internet access is becoming more widely available, especially through mobile devices. Therefore, the pool of potential reach is extremely large, and users have the ability to really engage on a meaningful level. On the other hand, traditional media is often costly, has limited reach, is extremely time-consuming, and is often based on one-way communication.

Social media offers significant opportunities to enhance their engagement in community dialogue, contribute to ongoing problem-solving, recognize the work of partner organizations, and help improve mass media coverage of global health issues. Social media can be an addition to traditional media methods (television, print media, billboards, etc.), further expanding the reach and reinforcement of critical health messages.

The popular platforms of social media such as Facebook, Twitter, WhatsApp, Instagram, YouTube and LinkedIn can be used to generate positive conversations around NCDs and benefits of healthy behavioural practices. A proactive and sustained strategy may be used for sharing positive messages around the disease(s) burden, their risk factors, diagnosis and management. Outreach can be done through existing handles of MoHFW on different social media platforms and website of MoHFW, PIB and partners. Separate handles may be created apart from official handles of MoHFW on different social media platforms. Monitoring of negative conversation, myths, rumours in social media can be done regularly and positive content may be shared on regular intervals to counter and dissolve these through seeding of positive and scientific information on NCDs.

E. Setting Based Approach for Health Promotion:

A setting is where people actively use and shape the environment; thus, it is also where people create or solve problems relating to health. Settings can normally be identified as having physical boundaries, a range of people with defined roles, and an organizational structure. This may be at school, workplace, home, cities, villages etc.

Action to promote health through different settings can take many forms. Actions often involve some level of organizational development, including changes to the physical environment or to the organizational structure, administration and management. Settings can also be used to promote health as they are vehicles to reach individuals, to gain access to services, and to synergistically bring together the interactions throughout the wider community. The following settings may be considered as under:

- Health Promoting Schools
- Health Promoting Institutions
- Health Promoting Cities
- Health Promoting Workplace
- Health Promoting Hospitals
- Health Promoting Villages
- Health Promoting Home
- Health Promoting Market
- Health Promoting municipalities/communities

All these efforts needed multisectoral coordination at State and District levels in order to smoothly implement these strategies and seek desired change to meet the objective to prevent and control NCDs in the country and meet the sustainable development by 2030. Modalities for implementing such interventions may be developed separately.

F. Innovative Strategies:

Innovation in health promotion can be defined as invention + adoption + diffusion. Any developments, simple or complex, that lead to improvements in health outcomes and patient experiences are healthcare innovations. In healthcare, it may be a novel idea, product, service or care pathway that has clear benefits when compared to what is currently done. Successful innovations often possess two key qualities: they are both usable and desirable.

There are many health promotion innovations that could benefit the health care sector and assist in the continuity of care across the health care delivery system. It is up to primary stakeholder how to embrace the idea of change through innovations and make a determined effort to realise the desire change. Culture of innovation offers the potential of greater impact on continuum of health care with lesser resources. It's needed to make sure to address issues of regulation, scalability and establishing partnership with other stakeholders while implementing those innovations on the ground.

The National NCD Division has envisioned some of the innovative health promotion ideas in order to address risk factors of NCDs, their prevention, knowledge sharing to better outcome, motivating health seeking behaviour within community at large. Few examples are Observance of NCD Week/Fortnight, mHealth, K4Health, Plant a Tree Campaign, etc. which may help in knowledge sharing, accessing appropriate information and motivating for leading a healthy life for prevention and control of NCDs to continue delivering universal healthcare to the population at large.

- **Observance of NCD Week/Fortnightly (Swasth Nagrik Saptah/Pakhwara):**

Observance of Special week/fortnight always draws attention of common people and gives a platform to increase awareness regarding NCDs risk factors, their prevention, diagnosis and management. The proposed observance of NCD Week/Fortnight (Swasth Nagrik Saptah/Pakhwara) will provide a platform to deliver NCDs related services with special attention. This NCD Week/Fortnight may start from World Stroke Day i.e., 29th October to World Diabetes Day i.e., 14th November every year to create awareness about NCD risk factors, screening of common NCDs, their management, prevention of NCDs and promotion of adoption of healthy lifestyle. The following activities may be proposed to observe Swasth Nagrik Saptah:

- Population based screening for common cancer may be intensified and organized in camp wise at all CHCs across the country.
- Observance of World Stroke Day i.e., 29th October, National Cancer Awareness Day i.e., 7th November and World Diabetes Day i.e., 14th November every year.
- Awareness at district and sub-district level may be organized.
- Inter-personal communication may be used extensively for creating necessary awareness. NCDNet network and PLNCDs network may also be used for effective community engagement program.
- National Service Scheme (NSS)/National Cadet Corps (NCC), NehruYuva Kendra (NYK), Local Youth Clubs and Rogi Kalyan Samiti (RKS) at CHC and Jan Arogya Samiti (JAS) at HWC may be integrated to engage local community in observance.
- Integration/convergence with other national programs (oral health, mental health, elderly, blindness control, etc.) for effective implementation of awareness campaign on NCDs
- Calendar of activities must be prepared for observance of NCDs week.

Special camps on population-based screening for common cancer may be organized in all Tertiary Cancer Care Centre (TCCC), State Cancer Institute (SCI) supported under NP-NCD program. Efforts may be made to realize this in CNCI, Kolkata and NCI, Jhajjar too for the observance of NCD Week/Fortnight along with community mobilization and outreach activities near their neighbouring area.

Special efforts may be made to organize such events in government of India medical colleges including AIIMS, PGIs. States/UTs governments may organize such events in their respective medical colleges to observe NCD Week/Fortnight. It will create a buzz in media as well as help in creating necessary awareness about NCDs and their prevention.

- **Knowledge for Health for NCDs:**

We all need up to date information to do our jobs better. If the information is not appropriate or misleading or not communicated accurately, it can lead to health consequences. Imagine a world where all health professionals regardless of geographical locations and resources can access the knowledge to improve their health knowledge and help in saving lives.

Knowledge for Health envisage sharing evidence-based knowledge about latest information or success stories/best practices on health, in which health programme managers and service providers at all levels across the stakeholders collaborate with and learn from each other to build a stronger health system and enable people to access appropriate information.

Ministry of Health and Family Welfare, Government of India has set up National Health Portal (NHP) in pursuance to decision of National Knowledge Commission to provide healthcare related information to people and to serve a single point of access for consolidated information. Centre for Health Informatics (CHI) has been established for managing National Health Portal. We may propose certain action plans which need to be taken care under this Knowledge for Health intervention.

- National Health Portal is a good example of Knowledge for Health but limited to National level interventions. Success stories from states which have been represented in National Summit on Good and Replicable Services and Innovations in Public Healthcare System may also be incorporated for wider public access.
- A separate dedicated website of NP-NCD should be created for wider public interface with all the latest updates. It should be made a comprehensive platform and all IEC materials/ innovations/ best practices should be made available for all stakeholders. The proposed website may be named as www.ncdindia.gov.in for public interface and wider recognition and branding.
- Sharing best practice for prevention and control of NCDs especially from middle- and low-income countries for references and wider adoption and replication in States/UTs.





TRAINING AND CAPACITY BUILDING

The successful implementation of NP-NCD would largely depend upon the quality of training conducted for all levels of health functionaries. Health-care providers are not only responsible for rolling out the various components of the programme but are also a major source of information for the community. A good training gives confidence to the health workers and thus all sessions must be interactive and use the adult learning methodology depending on the cadre of participants. The training would be imparted through classroom teaching using participatory methods including case studies and field practice. The training would also include practical sessions in addition to interactive lectures and discussions, PowerPoint presentations, role plays, exercises, case studies and interactive discussions. Each batch should not have more than 40 participants. The number of batches is to be planned according to the number of different health staff engaged in the district. Under NCD programmes, training modules have been developed for different cadre of service providers and programme managers and the trainings should be provided in accordance with the content and relevance with each cadre.

Health-care personnel who require training include District NCD Programme Officers (DNPOs), Medical officers (MOs), Community Health Officers (CHOs), data managers and frontline health workers and their supervisors. The ASHAs are also to be oriented for effective community mobilization. In addition, plans should be drawn up to orient the relevant faculty of departments in medical colleges as well as professional bodies (IAP, IMA) involved in NCD prevention and management. It is important to train not only the newly recruited staff, but also those who are already on the job regarding updated/ new guidelines/ activities under the programme. Key areas of training under the programme are NCD prevention, early detection and management of common NCDs, data recording and reporting, health promotion, planning, implementation, monitoring and evaluation. Effective implementation of a programme also requires the programme managers to be adequately equipped with skills to efficiently monitor and guide implementation of the programme at all levels of health care.

Training approach:

Cascaded training is envisaged for building capacity of all cadres of staff involved in NP-NCD. Each state is expected to conduct State ToT workshops for District level Nodal officers. Subsequently, the district level nodal officers will conduct district-level training and block level trainings. As per the programme need, the trainings with respect to programme implementation and disease specific will be conducted for healthcare provider separately or combinedly at all levels of healthcare delivery.

Apart from the one-time training and orientation as described above every opportunity should be utilized for sensitization of different cadres on NP-NCD.

The following mechanism as few examples to orient different cadres of health functionaries apart from regular trainings:

- Supportive supervisory or on the job training visits to the health care centres or partners.
- Review meeting at the block level/district level held every monthly or quarterly.
- Refresher trainings for front line workers/ CHOs/ MOs.
Newer modalities like virtual trainings using digital platforms like echo, webex, etc.
- Self-learning trainings using learning management information systems.

Specialised training:

Specialized clinical training for Cardiac care, Stroke care, Cancer Care, CKD, COPD and asthma and NAFLD etc. for the Medical and Para-medical staff for District Hospital and below could be conducted. Specialised clinical hands-on training (e.g., VIA technique/Chemotherapy for Cancer Care, STEMI, Emergency Cardiac/Stroke care training, etc.) could be conducted at the designated centres in respective States. Medical colleges, Nursing colleges, District Skill Labs etc., can be leveraged.

List of training materials:

- Programme specific guidelines and available training material/handbooks including standard treatment guidelines
- User manuals of various IT applications under NPCDCS
- Projector/LCD, screen, laptop/computer, and other audio-visual aids
- White board with marker pens/flip charts with tripod stands
- Revised CBAC checklist
- Job aids
- Communication materials
- Attendance sheet
- Pre and post assessment questionnaires, feedback forms
- Active internet connection
- Fully functional skill lab
- Clinical and public health scenarios for skilling on problem solving

Detailed table depicting training plan for various components under NP-NCD is placed as **Annexure 5.**





MONITORING, SUPERVISION AND EVALUATION

Programme monitoring and evaluation cycle requires identification of national and sub-national level of indicators that measures inputs, process, outputs, outcomes and impact. There are four components of programme monitoring and evaluation cycle:

1. Programme monitoring - Data collection, performance management and data quality assurance
2. Evaluation - Use of data for decision making, rapid assessment of program effectiveness and impact
3. Learning- Documentation, reporting and dissemination of findings/learning
4. Planning- Defining indicators and data source

The designated NP-NCD programme management unit at national, state and district level would be responsible for the above components of programme monitoring and evaluation cycle.

Data flow mechanism under NP-NCD:

For opportunistic screening

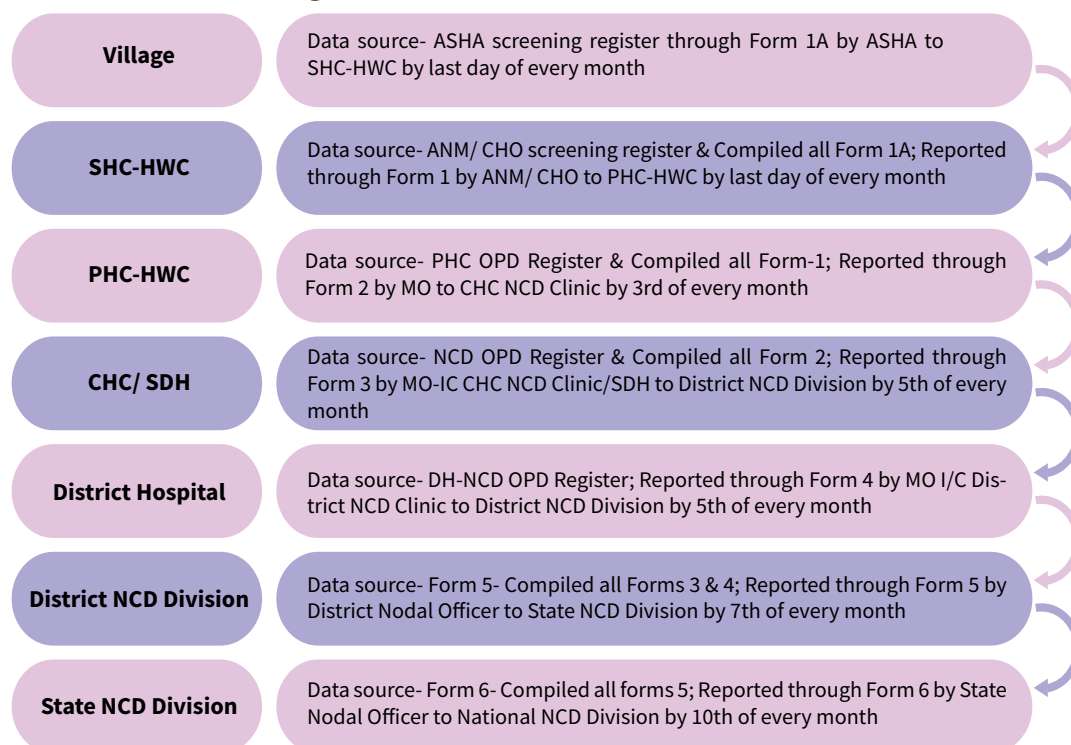


Figure 4: Data flow mechanism under NP-NCD

Since, National NCD portal maintained line listing data to ensure continuum of care. The monthly reports are generated directly from the portal, viewed and shared electronically. This monthly report should be used for monitoring and supervision in the field. The State/ facilities where National NCD portal is not functional the manual reporting may be submitted to their hierarchy. The formats are placed at **Annexure 6**.

Population based screening:

Data from Population Based Screening is coming from the following three sources:

National NCD portal:

National NCD Portal assists the healthcare providers and managers in service delivery and monitoring of Population Based Screening (PBS) for Non Communicable diseases (NCDs) at all levels (National, State, District, Block, PHC and Sub Centre level). The software addressed key issues of making Electronic Health Record (EHR), standardizing the recording and reporting system, creating unique personal health ID, streamlined the upward and downward referrals across health facilities, tracking follow-up, preparation of work plan for the health personnel and digitizing health record for every individual. The NCD application has also automated, referral management of NCDs.

The system enables population enumeration, risk assessment and screening of the entire population and collects information on risk factors for NCDs for 30+ population and management and follow up of those found to be diagnosed with any of the five NCDs. The system is used by health workers and mid-level health providers at Sub-Health centres and doctors and Nurses at Primary Health Centre. The programme managers at district, state and national level regularly access the dashboards to seek implementation insights. Community health workers, nurses, doctors, and programme managers can use these applications on devices like phones, tablets, or computers.

Non-Communicable Diseases Screening & Management

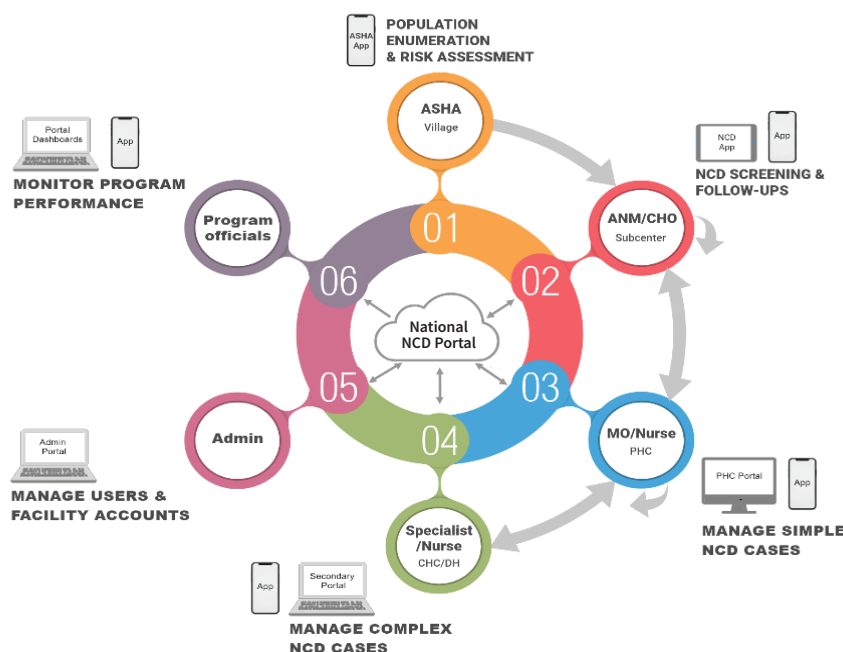


Figure 5: Six Applications in National NCD Portal

The National NCD Portal is a suite of 6 applications:

- 1) **ASHA Mobile App** - To capture Population enumeration and CBAC Assessment
- 2) **HWC App** - To screen the population for five common NCDs and enable referrals to PHC by ANM/CHO at the SHC, HWCs
- 3) **PHC Web Portal and App** - To validate patient screening, complete diagnosis/ manage/ refer to higher centres by MO in PHC and backward referrals for follow-ups. Mobile app version is about to be launched for the same.
- 4) **CHC/DH Portal and App** - To confirm diagnosis of patients referred from PHCs and initiate treatment and backward referrals.
- 5) **Admin Portal** - To manage the master data for facility and users at district and state levels.
- 6) **Health Officials Dashboard** - Dashboard for district, State and National NCD officials to monitor the status of programme implementation and NCD indicators.

The National NCD Portal is integrated with Ayushman Bharat Digital Mission (ABDM), to enable creation of ABHA Health IDs and linking of existing Health IDs in National NCD Portal. The National NCD Portal is also integrated with Ayushman Bharat Health and Wellness Centre Portal (AB-HWC) to update NCD facility data with HWC information and to populate NCD Indicators into HWC Service Delivery Format. Details on good practices of CDSS wrt to National NCD Portal is placed as **Annexure 7**.

Further, the Clinical Decision Support System (CDSS) was developed in the form of medical officer module and integrated with the current National NCD Portal. The CDSS enabled National NCD Portal analyses the data captured by healthcare providers and generates guideline-based advisories to provide evidence-based care for diabetes and hypertension

in accordance with the level of health facility i.e., where MO IC is posted. The workflow is described in the figure below.

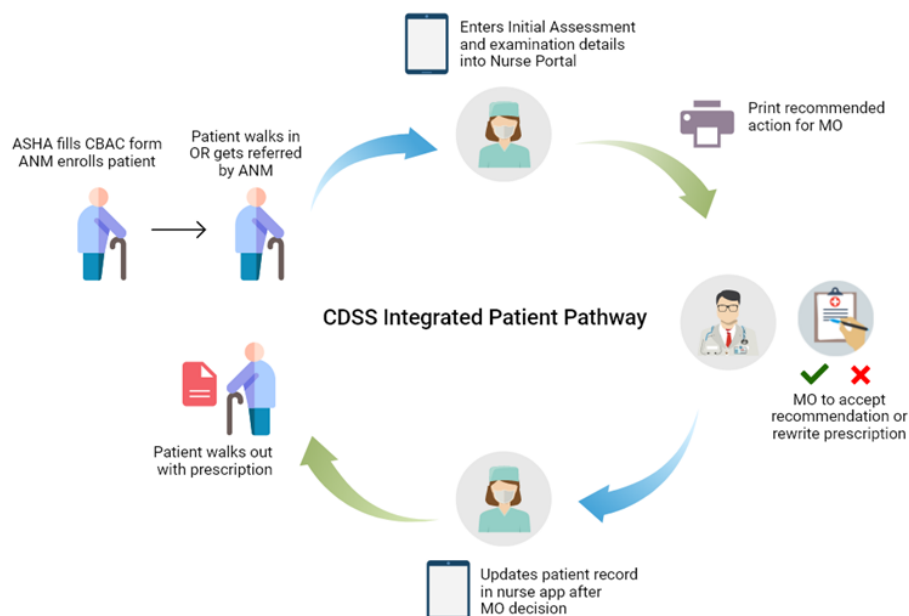


Figure 6: Clinical Decision Support System (CDSS) Integrated Patient Pathway

It is a robust system with adaptable algorithms which can be updated time-to-time. Additional, diseases or conditions under NP-NCD programme can be included on the platform. Details on the National NCD Portal architecture is placed as **Annexure 8**.

Programme monitoring:

Regular analysis of programme data reports:

At the national level, the monthly reports received from the States/UTs should be compiled and analysed to generate quarterly national reports and feedback should be sent to the States regularly on a monthly basis. At the District NCD Divisions and State NCD Divisions, the monthly reports should be generated based only on the verified data received from health facilities. Periodically the reported data should be analysed at all levels, to understand the service delivery requirements and performance assessment of NCD Clinics. The program report generated from the National NCD Portal dashboard can be analysed at Centre, State and District for monitoring programme performance.

Supervision:

Besides review meetings, frequent supervisory visits should be made by NCD officers and partners to various health facilities to oversee implementation of activities, as per operational guidelines. The standard supervisory checklists should be used to record observations and recommendations for action, and in subsequent visits, the action-taken-report must be reviewed.

Programme review:

Review meetings of State NCD Programme Managers should be organized at the National level on a half-yearly basis, to assess physical and financial progress and discuss constraints in implementation of the programme. Similarly, every State should conduct review meetings on a quarterly basis to review programme implementation. Whereas at district and below level, it should be conducted monthly. Also, a small refresher training should be conducted during review meetings by using pre-designed job aids. External programme reviews e.g. Common Review Mission (CRM) under NHM, or Joint Monitoring Missions (JMM), etc., may also be considered to get an insight into the programme implementation bottlenecks in the States/Districts. Sometimes, external evaluation of the programme may also be encouraged through studies/surveys by external agencies like research agencies, Medical Colleges, WHO, NGOs, etc

Data quality assurance:

NP-NCD data as collected through National NCD Portal needs to be assessed for its quality to ensure its completeness and validation. Nearly 10% of the collected data must go through quality checks by program managers at each quarter or half yearly. State team can conduct regular monitoring visits to different districts and below for data quality checks to assess the effectiveness of NP-NCD which evaluate the service delivery, implementation of NP-NCD, and health outcomes in terms of defined indicators.

Monitoring indicators:

In 2015, UN member states adapted the 2030 agenda for sustainable development. Sustainable Development Goal (SDG) 3 defines to ensure health and promote well-being for all at all ages. For the achievement of SDG 3, SDG 3.4 targeted- by 2030, premature mortality from NCDs through prevention and treatment and promote mental health and well-being reduced by one third. SDG Indicator 3.4.1 - Mortality rate attributed to cardiovascular disease, cancer, diabetes, or chronic respiratory disease. Premature NCD mortality indicator as defined by the NCD Global Monitoring framework is unconditional probability of dying between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.

Mortality can be calculated based on the ICD codes: cardiovascular disease: I00-I99, Cancer: C00-C97, Diabetes: E10-E14, Chronic respiratory: J30-J98. Numerator for this indicator can be deaths with International Classification of Diseases (ICD)-10 code as the underlying cause of death among population during a calendar year and denominator can be midyear population for the same calendar year.

SDG Target 3.8 - Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Indicator 3.8.1 - Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, NCDs and service capacity and access, among the general and the most disadvantaged population).

Tables depicting input, process and outcome indicators are placed as **Annexure 9.1**.

As per 2nd National Conference of Chief Secretaries held on 5th -7th January, 2023, the action points emerged with respect to Non Communicable Diseases: Nutrition, Lifestyle and Management along with implementation timelines are placed at **Annexure 9.2**.

Surveillance:

Surveillance is defined as the ongoing systematic collection, analysis, interpretation, and timely dissemination of information for action linked to NP-NCD programme. Its key objectives are to trigger public health control measures, changes in chronic disease presentation and its risk factors, change in health practices and facilitate planning and implementation of the programme.





FINANCES

NP-NCD is funded under the common NCD flexi-pool of NHM. The States/UTs, while formulating their interventions for NCDs, incorporate the budget for the same within the State NHM Programme Implementation Plan (PIP). The ‘flexi-pool’ allows States sufficient flexibility in providing funds to various components within the overall NCD allocation. The States are permitted to reassign funds among the various components to a certain extent after obtaining approval from the Government of India, but within the broad framework of NP-NCD.

Broad Activities permissible under NCD flexi-pool for NP-NCD are as follows:

- Health promotion and prevention
- Screening and case detection including Population-based screening
- Management of NCDs
- Human resources
- Capacity building
- Monitoring, evaluation, surveillance and research
- Integration with other programmes
- Public Private Partnership

Financial management groups (FMG) of Programme Management support units at state and district level, which are established under National Health Mission (NHM), are responsible for maintenance of accounts, release of funds, expenditure reports, utilization certificates and audit arrangements through the Finance and Logistics Consultant of the NCD Division.

Project Implementation Plan (PIP):

The purpose of PIP is to make budgetary proposals for both regular as well as need-based activities for once in two years. The PIP planning process for NP-NCD follows a bottom-up approach. The process begins with “District Health Action Plan (DHAP)” at the district level based on the inputs from all stakeholders including Block Medical Officer (BMO) in the districts. NP-NCD District PIP will be formed by DNO/DPO. All program unit plans are aggregated under DHAP. The District Program Management Unit (DPMU) will review DHAP and send it further to the District Health Society (DHS) which will finalise and submit it to the State.

The DHAPs of all Districts are reviewed, compiled, and aggregated under the State Program Management Unit (SPMU) with officials from the Mission Directorate and Directorate. The State PIP is submitted to the State Health Society (SHS) and finalised under the chairmanship of Principal Secretary. The final version of State PIPs is submitted to MoHFW, GoI.

The State PIP is appraised by the National Program Coordination Committee, which is chaired by Mission Director with officials from various program divisions in MoHFW and State officials. Once approved the States are issued with Record of Proceedings (RoP). Funds are provided in a phased manner to the State. The SHS implements the approved plan with governance and oversight exercised by the State Health Mission, in association with DHS. NP-NCD would operate through NCD Divisions constituted under the programme at State and District levels. The Statement of Expenditure (SOE) and Utilization Certificate (UC) as per GFR as amended from time to time should be submitted timely.

Under the PIP, apart from the budgetary requirement, if States/UTs request funding for innovative strategies/products, then on a case-to-case basis, this will be approved by the Ministry. The results, if found satisfactory and scalable, it will be implemented at National level.

Financial assistance:

The total funds to be released to each State under NP-NCD, are based on the number of units to be taken up at different levels on Centre Share: State Share basis. The funds are being provided to the States under NCD Flexi-Pool through State PIPs, with the Centre to State share in ratio of 60:40 (except for NE States and Hilly States, where the share is 90:10).

Details on financial assistance for NP-NCD programme is placed as **Annexure 10**.





LINKAGES WITH OTHER PROGRAMMES

Joint TB-diabetes collaborative activities:

People with a weak immune system after getting affected by diabetes are more prone to develop tuberculosis. Due to lack of early detection, it may go unnoticed and worsen the condition. On the other hand, TB is associated with poor glycaemic control. Both the instances lead to complications and high out of pocket expenditure. Therefore, to reduce TB-diabetes comorbidities, collaborative activities will be planned between NP-NCD and NTEP. Early detection of TB in NCD clinics and diagnosis of diabetes in TB clinics will be key activities. In CBAC format, one of the questions is related to TB-diabetes comorbidities to detect early by ASHA at community level. Joint monitoring mechanism was designed, and a standardized reporting system was shared.

NTEP and NP-NCD will conduct regular review meetings at national and state level. Chaired by MD NHM, a coordination committee is to be set at state level. Quarterly meetings should review activities and send feedback to the districts. Meeting minutes are to be shared with NCD division and CTD. District coordination committee also needs to be set, and quarterly meetings will be conducted from time to time. Meeting minutes will be shared with the state NCD Division and state TB Division. Operational research may also be planned.

National Programme for Palliative care (NPPC):

Government of India launched NPPC in November, 2012 with a goal to ensure availability and accessibility of rational, quality pain relief and palliative care to the needy, as an integral part of Health Care at all levels, in alignment with the community requirements. The key objectives of NPPC are to (i) improve the capacity of service providers to provide palliative care, (ii) refine the legal and regulatory systems and support implementation and ensure access and availability of opioids while maintaining measures for preventing diversion and misuse, (iii) promote behaviour change in the community and (iv) ensure continuous progress towards the vision of the programme.

Integration with National Urban Health Mission (NUHM):

The National Urban Health Mission (NUHM) was approved in 2013 as a sub-mission under the overarching National Health Mission (NHM), to strengthen delivery of primary health care services in urban areas. NUHM aims to provide equitable access to quality health care to urban population with special focus on vulnerable populations in NCDs.

For integration with NP-NCD, a convergent plan has been developed between NUHM and NP-NCD to promote comprehensive primary health care to reduce morbidity, mortality and DALY related to NCDs in urban areas. After NCD screening of the urban population, the suspected persons will be referred to UPHC for registration, laboratory tests and management of uncomplicated cases if a Medical Officer is available and resources permit, or else, they will be referred to the NCD Clinic in CHC/District Hospital. The NCD patients can, however, visit UPHCs for regular monthly drug-refills and investigations. The follow-up at community level will be done by ANM/ ASHA/ MAS. Besides health staff, all NP-NCD/NUHM State and district officials are also to be oriented on NP-NCD and NUHM and vice versa. At State/district level, it was suggested that NUHM and NP-NCD officials to conduct regular joint meetings preferably quarterly at state level and monthly at district level where planning, progress, gaps with respect to filling up of CBAC forms, NCD screening, reporting, trainings etc can be reviewed jointly.

National Oral Health Programme (NOHP):

Government of India launched National Oral Health Programme to provide integrated, comprehensive oral health care in the existing health care facilities with the objective to improve the determinants of oral health, to reduce morbidity from oral diseases, to integrate oral health promotion and preventive services with general health care system, and to encourage Promotion of Public Private Partnerships (PPP) model for achieving better oral health.

National Tobacco Control Programme (NTCP):

Government of India launched the National Tobacco Control Programme (NTCP) in the year 2007-08, with the aim to (i) create awareness about the harmful effects of tobacco consumption, (ii) reduce the production and supply of tobacco products, (iii) ensure effective implementation of the provisions under “The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003” (COTPA) (iv) help the people quit tobacco use, and (v) facilitate implementation of strategies for prevention and control of tobacco advocated by WHO Framework Convention of Tobacco Control. NTCP is implemented through a three-tier structure, i.e. (i) National Tobacco Control Division (NTCC) at Central level (ii) State Tobacco Control Division (STCC) at State level and (iii) District Tobacco Control Division (DTCC) at District level. There is also a provision of setting up Tobacco Cessation Services at the District level.

In addition, Tobacco Cessation Centres (TCCs) exist almost in every State/Union Territory apart from the hospitals providing cessation facilities. One who wants to quit tobacco may visit these Centres and take pharmacological therapy (if required).

The Ministry of Health and Family Welfare has also started National Tobacco Quit Line to provide tobacco cessation counselling services to the community through a toll-free number (1800-11-2356) and has launched a pan-India, “m-cessation” initiative to reach out to tobacco users who are willing to quit tobacco use and to support them towards successful quitting through text-messaging via mobile phones (on 011-22901701).

National Programme for Health Care of Elderly (NPHCE):

NPHCE was launched in 2010 with an objective to provide dedicated health care facilities to the senior citizens (>60 year of age). The programme aims to provide accessible, affordable, and high-quality long-term, comprehensive and dedicated care services to an Ageing population; create a new “architecture” for Ageing; and build a framework to create an enabling environment for “a Society for all Ages”. It also promotes the concept of Active and Healthy Ageing.

National Programme for Control of Blindness and Visual Impairment (NPCB&VI):

NPCB&VI was launched in 1976 with the goal of reducing the prevalence of blindness to 0.3% by 2020. Main objectives of the programme are to reduce avoidable blindness; develop and strengthen the strategy of NPCB for “Eye Health for All” and prevention of visual impairment; strengthening and up-gradation of Regional Institutes of Ophthalmology (RIOs) and partners like Medical College, DH/ SDH, Vision Centres, NGO Eye Hospitals; strengthening existing infrastructure facilities and developing additional human resources, enhance community awareness on preventive measures and expand research for prevention of blindness and visual impairment. Diabetic retinopathy is increasing due to increase in cases of diabetes. The linkages can be formed to address the issues at the ground level and awareness activities can be promoted.

Fifteenth Finance Commission (FC-XV) on Health Sector Grants:

The FC-XV recognized that in the efforts to achieve the ideal of universal health coverage, rural and urban local bodies can play a key role in the delivery of primary health care services especially at the “cutting-edge” level. Therefore, under the vision of comprehensive primary health care, FC-XV has provided support for diagnostic infrastructure (including for NCDs) in Sub Health Centres (SHCs), Primary Health Centres (PHCs) in rural and PHCs in urban areas. This will strengthen the comprehensive primary care services at the grass roots encompassing preventive, promotive, basic curative, rehabilitative and palliative health care services.

Ayushman Bharat - Pradhan Mantri – Ayushman Bharat Health Infrastructure Mission (PM-ABHIM):

Pradhan Mantri – Ayushman Bharat Health Infrastructure Mission was announced on 1st February 2021, for six years (till FY 25-26). The measures under the scheme focus on developing capacities of health systems and institutions (including critical care hospital block and integrated public health laboratories) across the continuum of care at all levels viz. primary, secondary, and tertiary and on preparing health systems in responding effectively to the current and future pandemics/disasters. The Mission also targets to build an IT enabled disease surveillance system by developing a network of surveillance laboratories at block, district, regional and national levels, in Metropolitan areas and strengthening health units at the Points of Entry, for effectively detecting, investigating, preventing, and combating Public Health Emergencies and Disease Outbreaks. The NCD related interventions can be included, and part of the improved infrastructure envisaged under PM-ABHIM.

Ayushman Bharat - PM-JAY:

Pradhan Mantri Jan Arogya Yojana (PMJAY) is a flagship scheme of Government of India which is a visionary step towards advancing the agenda of Universal Health Coverage (UHC). Under this, health insurance cover of Rs. 5 lakhs per family per year for secondary or tertiary care hospitalization to over 10.74 cr. beneficiary families are provided. The primary focus of the program is to provide cashless and paperless access to services related to NCDs for the beneficiary at the point of service. Under this scheme, there are 1669 health benefit packages under 26 different specialities. The treatment packages under AB-PMJAY are very comprehensive covering various treatment related aspects such as drugs and diagnostic services.

Ayushman Bharat-NDHM:

The National Digital Health Mission (NDHM) project of the Government of India, stemming from the National Health Policy, 2017 (“National Health Policy”) intends to digitize the entire healthcare ecosystem of India. This would be done by creating digital health records and creating and maintaining registries for healthcare professionals and health facilities in order to ensure a smooth interoperable framework for the multiple partners associated with healthcare delivery to individuals in India. The National Digital Health Blueprint, 2019 (“Blueprint”) recommends that a federated architecture be adopted, instead of a centralized architecture, for the management of digital health data to ensure interoperability, technological flexibility and independence across the National Digital Health Ecosystem (NDHE). Under it, Ayushman Bharat Health Account (ABHA) ID has been created under National NCD Portal. The ABHA Number is a hassle-free method of accessing and sharing health records digitally. It enables the interaction with participating healthcare providers, and allows to receive digital lab reports, prescriptions and diagnosis seamlessly from verified healthcare.

Emergency Response and Health System Preparedness Package (ECRP):

The Government is supporting States/UTs in strengthening existing laboratory services through Emergency COVID Response Proposals (ECRP) for testing under Free Diagnostics Service Initiative. The funds to be spent under ECRPs were given based on approvals given by the Executive Committee of the State Health Society. Under ECRP, the ICU setups has been strengthened and can be utilised as Cardiac Care Units.

Rashtriya Bal Swasthya Karyakram (RBSK):

The initiative aims to screen and manage children from birth to 18 years of age for defects at birth, deficiencies, diseases, and developmental delays including disabilities. As NCD is a life-course disease, the activities related to primordial prevention such as health promotion, interpersonal communication, and social-behavioural change communication etc. about the importance of health eating, physical activity, and non-usage of alcohol/tobacco. should be started at the earliest. The children identified with any health condition related to NCD are then referred to NCD clinics for further management and linking with tertiary care as and when required.

Rashtriya Kishor Swasthya Karyakram (RKSK):

Rashtriya Kishor Swasthya Karyakram is implemented among adolescents in the age group of 10-19 years, which target their nutrition, reproductive health and substance abuse, among other issues. The key principles of this programme are adolescent participation and leadership, Equity and inclusion, Gender Equity and strategic partnerships with other sectors and stakeholders. As incidence of NCDs is rising among adolescents, the persons with suspected NCDs can be managed in NCD clinics with focus on interventions related to lifestyle modifications. Regular awareness activities can be conducted among the adolescents.

Maternal health:

Non communicable diseases and maternal health are closely linked. NCDs such as diabetes, obesity and hypertension have a significant adverse impact on maternal health and pregnancy outcomes. All pregnant women should be screened for hypertension and diabetes during Antenatal check-up (ANC) on VHND/any other specified day. If anyone is identified for any of the above condition, can be referred to NCD clinics for further management.

e-Sanjeevani:

National Teleconsultation Service of Ministry of Health and Family Welfare i.e., eSanjeevani is first of its kind online OPD service offered by the government to its citizens. National Teleconsultation Service aims to provide healthcare services to patients in their homes. eSanjeevani has two variants:

i) eSanjeevani Ayushman Bharat-Health and Wellness Centre (AB-HWC):

A Doctor-to-Doctor telemedicine service under Ayushman Bharat-Health and Wellness Centres scheme of the Government of India, to provide general and specialised health services in rural areas and isolated communities. Doctor-to-Doctor telemedicine service is based on a Hub-and-Spoke model. 'eSanjeevani AB-HWC' enables virtual connection between the beneficiary (along with the paramedic and a generalist) at the spoke i.e. HWC and the doctor/specialist at the hub (tertiary healthcare facility/hospital/medical college). This facilitates real-time virtual consultation from doctors and specialists at the hub with the beneficiary (through paramedics) at the spoke. The e-prescription generated at end of the session is used for obtaining medicines. 'eSanjeevani AB-HWC' was implemented with a vision to provide quality health services to maximum number of citizens by leveraging potential of Information Technology bypassing hindrances of geography, accessibility, cost and distance.

ii) eSanjeevani OPD:

This is a patient-to-doctor telemedicine service to enable people to get outpatient services in the confines of their homes. 'eSanjeevani OPD' has also been speedily and widely adopted by citizens in all parts of the country. It is available as a mobile app for both Android and iOS based smart phones.

Both variants of eSanjeevani was utilised for NCD related services by beneficiaries and further it can be expanded to the whole of the country.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):

PMBJP is being implemented by Bureau of Pharma PSUs of India (BPPI), under Department of Pharmaceuticals, Government of India, for making quality medicines available at affordable prices for all, particularly the poor and disadvantaged, through exclusive outlets Pradhan Mantri Bhartiya Janaushadhi Kendras, so as to reduce out of pocket expenses in healthcare. More than 1,616 drugs and over 250 surgicals and consumables are currently included in the product basket of Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP). More than 9,000 Jan Aushadhi Kendras have been set up under the scheme.

Affordable Medicines and Reliable Implants for Treatment (AMRIT):

AMRIT, a novel initiative launched by the Ministry of Health & Family Welfare aims to provide affordable medicines for treatment of cancer, cardiovascular and other diseases. The Ministry is committed to reduce treatment cost of life-threatening diseases and bringing about a change with treatment being affordable to every Indian. The first AMRIT retail pharmacy opened on 15th November 2015 at AIIMS, New Delhi campus. Today, AMRIT has expanded its product basket covering Specialties like Oncology, Cardiology, implants - Stents, Ortho implants, medical disposables apart from Branded and Branded Generics.

As on May 2023, there are 240 AMRIT Pharmacies spread across 28 states/union territories, selling more than 5200 drugs (including cardiovascular, cancer, diabetes, stents, etc), implants, surgical disposables and other consumables at a significant discounts up to 50% on market rates, based on authentic prescriptions from doctors not only from the institutions where they are located but even to those patients' availing treatment at other hospitals.

Rastriya Arogya Nidhi (RAN):

A central sector scheme that provides one-time financial assistance up to Rs. 15 lakhs to poor patients belonging to families living below poverty line and suffering from life threatening diseases relating to cancer, heart, kidney, liver and rare diseases etc. for treatment at any of the super specialty Government/Institutes.

The umbrella scheme of RAN has three components namely:

- Health Minister's Cancer Patient Fund - for treatment of poor patients suffering from cancer
- RAN - for poor patients suffering from life threatening disease other than cancer
- Rare Diseases - for treatment of poor patients suffering from specified rare diseases

The financial assistance for Rare Diseases component has been changed to Rs. 50 lakhs (maximum).



REFERENCES



1. World Health Organization. Non-Communicable Diseases. (2022). Available from: [who.int/news-room/fact-sheets/detail/noncommunicable-diseases](https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases) [Accessed 20th April 2023].
2. World Health Organization. Impact of out-of-pocket payments for treatment of NCDs in developing countries: a review of literature. (2011). Available from: <https://www.who.int/publications/i/item/impact-of-out-of-pocket-payments-for-treatment-of-non-communicable-diseases-in-developing-countries-a-review-of-literature> [Accessed 24th September 2022].
3. Economics of Non-Communicable Diseases in India. A report by the World Economic Forum and the Harvard School of Public Health. (2014). Available from: https://www3.weforum.org/docs/WEF_EconomicNonCommunicableDiseasesIndia_Report_2014.pdf [Accessed 24th September 2022].
4. Resolution adopted by the United Nations General Assembly on 25 September 2015, 70/1. Transforming our world: the 2030 Agenda for Sustainable Development. (2015). Available from: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf [Accessed 24th September 2022].
5. Dandona L, Dandona R, Kumar GA, Shukla DK, et. al. Nations within a nation: variations in epidemiological transition across the states of India, 1990–2016 in the Global Burden of Disease Study. *The Lancet*. 2017;390(10111):2437–60.
6. National Health Policy, 2017. Available from: https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf [Accessed 24th September 2022].
7. Non-Communicable Diseases Country Profiles 2018. Available from: WHO India [Accessed 24th September 2022].
8. India: Health of the Nation's States, The India State-Level Disease Burden Initiative. (2017). Available from: https://www.healthdata.org/sites/default/files/files/2017_India_State-Level_Disease_Burden_Initiative_-_Full_Report%5B1%5D.pdf [Accessed 24th September 2022].
9. Report of National Cancer Registry Programme (2020). Available from: https://ncdirindia.org/All_Reports/Report_2020/resources/NCRP_2020_2012_16.pdf [Accessed 24th September 2022].
10. Comprehensive National Nutrition Survey, Fact Sheets, accessed on url: <https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1332&lid=713>

11. Global Adult Tobacco Survey 2, 2016-17 accessed on 28th September 2022 <https://ntcp.nhp.gov.in/assets/document/surveys-reports-publications/Global-Adult-Tobacco-Survey-Second-Round-India-2016-2017.pdf>
12. National Multisectoral Action Plan
13. World Health Organization. Hypertension. (2023). Available from: <https://www.who.int/news-room/fact-sheets/detail/hypertension> [Accessed 28th April 2023].
14. World Health Organization. Diabetes. (2023). Available from: [https://www.who.int/news-room/fact-sheets/detail/diabetes#:~:text=In%202019%2C%20diabetes%20was%20the,of%20cardiovascular%20deaths%20\(1\)](https://www.who.int/news-room/fact-sheets/detail/diabetes#:~:text=In%202019%2C%20diabetes%20was%20the,of%20cardiovascular%20deaths%20(1)) [Accessed 28th April 2023].
15. Global, regional, and national burden of stroke, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. <https://www.healthdata.org/research-article/global-regional-and-national-burden-stroke-1990%E2%80%932016-systematic-analysis-global>
16. The burden of neurological disorders across the states of India: the Global Burden of Disease Study 1990–2019. [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(21\)00164-9/fulltext#:~:text=The%20contribution%20of%20non%2Dcommunicable,5%E2%80%932016-systematic-analysis-global](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(21)00164-9/fulltext#:~:text=The%20contribution%20of%20non%2Dcommunicable,5%E2%80%932016-systematic-analysis-global)
17. Guidelines for Prevention and Management of Stroke – 2022.
18. Global, regional, and national burden of chronic kidney disease, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2930045-3>
19. Guidelines for establishing Peritoneal Dialysis under PMNDP
20. Pradhan Mantri National Dialysis Programme under NHM
21. Medical Officers' Manual for Prevention and Management of Chronic Kidney Diseases -2022.
22. India State-Level Disease Burden Initiative CRD Collaborators. The burden of chronic respiratory diseases and their heterogeneity across the states of India: the Global Burden of Disease Study 1990-2016. *Lancet Glob Health*. 2018 Dec;6(12):e1363-e1374.
23. Medical Officer's Manual for Prevention and Management of Chronic Obstructive Pulmonary Disease & Asthma.
24. Operational Guidelines of Non-Alcoholic Fatty Liver Disease (NAFLD) into NPCDCS.
25. Guidelines for Management of ST-Elevated Myocardial Infarction – 2022



RESOURCES



1. Operational Guidelines on Prevention, Screening and Control of Common NCDs
2. Operational Framework Management of Common Cancers
3. Ayushman Bharat Comprehensive Primary Health Care through Health & Wellness Centres
4. Training Manual for Medical Officers on Reducing Risk Factors of NCDs
5. Training Manual for NCD Programme Managers at State and District Level
6. Training Module for Staff Nurses on Population Based Screening of Common NCDs
7. Training Manual for Community Health Workers on Reducing Risk Factors of NCDs
8. Module for Multi-Purpose Workers - Prevention, Screening and Control of Common NCDs
9. Module for ASHA on Non-communicable Diseases
10. Handbook for Counsellors - Reducing Risk Factors for NCDs
11. Ayushman Bharat - Health and Wellness Centres (AB-HWCs) in first 18 months of Implementation (April 2018 - September 2019)
12. CPHC NCD Solution - NCD Application ANM User Manual
13. CPHC NCD Solutions - PHC Medical Officer User Manual
14. Guidelines and Training Manual on Integration of Ayurveda in NP-NCD
15. Operational Guidelines on Integration of Homeopathy in NP-NCD
16. Operational Guidelines on Integration of Unani Medicine in NP-NCD
17. Handbook on Prevention and Control of Rheumatic Fever & Heart Disease (2015)
18. National Framework for Joint TB-Diabetes Collaborative Activities



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35)	Prof. (Dr.) Lalit Kumar	Ex HoD, Dept. of Medical Oncology, AIIMS
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38)	Dr. Pradeep Joshi	Technical Officer (NCD), WHO-SEARO India
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40)	Dr. Aman Singh	Programme Lead, NCD Tata Trust
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42)	Dr. Gopal Chauhan	State Nodal Officer, NP-NCD, Himachal Pradesh
43)	Dr Ravivarman Lakshmanasamy	Medical Officer (NCD), WHO India
44)	Dr Tejpalsinh Anandrao Chavan	Senior CVHO, IHCI, WHO India
45)	Dr. Manish Pant	Ex Chief-Health and Governance Unit, UNDP India
46)	Dr. Akash Malik	Ex Senior National Program Manager, UNDP India

47)	Dr. Amit Karad	Ex-Consultant, NTEP
48)	Dr. Harsavardhan Nayak	Technical Consultant, UNDP India
49)	Dr. Payal Das	Partnership Consultant, UNDP India
50)	Mr. Himanshu Pandey	Consultant M & E, UNDP India
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56)	Ms. Ritika Kumari	National Consultant, Tata Trust
57)	Dr Neha Dumka	Lead Consultant, KMD, NHSRC
58)	Dr. Ashish Bhatt	National Officer, HSS (SAMARTH), WHO India
59)	Dr. Akansha Singh	Ex Partnership Consultant, UNDP India
60)	Mr. Varadharajan Srinivasan	Ex Consultant, Tata Trust

The National NCD Portal was developed in collaboration with a partner ecosystem of experts from NHSRC, AIIMS, DGHS, WHO, ICMR, NIC, CHI, Dell and Tata Trusts.



ANNEXURE 1.1



Indicative List of Tests by the facility are as follows:

Routine Blood Examination

- Haemoglobin and Complete Blood Examination (Hb, TLC, DLC, Platelet count)
- Blood Grouping and RH Typing

S. No.	Name of disease	Test	Facility level for screening
1	Cervical Cancer	1. VIA Screening	HWC (Sub Center and PHC)/ CHC/ District Hospital
		2. PAP Smear	CHC/District Hospital
		3. Biopsy and Histopathology	
		4. Colposcopy	
2	Breast Cancer	1. Breast examination	HWC (Sub Center and PHC)/ CHC/ District Hospital
		2. Mammography	CHC/District Hospital
		3. Fine-Needle Aspiration Cytology (FNAC)	
		4. Biopsy and Histopathology	
3	Oral Cancer	1. Mouth Cavity Examining Equipment (Torch, Tongue Depressor, Face Mirror)	HWC (Sub Center and PHC)/ CHC/ District Hospital
		2. Biopsy and Histopathology	CHC/District Hospital
4	Hypertension	1. Blood Pressure Measurement by Sphygmomanometer	HWC (Sub Center and PHC)/ CHC/ District Level
5	Diabetes	1. Blood Sugar Estimation (Fasting /PP blood sugar)	HWC (Sub Center and PHC)/ CHC/ District Hospital
		2. HbA1C by autoanalyzer	CHC/ District Hospital
6	Cardio-vascular Disease (including STEMI)	1. Blood Pressure Measurement	CHC/ District Hospital
		2. Blood Sugar Estimation	
		3. ECG	
		4. Lipid Profile Test	
		5. Cardiac Enzyme Test (Tropo-nin, Creatinine Kinase, Myo-globin)	
		6. C- Reactive Protein Test	
		7. Platelet Function Test	
		8. Bleeding Time	
		9. Clotting time	
		10. ECHO	District Hospital

7	Stroke	1. Blood Pressure Measurement 2. Blood Sugar Estimation 3. Bleeding Time 4. Clotting time 5. Lipid Profile Test	CHC/District Hospital
		6. CT-Scan/MRI with or without contrast	District Hospital
8	Chronic Kidney Disease	1. Blood Pressure Measurement 2. Blood Sugar Estimation 3. 24 Hr urinary protein 4. Urine for microalbumin, creatinine and urea protein 5. Kidney Function Test (Serum Urea and Serum Creatinine)	CHC/District Hospital
		6. CT-Scan/MRI	District Hospital
9	Chronic Obstructive Pulmonary Diseases	1. Pulse Oximeter 2. Peak Flow Meter	HWC (PHC)/ CHC/ District Hospital
		3. Spirometer 4. X-Ray 5. Arterial Blood Gas Analyzer	CHC/ District Hospital
10	Non-Alcoholic Fatty Liver Disease	1. Liver Function Test 2. Lipid Profile Test 3. Fibroscan	CHC/District Hospital

Other suggestions: Advance AI based tools or technology may be deployed for patient surveillance, monitoring or data management and even drug logistics

S.No.	Name of disease	Test
District hospital		
1	Hypertension	1. Blood Pressure Measurement by Sphygmomanometer
2	Diabetes	1. Blood Sugar Estimation (Fasting/PP blood sugar)
		2. HbA1C by autoanalyzer
3	Oral Cancer	1. Mouth Cavity Examining Equipment (Torch, Tongue Depressor, Face Mirror)
		2. Biopsy and Histopathology
4	Breast Cancer	1. Mammography 2. Fine-Needle Aspiration Cytology (FNAC) 3. Biopsy and Histopathology

5	Cervical Cancer	1. VIA Screening
		2. PAP Smear
		3. Biopsy and Histopathology
		4. Colposcopy
6	Cardiovascular Diseases (including STEMI)	1. Blood Pressure Measurement
		2. Blood Sugar Estimation
		3. ECG
		4. ECHO
		5. Lipid Profile Test
		6. Cardiac Enzyme Test (Troponin, Creatinine Kinase, Myoglobin)
		7. C- Reactive Protein Test
		8. Platelet Function Test
		9. Bleeding Time
		10. Clotting time
7	Stroke	1. Blood Pressure Measurement
		2. Blood Sugar Estimation
		3. CT-Scan/MRI with or without contrast
		4. Bleeding Time
		5. Clotting time
		6. Lipid Profile Test
8	Chronic Obstructive Pulmonary Diseases	1. Pulse Oximeter
		2. Peak Flow Meter
		3. Spirometer
		4. X-Ray
		5. Arterial Blood Gas Analyzer
9	Non-Alcoholic Fatty Liver Disease	1. Liver Function Test
		2. Lipid Profile Test
		3. Fibroscan
10	Chronic Kidney Disease	1. Blood Pressure Measurement
		2. Blood Sugar Estimation
		3. 24 Hr urinary protein
		4. Urine for microalbumin, creatinine and urea protein
		5. Kidney Function Test (Serum Urea and Serum Creatinine)
		6. CT-Scan/ MRI
CHC		
1	Hypertension	1. Blood Pressure Measurement by Sphygmomanometer
2	Diabetes	1. Blood Sugar Estimation (Fasting/PP blood sugar)
		2. HbA1C by autoanalyzer
3	Oral Cancer	1. Mouth Cavity Examining Equipment (Torch, Tongue Depressor, Face Mirror)
		2. Biopsy and Histopathology

4	Breast Cancer	1. Fine-Needle Aspiration Cytology (FNAC) 2. Biopsy and Histopathology
5	Cervical Cancer	1. VIA Screening 2. PAP Smear 3. Biopsy and Histopathology 4. Colposcopy
6	Cardiovascular Diseases (including STEMI)	1. Blood Pressure Measurement 2. Blood Sugar Estimation 3. ECG 4. Lipid Profile Test 5. Cardiac Enzyme Test (Troponin, Creatinine Kinase, Myoglobin) 6. C- Reactive Protein Test 7. Platelet Function Test 8. Bleeding Time 9. Clotting time
7	Stroke	1. Blood Pressure Measurement 2. Blood Sugar Estimation 3. Bleeding Time 4. Clotting time 5. Lipid Profile Test
8	Chronic Obstructive Pulmonary Diseases	1. Pulse Oximeter 2. Peak Flow Meter 3. Spirometer 4. X-Ray 5. Arterial Blood Gas Analyzer
9	Non-Alcoholic Fatty Liver Disease	1. Liver Function Test 2. Lipid Profile Test
10	Chronic Kidney Disease	1. Blood Pressure Measurement 2. Blood Sugar Estimation 3. 24 Hr urinary protein 4. Urine for microalbumin, creatinine and urea protein 5. Kidney Function Test (Serum Urea and Serum Creatinine)
HWC - PHC		
1	Hypertension	Blood Pressure Measurement by Sphygmomanometer Serum Creatinine
2	Diabetes	Blood Sugar Estimation (Fasting/PP blood sugar)
3	Oral Cancer	Mouth Cavity Examining Equipment (Torch, Tongue Depressor, Face Mirror)
4	Breast Cancer	Self-Breast Examination
5	Cervical Cancer	VIA Screening

6	Chronic Obstructive Pulmonary Diseases	1. Pulse Oximeter 2. Peak Flow Meter
HWC – SHC		
1	Hypertension	Blood Pressure Measurement by Sphygmomanometer
2	Diabetes	Blood Sugar Estimation (Fasting/PP blood sugar)
3	Oral Cancer	Mouth Cavity Examining Equipment (Torch, Tongue Depressor, Face Mirror)
4	Breast Cancer	Self-Breast Examination
5	Cervical Cancer	VIA Screening

Method of Screening of Diabetes by Strip method:

Things Needed:

1. A glucometer
2. Test strips
3. A lancet
4. A notebook and pen

Step 1: Take out the glucometer and place on a flat surface

Step 2: Remove a test strip from the container and place in the glucometer. One end will need to face the top of the glucometer; usually it has a darker colored line on it. This is where the blood will be placed for testing.

Step 3: Turn on your glucometer.

Step 4: Use a lancet to pierce the skin and obtain blood from the tip of a finger.

Step 5: Place the blood sample on the test strip. The test strip package will have exact instructions, including blood sample size. Usually, this is accomplished by placing the blood drop against the edge or top of the strip.

Step 6: Watch the glucometer screen. It should show a “waiting” or “processing” symbol, and will emit a beep when the sample has been tested. The results will be displayed as a number on the screen.

Record your test results in your notebook and pass this information to MO.

Criteria for diagnosing Diabetes:

Diagnosis

Diagnosis	Fasting Glucose (mg/dl)	2 hr Post Prandial Glucose (mg/dl)
Diabetes Mellitus	≥ 126	≥ 200
Impaired Glucose Tolerance	< 110	> 140 to < 200
Impaired Fasting Glucose	≥ 110 to < 126	< 140

Criteria for suspected Diabetes case is reading of 140 mg/dl by glucostrip.
The suspected case needs to undergo further tests to confirm the diabetes.

Steps for measuring Blood pressure using validate digital/automated BP apparatus:

- Ensure patient is relaxed and not talking.
- Back and arm supported and relaxed.
- Ensure the person has not exercised, had tea/coffee, or used tobacco in the last 30 minutes.
- Person should rest comfortably and quietly for 5 minutes before the reading.
- Legs uncrossed and feet supported.
- Explain the procedure.
- Choose correct size cuff correct cuff size such that the bladder encircles 80%–100% of the upper arm.
- Deflate arm cuff before placing it around the arm.
- Cuff bladder width should be at least 40% of upper arm circumference.
- Ensure cuff is on bare arm or over thin layer of clothing. Avoid bunching of clothes under cuff.
- Cuff at the level of heart, tubing centered correctly.
- Turn monitor on.
- Press the START/STOP button.
- BP cuff will start to inflate and then slowly deflate.
- The systolic and diastolic readings and pulse rate will appear.
- Record exact reading, don't round off.
- Turn the machine off and remove the cuff.

Diagnosis of Hypertension:

- Systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg, on two different occasions. (Consider earlier BP measurement e.g. ANM screening).
- First BP is $< 140/90$ mmHg – no further measurement, use 1st BP.
- First BP is $> 140/90$ mmHg- take 2nd BP and use 2nd BP.
- Difference b/w 1st and 2nd BP is > 5 mm Hg, take 3rd BP and use 3rd BP.

When to take 2nd reading:

- SBP 140-159 or DBP 90-99: check on another day and if still elevated, start treatment.
- SBP 160-179 or DBP 100-109: second reading should be taken on the same day to confirm diagnosis. Start treatment on the same day.
- SBP 180 or DBP 110: refer to a specialist after starting treatment.
- If only systolic, or only diastolic is raised, manage according to higher numbers.



ANNEXURE 1.2



*Ensure all State specific standard treatment protocol medicines are available in sufficient quantities

Indicative list of medicines – district hospital level

S.No	Name of drug
Anti-Neoplastic Medicines	
1	5-Fluorouracil Injection 250 mg/5 ml (<i>Protect from light in a single dose container and store at temperature not exceeding 30°C</i>) (<i>Injection should not be allowed to freeze</i>)
2	Actinomycin D Injection 0.5 mg (5 mcg)
3	All-Trans Retinoic Acid Capsule 10 mg
4	Arsenic Trioxide Injection 1 mg/ml
5	Bleomycin Powder for Injection 15 units ₃
6	Calcium Folate Tablet 15 mg
	Calcium Folate Injection 3 mg/ml
7	Capecitabine Tablet 500 mg
8	Carboplatin Injection 10 mg/ml
9	Chlorambucil Tablet 2 mg/5 mg ₃
	Chlorambucil Powder for Injection 500 mg
10	Cyclophosphamide Powder for Injection 500 mg ₃ (<i>Store in refrigerator (2 to 8°C). Avoid long exposure to temperature above 30°C</i>)
11	Docetaxel Powder for Injection 20 mg
12	Etoposide Capsule 50 mg ₂
	Etoposide Capsule 100 mg (<i>Capsules should not be stored in refrigerator</i>)
13	Imatinib Tablet 100 mg
	Imatinib Tablet 400 mg
14	Paclitaxel Injection 30 mg/5 ml
	Paclitaxel Injection 100 mg/16.7 ml
15	Trastuzumab Injection 440 mg/50 ml
Hormones and Anti-Hormonal Medicines used in Cancer Therapy	
16	Bicalutamide Tablet 50 mg
17	Prednisolone* Tablet 5 mg
	Prednisolone Tablet 10 mg
	Prednisolone Oral Liquid 5 mg/5 ml
	Prednisolone Oral Liquid 15 mg/5 ml (<i>Protect from light and store at temperature not exceeding 30°C</i>)
18	Letrozole Tablet 2.5 mg
19	Tamoxifen Tablet 10 mg ₃
	Tamoxifen Tablet 20 mg

Immunosuppressive Medicines	
20	Mycophenolate Mofetil Tablet 250 mg
21	Cyclosporine Capsule 10 mg, 25 mg, 50 mg, 100 mg, Oral Liquid 100 mg/ml Injection 50 mg/ml
22	Tacrolimus Capsule 0.5 mg, 1 mg, 2 mg
Cardiovascular Medicines	
23	Clopidogrel Tablet 75 mg
24	Diltiazem Tablet 60 mg Diltiazem SR Tablet 90 mg Diltiazem Injection 5 mg/ml
25	Glyceryl Trinitrate Sublingual Tablet 0.5 mg (<i>Glyceryl trinitrate tablets are unstable</i>) Glyceryl trinitrate Injection 125 mg/5 ml (<i>Protect from light and moisture in glass container of not more than 100 tablets and store at temperature not exceeding 30°C</i>)
26	Isosorbide-5- mononitrate Tablet 10 mg, Isosorbide-5- mononitrate SR Tablet 30 mg
27	Isosorbide Dinitrate Tablet 5 mg Isosorbide Dinitrate Tablet 10 mg
28	Atenolol Tablet 50 mg, 100 mg
29	Metoprolol Tablet 25 mg Metoprolol Tablet 50 mg Metoprolol Tablet 100 mg Metoprolol SR Tablet 25 mg Metoprolol SR Tablet 50 mg
30	Amiodarone Tablet 100 mg Amiodarone Injection 50 mg/ml
31	Amlodipine Tablet 2.5 mg Amlodipine Tablet 5 mg Amlodipine Tablet 10 mg (<i>Protect from moisture</i>)
32	Hydrochlorothiazid* Tablet 12.5 mg Hydrochlorothiazid Tablet 25 mg Hydrochlorothiazide Tablet 50 mg
33	Labetalol Injection 5 mg/ml Labetalol Tablet 100 mg Labetalol Injection 20 mg/2 ml
34	Methyldopa Tablet 250 mg Methyldopa Tablet 500 mg
35	Enalapril Tablet 2.5 mg Enalapril Tablet 5 mg Enalapril Tablet 10 mg
36	Captopril Tablet 25 mg
37	Lisinopril Tablet 5 mg
38	Verapamil Tablet 40 mg, 120 mg Verapamil Injection 5 mg/2 ml
39	Ramipril Tablet 2.5 mg/5 mg
40	Telmisartan Tablet 40 mg
41	Digoxin Tablet 0.25 mg Digoxin Tablet 250 mg

42	Dobutamine Injection 50 mg/ml
43	Dopamine Injection 40 mg/ml (Store in an airtight container protected from light)
44	Protamine Injection 50 mg/5 ml (Injection: Protect from light in a single dose container)
45	Noradrenaline Injection 2 mg/ml (Store in single dose containers. Store at room temperature (25°C). Store in tight, light resistant containers as it is readily oxidized. Do not use if discolored (e.g. pink, dark yellow, brown) or if there is a precipitate)
46	Enoxaparin LMWH Injection
47	Clofibrate Tablet 500 mg
48	Streptokinase Injection 15 lac/Vial Sterptokinase Injection 7.5 lac/Vial (Store in a sealed container protected from light in refrigerator (2 to 8°C). The container should be sterile and sealed so as to exclude micro-organisms)
49	Finofibrate Tablet 40 mg, 160 mg
50	Atorvastatin Tablet 10 mg Atorvastatin Tablet 40 mg (Protected from moisture and store at temperature not exceeding 30°C)
51	Esmolol Injection 10 mg/ml
52	Sodium nitroprusside Injection 10 mg/ml (Protect from light)
53	Alteplase Powder for Injection 20 mg Alteplase Powder for Injection 50 mg (Protect from heat, light and moisture and store at room temperature (<30°C). Use reconstituted solution within 8 hours)
Dialysis Solution	
54	Haemodialysis Fluid
55	Intraperitoneal Dialysis Solution*
Diuretic Medicines	
56	Furosemide Tablet 40 mg Furosemide Injection 10 mg/ml
57	Indapamide Tablet 1.5 mg
58	Chlorthalidone Tablet 12.5 mg ₃
59	Mephentermine Injection 15 mg/ml
60	Mannitol Injection 10% (Store at temperatures between 20° and 30°C) Mannitol Injection 20% (Exposure to lower temperatures may cause the deposition of crystals)
61	Spironolactone Tablet 25 mg Spironolactone Tablet 50 mg
62	Methyl Cellulose Tablet, Powder
Hormones, other Endocrine Medicines and Contraceptives (Diabetes)	
63	Glimepiride Tablet 1 mg Glimepiride Tablet 2 mg
64	Gliclazide Tablet 40 mg
65	Insulin (Soluble) Injection 40 IU/ml _{2,3} Insulin Lente Basal Injection Insulin Rapid Injection Insulin Mixtard

66	Metformin Tablet 500 mg ₃ Metformin Controlled released 750 mg
67	Premix Insulin 30:70 Injection (Regular: NPH) ₂ Premix Insulin 30:70 Injection 40 IU/ml ₃
68	Glibenclamide Tablet 2.5 mg ₃ Glibenclamide Tablet 5 mg
Medicines Acting on the Respiratory Tract	
69	Budesonide Inhalation (MDI/DPI) 100 mcg/dose Budesonide Inhalation (MDI/DPI) 200 mcg/dose Budesonide Respirator solution for use in nebuliser 0.5 mg/ml Budesonide Respirator solution for use in nebuliser 1 mg/ml
70	Combination of LABA+ICS (Formoterol, Salmeterolol/Fluticasone) MDI, DPI (<i>Protect from light, moisture and store at temperature not exceeding 30°C</i>)
71	Budesonide Nebulisation Solution
72	Ipratent/Levoline Nebulisation Solution
73	Budesonide (A)+ Formoterol (B) Inhalation (MDI/DPI) 100 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 200 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 400 mcg (A)+ 6 mcg (B)
74	Etofillin B Plus (A), Anhydrous Theophylline IP (B) combination injection 84.7 mg/ml (A) + 25.3 mg/ml (B)
75	Ipratropium Inhalation (MDI/DPI) 20 mcg/dose Ipratropium Respirator solution for use in nebuliser 250 mcg/ml
76	Levosaltamol 50mcg/dose
77	Salbutamol Tablet 2 mg Salbutamol Tablet 4 mg Salbutamol Oral liquid 2 mg/5 ml Salbutamol Inhalation (MDI/DPI) 100 mcg/dose, Salbutamol Respirator solution for use in nebuliser 5 mg/ml
78	Formoterol Inhaled Bronchodilator
79	Salmeterol Inhaled Bronchodilator
80	Tablet Theophylline (<i>Store protected from moisture</i>)
81	Tiotropium Inhalation (MDI) 9 mcg/dose Tiotropium Inhalation (DPI) 18 mcg/dose
82	Deriphyllin Tablet SR
83	Montelukast Tablet 5 mg Montelukast Tablet 10 mg Montelukast syrup

Indicative List Of Medicines – Sub- District Hospital Level

S.No	Name of drug
Anti-Neoplastic Medicines	
1	All-trans Retinoic Acid Capsule 10 mg
2	Arsenic Trioxide Injection 1 mg/ml
3	Calcium Folate Tablet 15 mg Calcium Folate Injection 3 mg/ml
4	Capecitabine Tablet 500 mg
5	Carboplatin Injection 10 mg/ml
6	Chlorambucil Tablet 2 mg/5 mg ₃ Chlorambucil Powder for Injection 500 mg
Hormones and Anti-hormonal Medicines used in Cancer Therapy	
7	Prednisolone* Tablet 5 mg Prednisolone Tablet 10 mg Prednisolone Oral Liquid 5 mg/5 ml Prednisolone Oral Liquid 15 mg/5 ml (Protect from light and store at temperature not exceeding 30°C)
Cardiovascular Medicines	
8	Clopidogrel Tablet 75 mg
9	Diltiazem Tablet 60 mg Diltiazem SR Tablet 90 mg
10	Glyceryl Trinitrate Sublingual Tablet 0.5 mg (Glyceryl trinitrate tablets are unstable) Glyceryl trinitrate Injection 125 mg/5 ml (Protect from light and moisture in glass container of not more than 100 tablets and store at temperature not exceeding 30°C)
11	Isosorbide-5- mononitrate Tablet 10 mg Isosorbide-5- mononitrate SR Tablet 30 mg
12	Isosorbide dinitrate Tablet 5 mg Isosorbide dinitrate Tablet 10 mg
13	Atenolol Tablet 50 mg, 100 mg
14	Metoprolol Tablet 25 mg Metoprolol Tablet 50 mg
15	Amiodarone Tablet 100 mg Amiodarone Injection 50 mg/ml
16	Amlodipine Tablet 2.5 mg Amlodipine Tablet 5 mg Amlodipine Tablet 10 mg (Protect from moisture)
17	Hydrochlorothiazide* Tablet 12.5 mg Hydrochlorothiazide Tablet 25 mg Hydrochlorothiazide Tablet 50 mg
18	Labetalol Injection 5 mg/ml Labetalol Tablet 100 mg Labetalol Injection 20 mg/2 ml

19	Methyldopa Tablet 250 mg Methyldopa Tablet 500 mg
20	Enalapril Tablet 2.5 mg Enalapril Tablet 5 mg Enalapril Tablet 10 mg
21	Captopril Tablet 25 mg
22	Lisinopril Tablet 5 mg
23	Verapamil Tablet 40 mg, 120 mg Verapamil Injection 5 mg/2 ml
24	Ramipril Tablet 2.5 mg/5 mg
25	Telmisartan Tablet 40 mg
26	Digoxin Tablet 0.25 mg Digoxin Tablet 250 mg
27	Dobutamine Injection 50 mg/ml
28	Dopamine Injection 40/ml (Store in an airtight container protect from light)
29	Protamine Injection 50 mg/5 ml (Injection: Protect from light in a single dose container)
30	Noradrenaline Injection 2 mg/ml (Store in single dose containers. Store at room temperature (25°C). Store in tight, light resistant containers as it is readily oxidized. Do not use if discoloured (e.g. pink, dark yellow, brown) or if there is a precipitate)
31	Enoxaparin LMWH Injection
32	Clofibrate Tablet 500 mg
33	Streptokinase Injection 15 lac/vial Streptokinase Injection 7.5 lac/vial <i>sealed so as to exclude micro-organisms</i>)
34	Fenofibrate Tablet 40 mg, 160 mg
35	Atorvastatin Tablet 10 mg Atorvastatin Tablet 40mg (Protect from moisture and store at temperature not exceeding 30°C)
Dialysis Solution	
36	Haemodialysis Fluid
Diuretic Medicines	
37	Furosemide Tablet 40 mg Furosemide Injection 10 mg/ml
38	Indapamide Tablet 1.5 mg
39	Chlorthalidone Tablet 12.5 mg ₃
40	Mephentermine Injection 15 mg/ml
41	Mannitol Injection 10%, Mannitol Injection 20% (Store at temperatures between 20° and 30°C. Exposure to lower temperatures may cause the deposition of crystals.)
42	Spironolactone Tablet 25 mg Spironolactone Tablet 50 mg
43	Methyl Cellulose Tablet, powder
Hormones, other Endocrine Medicines and Contraceptives (Diabetes)	

44	Glimepiride Tablet 1 mg Glimepiride Tablet 2 mg
45	Gliclazide Tablet 40 mg
46	Insulin (Soluble) Injection 40 IU/ml ^{2,3} Insulin Lente Basal Injection Insulin Rapid Injection Insulin Mixtard
47	Metformin Tablet 500 mg ³ Metformin Controlled released 750 mg
48	Premix Insulin 30:70 Injection ^{2,3} (Regular: NPH) Premix Insulin 30:70 Injection 40 IU/ml
49	Glibenclamide Tablet 2.5 mg ³ Glibenclamide Tablet 5 mg
Medicines Acting on the Respiratory Tract	
50	Budesonide Inhalation (MDI/DPI) 100 mcg/dose Budesonide Inhalation (MDI/DPI) 200 mcg/dose Budesonide Respirator Solution for use in Nebuliser 0.5 mg/ml Budesonide Respirator Solution for use in Nebuliser 1 mg/ml
51	Combination of LABA+ICS (Formoterol, Salmeterol/Fluticasone) MDI, DPI (<i>Protect from light and moisture and store at temperature not exceeding 30°C</i>)
52	Budesonide Nebulisation Solution
53	Ipratent/Levoline Nebulisation Solution
54	Budesonide (A)+ Formoterol (B) Inhalation (MDI/DPI) 100 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 200 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 400 mcg (A)+ 6 mcg (B)
55	Etofyllin B Plus (A), Anhydrous Theophylline IP (B) Combination injection 84.7 mg/ml (A) + 25.3 mg/ml (B)
56	Ipratropium Inhalation (MDI/DPI) 20 mcg/dose Ipratropium Respirator Solution for use in Nebuliser 250 mcg/ml
57	Levosalmamol 50 mcg/dose
58	Salbutamol Tablet 2 mg Salbutamol Tablet 4 mg Salbutamol Oral Liquid 2 mg/5 ml Salbutamol Inhalation (MDI/DPI) 100 mcg/dose Salbutamol Respirator Solution for use in Nebuliser 5 mg/ml
59	Formoterol Inhaled Bronchodilator
60	Salmeterol Inhaled Bronchodilator
61	Tablet Theophylline (<i>Protect from moisture</i>)
62	Deriphyllin Tablet SR
63	Montelukast Tablet 5 mg Montelukast Tablet 10 mg Montelukast syrup

Indicative List Of Medicines – Community Health Centre Level

S.No.	Name of Drugs
Cardiovascular medicines	
1	Clopidogrel Tablet 75 mg
2	Diltiazem Tablet 60 mg Diltiazem SR Tablet 90 mg
3	Glyceryl trinitrate Sublingual Tablet 0.5 mg Glyceryl trinitrate 125 mg/5ml (Glyceryl trinitrate tablets are unstable) (Store protected from light and moisture in glass container of not more than 100 tablets at a temperature not exceeding 30°C.)
4	Isosorbide dinitrate Tablet 5 mg Isosorbide dinitrate Tablet 10 mg
5	Isosorbide-5- mononitrate Tablet 10 mg Isosorbide-5- mononitrate SR Tablet 30 mg
6	Atenolol Tablet 50 mg/100 mg
7	Metoprolol Tablet 25 mg Metoprolol Tablet 50 mg Metoprolol Tablet 100 mg Metoprolol SR Tablet 25 mg
8	Propranolol Tablet 40 mg
9	Amiodarone Tablet 100 mg
10	Amlodipine Tablet 2.5 mg/5 mg (Protect from moisture.) Amlodipine Tablet 10 mg
11	Indapamide Tablet 1.5 mg
12	Chlorthalidone Tablet 12.5 mg
13	Injection Mannitol
14	Labetalol Injection 20 mg
15	Methyldopa Tablet 250
16	Enalapril Tablet 2.5 mg Enalapril Tablet 5 mg Enalapril Tablet 10 mg
17	Captopril Tablet 25 mg
18	Lisinopril Tablet 5 mg
19	Telmisartan Tablet 40 mg
20	Digoxin Tablet 250 mg
21	Dopamine Injection 40 mg/ml (Store in an airtight container protected from light.)
22	Noradrenaline Injection 2 mg/ml (Store in single dose containers. Store at room temperature (25°C). Store in tight, light resistant containers as it is readily oxidized. Do not use if discolored (e.g., pink, dark yellow, brown) or if there is a precipitate.)
23	Enoxaparin Injection LMWH

24	Atorvastatin Tablet 10 mg (Protect from moisture and store at temperature not exceeding 30°C.) Atorvastatin Tablet 40 mg
Diuretics Medicines	
25	Furosemide Tablet 40 mg Furosemide Injection 10 mg/ml
26	Hydrochlorothiazide* Tablet 12.5 mg Hydrochlorothiazide Tablet 25mg
27	Spironolactone Tablet 25 mg
28	Methyl Cellulose tablet/powder
29	Ciprofloxacin Drops 0.3 % Ciprofloxacin Eye/Ear drops (Protect from light)
30	Normal Saline nasal drop: sodium chloride drops 0.05% w/v
31	Xylometazoline nasal drop: Pediatric (0.05) and adult (0.1%)
32	Wax solvent ear drops: benzocaine, paradichlorobenzene, turpentine oil
33	Boro-spirit ear drop-0.183 gm boric acid in 2.08 ml of alcohol
34	Combo ear drop-Chloramphenicol 5% w/v + clotrimazole 1% +Lignocaine hydrochloride 2%
35	Liquid paraffinmenthol drop: Menthol 10 gm +Eucalyptus 2 ml+ Camphor 10 mg+ liquid paraffin to 100 ml
Antidiabetic medicines	
36	Glimepiride Tablet 1 mg/2 mg
37	Insulin (Soluble) Injection 40 IU/ml _{2,3}
38	Metformin Tablet 500 mg ₃ Metformin Controlled released 750 mg
39	Premix Insulin 30:70 Injection (Regular: NPH) _{2,3} Premix Insulin 30:70 Injection 40 IU/ml.
40	Glibenclamide Tablet 2.5 mg/5 mg ₃
41	Norethisterone 5mg Tablet
42	Gliclazide Tablet 40mg
Medicines acting on the respiratory tract	
43	Budesonide Inhalation (MDI/DPI) 100 mcg/dose Budesonide Respirator solution for use in nebulizer 0.5 mg/ml
44	Budesonide (A)+ Formoterol (B) Inhalation (MDI/DPI) 100 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 200 mcg (A)+ 6 mcg (B) Inhalation (MDI/DPI) 400 mcg (A)+ 6 mcg (B)
45	Combination of LABA+ICS (Formoterol, Salmeterol/Fluticasone) MDI, DPI (Protect from light, moisture and store at temperature not exceeding 30°C) (Protect from light, moisture and store at temperature not exceeding 30°C.)
46	Etofylline B Plus (A), Anhydrous Theophylline IP (B) combination injection 84.7 mg/ml (A) + 25.3 mg/ml (B)
47	Ipratropium Inhalation (MDI/DPI) 20 mcg/dose Ipratropium Respirator solution for use in nebulizer 250 mcg/ml.
48	Levosalmamol 50 mcg/dose
49	Salbutamol Tablet 2 mg/4 mg Salbutamol 100 mg/dose Salbutamol Oral liquid 2 mg/5 ml

50	Theophylline Tablet (Protect from moisture.)
51	Syrup Salbutamol Salbutamol Nebulizing solution.
52	Tiotropium Inhalation (MDI) 9 mcg/dose Tiotropium Inhalation (DPI) 18 mcg/dose
53	Deriphyllin SR Tablet
54	Montelukast Tablet 5 mg Montelukast syrup
55	N Acetyl Cystine Tablet 600 mg/Dispersible
56	Betamethasone Injection 4 mg/ml

Indicative List Of Medicines For Health And Wellness Centre – Primary Health Centre Level

S. No.	Name of Drugs
Anti-hypertensive medicine	
1	Amlodipine Tablet 2.5 mg Amlodipine Tablet 5 mg
2	Enalapril Tablet 5 mg
3	Hydrochlorothiazide Tablet 12.5 mg Hydrochlorothiazide Tablet 25 mg
4	Labetalol Tablet 100 mg Labetalol Injection 5 mg/ml
5	Methyldopa Tablet 250 mg
6	Telmisartan Tablet 40 mg
Medicines used in shock and heart failure	
7	Adrenaline Injection 1 mg/ml
Hypolipidemic medicines	
8	Atorvastatin Tablet 10 mg
Diuretics	
9	Furosemide Tablet 40 mg Furosemide Injection 10 mg/ml
10	Mannitol Injection 10% Mannitol Injection 20%
Medicines used in diabetes mellitus	
11	Glimepiride Tablet 2 mg
12	Metformin Tablet 500 mg Metformin SR Tablet 500 mg
13	Insulin (Soluble) Injection 40 IU/ml
14	Premix Insulin 30:70 Injection (Regular: NPH) Injection 40 IU/ml
15	Glibenclamide Tablet 2.5 mg Glibenclamide Tablet 5 mg
16	Glucose Packet 75 mg for OGTT Test
Medicines acting on the Respiratory Tract	
17	Budesonide Inhalation (MDI/DPI) 100 mcg/dose Budesonide Respirator solution for use in nebulizer 0.5 mg/ml
18	Salbutamol Tablet 2 mg Salbutamol Oral liquid 2 mg/5 ml Salbutamol Respirator solution for use in nebulizer 5 mg/ml
19	Montelukast Syrup Montelukast Tablet
20	Syrup Dextromethorphan
21	Syrup Bromhexine Hydrochloride
22	Syrup Pheniramine Maleate
23	Ipratropium Inhalation (MDI/DPI) 20 mcg/dose Ipratropium Respirator solution for use in nebulizer 250 mcg/ml.

Indicative List Of Medicines For Health And Wellness Centre – Sub Health Centre Level

S. No.	Name of Drugs
Cardiovascular medicines (Medicines used in angina)	
1	Isosorbide-5- mononitrate Tablet 5 mg
2	Atenolol Tablet 50 mg
3	Metoprolol Tablet 25 mg Metoprolol SR Tablet 25 mg
4	Isosorbide dinitrate Tablet 5 mg (Sublingual)
Anti-hypertensive medicines	
5	Amlodipine Tablet 2.5 mg Amlodipine Tablet 5 mg
6	Enalapril Tablet 5 mg
7	Telmisartan Tablet 40 mg
8	Hydrochlorothiazide Tablet 12.5 mg Hydrochlorothiazide Tablet 25 mg
Hypolipidemic medicines	
9	Atorvastatin Tablet 10 mg
Medicines used in Diabetes Mellitus	
10	Glimepiride Tablet 2 mg
11	Metformin Tablet 500 mg Metformin SR Tablet 500 mg
12	Glibenclamide Tablet 2.5 mg/ Glibenclamide Tablet 5 mg
Medicines acting on the respiratory Tract	
13	Budesonide Respirator solution for use in nebulizer 0.5 mg/ml (Nebulizer Essential)
14	Salbutamol Tablet 2 mg Salbutamol Oral liquid 2 mg/5 ml Salbutamol Respirator solution for use in nebulizer 5mg/ml (Nebulizer Essential)
15	Normal Saline Drops
16	Dextromethorphan oral Syrup
17	Hyoscinebutylbromide Tablet 10 mg
Diuretics	
18	Furosemide Injection (Lasix) Furosemide Tablet 40 mg



ANNEXURE 2



Community based assessment checklist (CBAC)

Date: DD/MM/YYYY

General Information	
Name of ASHA:	Village:
Name of MPW/ANM:	Sub Centre:
	PHC:
Personal Details	
Name:	Any Identifier (Aadhar Card, UID, Voter ID): Yes/No
Age:	State Health Insurance Schemes: Yes/No If yes, specify:
Sex:	Telephone No. (self/other – mention relation):
Address:	
Is this person having any visible/known disability?	Yes/No

Part A: Risk Assessment				
Question	Range		Circle Any	Write Score
1. What is your age? (in complete years)	30-39 years		0	
	40-49 years		1	
	50-59 years		2	
	≥ 60 years		3	
2. Do you smoke or consume smokeless products such as gutka or khaini?	Never		0	
	Used to consume in the past/ Sometimes now		1	
	Daily		2	
3. Do you consume alcohol daily	No		0	
	Yes		1	
4. Measurement of waist (in cm)	Female	Male		
	80 cm or less	90 cm or less	0	
	81-90 cm	91-100 cm	1	
	More than 90 cm	More than 100 cm	2	

5. Do you undertake any physical activities for minimum of 150 minutes in a week?	At least 150 minutes in a week	0	
	Less than 150 minutes in a week	1	

6. Do you have a family history (any one of your parents or siblings) of high blood pressure, diabetes and heart disease?	No	0	
	Yes	2	

Total Score

Every individual needs to be screened irrespective of their scores.

A score above 4 indicates that the person may be at higher risk of NCDs and needs to be prioritized for attending the weekly screening day

Part B: Early Detection: Ask if Patient has any of these Symptoms

B1: Women and Men	Y/N		Y/N	
Shortness of breath		History of fits		
Coughing more than 2 weeks*		Difficulty in opening mouth		
Blood in sputum*		Any ulcers in mouth that has not healed in two weeks		
Fever for > 2 weeks*		Any growth in mouth that has not healed in two weeks		
Loss of weight*		Any white or red patch that has not healed in two weeks		
Night Sweats*		Pain while chewing		
Are you currently taking anti-TB drugs**		Any change in the tone of your voice		
Anyone in family currently suffering from TB**		Any patch or discoloration on skin that is not healing		
History of TB *		Difficulty in holding objects with fingers		
Do you have cloudy or blurred vision?		Loss of sensation for cold/hot objects in palm or sole		
Do you have difficulty in hearing?				

B2: Women only		Y/N		Y/N	
Lump in the breast			Bleeding after menopause		
Blood-stained discharge from the nipple			Bleeding after intercourse		
Change in shape and size of breast			Foul smelling vaginal discharge		
Bleeding between periods					
B3: Elderly Specific		Y/N		Y/N	
Do you feel unsteady while standing or walking?			Do you need help from others to perform everyday activities such as eating, getting dressed, grooming, bathing, walking, or using the toilet?		
Are you suffering from any physical disability that restricts your movement					
In case of individual answers Yes to any one of the above-mentioned symptoms, refer the patient immediately to the nearest facility where a Medical Officer is available					
*If the response is Yes- action suggested: Sputum sample collection and transport to nearest TB testing center					
**If the answer is yes, tracing of all family members to be done by ANM/MPW					
Part C: Risk factors for COPD					
Circle all that Apply					
Type of Fuel used for cooking – Firewood / Crop Residue / Cow dung cake / Coal / Kerosene / LPG					
Occupational exposure – Crop residue burning/burning of garbage – leaves/working in industries with smoke, gas and dust exposure such as brick kilns and glass factories etc.					
Part D: PHQ 2					
Over the last 2 weeks, how often have you been bothered by the following problems?		Not at all	Several days	More than half the days	Nearly every day
1.	Little interest or pleasure in doing things?	0	+1	+2	+3
2.	Feeling down, depressed or hopeless?	0	+1	+2	+3
Anyone with total score greater than 3 should be referred to CHO.					





India hypertension control initiative: good practices

1. **Standardised hypertension treatment** protocols are drug and dose-specific established steps to take if BP is not controlled. Based on consensus from a state level expert committee each IHCI implementing state has adopted a State-specific hypertension treatment protocol consisting of three drugs: Amlodipine, Telmisartan and Chlorthalidone (or Hydrochlorothiazide). It reduces unwarranted clinical variability and therapeutic inertia and results in a more efficient and cost-effective selection of medications and treatment approaches of medications and treatment approaches, facilitates logistics, training, supervision, and evaluation. Similar standard treatment protocol developed for Diabetes management and implemented in several IHCI states.
2. **Uninterrupted availability** of hypertension and diabetes protocol medications at service delivery points through timely purchase of adequate quantities of drugs and equitable distribution to healthcare facilities. Optimal forecasting and adequate budgeting are supported by the morbidity-based “**drug forecasting tool**” developed under IHCI. A few practices that are proving beneficial are: Floating tenders at least 4 months in advance to expiry of existing rate contracts, provision for multi-year rate contracts, empanelling multiple suppliers, purchase orders with scheduled supply, decentralisation of procurement to district and empowering health facilities for small volume local procurement. Stock holding up to 3-months drug requirements at each health facility has been recommended and a handy “**stock adequacy ready reckoner**” has been made available at all levels for quick assessment of stock position and supply chain decisions.
3. **Information system** with specific indicators have been established under IHCI to enable cohort-based monitoring of enrolled patients on real-time basis. Reminder messages, overdue calling for patients who have missed follow-up visit and facility to schedule next appointment to preferred facility where key features of this information system along with QR coded BP passport and telemedicine.
4. **Capacity building of Health care workers:** Training, customized to meet the needs of different care providers depending on their roles and responsibilities, emphasizes on correct blood pressure measurement technique, communication skills, management skills, essentials of drug stock management, drug quantification, and forecasting. The trained Cardiovascular health officers thereafter facilitate cascade-type training from State Nodal Officers at state level to healthcare staff at all levels of health care delivery.
5. **Supportive supervision, monitoring, regular programmatic reviews** and rapid course corrections have been the cornerstone of the IHCI’s continued progress and improvement. IHCI monthly reports summarising the implementation progress, drug stock situation, findings from supervisory visits, key achievements and challenges are shared with district and state nodal officers for necessary action. The regular IHCI review meetings and supervisory visits provide an opportunity to learn the challenges in implementation, assess the program performance and provide technical advice and guidance.



ANNEXURE 4



Details of HR supported under the NP-NCD programme

Suggested roles and responsibilities of the key service delivery staff to provide NCD services:

Health facility	Human resources	Key tasks to be performed
Community level	ASHA	<ul style="list-style-type: none"> • Fill up Community-Based Assessment Checklist • Enumeration of Eligible Population • Health promotion and awareness generation • Follow-up patients on treatment • Support in screening and documentation
Sub-centre / SHC-HWC/ U-HWC	CHO	<ul style="list-style-type: none"> • Conduct health promotion/ education • Conduct wellness activities • Screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD and NAFLD • Indenting drugs from PHC/Store to ensure adequate drug stock as per patient load • Dispensing of prescribed drugs • Referral of cases to higher-level facilities • Follow-up of patients on treatment • Provide teleconsultation as per requirement • NCD data recording and reporting in prescribed formats on National NCD Portal • Ensure inclusion of NCD related activities in outreach including VHSNDs • Home visits to patients who have missed their follow up visit (specially drug refill) in last 3 months
	MPW - Female/ ANM	<ul style="list-style-type: none"> • Conduct health promotion/ education • Conduct wellness activities • Assist in screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD and NAFLD • Referral of cases to higher-level facilities • Follow-up of patients on treatment • NCD data recording and reporting in prescribed formats on National NCD Portal • Home visits to patients who have missed their follow up visit (specially drug refill) in last 3 months
	MPW – Male	

Health facility	Human resources	Key tasks to be performed
PHC / PHC-HWC/ UPHC-HWC	Medical Officer (MBBS)/ GDMO-MBBS	<ul style="list-style-type: none"> Screening/ Examination/ Diagnosis and management of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD, NAFLD, Stroke and STEMI among OPD attendees Evaluation, diagnosis, management, and counselling of referred cases Risk assessment, follow-up as per protocol Referral of complicated NCD cases to higher facilities Provide teleconsultation as required (including teleconsultation with specialists) Ensuring timely reporting in the National NCD Portal Ensure inclusion of NCD related activities in outreach including VHSNDs Review of health facility and HWCs performance on monthly basis.
	MPW - Female/ ANM	<ul style="list-style-type: none"> Conduct health promotion/ education Conduct wellness activities Assist in screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD and NAFLD Follow-up of patient on treatment NCD data recording and reporting in prescribed formats on National NCD Portal
	Staff Nurse	<ul style="list-style-type: none"> Assist Medical Officers in the screening, management and follow-up of patients attending the NCD Clinic Counsel patients and their family members about the risk factors of NCDs Provide home-based care as per guideline Ensuring timely reporting in the National NCD Portal
	Lab Technician	<ul style="list-style-type: none"> Conduct lab examination as per protocol Timely indenting and ensuring availability of consumables
	Pharmacist	<ul style="list-style-type: none"> Dispensing of prescribed drugs Timely indenting and ensuring availability of drugs/consumables as per patient load Counsel patients for timely return for drug refill

Health facility	Human resources	Key tasks to be performed
CHC/ UCHC	Physician (MD)/ General Medicine	<ul style="list-style-type: none"> Screening/ Examination/ Diagnosis and Management of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD, NAFLD, Stroke and STEMI among OPD attendees Referral of complicated cases to District Hospital/higher healthcare facility Health promotion including counselling
	Medical Officer (MBBS)/ GDMO-MBBS	<ul style="list-style-type: none"> Screening of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD, NAFLD, Stroke and STEMI among OPD attendees Early diagnosis through clinical and laboratory investigations Management of cases of common NCDs and regular follow-up Support in management of complicated cases of common NCDs, or referral to District Hospital/higher healthcare facility Health promotion including counselling
	Dentist/Dental Surgeon	<ul style="list-style-type: none"> Facilitate screening for oral cancers Health promotion including counselling
	Staff Nurse	<ul style="list-style-type: none"> Assist Medical Officers in the management and follow-up of patients attending the NCD Clinic Provide home-based care as per guideline Ensuring timely reporting in the National NCD Portal
	Counsellor/ Health Educator	<ul style="list-style-type: none"> Counsel patients and their family members about the risk factors of NCDs Plan IEC activities vis-à-vis NCDs or lifestyle diseases Make domiciliary visits for providing counselling to bedridden patients and attendants Assist in follow-up care and referral Coordinate observation of health days in respective health facility
	Dietician	<ul style="list-style-type: none"> Counsel patients and family members on dietary and lifestyle modifications
	Physiotherapist	<ul style="list-style-type: none"> Manage and follow up patients requiring physiotherapy services Make domiciliary visits for providing physiotherapy services to bedridden patients
	Lab Technician	<ul style="list-style-type: none"> Conduct lab examination as per protocol Timely indenting and ensuring availability of consumables
	ECG/ EEG Technician	<ul style="list-style-type: none"> Conduct diagnostic tests as per protocol
	Pharmacist	<ul style="list-style-type: none"> Dispensing of prescribed drugs Timely indenting and ensuring availability of drugs/consumables as per patient load Counsel patients for timely return for drug refill

Health facility	Human resources	Key tasks to be performed
SDH/ District Hospital	Physician (MD)/ General Medicine	<ul style="list-style-type: none"> Screening, Diagnosis and Management of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD, NAFLD, Stroke and STEMI among OPD attendees Management of complicated cases of common NCDs, or referral to a higher healthcare facility, if resources are inadequate Follow-up of cancer, chemotherapy and palliative care services for cancer cases, physiotherapy services for NCDs including Stroke patients, Dialysis facilities for CKD patients, etc. Health promotion for behaviour change and counselling for NCD cases. IEC activities on important Health Days.
	Medical Officer (MBBS) / GDMO-MBBS	<ul style="list-style-type: none"> Screening and Diagnosis of Diabetes, Hypertension, three common cancers (oral, breast and cervical), COPD and asthma, CKD, NAFLD, Stroke and STEMI among OPD attendees Support in management of complicated cases of common NCDs, or referral to a higher healthcare facility, if resources are inadequate Follow-up cancer chemotherapy and palliative care services for cancer cases, physiotherapy services for NCDs including Stroke patients, Dialysis facilities for CKD patients, etc. Health promotion for behaviour change and counselling for NCD cases. IEC activities on important Health Days.
	Dentist/Dental Surgeon	<ul style="list-style-type: none"> Facilitate screening for oral cancers Health promotion including counselling
	Staff Nurse	<ul style="list-style-type: none"> Assist Medical Officers in the management and follow-up of patients attending the NCD Clinic Counsel patients and their family members about the risk factors of NCDs Provide home-based care as per guideline Ensuring timely reporting in the National NCD Portal
	Lab technician	<ul style="list-style-type: none"> Conduct lab examination as per protocol Timely indenting and ensuring availability of consumables
	Pharmacist	<ul style="list-style-type: none"> Dispensing of prescribed drugs Timely indenting and ensuring availability of drugs/consumables as per patient load Counsel patients for timely return for drug refill
	Counsellor/ Health Educator	<ul style="list-style-type: none"> Counsel patients and their family members about the risk factors of NCDs Plan IEC activities vis-à-vis NCDs or lifestyle diseases Make domiciliary visits for providing counselling to bedridden patients and attendants Coordinate observation of health days
	Physiotherapist	<ul style="list-style-type: none"> Manage and follow up patients requiring physiotherapy services Make domiciliary visits for providing physiotherapy services to bedridden patients
	Dietician	<ul style="list-style-type: none"> Counsel patients and family members on dietary and lifestyle modifications
	Dialysis technician	<ul style="list-style-type: none"> Perform functions related to dialysis for patients
	ECG/ EEG Technician	<ul style="list-style-type: none"> Conduct diagnostic tests as per protocol



ANNEXURE 5



Training plan for various components under NP-NCD

Sl. No.	Name of the training program	Level of training	Eligible staff	Duration	Batch Size
1.	Training of NP-NCD for program managers	State/ District	SNO/ SPO/ SPC/ DNO/ DPO/ DPC	3 days	30-40
2.	Training of NP-NCD for program managers	State/ District	DEO/ FLO	2 days	30-40
3.	Training on the Comprehensive Primary Health care and continuum of care spanning health promotion, NCD prevention, screening, treatment, referral and follow ups	State/ District	CHOs/ MPW M & F/ ASHA	3 days	30-40
4.	Training on cervical cancer screening using VIA	State/ District	Staff Nurses/ LHV's/ CHOs/ ANMs	10 days	10-14
5.	PBS training for District pool of program managers for ANM/ASHA training	State	DNO/ DPO/ DPC/ SIHFW/ Medical College	2 days	30-40
6.	Training for Prevention, Control, PBS, Standard Treatment Portocol and National NCD Portal training of NCDs	State	MOs	3 days	
7.	Training of Staff Nurses on NCD care spanning health promotion, prevention, screening, treatment and follow up	District/ Sub-District	SNs	2 days	
8.	Training of ANMs/LHVs on NCD care spanning health promotion, prevention, screening, treatment and follow up	District/ Sub-District	ANMs/ LHVs	2 Days	
9.	PBS training of ASHA and ASHA facilitators	District/ Sub-District	ASHA/ ASHA facilitators	5 days (with ANM attending the last day for joint team training)	
10.	National NCD Portal for program managers	State	SNO/ SPO/ SPC/ DNO/ DPO/ DPC	1 day	
11.	National NCD Portal training for Master Trainers	District/ Sub-district	DNO/ DPO/ DPC/ DME	Induction - 1 day Refresher – 1 day	

12.	National NCD Portal for PHC / CHC / DH portal	State/ District/ Sub-District	Medical Officer/ Staff Nurses/ Data Entry Operator	Induction - 1 day Refresher – 1 day	
13.	National NCD Portal for ANMs and/ or MPW - Male/Female/CHOs/ ASHA	District/ Sub-District	ANMs/ MPWs/ CHOs /ASHA	Induction - 1 day Refresher – 1 day	

Note: Pre and post-test questionnaires to be conducted during all training and training reports need to be submitted within four weeks to State and National level. Refresher Training should be conducted on annual basis.



ANNEXURE 6 (FORMATS)



Reporting Form 1A				
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)				
Village				
Name of the Village _____ Sub-centre/ SC-HWC _____ PHC _____				
Block/ Mandal _____ District _____				
Population of Village (Projected for current year) _____				
Reporting Month _____ Year _____				
Part A : Enrollment & CBAC				
Indicators		Male	Female	Total
Total eligible population (Age 30+)				
No. of CBAC filled up out of eligible population (reporting month)				
Cumulative no. of CBAC filled up out of eligible population (current financial year)				
Part B : Screening, Suspected & Referral				
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
Oral Cancer (Patches/lumps in Mouth)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
Cervical Cancer	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			
CKD (Multiparameter Dipstick Test)	No. of Person Screened (reporting month)			
	No. of Suspected & Referred (reporting month)			
	Cumulative no. of Person Screened (current financial year)			
	Cumulative no. of Suspected & Referred (current financial year)			

Part C : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up				
Indicators		Male	Female	Total
Hypertension (HTN)	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup for Standard of Care (reporting month)			
	No. of patients for refill of drugs (reporting month)			
	Cumulative no. of patients lost to followup			
Diabetes (DM)	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup for Standard of Care (reporting month)			
	No. of patients for refill of drugs (reporting month)			
	Cumulative no. of patients lost to followup			
COPD	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup			
Oral Cancer	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup			
Breast Cancer	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup			
Cervical Cancer	Cumulative no. of cases Diagnosed from higher level facility			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup			

Signature: _____

Name and Designation _____

Date of Reporting _____

*The Report should be filled by ASHA and sent to SHC on last working day of the reporting month.

Reporting Form 1												
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)												
Sub Centre/ Sub Centre - Health & Wellness Centre												
Name of the Sub-centre/ SC-HWC _____					PHC _____							
Block/ Mandal _____					District _____ State _____							
Population of Sub Centre (Projected for current year) _____												
Reporting Month _____ Year _____												
No. of Villages under the Sub-centre/ Health & Wellness Centre _____					No. of Villages reported in the current month _____							
Part A : Enrollment & CBAC												
Indicators								Male	Fe-male	Total		
Total eligible population (Age 30+)												
No. of CBAC filled up out of eligible population (reporting month)												
Cumulative no. of CBAC filled up out of eligible population (current financial year)												
Part B : Screening, Suspected & Referral				SHC Report (A)			Cumulative Report of Villages (B)			Total Report (A+B)		
				Total	Male	Female	Total	Male	Female	Total	Male	Female
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
Oral Cancer (Patches/ lumps in Mouth)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
Cervical Cancer	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											
CKD (Multiparameter Dipstick Test)	No. of Person Screened (reporting month)											
	No. of Suspected & Referred (reporting month)											
	Cumulative no. of Person Screened (current financial year)											
	Cumulative no. of Suspected & Referred (current financial year)											

Part C : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up										
Indicators		SHC Report (A)			Cumulative Report of Villages (B)			Total Report (A+B)		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Hypertension (HTN)	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
	Cumulative no. of patients lost to followup									
Diabetes (DM)	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
	Cumulative no. of patients lost to followup									
COPD	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Oral Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Breast Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Cervical Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									

Signature: _____

Name and Designation _____

Date of Reporting _____

***The Report should be filled by CHO/ANM of HWC/Sub centre and sent to PHC on last working day of the reporting month.**

Reporting Form 2											
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)											
Primary Health Centre/ Primary Health Centre- Health & Wellness Centre/ UPHC- HWC											
Name of the PHC/ PHC- HWC/ UPHC- HWC _____											
Block/ Mandal _____			District _____			State _____					
Population of Primary Health Centre (Projected for current year) _____									Year _____		
No. of Sub-centre/ Health & Wellness Centre under the PHC / PHC-HWC/ UPHC-HWC _____						No. of Sub-centre/ Health & Wellness Centre reported in the current month _____					
						Male	Female	Total			
Total eligible population (Age 30+)											
Cumulative no. of CBAC filled up out of eligible population (current financial year)											
Part A : Screening, Suspected & Referral						PHC Report (A)			Cumulative Report of SHC (B)		
Indicators		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
Oral Cancer (Patches/lumps in Mouth)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
Cervical Cancer	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
CKD (Multiparameter Dipstick Test)	No. of Person Screened (reporting month)										
	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Person Screened (current financial year)										
	Cumulative no. of Suspected & Referred (current financial year)										
STEMI (Chest discomfort/ Pain)	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Suspected & Referred (current financial year)										
Stroke (BE FAST)	No. of Suspected & Referred (reporting month)										
	Cumulative no. of Suspected & Referred (current financial year)										

Part B : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up		PHC Report (A)			Cumulative Report of SHC (B)			Total Report (A+B)		
Indicators		Male	Female	Total	Male	Female	Total	Male	Female	Total
Hypertension (HTN)	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on life style modification (Without Medication)(reporting month) (Out of A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on life style modification (Without Medication)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
	Cumulative no. of patients lost to followup (Out of B)									
Diabetes (DM)	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on life style modification (Without Medication)(reporting month) (Out of A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on life style modification (Without Medication)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
	Cumulative no. of patients lost to followup (Out of B)									
COPD	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Oral Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Breast Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Cervical Cancer	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
	Cumulative no. of patients lost to followup									
Part C : Co-morbidities		PHC Report(A)			Cumulative Report of SHC (B)			Total Report (A+B)		
DM + TB	No. of known TB cases on ATT (Out of New Diagnosed + Follow up DM Cases)									
	No. screened for TB Symptoms									
	No. suspected for TB & referred to DMC/ PI									

Signature: _____

Name and Designation _____

Date of Reporting _____

*The Report should be verified and signed by Medical Officer I/c PHC and sent to Block PHC/CHC on 5th day of every month.

Reporting Form 3										
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)										
Community Health Centre/ Sub District Hospital										
Name of the CHC/ SDH _____										
Block/ Mandal _____			District _____			State _____				
Population of Community Health Centre (Projected for current year) _____										
Reporting Month _____ Year _____										
No. of PHC under the CHC/SDH _____					No. of PHC reported in the current month _____					
					Male		Female		Total	
Total eligible population (Age 30+)										
Cumulative no. of CBAC filled up out of eligible population (current financial year)										
Part A : Screening, Suspected & Referral					CHC/ SDH Report (A)			Cumulative Report of PHC (B)		
Indicators					Male	Female	Total	Male	Female	Total
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
Oral Cancer (Patches/lumps in Mouth)	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
Cervical Cancer	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
CKD	No. of Person Screened (reporting month)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	Cumulative no. of Suspected & Referred (current financial year)									
STEMI (Chest discomfort/ Pain)	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Stroke (BE FAST)	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Part B : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up					CHC/ SDH Report (A)			Cumulative Report of PHC (B)		
Indicators					Male	Female	Total	Male	Female	Total
Hypertension (HTN)	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on life style modification (Without Medication)(reporting month) (Out of A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on life style modification (Without Medication)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
Cumulative no. of patients lost to followup (Out of B)										

Diabetes (DM)	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on life style modification (Without Medication)(reporting month) (Out of A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on life style modification (Without Medication)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
COPD	Cumulative no. of patients lost to followup (Out of B)									
	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup (reporting month)									
	No. of patients for refill of drugs (reporting month)									
CKD	Cumulative no. of patients lost to followup (Out of B)									
	No. of New Cases Diagnosed (reporting month)									
	No. of New Cases Put on treatment (reporting month)									
	Cumulative no. of cases diagnosed									
NAFLD	Cumulative no. of cases Put on treatment									
	No. of New Cases Diagnosed (reporting month)									
Oral Cancer	Cumulative no. of cases diagnosed									
	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
Breast Cancer	Cumulative no. of patients lost to followup									
	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
Cervical Cancer	Cumulative no. of patients lost to followup									
	Cumulative no. of cases Diagnosed from higher level facility									
	No. of cases on followup (reporting month)									
Part C : Co-morbidities		CHC/ SDH Report (A)			Cumulative Report of PHC (B)			Total Report (A+B)		
DM + TB	No. of known TB cases on ATT (Out of New Diagnosed + Follow up DM Cases)									
	No. screened for TB Symptoms									
	No. suspected for TB & referred to DMC/ PI									

Signature: _____

Name and Designation _____

Date of Reporting _____

*The Report should be verified and signed by Medical Officer I/c CHC/ SDH and sent to Block HQ/CHC on 5th day of every month.

Reporting Form 4					
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)					
District Hospital					
Name of the District Hospital _____					
Block/ Mandal _____		District _____		State _____	
Population of District (Projected for current year) _____			Reporting Month _____ Year _____		
Total eligible population (Age 30+)		Male	Female		Total
Part A : Screening, Suspected & Referral			District Hospital Report		
Indicators		Male	Female	Total	
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
Oral Cancer (Patches/lumps in Mouth)	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
Cervical Cancer	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
CKD	No. of Person Screened (reporting month)				
	Cumulative no. of Person Screened (current financial year)				
STEMI (Chest discomfort/ Pain)	No. of Person presented with sign & symptoms (reporting month)				
	Cumulative no. of person presented with sign & symptoms (current financial year)				
Stroke (BE FAST)	No. of Person presented with sign & symptoms (reporting month)				
	Cumulative no. of person presented with sign & symptoms (current financial year)				
Part B : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up			District Hospital Report		
Indicators		Male	Female	Total	
Hypertension (HTN)	No. of New Cases Diagnosed (reporting month) (A)				
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)				
	No. of New Cases Put on treatment (reporting month) (Out of A)				
	Cumulative no. of cases diagnosed (B)				
	Cumulative no. of cases Put on life style modification (Without Medication)				
	Cumulative no. of cases Put on treatment (Out of B)				
	No. of cases on followup for Standard of Care (reporting month)				
	No. of patients for refill of drugs (reporting month)				
Diabetes (DM)	Cumulative no. of patients lost to followup (Out of B)				
	No. of New Cases Diagnosed (reporting month) (A)				
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)				
	No. of New Cases Put on treatment (reporting month) (Out of A)				
	Cumulative no. of cases diagnosed (B)				
	Cumulative no. of cases Put on life style modification (Without Medication)				
	Cumulative no. of cases Put on treatment (Out of B)				
	No. of cases on followup for Standard of Care (reporting month)				
COPD	No. of patients for refill of drugs (reporting month)				
	Cumulative no. of patients lost to followup (Out of B)				
	No. of New Cases Diagnosed (reporting month) (A)				
	No. of New Cases Put on treatment (reporting month) (Out of A)				
	Cumulative no. of cases diagnosed (B)				
	Cumulative no. of cases Put on treatment (Out of B)				
CKD	No. of cases on followup (reporting month)				
	No. of patients for refill of drugs (reporting month)				
	Cumulative no. of patients lost to followup (Out of B)				
	Cumulative no. of cases Put on treatment				

NAFLD	No. of New Cases Diagnosed (reporting month)			
	Cumulative no. of cases diagnosed			
Oral Cancer	No. of New Cases Diagnosed (reporting month) (A)			
	No. of New Cases Put on treatment (reporting month) (Out of A)			
	Cumulative no. of cases diagnosed (B)			
	Cumulative no. of cases Put on treatment (Out of B)			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup (Out of B)			
Breast Cancer	No. of New Cases Diagnosed (reporting month) (A)			
	No. of New Cases Put on treatment (reporting month) (Out of A)			
	Cumulative no. of cases diagnosed (B)			
	Cumulative no. of cases Put on treatment (Out of B)			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup (Out of B)			
Cervical Cancer	No. of New Cases Diagnosed (reporting month) (A)			
	No. of New Cases Put on treatment (reporting month) (Out of A)			
	Cumulative no. of cases diagnosed (B)			
	Cumulative no. of cases Put on treatment (Out of B)			
	No. of cases on followup (reporting month)			
	Cumulative no. of patients lost to followup (Out of B)			
Cardiovascular Diseases (including STEMI)	No. of New Cases Diagnosed (reporting month) (A)			
	No. of New Cases Thrombolysed (reporting month) (Out of A)			
	Cumulative no. of cases diagnosed (B)			
	Cumulative no. of cases Thrombolysed (Out of B)			
	No. of cases on followup (reporting month)			
	No. of patients for refill of drugs (reporting month)			
STROKE	Cumulative no. of patients lost to followup (Out of B)			
	No. of New Cases Diagnosed (reporting month) (A)			
	No. of New Cases Thrombolysed (Non-Hemorrhagic) (reporting month) (Out of A)			
	Cumulative no. of cases diagnosed (B)			
	Cumulative no. of cases Thrombolysed (Out of B)			
	No. of cases managed without Thrombolysed (Non-Hemorrhagic)			
	No. of cases on followup (reporting month)			
	No. of patients for refill of drugs (reporting month)			
	Cumulative no. of patients lost to followup (Out of B)			
Part C : Co-morbidities		District Hospital Report		
DM + TB	No. of known TB cases on ATT (Out of New Diagnosed + Follow up DM Cases)			
	No. screened for TB Symptoms			
	No. suspected for TB & referred to DMC/ PI			

Signature: _____

Name and Designation _____

Date of Reporting _____

***The Report should be verified and signed by Medical Officer I/c of DH NCD Clinic and sent to District NCD Cell by 7th day of every month.**

Reporting Form 5										
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)										
District NCD Division										
Name of the District _____										
Name of State _____ Reporting Month _____ Year _____										
Parameters								NCD Cell Report		
								Male	Female	Total
Population of District (Projected for current year)										
Total eligible population (Age 30+)										
No. of CHC NCD Clinics in the District										
No. of CCU in the District										
No. of Day Care Cancer Centre in the District										
No. of facilities providing NCD Services (including SHC/ PHC/ HWC/ CHC/SDH)										
Part A : Screening, Suspected & Referral				District Hospital Report (A)			Cumulative Report of CHC/ SDH (B)			Total Report (A+B)
Indicators		Male	Female	Total	Male	Female	Total	Male	Female	Total
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Oral Cancer (Patches/ lumps in Mouth)	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Cervical Cancer	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
CKD	No. of Person Screened (reporting month)									
	Cumulative no. of Person Screened (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
STEMI (Chest discomfort/ Pain)	No. of Person presented with sign & symptoms (reporting month)									
	Cumulative no. of Person presented with sign & symptoms (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Stroke (BE FAST)	No. of Person presented with sign & symptoms (reporting month)									
	Cumulative no. of Person presented with sign & symptoms (current financial year)									
	No. of Suspected & Referred (reporting month)									
	Cumulative no. of Suspected & Referred (current financial year)									
Part B : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up				District Hospital Report (A)			Cumulative Report of CHC/ SDH (B)			Total Report (A+B)
Indicators		Male	Female	Total	Male	Female	Total	Male	Female	Total
Hypertension (HTN)	No. of New Cases Diagnosed (reporting month) (A)									
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)									
	No. of New Cases Put on treatment (reporting month) (Out of A)									
	Cumulative no. of cases diagnosed (B)									
	Cumulative no. of cases Put on life style modification (Without Medication)									
	Cumulative no. of cases Put on treatment (Out of B)									
	No. of cases on followup for Standard of Care (reporting month)									
	No. of patients for refill of drugs (reporting month)									
	Cumulative no. of patients lost to followup (Out of B)									

Diabetes (DM)	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Put on life style modification (Without Medication)										
	Cumulative no. of cases Put on treatment (Out of B)										
	No. of cases on followup for Standard of Care (reporting month)										
	No. of patients for refill of drugs (reporting month)										
COPD	Cumulative no. of patients lost to followup (Out of B)										
	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Put on treatment (Out of B)										
	No. of cases on followup (reporting month)										
CKD	No. of patients for refill of drugs (reporting month)										
	Cumulative no. of patients lost to followup (Out of B)										
	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
NAFLD	Cumulative no. of cases diagnosed										
	Cumulative no. of cases Put on treatment										
Oral Cancer	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Put on treatment (Out of B)										
	No. of cases on followup (reporting month)										
	Cumulative no. of patients lost to followup (Out of B)										
Breast Cancer	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Put on treatment (Out of B)										
	No. of cases on followup (reporting month)										
	Cumulative no. of patients lost to followup (Out of B)										
Cervical Cancer	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Put on treatment (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Put on treatment (Out of B)										
	No. of cases on followup (reporting month)										
	Cumulative no. of patients lost to followup (Out of B)										
Cardiovascular Diseases (including STEMI)	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Thrombolysed (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Thrombolysed (Out of B)										
	No. of cases on followup (reporting month)										
	No. of patients for refill of drugs (reporting month)										
STROKE	Cumulative no. of patients lost to followup (Out of B)										
	No. of New Cases Diagnosed (reporting month) (A)										
	No. of New Cases Thrombolysed (Non-Hemorrhagic) (reporting month) (Out of A)										
	Cumulative no. of cases diagnosed (B)										
	Cumulative no. of cases Thrombolysed (Non-Hemorrhagic) (Out of B)										
	No. of cases on followup (reporting month)										
	No. of patients for refill of drugs (reporting month)										
	Cumulative no. of patients lost to followup (Out of B)										
Part C : Co-morbidities		District Hospital Report (A)				Cumulative Report of CHC/ SDH (B)				Total Report (A+B)	
DM + TB	No. of known TB cases on ATT (Out of New Diagnosed + Follow up DM Cases)										
	No. screened for TB Symptoms										
	No. suspected for TB & referred to DMC/ PI										

Signature: _____

Name and Designation _____

Date of Reporting _____

*The Report should be verified and signed by Nodal Officer and sent to State NCD Cell by 10th day of every month.

Reporting Form 6							
National Programme for Prevention & Control of Non Communicable Diseases (NP-NCD)							
State NCD Division							
Name of State _____ Reporting Month _____				Year _____			
Parameters				NCD Cell Report			
				Male	Female	Total	
Population of State (Projected for current year)							
Total eligible population (Age 30+)							
No. of District NCD Cells in the State							
No. of District NCD Clinics in the State							
No. of CHC NCD Clinics in the State							
No. of CCU in the State							
No. of Day Care Cancer Centre in the State							
No. of facilities providing NCD Services (including SHC/ PHC/ HWC/ CHC/SDH)							
Part A : Screening, Suspected & Referral				Reporting Month Report			Cumulative Report (Current Financial Year)
				Total	Male	Female	Total
Hypertension (Blood Pressure)	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Diabetes (Blood Sugar)	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Oral Cancer (Patches/ lumps in Mouth)	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Breast Cancer (Lumps in Breast)	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Cervical Cancer	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
COPD (Shortness of Breath/ Cough)	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
NAFLD (Obesity (BMI >30))	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
CKD	No. of Person Screened (reporting month)						
	Cumulative no. of Person Screened (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
STEMI (Chest discomfort/ Pain)	No. of Person presented with sign & symptoms (reporting month)						
	Cumulative no. of Person presented with sign & symptoms (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Stroke (BE FAST)	No. of Person presented with sign & symptoms (reporting month)						
	Cumulative no. of Person presented with sign & symptoms (current financial year)						
	No. of Suspected & Referred (reporting month)						
	Cumulative no. of Suspected & Referred (current financial year)						
Part B : Diagnosed, Standard of Care (On life style modification & Treatment) & Follow-up				Reporting Month Report			Cumulative Report (Current Financial Year)
Indicators				Male	Female	Total	Total
Hypertension (HTN)	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on life style modification (Without Medication)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup for Standard of Care (reporting month)						
	No. of patients for refill of drugs (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						

Diabetes (DM)	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on life style modification (Without Medication) (reporting month) (Out of A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on life style modification (Without Medication)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup for Standard of Care (reporting month)						
	No. of patients for refill of drugs (reporting month)						
COPD	Cumulative no. of patients lost to followup (Out of B)						
	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup (reporting month)						
	No. of patients for refill of drugs (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
CKD	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed						
	Cumulative no. of cases Put on treatment						
NAFLD	No. of New Cases Diagnosed (reporting month)						
	Cumulative no. of cases diagnosed						
Oral Cancer	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
Breast Cancer	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
Cervical Cancer	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Put on treatment (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Put on treatment (Out of B)						
	No. of cases on followup (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
Cardiovascular Diseases (including STEMI)	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Thrombolysed (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Thrombolysed (Out of B)						
	No. of cases on followup (reporting month)						
	No. of patients for refill of drugs (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
STROKE	No. of New Cases Diagnosed (reporting month) (A)						
	No. of New Cases Thrombolysed (Non-Hemorrhagic) (reporting month) (Out of A)						
	Cumulative no. of cases diagnosed (B)						
	Cumulative no. of cases Thrombolysed (Non-Hemorrhagic) (Out of B)						
	No. of cases on followup (reporting month)						
	No. of patients for refill of drugs (reporting month)						
	Cumulative no. of patients lost to followup (Out of B)						
Part C : Co-morbidities		Reporting Month Report		Cumulative Report (Current Financial Year)			
DM + TB	No. of known TB cases on ATT (Out of New Diagnosed + Follow up DM Cases)						
	No. screened for TB Symptoms						
	No. suspected for TB & referred to DMC/ PI						

Signature: _____

Name and Designation _____

Date of Reporting _____

*The Report should be verified and signed by State Nodal Officer and sent to National NCD Division by 15th day of every month.





Clinical decision support software enabled National NCD Portal: good practices

- 1. Evidence-based diabetes and hypertension care delivery:** treatment algorithms in CDSS are based on the national guidelines, in accordance with the IPHS standards, and validated by domain experts. The CDSS-enabled National NCD Portal has features that supports all the three essential steps (screening, management, and follow-up) of chronic disease management. The CDSS platform considers many parameters to provide recommendations, such as clinical information, medical history, drug history, personal history, level of health facility, availability of drugs, and investigations. The CDSS system offers a cafeteria choice for prescription of drugs to MOIC, tailored to an individual patient's clinical profile, which enables the MO to prescribe medicine according to their availability. Based on consensus from the state and district level advisory boards two drugs from a class of prescribed medicine is advocated to be made available at the facilities to ensure uninterrupted prescription.
- 2. Drug recommendations:** As part of CDSS-enabled National NCD Portal functioning, it was ensured that at least two drugs per class of hypertension and diabetes medications based on the IPHS standards and the backend algorithms were available for ease of prescription by MOIC.
- 3. Multi- stakeholder engagement:** Stakeholder discussions (healthcare providers, health administrators, bureaucrats and patients) were done to ensure that healthcare needs was addressed. Regular advocacy meetings with State and District level health authorities were done to ensure seamless supply of drugs and investigations at levels of health facilities.
- 4. Inherent task shifting feature:** To enable the efficient implementation of the CDSS enabled CPHC NCD system, the fulcrum of care has been shifted from the physician to the nurse provider (referred to as task shifting). To enable task shifting the clinic workflow is facilitated in a manner that it is the nurse who first interacts with the patient, adds information to the electronic case record form, following which the CDSS working at the backend generates guideline-based recommendations for the physician. Physicians thereby receive a suitably triaged patient with a draft management plan based on evidence- based guidelines, which ensures efficient utilisation of their time and enables objectivity in decision making. Since everything is digitised, the patient record can be seen at any level of the government health facility enabling seamless care, delivery of routine care, and facilitating clinically-mandated referral to an appropriate facility.
- 5. Trainings and refresher trainings of physicians and non-physician healthcare providers:** Separate NP-NCD refresher trainings in addition to the CDSS training were conducted to facilitate adoption by different cadre of healthcare providers. The trainings were discussion based and included role plays to acquaint the participants about the community scenarios they might encounter and the strategies they should adopt to advocate lifestyle modifications.

- 6. Monitoring and Evaluation activities:** Regular activities like supportive supervision, handholding, and continuous monitoring were carried out to identify and address any processes required to improve efficiency of the system. Process indicators were regularly monitored to ensure smooth implementation. Annual/bi-annual review meetings with international, national, state and district advisory boards were useful in providing insights on the corrective course of actions needed for implementation and scale up.



ANNEXURE 8



National NCD Portal - Architecture considerations

1. *Plug and Play Model to Allow Configurability*

A federated enterprise architecture allows a vast network of loosely coupled, semi-autonomous entities to exchange information in a standardized secure manner. It fosters innovation by allowing easy development of apps on the platform and allows for modular expansion by its adherence to standards. A variety of patient apps can be developed that allow the individual to have a comprehensive view of her health record and track her visits, her wellness metrics and care regimen. In National NCD Portal, a Clinical Decision Support System (CDSS) for hypertension and diabetes has been plugged into the platform through standardized interfaces for use in one state/district while other states continue to use existing Government protocols.

2. *Open-Source stack*

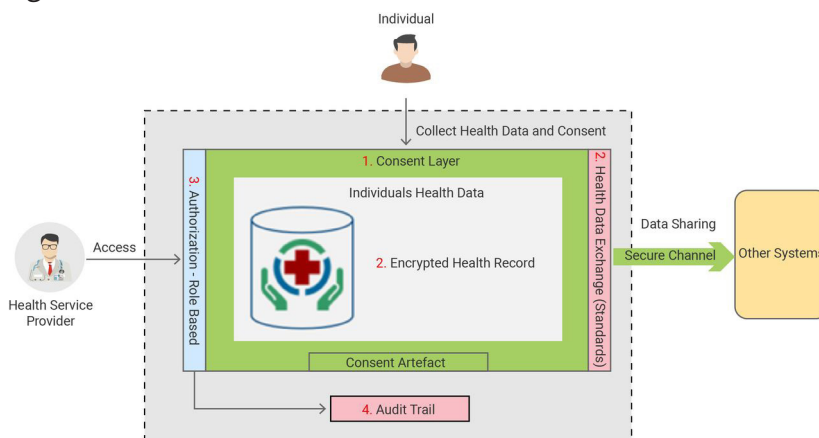
An open-source platform leads to stronger community participation for ecosystem innovations and sustainability. National NCD Portal is completely built on open-source stack

3. *Opensource Platform*

The National NCD Portal source code is completely open sourced and hosted in www.openforge.gov.in. State governments are encouraged to contribute the opensource platform and strengthen it.

4. *Authenticated, Secure Data Exchange with Privacy by Design*

According to the National Resource Center for EHR standards (NRCeS), the government (as a health provider) is only a custodian of health data while ownership lies with the individual. National NCD Portal has a 4-pronged security strategy below as shown in figure below.



5. *Encryption and Secure Data Exchange*

The architecture of a large-scale health system must have robust security features designed into the system. Digital keys used in cryptographic functions must be safeguarded and periodically rotated. In National NCD Portal, data is securely encrypted whether it is at rest or in transit within the system, using the best available encryption key strength. Secure transmission standards like HTTPS, TLS 1.2, TLS 1.3 are adopted, along with digital signatures for ensuring authenticity of identity.

6. *Authentication and Authorization*

As digital ecosystems mature, it is imperative that access to data is role-based in concordance with institutional policy and pertinent laws. As the COVID-19 pandemic has shown, it is still not a common practice or expectation that identities be masked from health datasets. To enable role-based access, National NCD Portal authenticates user credentials through identity management and authentication services. Security features like strong password management, automatic logging off, captcha, access privileges, and interface data validations are part of the platform.

7. *Audit Trail*

To ensure accountability and transparency, all transactions should have a clear audit trail that records user identity, identifies the datasets accessed, with timestamps and transaction description. Audit trails should be available to authenticated users on demand or on a periodic basis for compliance monitoring as mandated by policy.

8. *Integration with National health systems*

Health systems digitization journey has accelerated, and single-source-of-truth data should be made available to external system as and when required. National NCD Portal is integrated with HWC IT System for data reporting, Ayushman Bharat Digital Mission (ABDM) for creating and linking Ayushman Bharat Health Account (ABHA) and consented data sharing with other health systems. The system should have Health ID printing and QR Code scanning. The health data should be linked only after AADHAAR based consent as recommended MoHFW.

9. *National-NCD Portal API Specification*

National NCD Portal built with modular architecture and open standards. The API Specification for below modules are standardized and available for consumption by interested parties. For more details, please contact NCD division in MoHFW.

- ABHA Health Gateway for MoHFW Program
- Family Folder
- CBAC
- Screening for HTN, DB, Oral, Breast and Cervical
- Examination, Diagnosis, Treatment and Management
- Workplan/Task list
- Master data registries (ex: Users, Facilities, Location)
- Actionable insights for all decision makers/ administrators
- NP-NCD Reports



ANNEXURE 9.1



List of indicators for monitoring and evaluation

1. Input indicators

Infrastructure	Level	Data source	Frequency
Infrastructure – Status of State/ District NCDDivision	State/District	Monthly reporting forms	Quarterly
Infrastructure – Status of District/ CHC NCD Clinics	District/Block	Monthly reporting forms	Quarterly
Human resource			
Name of the post	Sanctioned	Filled	Frequency
Approved HR at State Level			Half Yearly
Approved HR at District Level			Half Yearly
Approved HR at Block Level			Half Yearly

2. Process indicators

Infrastructure			
Name of indicator	Level	Data source	Frequency
Saturation of all districts having Standard Treatment Protocols for Hypertension and Diabetes	State	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all districts having NCD Clinics	State	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all CHCs having NCD Clinics	State / District	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all districts having Chemotherapy related services	State	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all districts having COPD and asthma services	State	Monthly reporting forms	Monthly, Quarterly, Annually

Saturation of all districts having STEMI services	State	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all districts having Stroke services	State	Monthly reporting forms	Monthly, Quarterly, Annually
Saturation of all districts having Hemodialysis services	State	Monthly reporting forms	Monthly, Quarterly, Annually

Training			
Name of indicator	Level	Data source	Frequency
Percentage of Programme Officers/Medical Officers trained for NP-NCD Trainings	State, District, Block	Training report	Quarterly
Percentage of Staff Nurse/CHO trained for NP-NCD Trainings	State, District, Block	Training report	Quarterly
Percentage of ANM/ MPW/ ASHA trained for NP-NCD Trainings	District, Block	Training report	Quarterly
Advocacy and communication			
For NMAP- Number of meetings conducted with different ministries	All	Meeting minutes	Annually
Number of IEC activities including report (health days and campaigns) conducted at block, district, state and national level related to NCD	All	Published reports with content of activities	Quarterly, Annually
IT System Usage			
Proportion of Health Facilities reporting through IT system (incl. SHC, PHC, NCD Clinics at CHC/ DH)	All	National NCD Portal/ State/ own IT system	Monthly, Quarterly, Annually
Proportion of active MOs in National NCD Portal in last 30 days (denominator: total MOs)	PHC/ CHC/ DH	National NCD Portal/ State/ own IT system	Monthly, Quarterly, Annually

3. Output and Outcome Indicators

Indicator name	Level	Data source	Frequency
Indicators for enrolment and ABHA-ID creations			
Saturation enrolment of all eligible populations aged 30 years and above on National NCD Portal	All	National NCD Portal	Monthly, Quarterly, Annually
Saturation of creating ABHA-ID of all enrolled populations	All	National NCD Portal	Monthly, Quarterly, Annually
Indicators for screening			
Saturation screening of eligible population aged 30 years and above for common NCDs	State, district, block	National NCD Portal	Monthly, Quarterly, Annually
Percentage of eligible population (target population needs to be decided based on prevalence of diseases as per NFHS-5) aged 30 years and above, diagnosed for common NCDs	State, district, block	National NCD Portal	Monthly, Quarterly, Annually
Percentage of eligible population aged 30 years and above, put on standard of care (lifestyle modifications and treatment) for common NCDs	State, district, block	National NCD Portal	Monthly, Quarterly, Annually
Percentage of eligible population diagnosed with COPD and asthma, Stroke, STEMI, NAFLD and CKD.	State, district, block	Monthly reporting forms/National NCD Portal	Monthly, Quarterly, Annually
Percentage of eligible population who initiated treatment for COPD and asthma, Stroke, STEMI, NAFLD and CKD.	State, district, block	Monthly reporting forms/National NCD Portal	Monthly, Quarterly, Annually
Indicators based on treatment outcome and incidence			
Percentage of patients on control and cohort reporting for hypertension, diabetes	State, district, block	National NCD Portal Cumulative Cohort Report	Monthly, Quarterly, Annually
Proportion of individuals with hypertension having blood pressure under control in previous 3 months (cumulative cohort report)	State, district, block	National NCD Portal Cumulative Cohort Report	Monthly, Quarterly, Annually
Proportion of individuals with diabetes having blood pressure under control in previous 3 months	State, district, block	National NCD Portal Cumulative Cohort Report	Monthly, Quarterly, Annually
Reduced Incidence of Hypertension and Diabetes	National State	Research / Study	Annually



ANNEXURE 9.2



Action items from 2nd National Conference of Chief Secretaries held at New Delhi between 5th -7th January, 2023

Non Communicable Diseases: Nutrition, Lifestyle and Management

Indicators	Timeline
100% coverage of districts for NCD clinic including Pradhan Mantri National Dialysis Programme	December 2023
100 crore individuals with ABHA and saturation screening of eligible population for Non Communicable Diseases (NCDs)	December 2024
75 million people with hypertension and diabetes on standard care	March 2025
All districts to provide NCD related services for ST Elevated Myocardial Infarction (STEMI) / Stroke / Chronic Obstructive Pulmonary Diseases (COPD) / chemotherapy related services	December 2025
Establishment of Radiotherapy equipment to provide services for Cancer treatment per 10 lakhs population	December 2026
All States to have Standard Treatment Protocols for Hypertension and Diabetes	December 2023
All eligible population (30+ of age) to be enrolled in NCD portal	December 2024



ANNEXURE 10



Pattern of Assistance

A. NCD Clinics at DH

S. No.	Head	Sub-head	Unit Cost (Rs. in Lakhs)
1	Equipment	Non-Recurring: Furniture, Equipment and Computer etc. at District NCD clinic	1
		Non-Recurring: Laboratory equipment at District NCD clinic	35
2	Drugs and Supplies	Drugs and Consumables for DH	50
3	Others including Operating Costs (OOC)	Contingency/Office Expenses at District NCD Clinic	1
		Referral Transport District NCD Clinic	2.5

B. NCD Clinics at CHC/SDH

S. No.	Head	Sub-head	Unit Cost (Rs. in Lakhs)
1	Equipment	Non-Recurring: Furniture, Equipment and Computer etc. at CHC NCD clinic	1
		Non-Recurring: laboratory equipment at CHC NCD clinic	8
2	Drugs and Supplies	Drugs and Consumables for CHC	10
3	Others including Operating Costs (OOC)	Contingency/Office Expenses at CHC NCD Clinic	1
		Referral Transport CHC NCD Clinic	0.32

C. Critical Care Unit [Cardiac Care Unit (CCU/ICU)]

S. No.	Head	Sub-head	Unit Cost (Rs. in Lakhs)
1	Infrastructure – Civil Works (I&C)	Cardiac Care Unit (CCU/ ICU) (Civil Construction)	40
2	Equipment	NR: Equip at CCU/ICU	270
3	Drugs and Supplies	Drugs for Cardiac Care	50

D. Other NP-NCD Components

S. No.	Head	Sub-head	Unit Cost (Rs. in Lakhs)
1	Equipment	Non-Recurring: Equipment for Cancer Care	15
		Any Other for cancer equipment	70
		Any Other for COPD and Asthma equipment	15
		Any Other for NAFLD equipment	80
		Equipment for universal screening of NCDs	0.30
2	Drugs and Supplies	COPD and Asthma Drugs and Consumables	25
		Drugs for Cancer Care	50
		Drugs for Stroke care	50
3	Diagnostics (Consumables, PPP, Sample Transport)	Consumables of PHC	0.25
		Consumables of SC	0.25
		Consumables for Universal screening of NCDs	0.14
4	Capacity Building including Training	Training at State NCD Division	As per State proposal
		Training at District NCD Division	As per State proposal
		Training for Universal screening of NCD: <ul style="list-style-type: none"> • SC Training (per SC/HWC) • VIA Training (per MO/SN/CHO) 	0.01750 0.18
		Any other Training	
5	ASHA Incentive	ASHA Incentive	Rs. 10 per CBAC and Rs. 100 for annual follow up of confirmed NCD pt.

	Others including Operating Costs (OOC)	Contingency at PHC	0.30
		Contingency at SC	
		Outreach activities (per camp in hilly states/ hard to reach areas)	
		PPP at State NCD Division, District NCD Division and Clinic and CHC NCD clinic	
		Non-Recurring: (One Time) Renovation and furnishing, furniture, computers, office equipment at State Level	5
		Non-Recurring: (One Time) Renovation and furnishing, furniture, computers, office equipment at District level	5
		Collaborative / integration activities with another program such as NUHM, NTEP etc.	
	IEC and Printing	IEC activities for State NCD Division	Small state- 50 Large state-70
		IEC activities for District, NCD Division	3-5
		IEC activities for Universal NCD Screening,	0.05
		Any Other (IEC)	
		Printing for referral cards for PHC	0.025
		Printing for referral cards for SC	0.025
		Printing for Universal NCD screening (per SC/PHC/ HWC)	0.4625
		Any other (Printing)	
	Planning and MandE	Monitoring, Supervision and Review meetings at State NCD Division	5
		Monitoring, Supervision and Review meetings at District NCD Division	3
		TA, DA and POL at State NCD Division	3
		TA, DA and POL at District NCD Division	2
		Contingency at State NCD Division	2
		Contingency at District NCD Division	1
	Surveillance, Research, Review Evaluation (SRRE)	Research and Surveys at State NCD Division, institutes	
		Surveillance at State NCD Division, institutes and any other	

E. Human Resources

Head	Sub-head	Unit Cost (Rs. In Lakhs)
State NCD Division	State Programme Officer	As per NHM norm
	State Programme Coordinator / NCD Consultant	As per NHM norm
	Finance cum logistics consultant	As per NHM norm
	Data Entry Operator	As per NHM norm
District NCD Division	District Programme Officer	As per NHM norm
	District Programme Coordinator / Senior Treatment Supervisor	As per NHM norm
	Finance cum logistics Consultant	As per NHM norm
	Data Entry Operator	As per NHM norm
District NCD Clinics	1 Consultant (MD, Medicine)	As per NHM norm
	2 GNMs	As per NHM norm
	1 Physiotherapist	As per NHM norm
	1 Counsellor	As per NHM norm
	1 Data Entry Operator	As per NHM norm
District Critical Care Unit	1 Cardiology or MD General Medicine	As per NHM norm
	4 GNMs	As per NHM norm
CHC NCD Clinic	1 MD (Medicine) / Medical Officer (NCD)	As per NHM norm
	1 GNMs	As per NHM norm
	1 Counsellor	As per NHM norm
	1 Data Entry Operator	As per NHM norm
PHC	1 Staff Nurse	As per NHM norm

Notes

[illegible]

