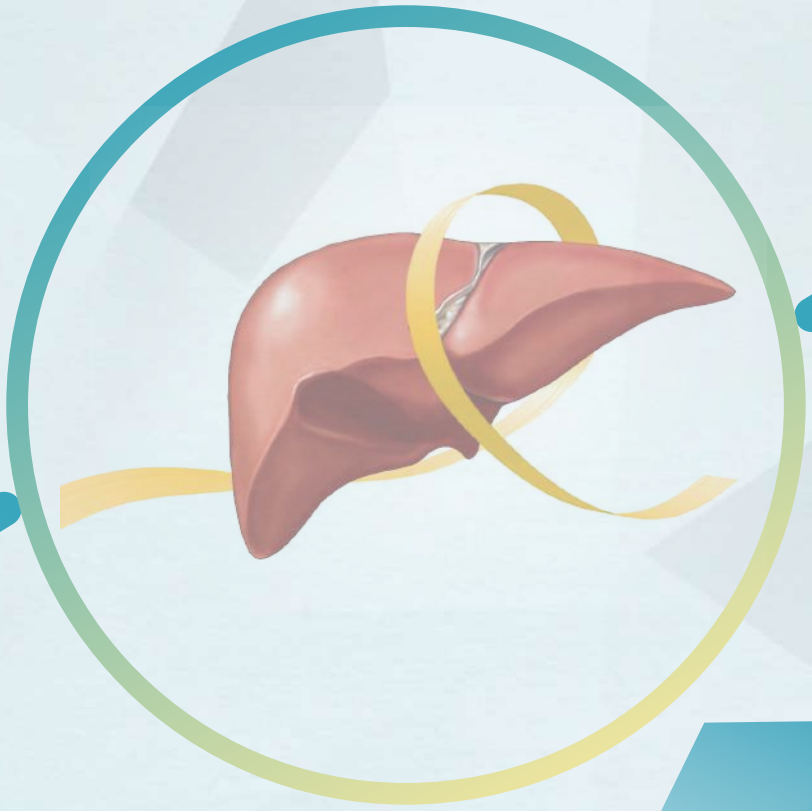
Operational Guidelines for Non-alcoholic Fatty Liver Disease under National Programme for Prevention and Control of Non-Communicable Diseases

(Version 2.0)

Updated September 2024



Directorate General of Health Services,
Ministry of Health and Family Welfare, GOI

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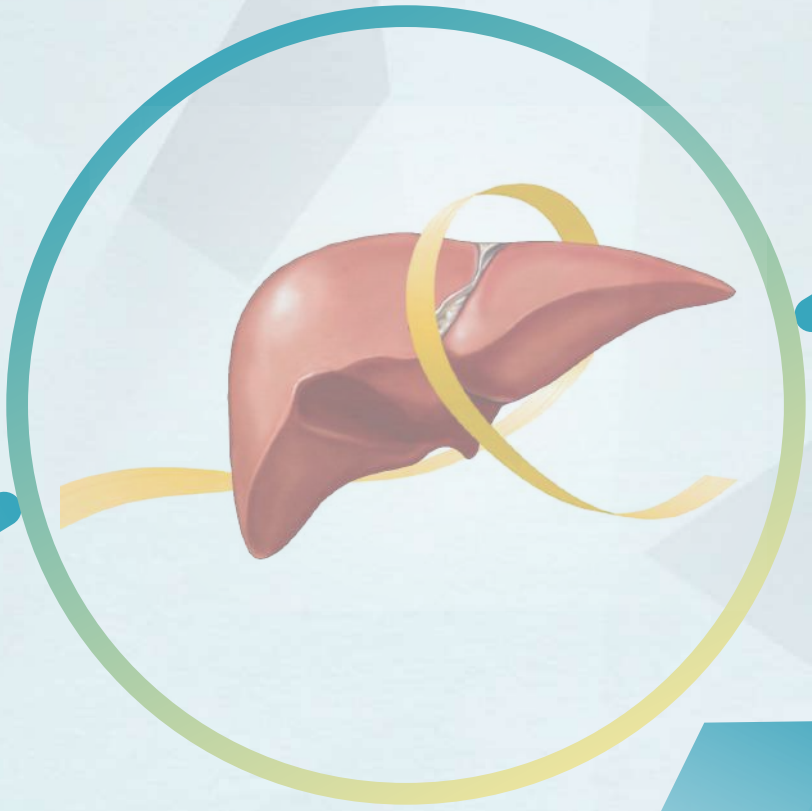

Directorate General of Health Services,
Ministry of Health and Family Welfare, GOI

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आज़ादी का अमृत महोत्सव

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

It is my privilege to introduce the Operational Guidelines for Non-Alcoholic Fatty Liver Disease (NAFLD) version 2.0 under the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD). These guidelines represent a significant milestone in our ongoing efforts to strengthen the prevention, early detection, and management of chronic diseases in India.

NAFLD is rapidly emerging as a major public health concern, closely linked with metabolic disorders such as obesity, diabetes, and cardiovascular diseases. With the rising prevalence of these conditions in our population, it is critical that we equip our healthcare professionals with the necessary tools to address this complex disease effectively. These guidelines provide a clear framework for health workers at all levels, from community health workers to medical officers, to ensure comprehensive care and management of NAFLD.

The Ministry of Health and Family Welfare remains committed to provide evidence-based strategies to enhance the quality of care for NAFLD patients. I also extend my heartfelt congratulations to ILBS and the team of experts for their exceptional efforts in developing these guidelines. Their expertise and dedication have been pivotal in bringing this important document to life.

I urge all healthcare providers and stakeholders to diligently implement these guidelines in their respective areas and work together to ensure their success. This initiative aligns with our broader goal of reducing the burden of non-communicable diseases and improving the overall health of our population.

Dated 26th September, 2024

(Aparva Chandra)

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Message

It gives me great pride to introduce the Operational Guidelines for Non-Alcoholic Fatty Liver Disease (NAFLD) version 2.0, a critical step in our ongoing battle against non-communicable diseases in India. As the prevalence of NAFLD continues to rise alongside other metabolic conditions, it is essential that we equip our healthcare system with the right tools and knowledge to effectively combat this growing public health challenge.

These guidelines are designed to empower healthcare providers at every level—from community health workers to specialists—with the necessary resources to identify and manage NAFLD in its early stages. By promoting lifestyle changes and early intervention, we can significantly reduce the progression of NAFLD to more severe liver diseases and improve the overall health of millions of Indians.

I am confident that the integration of NAFLD into our National Programme for Prevention and Control of Non-communicable Diseases (NP-NCD) will enhance the capacity of our healthcare system to tackle this complex condition. The Ministry is dedicated to ensuring that these guidelines are implemented effectively across the country, bringing us closer to our goal of a healthier India.

I would like to express my gratitude to the team of experts, researchers, and healthcare professionals whose collective efforts have made this document possible. I urge all stakeholders to take full advantage of these guidelines in their daily practice and help shape a healthier future for our country.

Punya Salila

(Punya Salila Srivastava)

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MESSAGE

The NAFLD is a health and economic burden on healthcare systems, with increased costs related to managing advanced liver disease, cardiovascular complications, and associated metabolic conditions. This underscores the need for early detection and cost-effective strategies to mitigate their impact in long run.

This updated Operational Guidelines for Non-Alcoholic Fatty Liver Disease (NAFLD) under the National Programme for Prevention and Control of Non-communicable Diseases (NP-NCD) encompasses necessary strategies to address the challenge. Infact, prevalence of NAFLD is rising alongside other metabolic conditions such as obesity, type 2 diabetes, and cardiovascular disease. Current estimates indicate that upto one-third of adult population in India may be affected by NAFLD, making it imperative that we address this challenge through comprehensive and coordinated efforts.

The guidelines place emphasis on health promotion and early detection which important to ensuring that patients with NAFLD receive timely and appropriate care. Also, the role of primary care providers, community health workers, and medical officers in early detection and management is central to the success of this initiative.

Lifestyle modifications remain the cornerstone of NAFLD management, and these guidelines provide clear, actionable steps for promoting healthy diets, physical activity, and weight management—interventions that are critical for halting progression of NAFLD and also reducing overall burden of non-communicable diseases.

The operational guidelines also advocate for a multidisciplinary approach, integrating the efforts of healthcare providers from various disciplines, including hepatology, endocrinology, and cardiology, to offer holistic care to individuals affected by NAFLD. This collaboration is essential for managing the complex interplay of metabolic processes that contribute to progression of the liver disease.

I would like to appreciate all experts, clinicians, and researchers who have contributed to this important document. I urge all stakeholders to adopt these guidelines fully and to work together to reduce the burden of NAFLD, thereby improving health and well-being of millions of individuals across India.

(Atul Goel)

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Message

The Focus on Non-Alcoholic Fatty Liver Disease (NAFLD) under the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD) is crucial in addressing the growing burden of metabolic and lifestyle-related diseases in India. As a public health challenge linked to obesity, diabetes, and cardiovascular conditions, NAFLD requires timely and focused interventions to prevent its progression to more serious liver diseases and associated complications.

These Operational Guidelines for NAFLD provide a comprehensive framework to empower our healthcare workforce, especially those working at the grassroots level, including ASHA workers, ANMs, and community health officers. By emphasizing early detection, risk stratification, and lifestyle modifications, these guidelines will equip our health systems to identify high-risk individuals and implement effective, patient-centered interventions.

The guidelines also underscore the importance of integrating NAFLD management into our ongoing efforts under the National Health Mission (NHM) to address Non-Communicable Diseases (NCDs). The NHM's focus on strengthening primary healthcare is vital for reaching individuals at risk, providing early diagnosis, and ensuring sustained lifestyle interventions. The operationalization of these guidelines through the public health system will not only improve liver health but also contribute to better management of coexisting conditions such as diabetes and hypertension, thereby reducing the overall NCD burden.

I would like to take this opportunity to congratulate the team of Experts for their dedicated efforts in creating these revised guidelines. Their expertise and hard work have been instrumental in shaping this comprehensive document. I urge all stakeholders across the health system to work collaboratively to implement these guidelines and improve the health outcomes for millions of Indians affected by or at risk of NAFLD.

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MESSAGE

The focus on Non-Alcoholic Fatty Liver Disease (NAFLD) into India's national health programmes marks a significant milestone in our ongoing efforts to tackle the growing burden of non-communicable diseases (NCDs). As one of the most common liver disorders, NAFLD is closely associated with conditions such as obesity, type-2 diabetes, and cardiovascular diseases, which together pose a considerable challenge to public health in India.

These Operational Guidelines for NAFLD, developed under the National Programme for Prevention and Control of Non-communicable Diseases (NP-NCD), offer a comprehensive and systematic approach to screening, risk stratification, and management. A key focus of these guidelines is on lifestyle modifications, which form the foundation of NAFLD prevention and management. By promoting healthy eating, physical activity, and weight management, we cannot only prevent the progression of liver disease but also address the broader spectrum of metabolic disorders affecting our population.

As we move forward, I urge all stakeholders to adopt these guidelines in their daily practice and work collaboratively to improve health outcomes for individuals living with or at risk of NAFLD. Together, we can significantly reduce the burden of liver disease and create a healthier future for India.

(Latha Ganapathy)

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Acknowledgement

दिनांक / Dated 26/Sep/2024

In a country experiencing the epidemiological transition from Communicable Diseases to Non-communicable diseases (NCDs), NCDs are a major threat causing morbidity, premature mortality, and huge productivity and economic losses. The changed lifestyle behaviours over the years are impacting our health greatly resulting in diseases like Non-Alcoholic Fatty Liver Disease (NAFLD) at the forefront of NCDs. Incorporating NAFLD under National Program for Prevention and Control of Non-Communicable Diseases was a milestone step in the direction of achieving overall health.

The release of Revised Operational Guidelines for NAFLD gives a revised commitment toward implementing services for NAFLD under NP-NCD. For which, I would like to extend my heartfelt thanks to Prof. (Dr.) S.K: Sarin, Director, Institute of Liver and Biliary Sciences (ILBS) and his team from ILBS (Dr. BB Rewari and Dr Manya Prasad) for their invaluable contribution and visionary leadership in shaping these guidelines. Special acknowledgment goes to the ILBS team for its contributions to the layout and design of this guide.

I would like to express my sincere gratitude to Prof. (Dr.) Atul Goel, Director General of Health Services (DGHS) and Ms. L.S. Changsan, Additional Secretary, for their leadership in ensuring the highest quality and timely completion of this important document. I extend my gratitude to Ms. Latha Ganpathy, Joint Secretary for overseeing this process so diligently.

The hard work of the entire technical expert group members for NAFLD, who have contributed tirelessly to bring out these guidelines in record time, deserves special mention. Special gratitude to Dr Avinash Sunthlia, DADG (NCD) and Dr. Shweta Singh, NCD Management & Surveillance Officer, WHO India for providing their technical and public health expertise and their tireless efforts in bringing out the refined version of the document and remarkable coordination for the release.

I also extend sincere appreciation to my team, including Ms Sarita Nair, Deputy Secretary (NCD), Dr. Shikha Vardhan, ADG (NCD), Dr Sunny Swarnkar, DADG (NCD), Dr. Manoj Kumar Singh, AD (NCD), and consultants Dr. Roli Srivastav, Ms. Ritika Kumari, Mr. Naiyar Azam, Ms. Richa Bharti, Dr. Ankita Piplani, Dr. Shefali Sharma, and Dr. Athira Satisan for their coordinated efforts during the release.

I would also like to extend my gratitude to each and every individual who has contributed to the conceptualization, writing, proofing, and printing of this revised edition of the Operational Guidelines.

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Contents

List of Abbreviations

AAM	Ayushman Arogya Mandir
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BMI	Body Mass Index
BCC	Behaviour Change Communication
CHC	Community Health Centre
CHO	Community Health Officer
DH	District Hospital
DGHS	Directorate General Health Services
FIB-4 score	Fibrosis-4 score
GRADE	Grading of Recommendations Assessment Development and Evaluation
HCC	Hepatocellular carcinoma
IEC	Information Education Communication
ILBS	Institute of Liver and Biliary Sciences
LFT	Liver Function Test
MASLD	Metabolic-dysfunction associated Steatotic Liver Disease
MPW (M/F)	Multipurpose Worker (Male/ Female)
NAFLD	Non-alcoholic Fatty Liver Disease
NASH	Non-alcoholic Steatohepatitis
NCD	Non-communicable Disease
NFS score	NAFLD Fibrosis Score
NHM	National Health Mission
NP-NCD	National Programme for Prevention and Control of Non-communicable Diseases
MoHFW	Ministry of Health and Family Welfare
PBS	Population Based Screening
PHC	Primary Health Centre
SBCC	Social and Behaviour Change Communication
SC	Sub-centre
USG	Ultrasonography
VHSNC	Village Health Sanitation and Nutrition Committee

CHAPTER 1

1. Introduction

Non-Alcoholic Fatty Liver Disease (NAFLD) is the most common chronic liver disease globally, estimated to affect up to one-third of adults worldwide. In India, the estimated prevalence ranges from 9- 53% [1, 2]. NAFLD is closely associated with obesity, type 2 diabetes mellitus, dyslipidemia, hypertension, coronary artery disease, metabolic syndrome, and several cancers. It predates many of these conditions and has a bi-directional link with them [3, 4]. Due to its widespread prevalence and the increased risk of developing liver cirrhosis and cancer, NAFLD has been identified as a disease requiring a robust primary care component for its prevention and control [1]. Evidence -based strategies for the prevention and control of NAFLD are crucial for effectively managing and educating patients with this condition.

The revised operational guidelines for NAFLD provide updated information and strategies to enhance the prevention and management of NAFLD under the purview of the National Program for Prevention and Control of Non-Communicable Diseases (NP-NCD).

This guideline covers the prevention and control of NAFLD through early diagnosis, risk stratification, and management through lifestyle modification and health promotion. It also deliberates on the various services provided at the different healthcare levels viz. community level, primary healthcare level, and secondary healthcare level.

1.1. Definition and Disease Burden

NAFLD is a liver disorder caused by the accumulation of excess fat in liver cells, not necessarily caused by significant alcohol consumption. It is normal for the liver to contain some fat. However, if more than 5% of the liver's weight is fat, it is called a fatty liver (steatosis) [4]. NAFLD encompasses a spectrum of conditions, ranging from simple fatty liver (NAFL or simple steatosis) to non-alcoholic steatohepatitis (NASH). In NAFL, hepatic steatosis is present without evidence of significant inflammation, whereas in NASH, hepatic steatosis is associated with hepatic inflammation [5-7]

NAFLD is strongly associated with rising rates of obesity and metabolic syndrome. The prevalence is increasing in developing countries due to changing dietary patterns and sedentary lifestyles. Cardiovascular disease is the most common cause of mortality in NAFLD, suggesting a close interlink with other non-communicable diseases (NCDs).

1.2.Pathogenesis and progression

The precise mechanisms underlying the development and progression of NAFLD are not yet fully understood. However, it is believed that multiple factors, including insulin resistance, oxidative stress, inflammation, and genetic susceptibility, play significant roles [5]. The progression of NAFLD involves the following stages:

1. **Simple Steatosis**: The initial stage is characterized by fat accumulation in liver cells without inflammation or liver cell damage, and individuals may remain asymptomatic.

2. **Non-Alcoholic Steatohepatitis (NASH)**: Fat accumulation triggers inflammation and liver cell injury. This inflammation can lead to the progression of NASH, involving liver cell damage, swelling, and potentially fibrosis (scarring).

3. **Liver Fibrosis and Cirrhosis**: In individuals with NASH, continued inflammation and liver cell damage can lead to liver fibrosis, characterized by the accumulation of scar tissue. Over time, advanced fibrosis can progress to cirrhosis, a severe stage associated with liver dysfunction and complications such as liver failure and hepatocellular carcinoma.(Figure 1)

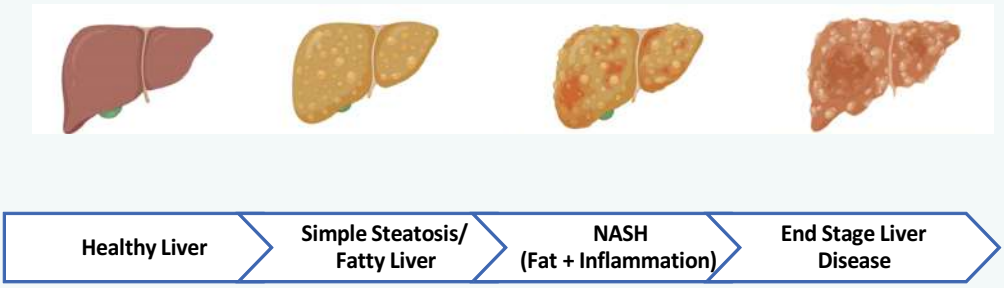

Fig. 1: Disease spectrum of NAFLD

1.3.Risk factors and associated diseases

Several factors contribute to the development of NAFLD. Understanding these risk factors helps identify individuals more susceptible to the disease and its progression (Figure 2 and Table 1). Common risk factors include:

a) **Obesity/ Metabolic Syndrome**: Excess body weight, especially abdominal obesity, is a significant risk factor for NAFLD. The accumulation of fat around the abdomen contributes to insulin resistance and inflammation in the liver. Metabolic syndrome comprises a cluster of conditions, including abdominal obesity, high blood pressure, high blood sugar, and abnormal blood lipid levels. NAFLD is frequently observed in individuals with metabolic syndrome. NAFLD has been observed to occur in 60% to 90% of persons who are obese [8,9].

b) **Insulin Resistance and Type 2 Diabetes Mellitus**: Insulin resistance is closely associated with NAFLD. Individuals with type 2 diabetes mellitus are at an increased risk of developing NAFLD. NAFLD has been observed to occur in 40% to 80% of those with type 2 diabetes mellitus [8,9].

c) **Sedentary Lifestyle**: Lack of physical activity and a sedentary lifestyle are associated with development and progression of NAFLD [7]. Regular aerobic exercise (e.g., walking, cycling, or swimming) and resistance training (e.g., weightlifting or bodyweight exercises) promotes weight loss, improves insulin sensitivity, and reduces liver fat accumulation.

d) **Dietary Factors**: High-calorie diets, mainly those high in unhealthy fats and added sugars, contribute to the development of NAFLD. For prevention, diets rich in fruits, vegetables, whole grains, and lean proteins are recommended.

e) **Other Risk Factors**: Age (middle-aged and older adults), gender (males have a higher risk), certain medications (e.g., corticosteroids, tamoxifen), and certain medical conditions (e.g., polycystic ovary syndrome, sleep apnea) are also associated with increased NAFLD risk [8].

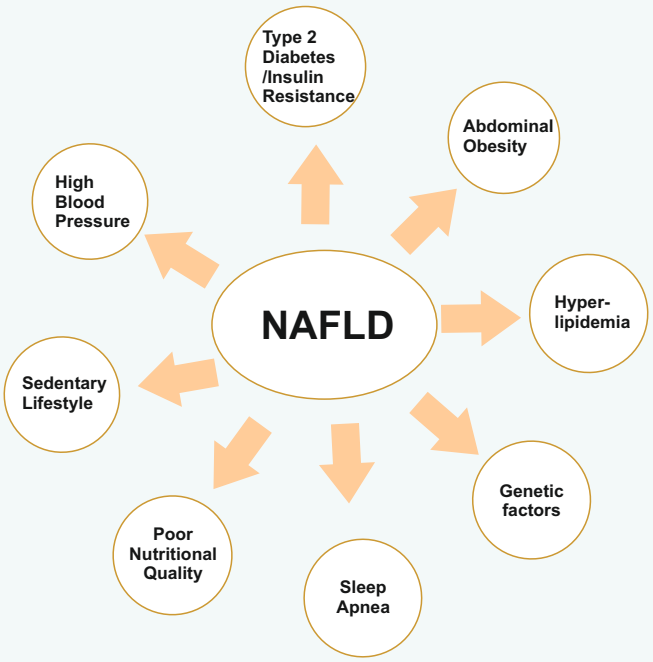

Figure 2: Risk Factors & Associated Diseases with NAFLD

Comorbidities	NAFLD prevalence/ risk	Progression of Liver diseases/ complication	Progression of comorbidity from NAFLD
Obesity	60-90%	Strong risk	NA
Type 2 Diabetes Mellitus	70%	Strong risk	Strong risk
Metabolic Syndrome	53%	Strong risk	Strong risk
Obstructive sleep apnea	2-3 times risk	Moderate risk	-

Table 1. Bidirectional link of risk factors associated with NAFLD[9]

1.4. Population at Risk for NAFLD

Identifying individuals at high risk for NAFLD is crucial for early intervention and prevention. Here are some key points for identifying high-risk individuals:

i.Obesity: Assess body mass index (BMI) and waist circumference. Individuals with a BMI $\geqslant$ 23 kg/m^2 or waist circumference $\geqslant$ 90 cm in men and $\geqslant$ 80 cm in women are at higher risk.

ii. **Metabolic Syndrome and Insulin Resistance**: Evaluate for components of metabolic syndrome, including abdominal obesity, high blood pressure, high fasting blood glucose levels, dyslipidemia and females with PCOS.

iii. **Type 2 Diabetes**: Consider individuals with known diabetes or impaired glucose tolerance as high risk for NAFLD.

iv. **Family History**: Inquire about a family history of NAFLD and other metabolic syndrome components, especially in first-degree relatives.

v. **Medications and Medical Conditions**: Identify individuals taking medications associated with NAFLD risk (e.g., corticosteroids) or medical conditions linked to NAFLD (e.g., polycystic ovary syndrome, sleep apnea).

vi. **Other Risk Factors**: Take into account age (middle-aged and older adults), gender (males have a higher risk), and lifestyle factors such as sedentary behavior and unhealthy dietary patterns [10]. Alcohol consumption, even at moderate levels, can exacerbate the progression of NAFLD by increasing liver inflammation and fat accumulation, complicating the management and outcome of the disease.

vii**. Hypertension**: Persons with hypertension may be considered at high risk for all components of metabolic syndrome.

CHAPTER 2

2. Operationalization of NAFLD

NAFLD is designed and included within the broad structure of NP-NCD at each level of health care delivery.

2.1. Services at different healthcare levels

The key strategies include a continuum of prevention and care to address the spectrum of NAFLD at various levels of healthcare (Figure 3). For this 'bottom-up' approach is to be implemented. The first step begins at the community level, where health workers (ASHA) conduct risk assessments through the Community Based Assessment Checklist (CBAC) to identify individuals at an increased risk of having NAFLD.[11]

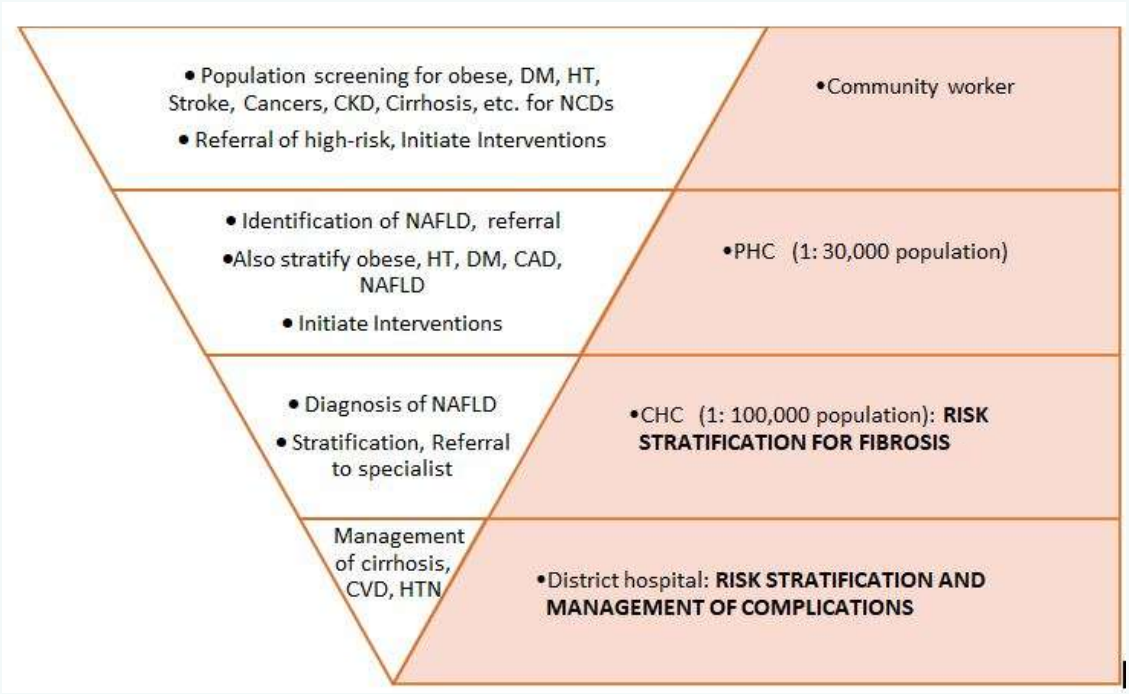

Fig. 3. Bottom-up approach for community-based risk stratification and management of NALFD[12,13]

Primary care providers (Medical Officers at the PHC level) will validate these risk assessments, administer appropriate therapy for risk factors, health promotion and prevention or facilitate referrals. Easy-to-use and inexpensive non-invasive tests, such as FiB-4 (Fibrosis-4 risk score for advanced liver fibrosis), have been included in the operational guidelines, offering the opportunity to reduce inappropriate referrals to specialists.

At the secondary care level, the diagnosis of NAFLD and risk stratification for advanced liver fibrosis, including the use of transient elastography, will guide further management and referral as per the NP-NCD guidelines.

2.2. Roles and Responsibilities of healthcare providers

2.2.1. At the Community level: ASHA

- Identifies and refers the following high-risk people using Community-Based Assessment Checklist (CBAC) in adults aged more than 30 years:

- Personal and family history of Diabetes, Hypertension, Coronary Heart Disease, liver diseases, gallstones and cancers.

- Abdominal obesity assessment (waist circumference of >90 cm in adult men o>80 cm in adult women) or Body Mass Index (BMI) assessment (BMI $\geqslant$ 23 kg/m^2).

- Those individuals who have a history of diabetes and/or obesity are referred to subcentre /Ayushman Aarogya Mandir (AAM) by ASHA as NAFLD suspect.

2.2.2. At the Subcenter level: Multipurpose Worker (Female/Male) Community Health Officer (CHO)

- Validates all individuals referred by ASHA
- Further makes assessments for the following:

  - Abdominal obesity (waist circumference > 90 cm in men or > 80 cm in women)
  - Overweight and obese (BMI $\geqslant$ 23 kg/m2)
  - Personal or family history of hypertension, diabetes, heart disease, cancer, liver disease, gallstones.
  - Screening for diabetes, hypertension, cancers
  - Pedal edema

. CHO to supervise the assessments and data for monitoring

2.2.3. At Primary care level (PHC) level: Medical Officer (MO)

· Medical officer will examine patients referred by ANM/ CHO
. High-risk individuals are to be identified by Medical Officers as those having:
. Abdominal Obesity (waist circumference of > 90 cm in men or > 80 cm in women)
. Overweight and obesity (BMI ⩾ 23kg/m2)
. Diabetes, Hypertension, Coronary Heart Disease, Dyslipidaemia, liver disease, gallstones, cancer
. Any patient with abnormal LFT report or a report showing incidental detection of hepatic steatosis on ultrasound (USG), which is available to the patient, should be further evaluated.
. Family history of Diabetes, Hypertension, Coronary Heart Disease, liver diseases, gallstones and cancers
· Medical officers may undertake teleconsultation, if required.

2.2.4. At Community Health Centre (CHC) level: Medical Officer (MO)

At Community Health Centres, risk stratification for the presence of fibrosis may be carried out by running simple blood tests for high-risk individuals (diabetics, obese, referred from PHC for other causes).

Complete blood count and Liver Function tests are the blood investigations required to calculate non-invasive risk scores FIB-4 (Fibrosis-4) and NFS (NAFLD Fibrosis Scores). Calculate FIB-4/NFS score on the application. The non-invasive risk scores will guide further referral or management as per the following risk stratification algorithm (Figure 4):

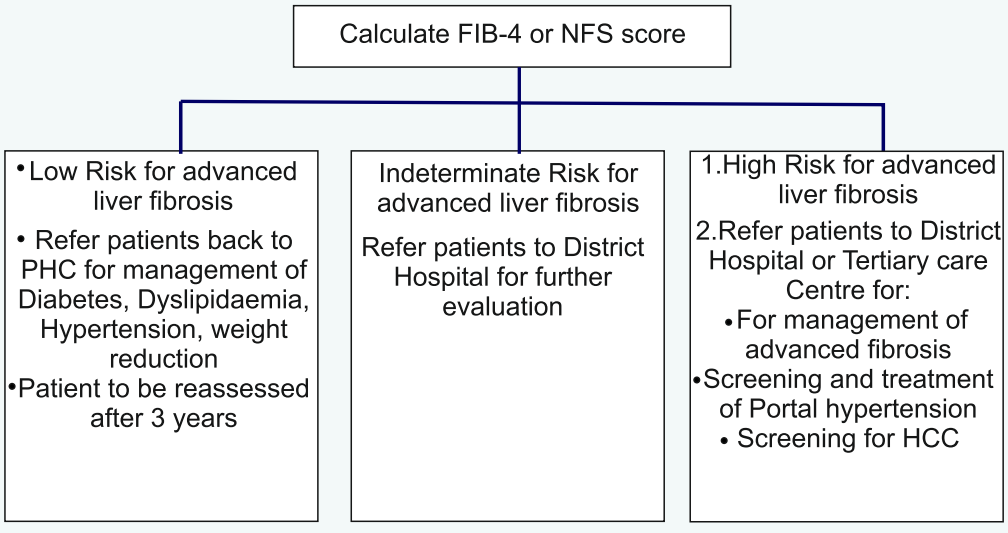

Fig. 4. Non-invasive risk scores and Risk stratification for management of patient

	Components	Cutoff
NAFLD Fibrosis score, NFS	Age, BMI, Type 2 Diabetes Mellitus, AST, ALT, PLT, Albumin	-1.455, 0.676
Fibrosis-4	AST, ALT, Age, Platelets	>2.67 high risk

Table 2: Cut-offs for non-invasive risk scores for risk stratification of NAFLD[14]

The cut-offs presented in Table 2 for the NAFLD Fibrosis Score (NFS) and FIB-4 score represent thresholds used to assess the risk of advanced liver fibrosis. These scores are calculated based on a combination of clinical factors, such as age, liver enzymes (AST, ALT), platelet count, and BMI. The cut-offs help categorize patients into low, intermediate, or high risk for advanced liver fibrosis, guiding further management or referral for specialized care. For example, a FIB-4 score below 1.30 indicates a low risk, whereas a score above 2.67 suggests a high likelihood of advanced fibrosis. It is important to note that these cut-offs are based on global data and may require clinical adaptation when applied to specific populations, such as the Indian population, where metabolic risks may manifest at lower thresholds.

2.2.5. At District Hospital (DH) level: Medical Officer (MO)

Patients referred from CHC as having indeterminate risk for liver fibrosis may undergo ultrasound or transient elastography at the district hospital. Transient elastography (Fibroscan®) is envisaged to be made available at the level of district hospitals. Training on operating a Fibroscan® machine will be imparted to nursing staff involved in screening for liver fibrosis and steatosis using this technique.
Transient elastography may guide further management as depicted below.

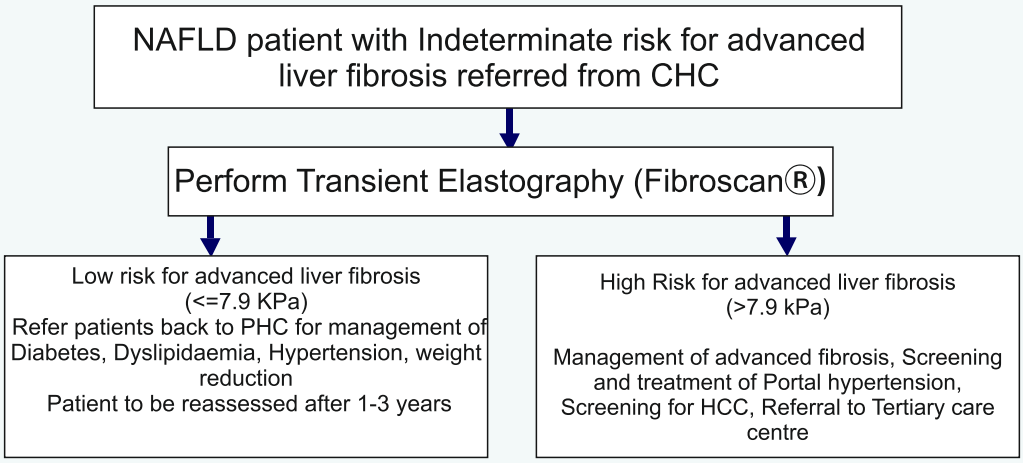

Fig. 5: Management Guidance through Transient Elastography

CHAPTER 3

3. Diagnosis and Management of NAFLD

Early identification of NAFLD allows for appropriate interventions, lifestyle modifications, and follow-up to prevent disease progression and related complications. This section provides a summary of the various methods for screening and diagnosing NAFLD.

3.1. Screening and diagnosis of NAFLD

Early screening and diagnosis of NAFLD is crucial for timely intervention and preventing disease progression[12,13]. The following methods are commonly used for screening and diagnosis of NAFLD:

3.1.1. Medical History and Physical Examination: Assessing risk factors and symptoms (if present) and conducting a physical examination can provide valuable information. Clinical assessment and physical examination can provide additional clues for NAFLD risk assessment. Consider the following:

a) **Symptoms**: Although most individuals with NAFLD may be asymptomatic, some nonspecific symptoms, such as fatigue, malaise, and right upper quadrant abdominal discomfort, may be present.

b) **Signs of Metabolic Syndrome**: Assess for signs of metabolic syndrome, including central obesity, elevated blood pressure, and insulin resistance (e.g., acanthosis nigricans, skin tags).

c) **Hepatomegaly**: Palpation of an enlarged liver during physical examination may suggest fatty liver disease. However, note that NAFLD can also be present with a normal liver size.

d) **Signs of Advanced Liver Disease**: In advanced stages of NAFLD, signs of chronic liver disease such as jaundice, ascites, spider angiomas, palmar erythema, and hepatosplenomegaly may be present.

3.1.2. Laboratory Tests:

a) **Liver Function Tests**: Evaluate liver enzyme levels, including alanine transaminase (ALT) and aspartate transaminase (AST).

b) **Lipid Profile**: Measure total cholesterol levels, low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, and triglycerides.

c) **Fasting Blood Glucose**: Assess blood sugar levels to screen for diabetes or impaired glucose tolerance [6].

3.1.3. Imaging Studies:

a) **Ultrasonography**

b) **Transient Elastography (Fibro Scan®)**: Measures liver stiffness to assess the degree of fibrosis or cirrhosis. It provides two measurements: the measure of fibrosis in kilopascals (kPa) and the measure of steatosis in terms of Controlled Attenuated Parameter (CAP). A cutoff of >7.9 kPa is considered indicative of significant fibrosis (F2 to F4) [15]. Controlled Attenuation Parameter (CAP) provides a measurement of liver steatosis. The following cut-offs are used for stratifying the grade of steatosis:

CAP score	Steatosis grade	Liver with fatty change
248 to 268 dB/m	S1	11% to 33%
268 to 280 dB/m	S2	34% to 66%
Higher than 280 dB/m	S3	67% or more

Table 3: CAP score for grading of Liver Steatosis

3.1.4. Other investigations in specialized settings:

a) **Magnetic Resonance Imaging (MRI), Magnetic Resonance Proton Density Fat Fraction (MRPDFF) and Magnetic Resonance Elastography (MRE)**: Advanced imaging techniques that can provide more accurate assessment of liver fat content, fibrosis, and inflammation.

b) **CT (Computed Tomography)** can be utilized for the quantification of liver fat content and assessment of liver morphology, providing detailed imaging to support the diagnosis and management of NAFLD.

c) **Liver Biopsy (In very selected cases)**: A liver biopsy may be recommended for patients with suspected advanced disease or when other diagnostic methods are inconclusive. It's important to note that liver biopsy is an invasive procedure associated with risks, and referral to a hepatologist is recommended after careful consideration of individual patient factors and clinical judgment.

d) **Fasting serum Insulin levels (to calculate HOMA-IR)**: HOMA IR is an estimation of insulin resistance. It can be calculated by the formula-Fasting glucose (mmol/L) x fasting insulin (mIU/L)/22.5. If more than 2.5, it indicates insulin resistance. Insulin resistance is a condition that affects liver and can lead to hyperglycaemia, Type 2 Diabetes, NAFLD etc

e) **Upper gastrointestinal endoscopy** to exclude portal hypertension

3.2. Management of NAFLD

Health Promotion and Lifestyle modifications for NAFLD are the mainstay of the prevention and management of NAFLD.

3.2.1. Lifestyle Modifications for NAFLD:

a) Abstain from Alcohol: complete avoidance of alcohol intake is advisable

b) Immunizations: Vaccination for hepatitis B virus should be administered to patients.

c) Modify Risk Factors for Cardiovascular Disease: Patients with NAFLD are at increased risk for cardiovascular disease and often have multiple risk factors (e.g., hypertension, hyperlipidemia). The lifestyle interventions below should be advised to all patients [16].

3.2.2. Healthy Diet Recommendations: A healthy diet is crucial for NAFLD prevention and management. Here are some dietary recommendations:

a) Balanced Macronutrients:

i.Emphasize a well-balanced diet consisting of carbohydrates, proteins, and healthy fats.

ii.Opt for complex carbohydrates such as whole grains, legumes, and vegetables, while limiting refined carbohydrates such as white bread, pastries, and sugary cereals and sugary foods.

b)Healthy Fats:

i.Encourage the consumption of healthy fats like unsaturated fats found in nuts and seeds or ghee.

ii.Limit saturated fats found in red meat, full-fat dairy products, and fried foods.

iii.Avoid trans fats, commonly found in processed and fried foods.

c) Portion Control and Calorie Intake:

i.Promote portion control to avoid excessive calorie intake. Portion control involves managing the amount of food consumed in a meal to align with your nutritional and caloric needs, helping to prevent overeating and maintain a balanced diet. It includes understanding appropriate serving sizes and balancing food groups. Strategies such as mindful eating, using smaller plates, pre-portioning snacks, and checking nutrition labels can support better portion control. By practicing portion control, individuals can manage their calorie intake more effectively, contributing to better weight management and overall health without feeling deprived. A dietary recall notebook to be maintained wherever possible.

d) Increase Fibre Intake:

i. Encourage the consumption of high-fibre foods such as whole grains, fruits, vegetables, and legumes.

ii. Dietary fibre aids digestion, promotes satiety, and helps regulate blood sugar and cholesterol levels.

e) Limit Added Sugars and Sugary Beverages:

i.Advise individuals to limit their intake of added sugars found in sugary or aerated beverages, processed foods, desserts, and sweets.

f) Hydration:

i.Emphasize the importance of adequate hydration by consuming sufficient amounts of water throughout the day [17].

3.2.3. Weight Management: Weight management is a key component of NAFLD prevention and management. It has been observed to help in the regression of NAFLD, and weight loss may be beneficial in several ways:

a)Reduced Fat Accumulation: Weight loss helps reduce fat accumulation in the liver and improves liver function.
b)Improved Insulin Sensitivity: Weight loss and maintenance of a healthy weight can enhance insulin sensitivity, reducing the risk of insulin resistance and progression to NASH as well as diabetes.
c)Overall Health Benefits: Achieving and maintaining a healthy weight is associated with numerous health benefits, including reduced cardiovascular risk and improved metabolic health [18].

3.2.4. Regular Physical Activity and Exercise: Regular physical activity and exercise are essential for NAFLD prevention and management. Here are the benefits:

a) Weight Loss and Maintenance: Contributes to weight loss and weight maintenance. Target a 7-10% weight reduction in those with hepatic fibrosis, and 3-5% in those with lean/normal weight NASH.

b) Improved Insulin Sensitivity: Exercise enhances insulin sensitivity, reducing the risk of insulin resistance and NAFLD progression.

c) Reduced Liver Fat: Physical activity and exercise promote the utilization of stored fats, including liver fat, leading to a reduction in liver fat accumulation.

d) Cardiovascular Health: Exercise improves cardiovascular health, lowers blood pressure, and reduces the risk of comorbidities associated with NAFLD.

e) Enhanced Metabolic Rate: Regular physical activity boosts the metabolic rate, aiding in weight management and overall metabolic health.

Encourage individuals to engage in at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity activity per week, in addition to muscle-strengthening exercises at least twice a week, which can be done at home using bodyweight exercises like squats, push-ups, lunges, or resistance band workouts. [19]

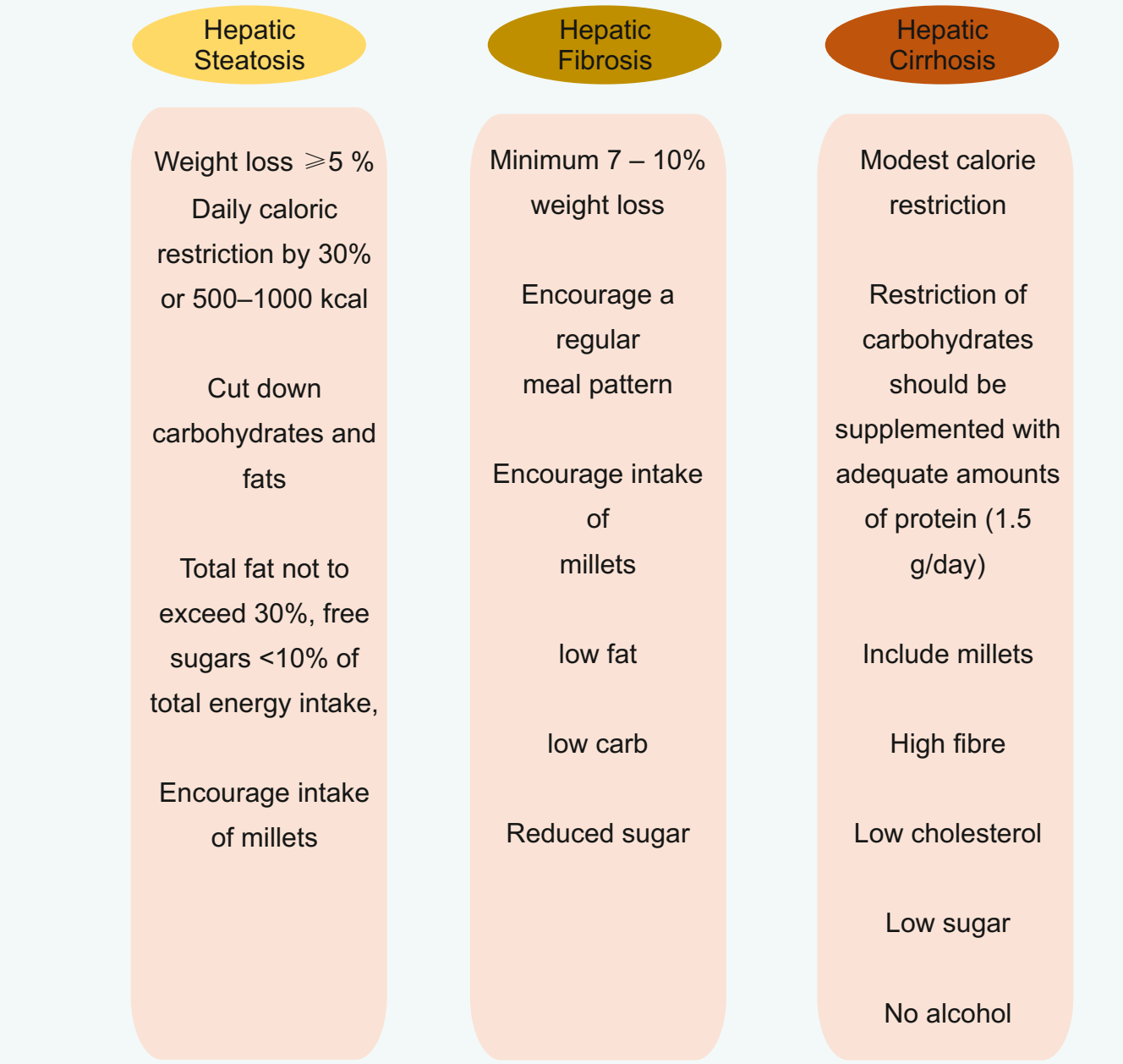

Fig. 6: Summary of the lifestyle treatment options through the course of NAFLD

For lean individuals with NAFLD, lifestyle treatment focuses on maintaining current weight and adopting a nutrient-dense diet. Key recommendations include a balanced diet with complex carbohydrates, lean proteins, healthy fats, and reduced free sugars. Incorporate millets and high-fiber foods, and ensure adequate protein intake, especially in advanced stages like cirrhosis. Regular physical activity, including at least 150 minutes of moderate-intensity aerobic exercise per week and strength training twice a week, is essential. Additionally, minimize sedentary time and strictly avoid alcohol to prevent further liver damage. These modifications help manage NAFLD and prevent disease progression, supporting overall health and well-being.

3.2.5. Pharmacologic Agents for Treatment of NAFLD: Currently, there is no specific medication approved for the treatment of NAFLD. Pharmacological interventions for NAFLD management are still under development, and no specific medication has been approved as a standard treatment. The treating hepatologist/physician may decide the treatment as per the standard pharmacological treatment.

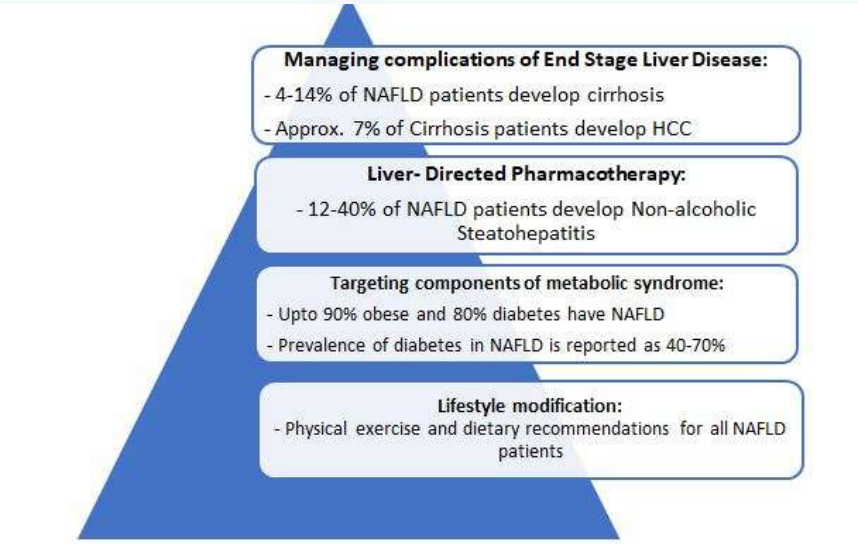

Fig. 7: Summary of the lifestyle treatment options through the course of NAFLD

3.3. Referral & Follow-up: NAFLD management benefits from a multidisciplinary approach involving various healthcare professionals. Collaboration with nutritionists, dieticians, endocrinologists, hepatologists, and other specialists is essential to provide comprehensive care. Referral to Specialized Services like Endocrinologists for managing comorbidities, such as diabetes and metabolic syndrome, Hepatologists/ gastroenterologists for management of complications, and consideration of additional treatment options in cases of advanced liver disease. Further to address risk factors like tobacco use and excessive alcohol consumption collaboration with healthcare professionals specialized in addiction medicine or smoking cessation programs to support patients in quitting tobacco use or reducing alcohol intake may be undertaken.

Regular follow-up is crucial for the management of NAFLD to assess treatment response, track disease progression, and prevent complications. Ongoing patient education and counseling are essential components of follow-up visits. The lifestyle factors including adherence to dietary modifications, physical activity levels, weight management, and alcohol consumption, is essential for long-term success. Regular assessments may be required to evaluate treatment response and disease progression. Elevated liver enzymes may indicate ongoing liver inflammation or progression of the disease. Monitoring liver function helps to adjust treatment plans accordingly. Further, imaging modalities such as ultrasound or transient elastography (FibroScan®) may be used to assess liver fat content and fibrosis. These imaging studies can help evaluate treatment response, monitor disease progression, and determine the need for further interventions or specialized care.

The frequency of follow-up visits may vary based on individual patient characteristics and disease severity.

· For patients with simple steatosis without significant liver inflammation or fibrosis, annual follow-up visits may be appropriate. These visits can focus on monitoring lifestyle modifications, assessing metabolic risk factors, and providing guidance on weight management, physical activity, and dietary changes.

· Patients with NASH or evidence of significant fibrosis may require more frequent follow-up visits. Depending on the individual patient's risk factors and disease progression, follow-up visits every six months or even more frequently may be recommended. These visits can involve monitoring liver function tests, assessing disease progression, and considering interventions to slow or reverse liver fibrosis.

· The presence of associated conditions, such as obesity, diabetes, dyslipidemia, and metabolic syndrome, may necessitate more regular follow-up visits to optimize their management.

· The frequency of fibrosis assessment can vary depending on the patient's risk profile, disease severity, and available diagnostic tools.

· Non-invasive tests, such as transient elastography (FibroScan®) or blood-based biomarkers, can be used periodically to monitor liver fibrosis progression [15].

CHAPTER 4

4. Health Promotion Interventions for NAFLD

Patient Education and Counselling is crucial for the prevention and management of NAFLD. Reinforce the importance of lifestyle modifications, medication adherence (if applicable), and addressing any concerns or questions the patient may have. Provide additional IEC materials, resources, and support to empower patients in self-management and encourage their active involvement in their healthcare.
States would develop context specific strategies for lifestyle modification and for promoting healthy behaviours for primary prevention. Such strategies would need to be targeted at individuals, families, and communities. States should develop an Integrated health promotion strategy that envisages convergence, multitasking and pooling of resources from various programmes.

Healthcare providers can promote better understanding, motivation, and adherence to recommended lifestyle modifications.

1. **Education and Understanding**: Engaged patients have a better understanding of their condition, including its causes, risk factors, and treatment options. IEC material and patient brochures/ leaflets that promote healthy behaviours, exercise routines, dietary advice, avoiding substance abuse and compliance with treatment including through use of it would need to be developed. IEC leaflets would be distributed to those who are diagnosed with NAFLD to enable them to develop individual health plans (diet/exercise).

2. Improved Communication: Communication between healthcare providers and patients allows for open discussions, addressing concerns, and clarifying doubts, leading to better shared decision-making. Individual and family counselling will be needed for those who are started on treatment for compliance to treatment and for lifestyle modifications.

3. IEC and Behaviour Change Communication: Patient engagement is associated with long-term success in managing chronic conditions like NAFLD. It promotes sustained behaviour change, leading to improved health outcomes. Health talks may be held in the community to engage patients in healthy lifestyles.

IEC messages would aim at increasing awareness on risk factors of NAFLD, healthy lifestyle and benefits of screening. They would also focus on the benefits of improving lifestyle behaviours such as poor dietary habits and lack of exercise. The district NCD cell will collect information on locally available healthy foodstuffs that should be encouraged and use this in the development of messages for healthy lifestyles. States must also use MMUs to display audio visual messages related to prevention and health promotion.

4. Wellness Activities: States should make the effort to incorporate appropriate prevention and promotion strategies, including practice of Yoga and other wellness activities.

5. Increasing Community Awareness: For community level awareness raising, platforms such as meetings of Gram Sabha, SHGs, ULBs, VHSNCs, MAS, etc. would be used. The use of traditional media such as Kala Jathas, use of folk/local media, and flip charts, flash cards, IT and social media etc, would be promoted, Local folk media could also be used creatively to raise community awareness and mobilize for screening and ensuring treatment compliance, States could also consider dissemination of NAFLD related communication.

6. Village Health and Nutrition Day: Observing a fortnightly 'NAFLD day' can emphasize the importance of nutrition and exercise in the prevention of NAFLD and other NCDs. The detrimental effects of tobacco use and excessive alcohol consumption on liver health can also be highlighted. NAFLD day to include awareness programmes in primary schools and Anganwadi's to make children aware about risk of eating highly processed and packaged food and to highlight the importance of outdoor games and less screen time to avoid future NASH.

The interventions advocated under the programme are based on the strong principles of health promotion, early diagnosis, risk stratification, appropriate referral and prompt treatment.

CHAPTER 5

5. Monitoring and Evaluation under the NP-NCD programme

The routine monitoring mechanism, which is being adopted for NP-NCD, include the indicators for NAFLD. Therefore, the following formats for monthly reporting from the facilities at various levels have been modified to include components of NAFLD:

Sub centre	1	ANM screening register	CHO of SHC-HWC	PHC	Last day of the month
PHC (including urban PHC-HWC)	2 & 2A	PHC-HWC OPD register & compiled all Form-1	MO I/c PHC-HWC	CHC NCD Clinic	5th of every month
CHC/BPHC/SDH	3A	CHC NCD OPD register	MO I/c CHC NCD clinic	District NCD cell	7th of every month
	3B	Compiled all forms 1& 2	BPHC/SDH		
District Hospital	4	DH- NCD OPD Register	MO I/c District NCD clinic	District NCD cell	7th of every month
District NCD cell	5A	Form 5A Compiled all forms 3A & 4	District Nodal Officer (NCD)	State NCD Cell	10th of every month
State NCD cell	5B	Form 5B Compiled all forms 3B			
	6	Form 6 Compiled all forms 5A & 5B	State Nodal Officer (NCD)	National NCD cell	15th of every month

Table 4: Monthly reporting and compilation formats under the NP-NCD

CHAPTER 6

6. Capacity Building

Capacity building needs to be done with a well-designed training plan and program for the identified health functionaries at identified levels of the healthcare delivery system. Proper training needs assessment will be carried out, and accordingly, a training plan, program, and calendar would be worked out.

Level of Healthcare Delivery System	Type of health manpower	Training institutes to be involved
Master Trainers	Staff/Officers in National NCDC, NIHFW	DGHS, ILBS, NIHFW, NHSRC
Training of State Level Trainers	Medical Officers	DGHS, ILBS, NIHFW, NHSRC
Faculty of Central Government Institutes, Medical Colleges	Clinicians involved in the management of NAFLD	State level trainers
District hospital team including NCD Clinic	Doctors, nurses in DH and NCD including counselors	State level trainers
CHC NCD Clinic	Doctors, nurses in CHC and NCD NCD	District level trainers
PHC-HWC	MO and Staff Nurse	District level trainers
CHO and MPW (F/M)	ANM	District level trainers
Community- level	ASHA	District level trainers

Table 5: Capacity Building for NAFLD under NP-NCD

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Annexures

Annexure 1

Technical Expert Group (TEG) for NAFLD

1. Prof (Dr) Atul Goel, DGHS, MoHFW -The Chair
2. Prof (Dr) S.K. Sarin, Chancellor & Director, Institute of Liver & Biliary Sciences, New Delhi
3. Dr L Swasticharan, Addl. DDG (NCD) & Director (EMR).Dte.GHS, MoHFW
4. Dr Vineet Ahuja, Professor, Department of Gastroenterology, AIIMS, New Delhi
5. Dr CE Eapen, HOD, Hepatology department, Christian Medical College, Vellore, Tamil Nadu
6. Dr Ashish Goel, Professor, Department of Hepatology, Christian Medical College, Vellore, Tamil Nadu
7. Dr Ajay Duseja, Professor, Department of Hepatology, PGIMER, Chandigarh
8. Dr Rakesh Aggarwal, Prof. & Director, JIPMER
9. Dr Shalimar, Prof. Gastroenterology and Human Nutrition, AIIMS New Delhi
10. Dr Rohit Gupta, Additional Professor & Head, Gastroenterology, AIIMS Rishikesh
11. Prof Radha Krishan Dhiman, Director, SGPGIMS
12. Prof. Amit Goel, Prof. & Head, Hepatology, SGPGIMS
13. Dr Tanmay Vajpai, Asst Professor Dept of Gastroenterology AIIMS Raipur
14. Dr Vaishali Bhardwaj, HOD, Department of Gastroenterology, RML Hospital, New Delhi
15. Dr Abhishek Kunwar, NPO-NCD, WHO India
16. Dr Avinash Sunthlia, DADG (NCD), Dte.GHS (Member Secretary)
17. Prof Ramesh Agarwal, ADG (NCD), Dte.GHS, MoHFW
18. Dr. Shikha Vardhan, ADG (NCD), Dte.GHS, MoHFW
19. Dr. Sunny Swarnkar, DADG (NCD), Dte. GHS

Annexure 2

Minutes of the Meeting:

T.20015/166/2021-NCD.II I/3685605/2024

T.20015/166/2021-NCD-II (8105902)
Government of India
(Bharat Sarkar)
Ministry of Health & Family Welfare
(Swasthya Aur Parivar Kalyan Mantralaya)

Nirman Bhawan, New Delhi
Dated the 21st June, 2024

OFFICE MEMORANDUM

Subject: Minutes of the meeting held under the chairmanship of Secretary (Health & Family Welfare) on 14.06.2024 on Non Alcoholic Fatty Liver Disease (NAFLD) - regarding.

The undersigned is directed to enclose herewith a copy of minutes of the meeting held under the Chairmanship of Secretary (Health & Family Welfare) on 14.06.2024 on Non-Alcoholic Fatty Liver Disease (NAFLD), for information and necessary action.

Signed by
Rajesh Kumar
Date: 21-06-2024 13:43:51

(Rajesh Kumar)
Under Secretary to the Government of India
Tel.: 23062068
Email : rajesh.kumar26@nic.in

To

1. Director, Institute of Liver and Biliary Sciences, New Delhi.
2. Additional Secretary (PH&P), MoH&FW
3. Additional Secretary & MD (NHM), MoH&FW
4. Additional DDG-DGHS
5. ADG, DGHS

Copy for information to:
i. PSO to Secretary (HFW)
ii. PSO to DGHS
ii. Deputy Secretary (SN)

Minutes of the meeting held under the chairmanship of Secretary(H) on 14.06.2024 on Non Alcoholic Fatty Liver Disease(NAFLD)

A meeting was held with Dr Shiv Sarin, Director Institute of Liver and Biliary Sciences(ILBS), New Delhi and his team under the chairmanship of Secretary(H) on 14.06.2024 to discuss the NAFLD under NP NCD Programme. The meeting was attended by the following officers of MOHFW:

1). Smt L.S.Changsan, AS(PH&P)

2). Smt. Aradhana Patnaik, AS&MD(NHM)

3). Dr L.Swasticharan, Addl DDG-Dte GHS

4). Dr Shikha Vardhan, JD-Dte GHS

5). Smt. Sarita Nair, DS(NCD.II)

2. Secretary (H) was informed that the Webinar organised on the occasion of Global Fatty Liver Day on 13.6.2024, in which Dr Sarin was a panelist for technical session, was attended by over 4,000 participants and it was much appreciated. Dr Sarin raised his concern over the lack of screening for NAFLD in the AAMs. He also informed that the awareness on NAFLD was also lacking in the rural areas. Further, the National NCD portal does not record NAFLD data. He was informed that action is being taken to include all other NCDs in the National NCD portal. However, it would become operational only by October 2024.

3. AS&MD(NHM) apprised Secretary(H) that the CBAC form, to be filled by ASHAs for preparing family folder, has columns on waist measurement and questions on any family history of hypertension, diabetes and heart disease and whether they undertake regular exercise. However, it appears that ASHAs are not sensitised on the screening for NAFLD.

4. Dr Sarin informed that Hypertension and Diabetes are the main causes of NAFLD. People with a family history of hypertension, diabetes and NAFLD are even more susceptible to develop NAFLD at a young age. Dr Sarin suggested a point of care test for ALT- a liver enzyme to screen for NAFLD. AS (PH&P) informed that awareness campaign- NCD Pakhwada and screening for NCDs has been included in the 100 days targets and further, that we perhaps need to start screening of population of younger age for ALT than the 30+, as is the current practice, for diabetes and hypertension. Secretary(H) directed that the screening for NAFLD needs to be focused in the 5 Cr individuals presently under treatment for hypertension and diabetes under the NP NCD programme.

5. Dr Sarin requested that in the UN General Assembly 2025, MOHFW must propose a global agenda on NCDs by showcasing NP NCD. As we have integrated NAFLD into NP NCD, we are uniquely positioned to champion this critical public health issue on the world stage.On a query from the chair , he informed that low cost Point of Care tests have been developed and are available in India.

6. After deliberations, the following decisions were taken in the meeting:

(i) Sensitisation of AAM staff and training of ASHAs need to be conducted on screening for NAFLD.

(ii) A letter from Secretary(H) would be sent to all Health Secretaries of State Govts/UTs to sensitise their programme officers and health workers in their States/UTs on NAFLD.

(iii) As hypertension and diabetes are major risk factors for NAFLD, States/UTs would be directed to keep NAFLD screening under focus for the 5 Cr individuals under treatment for Hypertension and Diabetes.

(iv) A Committee may be formed under the chairmanship of Dr Sarin for preparation for UNGA 2025 and to strengthen the NAFLD component of NP NCD ,

7. Meeting ended with thanks to the Chair.

Minutes of the meeting held under the chairmanship of Secretary(H) on 23.07.2024 on Non-Alcoholic Fatty Liver Disease (NAFLD)

A meeting was held with Dr Shiv Sarin, Director Institute of Liver and Biliary Sciences (ILBS), New Delhi and his team under the chairmanship of Secretary (H) on 23rd July 2024 to discuss the NAFLD under NP-NCD as a follow-up of the previous meeting held on 14th June 2024. The list of participants is annexed:

1. Dr Sarin, Director ILBS proposed to take up liver health as an agenda at the United Nations General Assembly (UNGA) main event and side events that are scheduled to be held in 2025. Secretary (H) clarified that liver health *per se* cannot be an agenda for UNGA. However, it would be an integral part of the NCD agenda. Secretary (H) asked the Director (IH) to discuss with WHO and MEA officials on how to make NAFLD the focus of discussion in the NCD agenda at UNGA.
2. The ILBS team highlighted the requirement for revision of the existing Operational Guidelines for NAFLD under NP-NCD and offered to submit a revised version to the National NCD Division, MoHFW. They were requested to go ahead with the proposal.
3. The ILBS team emphasized the need to increase the awareness and commitment among the states/UTs regarding increasing the implementation of NAFLD services and prevention. In this regard, ADDG (NCD) and Director (EMR), Dte.GHS apprised the Secretary (HFW) about the Webinar Series being organized by the Training Cell under the National NCD Division, Dte.GHS, MoHFW through which sensitization of the healthcare providers and awareness generation of the various components of the program including NAFLD and related risk factors is being carried out by the Ministry. Moreover, Training Modules for Medical Officers and Program Managers is being prepared under NP-NCD where sufficient focus has been given for NAFLD. He further informed that a DO letter from the Secretary (HFW) has been proposed over the file for communicating with the States/UTs regarding the same.
4. It was proposed by the ILBS team to initiate a pilot program on NAFLD with a vision for 2047 to reduce the disease. The Secretary (HFW) suggested that the implementation of NAFLD services are to be undertaken as a part of NP-NCD program only and not a standalone project/program.
5. The DGHS apprised Secretary (HFW) that since the risk factors for liver diseases are same as that of other NCDs, therefore a standalone project/program for NAFLD is not justifiable, instead, the diseases under NP-NCD umbrella, may be clubbed into three to four focus areas viz. metabolic diseases (Diabetes, Hypertension and Liver), cancers, chronic respiratory diseases, etc.. In addition, with respect to the diagnostic intervention such as

Annexure 3

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 gutkaor 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 90cm	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 forattending 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 currentlysuffering from TB**		Any patch or discolor-ation on skin that is not healing		
History of TB *		Difficulty in holding ob-jects with fingers		
Do you have cloudy or blurred vision?		Loss of sensation forcold/ 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 inter-course		
Change in shape and size of breast		Foul smelling vagi-nal discharge		
Bleeding between periods				
B3: Elderly Specific	**Y/N**		**Y/N**	
Do you feel unsteady while stand-ing 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 move-ment				
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 indus-tries 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	Sev-eral 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.					

Annexure 4

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	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		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**_____

Reporting Month_____

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)**			**Total Report (A+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 & refered 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)**			**Total Report (A+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	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)**			**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	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**)										
	No. of New Cases Put on treatment (**reporting month**)										
	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	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		**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 & refered 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)**			
	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	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 **(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 & refered 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**)										
	Cumulative no. of patients lost to followup (**Out of B**)										
COPD	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		**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 & refered 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**	**Male**	**Female**
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**	**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	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**			**Cumullative 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 & refered 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.**

Ministry of Health and Family Welfare
Government of India