



NATIONAL URBAN HEALTH MISSION



ORIENTATION MODULE FOR PLANNERS, IMPLEMENTERS AND PARTNERS



MINISTRY OF HEALTH AND FAMILY WELFARE
GOVERNMENT OF INDIA



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Preface

Rapid and unplanned urbanization has resulted in multidimensional challenges for urban dwellers with a serious threat to health, especially for the urban poor and vulnerable. While on the one hand, complex urban infrastructures are touching unprecedented heights, the marginalized are struggling to access basic amenities in their shadows.

In this context, the National Urban Health Mission (NUHM) was launched to understand and respond to the health needs of the urban poor and vulnerable by strengthening the urban care system both at the facility and community level.

The intent and the spirit of the Mission can only be translated into action with a sensitized, aware and technically competent workforce. With this vision, the NUHM Training Module has been developed, to inculcate and improve the knowledge, skills and understanding among all those involved in NUHM implementation.

Having been developed through widespread consultation and inputs from various experts, I congratulate all the concerned people for their dedicated work in bringing the module to this shape. I hope that through this document, States, UTs and Urban Local Bodies shall be able to create a sensitized and skilled workforce, who will be instrumental in helping NUHM reach its goal of a healthy urban population.


(C.K. Mishra)



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Foreword

The National Urban Health Mission is a program designed to cater to the expressed and un-expressed health needs of the vulnerable and poor urban population. Being the first country wide urban health program, NUHM has established novel strategies and platforms to not only deliver comprehensive services, but also to enhance community participation and build partnerships among various stakeholders. Implementing NUHM to meet the aspirations and expectations of the urban poor and vulnerable requires a deep understanding of health systems, its determinants and its impact on the health of the marginalized population.

To achieve this, we need to create a workforce that is skilled, sensitized and technically strong with knowledge of not only the health system but also the impact of various determinants of health such as nutrition, water, sanitation, education, cultural practices and many others, on health. With this background, I believe that the NUHM Training Module shall be a valuable resource in building the right perspectives and imparting the necessary knowledge of implementation issues to all participants.

I appreciate the efforts taken by Urban Health division of Ministry, NHRSC and other experts in designing and drafting this document which will certainly be a great source for states and guiding the districts in planning and executing the strategies under National Urban Health Mission.

(Arun K Panda)

Healthy Village, Healthy Nation





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Acknowledgement

The experience of implementing NUHM clearly indicates that its success depends on effective execution of various initiatives which lead to tangible outcomes. Some of the core determining factors for this are capacity and understanding of service providers in assessing vulnerabilities and barriers in accessing healthcare, effective -urban health planning for minimizing barriers and intersectoral linkages to address issues affecting social determinants of health etc.

The Training Module on NUHM is an important document that elaborates on the various aspects of the Mission and builds the necessary perspective required to cater to the health needs of the urban poor. It has different sections addressing the knowledge and skills required for various stakeholders in effectively tackling such core issues under NUHM. The Module is also accompanied by presentations for each section, to enable States to smoothly and efficiently conduct orientation workshops.

It is envisaged that by utilizing this document various partners such as Health, ULBs, representatives from various departments shall be oriented at common platforms. The facilitators shall encourage interactions and discussions among the participants who ultimately have to implement the Mission together.

For the development of the Module, I would like to thank the Urban Health Division at MoHFW, and specifically Ms. Preeti Pant (Director, UH), Dr. Basab Gupta (Deputy Commissioner, UH), Dr. Ranjana Garg (Assistant Commissioner, UH), the IDSP team and all the consultants for their invaluable contributions. I also thank Dr. J.K. Das and his team at NIHFV for their important inputs.

I thank the team at NHSRC, especially Dr. Himanshu Bhushan and Ms. Aastha Sharma for envisaging the shape of the document, anchoring and coordinating the entire effort, and compiling the Module, in addition to developing specific chapters. Further, I would also like to thank Dr. Rajani Ved, Dr. J.N. Srivastava and their teams, and Dr. Rajib Das for developing their respective sections. I also thank Ms. Anna Schurmann, Dr. Chandrakant Lahariya, Ms. Seema Pati and Ms. Ranjani Gopinath for their continued support to the process.

I believe this training module will surely serve its purpose of training and capacity development under NUHM and will be an important tool in building a well-oriented and trained workforce to support NUHM.

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INTRODUCTION

The National Urban Health Mission (NUHM), launched in 2013, is a sub-mission under the National Health Mission, which aims to cater to the unique and diverse needs of the urban poor and vulnerable population. The Urban Health Mission aims to respond to several unaddressed needs of the urban population through novel strategies, implemented through a diverse set of stakeholders. For this, technical knowledge of diverse subject matters, skills, information and platforms to share and disseminate the knowledge will be essential for effective implementation. Training and Orientation on the conceptual and practical aspects of NUHM implementation is thus essential for all stakeholders involved in NUHM.

Guided by the Capacity Development Framework for NUHM, the Training Module is the first step towards capacity development of NUHM stakeholders to the perspective and technical components of the National Urban Health Mission. It is a comprehensive document for orienting a diverse range of personnel involved in implementing the NUHM.

The Module gives a basic overview of the Program, knowledge of which is essential for those involved in NUHM implementation, even peripherally. It has been drafted in a way so that the information presented is applicable for all stakeholders – planners, implementers, program officers, clinical staff, Urban Local Bodies and NGO workers.

Objectives

The objectives of the module are as follows:

- ▶ To provide an overview of the NUHM Program Components
- ▶ To sensitize participants towards urban vulnerability and build perspectives on urban health
- ▶ To provide guidance on effective implementation through systematic planning, convergence, financial and human resource management.

About the Module

Orienting the stakeholders on NUHM involves not only technical knowledge of the program components, but also perspective building and sensitization on urban health. While the Mission aims to provide essential primary health services to the entire urban population, the urban poor and vulnerable remain its prime concern. To tailor health service provision to these marginalized populations, it is necessary that the implementers of the program are adequately sensitized to the everyday challenges faced by them, their special circumstances and health needs.

To achieve this, **Section 1** of the Module begins by sensitizing the participants towards the challenges faced by urban dwellers and establish the background of urban vulnerability within which the Mission operates. This section also aims to provide participants with a vision for urban health – what must the Mission strive towards - and discusses sustainable urban development and ‘healthy cities’.

Section 2 introduces NUHM and provides an overview of the various NUHM program components. It briefly touches upon the history of urban health in India to give context to the current provisions of the NUHM. The

objective of this section is to familiarise participants with the major components of the program, which are later described in greater detail, as separate sections of the Module.

Section 3 of the Module provides an in-depth and step-wise orientation to implementation of the Mission. It begins with a section on establishing institutional mechanisms essential for rolling out the Mission, and provides details into urban health mapping, planning, operationalization of health facilities and bringing about inter-sectoral convergence. Through this section, participants will get an overview of how to get NUHM 'up and running' in a state or an Urban Local Body.

Section 4 of the Module provides greater details into each component of the Mission, which were touched upon in Section 2. These 'Essential Programs and Processes' include: Community Processes, Prevention, Screening and Control of Non-Communicable Diseases, Quality Assurance under NUHM, Managing Disease Outbreaks in urban areas, Managing Public Private Partnerships and Monitoring and Evaluation of the Mission. The sub-sections under Section 4 may be used to orient specific program officers in-charge of implementing particular components of the NUHM (such as Community Processes Program Officer, Quality Assurance Program Officer and Monitoring and Evaluation Officers).

Section 5 of the Module focuses on the administrative aspects of Financial Management and Human Resource Management. The section on Financial Management outlines the fund flow, financial reporting and documentation, while the section on Human Resource Management focuses on strategies for recruiting, retaining and enhancing performance of the health workforce under NUHM.

Target Audience

The Module provides a basic orientation to program components and implementation processes of NUHM. Hence it can be used for various individuals involved in NUHM implementation, including personnel from the State Health Department, Urban Local Bodies, Panchayati Raj Institutions, Urban Development Department, water, sanitation, roads and transport, nutrition, education, NGOs, and the private health sector. From the Health Department, both program personnel and clinical staff working as part of UPHCs and UCHCs may be oriented using this Module. Having a single module will help ensure all stakeholders are on the "same page", with access to the same information. This will help people to better coordinate as a team, and contribute to a stronger system.

Using the Training Module

The content of the Module has been developed in such a way that it can be used for NUHM orientation for a range of participants as described above. However, it may vary according to the target audience, wherein the sessions on individual components may be expanded or compressed accordingly. It is recommended that the training workshop be conducted over 2 days. A suggested agenda of the workshop is provided in Annexure A. Power Point presentations for each session have also been prepared and are given an accompanying booklet, along with their soft copies in a CD. The content of the presentations may also be modified as required.

The suggested mode of delivery is lectures with presentations. Each presentation may be around 15 – 30 minutes, followed by 15 minute discussion or Q&A Session. The lecture content written in each section may have more details than required for an overview of the topic. This has been provided to support the state in case they prefer to undertake a more detailed orientation for specific personnel.

As explained above, Sections 1, 2, and 3 are essential for all NUHM orientations irrespective of the participants as they give the basic overview of NUHM and develop the necessary perspective for working on urban health. Sections 4 and 5 delve deeper into into the technical specifications of specialized components of NUHM such as Community Processes, Quality Assurance, Monitoring & Evaluation, PPPs, Disease Outbreaks. States may take a call on how much detail they would like to orient the participants on, for these topics.

As mentioned previously, Section 4 and 5 of the Module may be used to provide an in-depth orientation to personnel responsible for implementing the specific part of the program.

A suggested model for the training program is to conduct an overview for all participants, and then conduct parallel sessions for specialized topics (Section 4 and 5) in more details as necessary for those responsible for conducting these activities. However, it is recommended that the entire module be used in orientations for all stakeholders. The Module may also be given to the participants in hard copy as reference material, if required.

At several places in the Module, discussion questions have been highlighted in blue boxes. These questions have been provided to generate debate and discussion. There may not be a right or wrong answer to these question, but the discussion will help the participants think about some of the issues concerning urban health.

Facilitators

It is suggested that a range of facilitators be invited to provide training, as no one person will have the expertise on all aspects covered by the Module. As the Module discusses various aspects of urban health, different sessions may be facilitated by the respective nodal persons from the state such as health program officers, ULB officials, urban health experts from academia, medical colleges, development partners and NGOs. It is important to utilize each other's strengths, learn from each other and make NUHM a collaborative effort. The training, like NUHM implementation, has to be a joint effort of all stakeholders.

Tailoring the content

States and ULBs may tailor the content of the Module as per the state specific context, as well as the needs of the target audience. The Module has been fragmented into sub parts which may be re-sequenced, replaced or removed as required. The guiding principle has been to include as much information as necessary, so that all information is available with the states and the participants. Depending upon the type of participants called by the state, the time available and the priority of the state, the state may customize the level of detail they want to go in during each session. The Module provides such flexibility in planning the training on NUHM.

Tips for Trainers and Facilitators

- ▶ Maintaining time schedule and beginning the sessions on time is of paramount importance.
- ▶ Draft Presentations have been developed and printed in a separate booklet/CD. They may be modified as per need.
- ▶ Encourage experience sharing from participants in all sessions. Try to make sessions as interactive as possible, ensuring the discussion and questions are relevant and on-topic.
- ▶ Encourage participants to present recap of sessions on Day 2.
- ▶ Customize, add or delete session contents to make it applicable to your State/ULB.
- ▶ All tea breaks may be held along with discussions to save time, if possible.
- ▶ Optional Session: Make small working groups of participants to discuss on following issues:
 - ▶ What are the pressing issues of urban health in your area?
 - ▶ What solutions may be implemented to solve them?
 - ▶ Which departments/stakeholders will be required for the implementation of the above solution/s?
- ▶ While some case examples have been cited in the Module, State/ULB may add more examples from their experiences.
- ▶ State may invite local urban health experts, individuals who have worked with a particular vulnerable group to share their experiences.

SECTION-1

PERSPECTIVE BUILDING ON URBAN HEALTH

LEARNING OBJECTIVES:

After covering this content, participants shall understand:

- ▶ *Urbanization, migration and their implications on the urban poor*
- ▶ *Everyday challenges and types of vulnerabilities faced by the urban poor and their impact on health*
- ▶ *Ways to address social determinants to create healthy living environments in our cities*

1.1 Urbanization, migration and marginalization of urban poor

India has witnessed fast paced urbanization in the last few decades. India has historically been called a rural economy, however, currently one third of our population is urban. It is projected that by 2030, 46% of our population will be living in cities. Thus, we need to focus on urban health planning and also plan for further expansion of urban areas in the future.

1.1.1 Causes and implications of urbanization

What makes an area rural or urban? What is the meaning of urbanization? How does urbanization have an impact on people's lives and how does it impact their health?

Urban areas are characterised by high economic activity, diversity of livelihood opportunities and infrastructural development. An important distinction between an urban and a rural area is the density of population. An urban area is one where the density of population is high, as compared to rural areas. For example, the density of population of Bangalore Urban district is 4378 people per square km, while that of Bangalore Rural district is only 431 persons per square km. India is becoming more urbanized, with the proportion of urban population increasing from 11.4% in 1901, to 28.53% in 2001 and 31% in 2011, and is expected to increase to 50% over the next few decades. The increase in the last couple of decades has been particularly rapid.

The rapid increase in urbanization has led to more people living in cities, than the resources available to sustain a safe and healthy living environment for all. Urbanization often leads to overcrowding, proliferation of slums and poor quality housing, competition for resources, air, water and noise pollution and an increase in vehicular traffic. Most Indian cities lack the necessary infrastructure in terms of housing, water and sanitation, employment opportunities, and basic services such as health care and education to accommodate and meet the needs of the urban poor. This has implications for their health, wellbeing and productivity. Due to a number of factors related to planning, governance and social inequities, there has been a creation of

circumstances in which the powerful and elite are able to access resources while the poor and vulnerable are pushed to the margins. Urban low income settlements and vulnerable urban populations demonstrate that the urban advantage is concentrated in pockets of development, while large proportions of the population remain poor and lack basic living amenities.

Thus, cities present two stark extremes – one with extreme poverty and deprivation of basic needs and the other with extreme wealth and prosperity. While the root cause of the problem is not with urbanization as such, it is with the lack of appropriate planning to accommodate the increasing population in the urban space, and to generate or procure adequate resources for decent living for all city residents.

1.1.2 Migration

Migrants are drawn to urban areas for employment opportunities and to establish a better life for themselves and their families. Rural to urban migration involves both 'urban pull' and 'rural push' factors. Factors such as lack of land-holdings, lack of viable economic opportunities, difficulty in sustaining profitable agricultural practices, and inadequate amenities and infrastructure often 'push' rural families or head of households out of rural areas towards urban areas in search of better opportunities.

Is rural to urban migration good or bad? Should migration be 'controlled' or 'managed' in some way? How can we ensure that migrants get adequate services to sustain a healthy life?

A large proportion of people migrating to cities are often employed on daily wages in the unorganized sector such as rickshaw pullers, construction workers, factory workers, head loaders, domestic workers and other similar vocations. Safe, affordable and good quality housing is limited in cities, and migrants often live on the margins in slums or slum-like housing, with poor sanitation, water supply and inadequate space. The next section expands on some of these issues and helps develop an understanding of 'urban vulnerability'.

1.1.3 Marginalization of the Urban Poor

The urban poor face harsh urban living conditions and are often marginalized as legitimate citizens of the city. While the city needs their services, it does not offer them adequate physical space or resources for their sustenance. In cities where population density is high, and resources limited and expensive, the needs of the poor are never a priority. The poor, in turn, are incapacitated to demand their entitlements and raise their voices for the discrimination they face. Following are some of the challenges faced by them:

- ▶ **Lack of basic services:** Basic services such as safe drinking water, electricity, garbage disposal, sanitation facilities are either lacking or of very poor quality. Toilets, where present, are often shared by a large number of people, and may even be unaffordable (pay-per-use) in cases of large families. Congested living conditions exacerbate the risk of faecal contamination and infectious diseases such as tuberculosis, acute respiratory infections, and various skin disorders.
- ▶ **Hazardous living environment:** Living in makeshift, temporary constructions of plastic, brick, tin, and waste materials or on roads, under flyovers and railway platforms, on or near landfills, garbage dumps, factories, open drains, construction sites, they are exposed to extreme weather conditions of heat and cold. During rains, such housing may get flooded, exposing them to toxic effluents and sewage and causing outbreaks of infectious diseases and injuries.
- ▶ **Exposure to violence:** They are easy targets of crime, physical assault, theft, kidnapping, abduction and accidents. Children, adolescent girls and women are particularly at risk of sexual violence.

- ▶ **Fear of evictions:** Considered 'illegal' residents of the urban space, the poor, especially migrants, live under the constant threat of eviction and demolition, as part of city 'clean-up' drives.
- ▶ **Unsafe work environment:** Like their living environment, the work environment is also often hazardous. Laborers and construction workers work at minimum wage and generally without adequate safety equipment. Women workers often have to take their children along to factories or construction sites – exposing them to a hazardous and unprotected environment.
- ▶ **Lack of social networks:** Lack of family network and social support systems to fall back on place urban dwellers at a greater risk for common mental disorders and even severe illnesses such as depression, schizophrenia, substance abuse, alcoholism and crime.
- ▶ **Monetization of basic needs:** In contrast to rural areas, in urban areas, most commodities have to be paid for - including the use of bathrooms and toilets. In winters, blankets and mattresses are rented out on a per night for the homeless. Similarly, in summers fans and coolers are available on rent. This makes access to even basic services unaffordable for the urban poor. Expenditure on rents for slum housing, fruits and vegetables, basic food items, clothing and other basic necessities makes living in the urban area prohibitive for the poor.
- ▶ **Limited access to social security schemes:** Although the government has many schemes for populations Below the Poverty Line (BPL), many urban poor are denied these entitlements without proper proof of identity, residence and other official documentation. For example, children from many urban poor and migrant populations are not entitled to admission in schools due to lack of proper identification documents. Similarly proving their entitlements to various subsidies and accessing basic services such as the public distribution system (PDS) remains a challenge.

1.1.4 Urban Vulnerability

The vulnerabilities faced by the urban poor come from their location of residence (residential vulnerability), their work and occupations (occupational vulnerability) and their social status (social vulnerability).

- ▶ **Residentially vulnerable** include those who are homeless, live in slum or slum-like habitations, face insecurity of tenure and are unserved or under-served with basic public services like sanitation, clean drinking water and drainage.
- ▶ **Occupationally vulnerable** include those working in the informal sector, daily wage labourers, factory workers working without adequate safety equipment, sanitation workers without adequate protective equipment and bonded labour are occupationally vulnerable.
- ▶ **Socially vulnerable** include widows, transgenders, the elderly, the disabled and those belonging to scheduled castes and tribes who face discrimination in their everyday life because of their disadvantaged social status. Social vulnerability hinders access to resources such as health services, education and access to government's schemes/programs because of societal discrimination.

Most individuals and families living in urban areas face multiple and overlapping vulnerabilities, which exacerbate the impact of other factors – those in unhygienic and unsafe slum housing often work in hazardous conditions and may also be socially excluded. The composite effect of all vulnerabilities on one family or individual has an adverse impact on their well-being and health. This increases their risk of disease and/or injury, while reducing their opportunity to access affordable health care when needed.

1.1.5 Barriers to accessing care in urban settings

Barriers to accessing health in urban areas are distinct from those in rural areas. With shorter distances and availability of public transport, geographical access is not as big a barrier in urban areas. Accessing services (not just health) is not easy due to social and systemic barriers:

- ▶ **Limited availability of government primary health care services:** Primary health care facilities in urban areas are limited in number; where they exist, they offer a limited range of services or are targeted for specific populations. Most urban residents thus access 'larger' or secondary/tertiary hospitals (even for minor ailments), or private sector providers, often paying heavily out of their pockets. The quality of care of such providers is also not assured.
- ▶ **Overcrowding in public hospitals:** Secondary and tertiary public hospitals are generally too crowded to provide timely and adequate care to all. Shortages of drugs, supplies and diagnostic facilities are common, and many patients are forced to procure products and diagnostic services from other private providers due to lengthy waiting times. There are reports of patients lining up at OPD queues in the early hours of the morning - for counters that open at 8 am.
- ▶ **Unprofessional and rude behaviour towards the urban poor:** The poor and vulnerable are often treated with disrespect and hostility by service providers, and at times even refused treatment. Special needs groups such as elderly, the disabled and transgenders have a very difficult time navigating the system.
- ▶ **High cost of drugs and diagnostics:** Accessing both public and private care can involve high costs and out of pocket expenditure, which can be unaffordable for the urban poor. The out of pocket expenses are substantial and cause severe financial strain.
- ▶ **Out of physical reach:** Navigating the city and its hospitals may be physically impossible for the disabled and the elderly, as most are not disabled friendly. Dependence on care givers further limits their access.
- ▶ **Inconvenient Timings:** As most public health services open in the morning hours, consulting a doctor may mean the loss of a day's wage for the poor. The alternative is to go to private doctors during evening hours, even though they have to pay for their services.

Thus, the urban poor face physical, social, and economic constraints to accessing public health care. As a result, many seek health care from a range of licensed and unlicensed providers, or seek health care only when their health condition becomes severe - or do not seek health care at all. The NUHM attempts to address some of these challenges and provide accessible and affordable quality health care services for the marginalized and disadvantaged urban poor. It has developed a systematic institutional structure for addressing their diverse needs. The next section provides details of the program components of the NUHM.

All persons, whether residing in rural or urban areas, are entitled to primary healthcare. It is the responsibility of the public health system to ensure that affordable primary healthcare services of acceptable quality are available to all – irrespective of their type of housing (whether they live in slums or are homeless), place of residence (urban or rural), social status or economic productivity. Population health cannot be ensured by leaving out large numbers of population out of the fold of the public healthcare system.

1.2 Understanding and Responding to Urban Health Needs

The previous section described the demographic trends around urbanization, and some of the challenges of urban life for the poor. Many of these challenges have strong consequences for health and wellbeing. This section describes the determinants of urban health, the burden of disease and priority health areas, and the framework required to address them.

Figure 1: Determinants of Urban Health



Determinants of Urban Health

The urban environment affects residents' health because it shapes how people live their lives. Different aspects of peoples' lives in cities directly affect health outcomes, including place of residence, type of housing, water and sanitation amenities, education, access to healthcare, livelihoods, availability of parks and recreational facilities, and facilities for mental health.

Cities offer both the best and the worst environments for health and well-being. In general, living in an urban area provides many advantages – and this is reflected in aggregate data. On average, urban residents will have better health care seeking behaviour and better health status than their economic counterparts living in rural areas. For the wealthy, there are many protective factors – air conditioners, air purifiers, access to private health care, private cars, access to good jobs, and comfortable housing.

However, if we disaggregate this data we typically find large inequalities between higher and lower wealth quintiles, with the poorest typically being worse off than their rural counterparts. Poverty profoundly

affects the daily conditions in which people live, work, learn and play – exposing them to all kinds of health hazards and depriving them of capacities, opportunities and resources. For the poor, vulnerabilities will vary according to their specific context. For example, the vulnerabilities faced by workers in a chemical factory will vary for those faced by sex workers or construction workers.

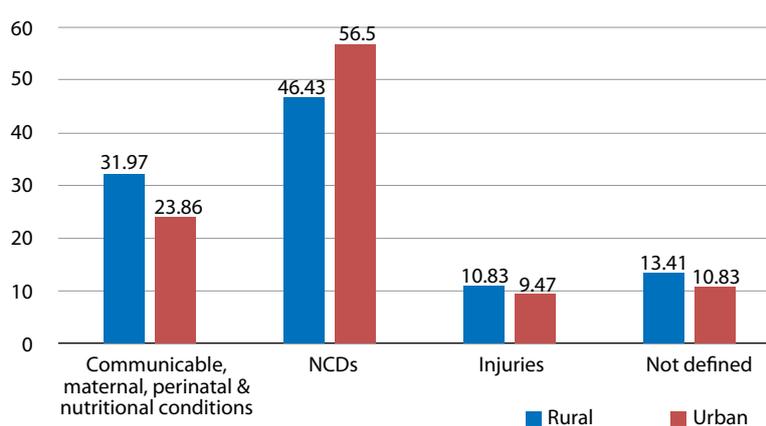
In addition, circumstances in cities can change quickly with weather changes, seasonal migration and shifting construction and work patterns. Even within households, women and children are likely to have a poorer health status than men. Certain population groups within urban environments will always require special consideration because they have particular health issues or needs. Without targeted attention, they are likely to be excluded from overall health development. As vulnerability will always be locally specific and dynamic, an important part of NUHM is getting to know the local population and their needs through mapping activities and community processes.

Urban Morbidities and their Causes

Health planning requires that we understand the specific disease burden of the target population. This section compares the mortality and morbidity data for urban and rural populations, to understand how the above-described urban context affects health, wellbeing and mortality of its' residents.

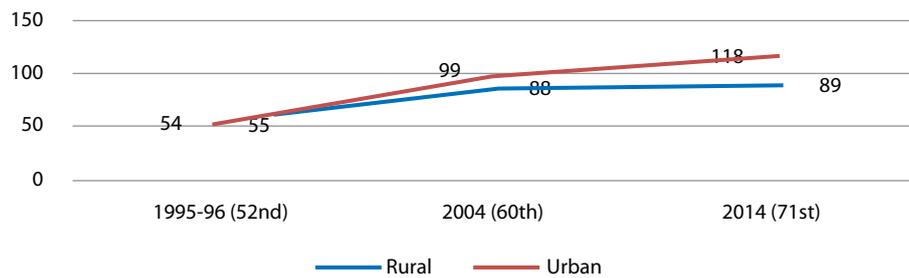
When we look at data comparing mortality patterns in rural and urban areas, we see that the burden patterns are similar – that is, in both urban and rural areas non-communicable diseases account for the greatest number of deaths, accounting for about half in both locations (see Figure 2 below). However, there are some interesting differences. In urban areas, non-communicable diseases are a more common cause of death (10 percentage points more than in rural areas); whereas rural areas have a greater proportion of deaths due to communicable, maternal, perinatal and nutritional conditions compared to urban areas (with 8 percentage points more).

Figure 2: Major Causes of Death in Rural and Urban Areas, 2007-2013, NSSO Data



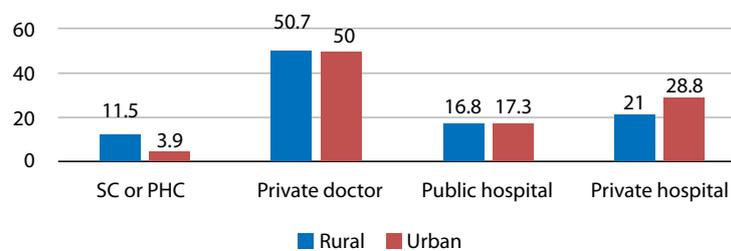
Aside from mortality, there are differences in the morbidity rate between rural and urban areas as well (as per NSSO's data collection definition, the number of ailments reported in the last two weeks per 1000 population). In 1995 the rate was similar, but it has increased at a much greater rate for the urban population – increasing to 118 in 2014, compared to 89 for the rural population (see Figure 3 below). We have to be careful in interpreting this data - this could be due to deteriorating urban lifestyles, or due to greater health literacy increasing the reporting of morbidities.

Figure 3: Morbidity Rate in Rural and Urban Areas, 1995-2014, NSSO Data



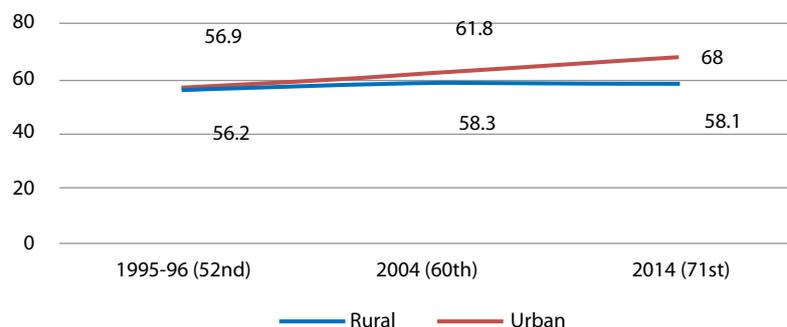
Where are people seeking care for these ailments? In both rural and urban areas, people seek care primarily in the private sector, with around half seeking care from private doctors. These *private doctors* are usually owner-operated enterprises who may or may not have medical qualifications, but are serving a primary care function. See Figure 4, below.

Figure 4: Out-patient Care Seeking in Rural and Urban Areas, 2014, NSSO Data



Care seeking for inpatient care (that is, hospitalization) is also primarily in the private sector, but the differences are not so large. That is, more people seek hospital care in the public sector, as opposed to primary care. The proportion of care seeking in the private sector is growing faster in urban areas compared to rural areas (see Figure 5). This probably reflects the fact that the private sector for health in rural India is not well developed.

Figure 5: In-patient Care Seeking in Rural and Urban Areas, 1995-2014, NSSO data



The cost of this private sector care seeking is huge, and much higher in urban areas. The average cost of a hospitalization was Rs. 26,455 in urban areas, compared to Rs. 16,956 in rural areas; and the average outpatient expenditure was Rs. 639 in urban areas, compared to Rs. 509 in rural areas. A huge 82% of the urban population are not covered by any kind of insurance (NSSO data, 71st round).

What are the risk factors for the morbidities and mortalities described in the graphs above? The table below (see Table 1) indicates that the top cause of mortality and morbidity is heart disease, for which risk factors

are unhealthy diet and inactive lifestyle. This table depicting the key risk factors for health in India highlights the need to create cities which encourage an active lifestyle, and good dietary habits.

Table 1: Urban mortalities and morbidities, and associated risk factors

Rank	Causes of death and disability, combined	Risk factors	Preventive interventions
1	Ischemic heart disease	Unhealthy diet, high blood pressure, high body mass index (overweight), high blood sugar, tobacco smoke.	Healthy diet and lifestyle, exercise
2	Neonatal preterm birth	Child and maternal malnutrition, Unsafe water, maternal disorders	Healthy diet, Facility-based deliveries, quality of care
3	Neonatal encephalopathy	Child and maternal malnutrition, Unsafe water, maternal disorders	Healthy diet, Facility-based deliveries, quality of care
4	Chronic Obstructive Pulmonary Disease (COPD)	Air pollution, tobacco use	Controls on polluting industries, provide alternatives to indoor wood-fired cookstoves; Taxes on cigarettes, labelling packages
5	Lower respiratory infections	Air pollution	Controls on polluting industries, provide alternatives to indoor wood-fired cookstoves.
6	Diarrheal diseases	Unsafe water	Provide improved water sources such borewells, bottled water, piped water
7	Cerebrovascular disease (stroke)	Unhealthy diet and lifestyle, high blood pressure, high body mass index (overweight), high blood sugar, tobacco smoke.	Healthy diet, exercise, healthy diet and active lifestyle
8	Tuberculosis	Pollution, exposure to infection, malnutrition	Good nutrition and high immunity, fresh air, early detection
9	Iron deficiency (anemia)	Unhealthy diet, Unsafe water	healthy diet, provide safe water
10	Lower back and neck pain	Poor posture, excessive physical work, lack of exercise, physical conditions	Exercise, good posture

Source: The Global Burden of Disease Study, 2015. <http://www.healthdata.org/india>

According to WHO, 'regular physical activity reduces the risk of ischaemic heart disease, diabetes, breast and colon cancer. Additionally, it lowers the risk of stroke, hypertension, and depression. Physical activity is a key determinant of energy expenditure and is thus fundamental to energy balance and weight control.'

There is a misconception that those engaged in physically demanding work would not need exercise. Physically challenging work — whether informal sector work or household work — does not give the health benefits that come from physical activity. Nor are all types of physical activity created equal. Some contribute to better health while others are likely to result in injury. Health status can actually decline as a result of long hours of demanding physical labour. Moreover, intense physical labour may be detrimental to women's reproductive health, with a number of research studies suggesting that overly strenuous physical activity may be linked to low infant birth weight and pregnancy weight gain, shorter gestation, congenital malformations, and other pregnancy-related problems.

It is an important responsibility of governments to increase opportunities for people to engage in health-promoting physical activity while simultaneously protecting workers from the types of physically strenuous labour that are most likely to result in injury or disease.

Hence governments should create open spaces for recreation, develop walkways that encourage walking, cycle tracks for safe cycling, parks and gardens for outdoor activities. They should also enforce rules for occupational safety, food safety, clean fuel choices, pollution reduction, and thus progress towards creation of Healthy Cities.

Healthy Cities

Many cities across the globe have followed an integrated planning process to achieve healthy cities. A healthy city is one that is continually creating and improving the physical and social environment, and expanding those community resources which enable people to mutually support each other in performing all the functions of life and developing to their maximum potential. A Healthy City aims to:

- ▶ create a health-supportive environment,
- ▶ achieve a good quality of life,
- ▶ provide basic sanitation and hygiene needs,
- ▶ supply access to health care.

A healthy city¹ will typically have the following attributes:²

- ▶ a clean, safe physical environment of high quality (including housing quality);
- ▶ an ecosystem that is stable now and sustainable in the long term;
- ▶ a strong, mutually supportive and non-exploitative community;
- ▶ a high degree of participation in and control by the citizens over the decisions affecting their lives, health and well-being;
- ▶ the meeting of basic needs (food, water, shelter, income, safety and work) for all the city's people;
- ▶ access by the people to a wide variety of experiences and resources, with the chance for a wide variety of contact, interaction and communication;
- ▶ a diverse, vital and innovative economy;
- ▶ connectedness with the past, with the cultural and biological heritage of city dwellers and with other groups and individuals;
- ▶ a form that is compatible with and enhances the preceding characteristics;
- ▶ an optimum level of appropriate public health and sickness care services, accessible to all; and
- ▶ high health status (high levels of positive health and low levels of disease).

Many Indian cities have some of these attributes already, and others are achievable under the NUHM. While striving towards a 'Healthy City', cities should take special care of creating healthy spaces around low income housing, slum and slum like habitations. While proper solid and liquid waste management and creation of proper drainage system is a pre-requisite, it must be ensured that proper measures are taken to prevent water logging and flooding.

1 More information on Healthy Cities initiative can be found at: http://www.who.int/healthy_settings/types/cities/en/

2 <http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network/what-is-a-healthy-city/healthy-city-checklist>

Urban Flooding

In 2015, the city of Chennai witnessed massive floods during the monsoons. Many other cities across India have also experienced flooding, unlike in the past. Such floods create havoc in everyday lives, leading to loss of life and property, cutting of essential supplies and services. Flooding of congested areas is a public health threat and may lead to rapid spread of infections. The urban poor, homeless and slum dwellers are the worst affected.

What are the key reason behind such urban flooding? While intensity of rains has increased owing to climate change, does urban planning also have a role to play in flood prevention? What can be done to prevent such floods? How can we plan for such extreme climate conditions, including excessive heat and cold, in the future?

Sustainable Development for Urban Health

Urban health issues are characterized by inequities, multiple vulnerabilities and poor access to resources by the marginalized. Working towards urban health requires action based on the principles of intersectoral coordination, equity, community involvement and sustainability. India currently has a growth rate of 1.2%, and is projected to be the world's most populous country by 2022. It is also projected that by 2040, 50% of the Indian population will be living in cities. While this is not a concern by itself, it poses challenges in terms for planning for adequate services for the future. We must create robust systems and processes, which ensure equitable access to all and which do not adversely impact the environment.

After the Millennium Development Goals, which were to be achieved by 2015, the United Nations announced the Sustainable Development Goals (SDG). There are 17 SDGs with 169 targets that all 191 UN Member States have agreed to work towards by the year 2030. These include: no poverty, zero hunger, good health and wellbeing, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace justice and strong institutions, partnerships for the goals.

Figure 6: Sustainable Development Goals



With the SDGs, for the first time ‘**Sustainable Cities and Communities**’ (Goal 11) has been declared as an international goal. Although all the 17 goals have a direct and indirect impact on health, Goal 3 directly aims for “Good Health and Wellbeing” for all. The specific targets for Goal 3 are as follows:

Figure 7: SDG 3 and its Targets

SDG 3: Ensure healthy lives and promote well-being for all at all ages		
Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, medicines and vaccines for all		
MDG unfinished and expanded agenda	New SDG 3 targets	SDG3 means of Implementation targets
3.1: Reduce maternal mortality	3.4: Reduce mortality from NCD and promote mental health	3.a: Strengthen implementation of framework convention on tobacco control
3.2: End preventable newborn and child deaths	3.5: Strengthen prevention and treatment of substance abuse	3.b: Provide access to medicines and vaccines for all, support R&D of vaccines and medicines for all
3.3: End the epidemics of HIV, TB, malaria and NTD and combat hepatitis, waterborne and other communicable diseases	3.6: Halve global deaths and injuries from road traffic accidents	3.c: Increase health financing and health workforce in developing countries
3.7: Ensure universal access to sexual and reproductive health-care services	3.9: Reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.d: Strengthen capacity for early warning, risk reduction and management of health risks

With increasing global urbanization, achievement of SDGs will not be possible without working towards urban health.

Key Learnings:

- ▶ With low access to basic amenities, employment, health, social security and high incidence of crime, cities are harsh living environments for the urban poor. These and many other social determinants of health render them vulnerable and susceptible to ill-health.
- ▶ Urban vulnerable groups face multiple barriers to seeking health care. Although medical facilities are available, expenditure on medical care is high often pushing them further down in poverty.
- ▶ Urban residents face triple burden of ill-health i.e., communicable, non-communicable diseases and injuries. However, NCDs are responsible for 56% deaths in urban areas.
- ▶ City administrations can develop ‘Sustainable cities and communities’, one of the 17 Sustainable Development Goals.
- ▶ Cities must encourage healthy behaviours and lifestyles by ensuring basic sanitation and hygiene, solid waste management, water management, proper transport and recreational spaces.

SECTION-2

THE NATIONAL URBAN HEALTH MISSION

LEARNING OBJECTIVES:

- ▶ *Background and genesis of NUHM with history of urban health services in India*
- ▶ *Comprehensive Primary Health Care as approach to NUHM*
- ▶ *Introduction to NUHM Components*

History of Urban Health in India

Historically, primary health care in the government health system in India has been limited to package of select services around maternal and child health and infectious diseases. This means that people with other ailments need to seek care in the private sector or at secondary or tertiary care facilities, leading to fragmentation of care, inefficiency in service delivery and high out of pocket expenditure. The private sector in urban areas is large and unregulated with significant variation in cost and quality of services. All these factors challenge the provision of primary health care in urban areas.

The issue of urban health has cropped up repeatedly since independence. It has almost consistently been acknowledged as an issue to be tackled in various programme documents and policies although little has been done to actually address the situation.

The need to address urban health needs was mentioned repeatedly in successive Five Year Plans. The National Health Policy of 2002 also acknowledged that the presence of public health services in urban areas is meagre and highly disorganized; 'Even the extent to which these services are available, they do not percolate to unplanned habitations, forcing people to avail of private health care through out-of-pocket expenditure' (Government of India, National Health Policy 2002). The policy recommended establishing of a structured primary healthcare system for urban areas. National Health Policy 2016 calls for stronger commitment and greater funding for urban health, specifically NUHM.

As the concept of family welfare became more comprehensive, the Ministry of Health and Family Welfare constituted a working group under the chairmanship of Shri S. V. Krishnan, to make recommendations to improve maternal and child health status in urban areas, where primary health care services were weak. The committee recommended establishment of 'Urban Health Posts' for 50,000 population, to be located in and around urban slums, with strong linkages with secondary and tertiary level facilities.

Under the World Bank supported India Population Projects (IPPs), urban health facilities in many metropolitan cities were established. 479 Urban Health Posts, 85 Maternity Homes and 244 sub-centres were created in Mumbai and Chennai, Delhi, Bengaluru, Hyderabad and Kolkata. Although the projects have been terminated, the infrastructure created continues to be utilized by municipal bodies and states for providing health services.

Under various schemes and projects, there was establishment of Urban Health Posts, Urban Maternity Centers, Urban Dispensaries, Urban Health and Family Welfare Centres. There was also the Urban RCH program under which outreach services were also provided. Various other initiatives for providing services to urban slums were also started by several NGOs and community based organizations, sometimes targeting a specific vulnerable group. Thus, though steps taken to respond to urban health needs were taken at state and central levels, they were scattered and sporadic.

Launched in 2013, the NUHM for the first time, is a country wide program that aims to establish a structured primary health care system in urban areas, like the one in rural areas.

2.1 Introduction to NUHM

The NUHM, as a sub-mission of the National Health Mission was approved in May 2013. The Mission aims for universal access to its services while maintaining a definite focus on the urban poor and vulnerable. It makes special efforts to make its services accessible by the urban marginalized population through its location, service delivery, outreach and making its service providers sensitive to the needs of its target population. The following section gives the conceptual approach and overview of the NUHM components.

Approach and Principles: Comprehensive Primary Health Care

Urban areas are becoming hubs of non-communicable diseases (diabetes, hypertension, cancers), infectious diseases (dengue, malaria, chikungunya, HIV), and mental health conditions arising from the stress and anxiety of the urban life. NUHM understands this “triple” burden of disease on the health system, and aims to respond to the three-pronged challenge through integrated planning and a strong focus on primary care. While planning the services of NUHM through the UPHC, certain principles of comprehensive primary health care have been adhered to. These are as follows:

- ▶ **Universal access:** No one shall be turned away or refused any health service.
- ▶ **Assured minimum package of services:** A defined minimum package of services shall be delivered to the population, as close to home as possible, to ensure universal access with quality.
- ▶ **Preventive and promotive care:** An increased focus on preventive and promotive care shall be given at the community level. There shall be enhanced focus on screening of non-communicable diseases, early identification of communicable diseases, early outbreak identification and management.
- ▶ **Gatekeeping:** NUHM shall reduce patient load at secondary and tertiary centers through effective gatekeeping by the community level workers and service provision at the urban primary health centre.
- ▶ **Outreach:** There shall be special efforts to identify, reach out to and address healthcare needs of urban marginalized populations.
- ▶ **Reduction in out of pocket expenditure:** With free drugs, diagnostics and consultation, the out of pocket expenditure shall be effectively reduced.
- ▶ **Integration:** Integration and collaboration with urban local bodies and other departments for addressing cross cutting issues of urban health.

Comprehensive Primary Health Care (CPHC) has an important role in the primary and secondary prevention of several disease conditions, including non-communicable diseases which today contribute to over 60% of the mortality in India. The provision of Comprehensive primary healthcare reduces morbidity, disability and mortality at much lower costs and significantly reduces the need for secondary and tertiary care. Estimates suggest that almost 52% of all conditions can be managed at the primary care level. CPHC entails services that:

- a. Can be delivered at the level of the household and outreach sites in the community by suitably trained frontline workers,
- b. Those that are delivered (by a team headed by a mid-level health provider), at the level of the Health Centre and,
- c. Offer referral support and continuity of care within the district health system in urban areas.

Package of Primary Health Care service (from 'Operational Guidelines on Prevention, Screening and Control of Common Non-Communicable Diseases', MoHFW)

- ▶ Care in pregnancy and child-birth
- ▶ Neonatal and infant health care services
- ▶ Childhood and adolescent health care services including immunization
- ▶ Family planning, Contraceptive services and Other Reproductive Health Care services
- ▶ Management of Common Communicable Diseases and General Out-patient care for acute simple illnesses and minor ailments
- ▶ Management of Communicable diseases: National Health Programmes
- ▶ Prevention, Screening and Management of Non-Communicable diseases
- ▶ Screening and Basic management of Mental health ailments
- ▶ Care for Common Ophthalmic and ENT problems
- ▶ Basic oral health care
- ▶ Geriatric and palliative health care services
- ▶ Trauma Care (that can be managed at this level) and Emergency Medical services

Over the past decade, maternal and child health and infectious diseases have been supported by the National Health Mission (NHM), through a continuum of care from the community to the first referral point. The health systems strengthening approach under the NHM, allows states to expand the existing selective primary health care package to Comprehensive Primary Health Care package. While the addition of packages would be undertaken incrementally, given the load of NCDs, the first package to be added to the services is population based NCD Screening. This has been discussed in a later section in detail.

However, provision of the above package of comprehensive services, provided through a process that adheres to the principles listed above, should be aimed for while planning for NUHM.

NUHM Coverage

NUHM is implemented in all cities with a population of over 50,000 and all District Headquarters, as per the 2011 census. This means that NUHM covers a population of around 30 crores across 1006 cities so far.

Implementing Bodies

The implementation of the NUHM is to be done jointly by the Health Department and Urban Local Bodies such as municipal corporations and municipalities. In large cities such as Mumbai, Bangalore and Chennai, the implementation shall be done by Municipal Corporations, and in smaller and non-metro cities, the implementation shall be done by the Health Department, but with close collaboration and help of the ULBs. The involvement of ULBs is very important for all types of cities and at all levels, because they are responsible for basic services such as water, sanitation, vector control and housing which directly impact health outcomes of the population.

Program Management

For the implementation of NRHM, State Program Management Units and District Program Management Units were created in all states and districts. For NUHM also, the same structures shall be utilized. NUHM does not aim to create a new and parallel structure of management and governance, although more staff shall be added to them for NUHM. It may vary in case of metro cities where implementation is through ULBs. Only cities where no prior comprehensive health system was in place, shall have new program management units, called as 'City Program Management Units', placed under the Urban Local Bodies.

Funding

The funding shall be provided to states and metro cities based on the Program Implementation Plan (PIP) submitted to MoHFW annually. The states shall transfer funds to ULBs based on the activities to be conducted by them, as per the PIP. Details on the flow of funds and funding mechanism are provided in Section 5 (under financial management of NUHM).

2.2 Key Components of NUHM

NUHM is designed to provide health services at the facility level, community level and at home. Thus the various service delivery platforms of NUHM are as follows:

1. Home visits by ASHAs and ANMs
2. Outreach services at community level by ANMs, MOs and specialists (for special outreach)
3. Services at Urban Primary Health Center
4. Services at Urban Community Health Center
5. Assured referral linkages
6. Effective intersectoral co-ordination

The key features of the NUHM include infra-structural components of the Urban Community Health Center, (UCHC) the Urban Primary Health Center (UPHC) and Health Kiosks, functionaries such as the ANMs, the urban ASHA and the Mahila Aarogya Samitis and a focus on structured outreach activities in the form of Urban Health & Nutrition Days (UHND) and Special Outreach camps. The National Urban Health Mission envisages the following services, health workers and community structures based on the population served:

Figure 8: Service Delivery Structure of NUHM

Population Served	Health Facility/Worker
2.5 lakh population (5 lakh for metros)	1UCHC (30-50 bedded in-patient facility)
50,000 population	1 UPHC (OPD facility)
10,000 population	1 ANM
1000-2500 population (200-500 households)	Community Health Volunteer (ASHA)
250-500 Population (50-100 household)	Mahila Aarogya Samiti

Thus, NUHM aims to provide services at four levels – Community/Household level, Outreach Level, UPHC Level and UCHC Level. A detailed list of services to be provided at each level is given in Annexure B.

The Urban Primary Health Center

In order to provide comprehensive primary healthcare services, the National Urban Health Mission aims to establish Urban Primary Healthcare Centers, not as a stand-alone health facility, but as a hub of preventive, promotive and basic curative healthcare for its catchment population. Within its catchment area, the UPHC is responsible for the primary health care and public health needs of the population. The package of services that the UPHC is expected to provide spans preventive, promotive, curative, rehabilitative and palliative care.

Unlike in the National Rural Health Mission, there are no sub centers envisaged under the NUHM plan as geographical distances in accessing health services are not as great as in rural areas. However, some states have established sub-center like facilities such as Health Kiosks (described later). Key characteristics of the UPHC include:

- a. **Population coverage:** Depending on the spatial distribution of the slum population, the population covered by a UPHC may vary from 30,000 to 50,000 for cities with sparse slum populations to 75,000 for highly concentrated slums.
- b. **Timings:** The hours of operation must enable the urban working population to conveniently access the UPHC. States may opt for any suitable timings, provided the UPHC provides 8 hours of service, which are convenient to the community. It is recommended that the UPHC operates preferably from 12 noon to 8 pm or in dual shifts (i.e. 8am to 12pm and 4pm to 8pm); Dual shift timing of UPHC should be flexible with the ability to be modified according to the convenience of vulnerable and marginalised communities.
- c. **Location:** The UPHC should be located in close proximity to slums e.g. about half a kilometre from a slum or slum-like habitation. If more than one slum exist in the catchment area, the slum with largest population could be considered as reference point for the location of UPHC.
- d. **Service Provision:** The UPHC's key responsibility is to provide comprehensive preventive, promotive and non-domiciliary curative care. Services provided by UPHC include:
 - ▶ OPD (consultation)
 - ▶ Basic lab diagnosis (Listed in Table 3)
 - ▶ Drug /contraceptive dispensing
 - ▶ Delivery of Reproductive and Child Health (RCH) services, preventive, promotive and where appropriate, curative aspects of communicable and non-communicable diseases
 - ▶ Minor surgical procedures
 - ▶ Counselling and Help Desk
 - ▶ Outreach
 - ▶ Population Based Screening
 - ▶ Referral Services

To strengthen the delivery of specialized OPD care, UPHCs can utilize the services of specialists on a weekly basis. As per the NUHM framework, the UPHC does not have provision for in-patient care. However, some states may include in-patient care, if it emerges as a need for the community.

- e. **Staff Structure:** There is a team of about 15 personnel at the UPHC and the staff structure is as follows:

Table 2: Staff Structure at UPHC

Cadre	Number at UPHC
Medical Officer in-charge	1
2nd Medical Officer (part time)	1
Lady Health Visitor (LHV)	1
Nurse	1
Lab Technician	1
Pharmacist	1
ANMs	3-5
Public Health Manager/ Mobilization Officer	1
Support Staff	3
Monitoring & Evaluation Unit	1

At the UPHC, every ANM will be responsible for a population of about 10,000. Since a UPHC covers an average 30,000-50,000 population, it will have 3-5 ANMs. Urban ASHAs and ANMs will be important links with the community.

Urban Community Health Center

Urban Health Community Centres are similar to the rural Community Health Center in its basic operationalization and functions. Under the NUHM, there is one UCHC envisaged for a population of 2.5 lakhs. Each UCHC shall have 4-5 UPHCs in its catchment area, for which it acts as a referral unit for curative services.

Urban ASHA

One urban ASHA for every 200-500 urban vulnerable households shall ensure delivery of services to vulnerable households through home visits and provide an essential link between the community and the UPHCs.

Mahila Aarogya Samiti

To enhance community participation, groups of community women called Mahila Arogya Samitis will be formed in slum and slum-like areas. These groups will conduct monthly meetings facilitated by the ASHA to discuss issues faced by the community, and mobilize action for resolving them. They will be given a fund of Rs. 5000 per year through accounts opened for each MAS group.

Health Kiosks

As the NUHM does not have a provision for sub-centers, some states have felt the need for an additional level of health facility such as Health Kiosks. This innovative approach can be considered depending on the availability of adequate funds and existing human resources. These are prefabricated structures that can facilitate ANMs in conducting outreach services. These can be set up where slums under a UPHC are distant, and it is not possible to create another UPHC, or where there is no adequate space within or near a slum to establish a UPHC. These may also be considered in unauthorized slums and/or in areas inhabited

by communities at high risk of adverse health outcomes, e.g. commercial sex workers, street children, rag pickers and migrants.

These health kiosks will act as the first point of contact between the community and the health system and will be attached to the nearest Urban PHC. The services provided at Health Kiosks could include:

- a. Immunization services
- b. Antenatal and postnatal care
- c. Family planning - counselling and contraception services
- d. Screening for Anaemia and other non- communicable diseases such as BP, blood sugar, cancers
- e. Treatment of acute simple illnesses
- f. Sputum and blood smear collection for detection of TB and Malaria
- g. Health promotion activities.

There are also community-based structures provided under schemes like Rajiv Awas Yojana (RAY) in slum habitations, which could be utilized for establishing Health Kiosks.

Key Messages:

- ▶ NUHM adheres to principles of comprehensive primary health care, and aims to provide a defined package of services as close to home as possible for vulnerable population
- ▶ There are multiple service platforms of NUHM – UPHC, UCHC, home and community (outreach)
- ▶ UPHCs aim to effectively gatekeep and reduce the burden at secondary and tertiary health services
- ▶ ASHAs and Mahila Aarogya Samitis are important components to enhance community participation and generate awareness around health issues

IMPLEMENTING NUHM

LEARNING OBJECTIVES:

- ▶ *Background and genesis of NUHM with history of urban health services in India*
- ▶ *Establishing Institutional Mechanisms: Understanding the administrative and institutional set up for the NUHM*
- ▶ *Urban Health Planning: Understanding the objectives, steps and outcomes of a collaborative urban health planning process*
- ▶ *Urban Mapping: Understanding the objectives, types and outcomes of urban mapping*
- ▶ *Operationalizing UPHCs and UCHCs: Understanding how UPHCs and UCHCs may be established and operationalized*
- ▶ *Linkages with Disease Control Programs: Understanding the services delivery of various national disease control programs under NUHM*
- ▶ *Organizing Outreach Services: Understanding organization of routine and special outreach services*
- ▶ *Organizing Referral Services: Understanding organization of assured and multidirectional referral services*
- ▶ *Intersectoral Convergence: Understanding the objective and process of intersectoral convergence*

This section shall elaborate on the essential processes to be carried out in order to effectively implement NUHM. The key features explained in the previous section need to be established through the processes outlined in this section.

The processes outlined above have been listed in the order in which they need to be implemented. Of course, some of the processes may be overlapping or carried out simultaneously.

3.1 Establishing Institutional Mechanisms

Historically, there have been largely three models or patterns of providing urban health services in India, as reported by the Technical Resource Group on NUHM, a committee constituted by the Ministry to provide strategic recommendations for NUHM in 2013. These are as follows:

1. Cities in which health care facilities are entirely provided by the state departments of health, with little involvement of the Urban Local Body (ULB).
2. Cities in which a minority of care provision is by health care facilities under ULB (and this role is usually receding) and curative care is largely provided by the state health department.
3. Cities in which the majority of health care facilities are under the urban local body which looks after medical and non-medical public health functions in an integrated manner. This is the pattern in most metropolitan cities such as - Mumbai, Kolkata, Chennai, Bangalore, Ahmedabad.

NUHM, as per the Framework of Implementation, may be implemented by the State Health Departments or the Urban Local Bodies. According to the Report of the Technical Resource Group on the NUHM, "The NUHM

design leaves these decisions to the state government, respecting the needs, capacity and will of the states for implementation of health services". At the same time, it advises that certain principles and parameters may be exercised:

- a. There should be no withdrawal or reduction in the current services being offered, even in a transient or temporary sense, from the people it serves.
- b. Mechanisms for convergence with non-medical services (water, sanitation, waste disposal) centred around the municipal health officer should be retained and strengthened.
- c. Where the population is over a million and a municipal corporation is in place, the preferred option be integration of health services under the urban local body, with coordination mechanisms for ensuring care in peri-urban areas and for handing over of rural services along with the human resources and the finances needed for the same. However, if the state government chooses to take over, the following para applies.
- d. That where the population is less than a million and the ULB is not effectively in charge then the state government takes over the health care provision- while the ULB retains the position of the municipal health officer for non-medical dimensions of public health.
- e. Where the state health departments are the main governance institution for health, they must ensure effective coordination with the ULBs and the continuation of all preventive and secondary care services.

The NUHM Framework states that "In the metropolitan cities and other cities where the State government decides to hand over the management of urban health system to municipal corporations, city level health society will be set up. In such cases, an MOU may be signed with the city corporation with clearly defined performance benchmarks".

Institutional mechanisms for NUHM rollout

Establishing of institutional mechanisms is the foundational step for initiating the roll-out of NUHM. These are key administrative steps that need to be undertaken to establish NUHM as a program and ensure smooth management of the program. Many States may have already conducted these steps at the State level. The key steps are as follows:

1. Expansion of State Health Society
2. Expansion of District Health Society
3. Appointment of Additional Mission Director for NUHM
4. Establishment of program management units at state, district & city level (SPMU, DPMU and CPMU)
5. Establishment of City Health Society
6. Convergence with Urban Local Bodies
7. Coordination with other urban stakeholders and partners

Details of institutional mechanism for establishing convergent actions have been detailed in the section on intersectoral convergence.

Legacy Management

In all cases, state governments must formulate a timeline for a plan for 'legacy management' on the absorption of existing health workforce and institutions such as link workers, health posts, dispensaries, MMUs and secondary hospitals into a formal NUHM framework, with no redundancy or duplication or loss of role clarity. Legacy management requires re-allocation of job descriptions with appropriate training and supervisory and support

changes. Legacy management shall also apply to a plethora of urban health projects (mostly externally funded) in a number of states that have varying patterns of existing service delivery models as well as healthworker cadres.

3.2 City Mapping and Vulnerability Assessment

After establishing appropriate institutional mechanisms, the second step towards implementing NUHM is to understand the health needs of the vulnerable population. The process of mapping must make the vulnerable visible to the health care system, and capture their problems in access, and their health care needs. Mapping is not only the geo-spatial distribution of populations and physical structures, but also the social relationships and issues of access to health care.

The **specific objectives** of City Mapping and Vulnerability Assessment are as follows:

- ▶ To identify and map different categories of vulnerable groups (slums, mobile population) vis-à-vis services, infrastructure and environmental issues
- ▶ To understand health issues, health needs and health seeking behaviour of vulnerable groups
- ▶ To understand the barriers faced by the poor and marginalized in accessing services
- ▶ To locate existing healthcare services, understand the accessibility and their responsiveness to local needs of vulnerable populations

Types of Mapping

There are various types of mapping that are being conducted by the states. These include slum mapping, facility mapping, city mapping and vulnerability mapping. While all these may contribute to understanding of vulnerability, states must plan their mapping in such a way that they get the desired information in a holistic way. Many states are also using the GIS technology to create digital maps. It is recommended however, that the following mapping be carried out:

1. City mapping through GIS mapping
2. UPHC Catchment area mapping
3. Vulnerability Assessment

It is essential to note that 'Mapping and Vulnerability Assessment' is not to be seen as one time activity. Cities will need to revisit the exercise on a periodic basis so as to revise the existing plans. This may not be as extensive and can be done in a sampled way as an annual exercise which can be linked to the annual planning and budgeting process.

1. City Mapping

This is a geographic mapping of the city specifically capturing spatial information relevant to urban health (detailed in later section). The objective is to get an accurate map of the city with all geographic information relevant to urban health. These include knowledge of all health facilities (public and private), their catchment areas, slums with population, anganwadi centers, educational institutions (public and private), municipal and ward boundaries, major road networks, major landmarks, agriculture land, and major water bodies.

City Mapping will help the urban health team in understanding the location of slums in relation to health facilities, the spread and distribution of urban slums and vulnerable pockets and the geography of the city. This will help in:

- ▶ Rationalizing the location of health facilities (UPHCs and health kiosks in particular)
- ▶ Ensuring that vulnerable populations are provided adequate services

States may conduct city mapping either through GIS or through a manual consultative process. GIS mapping of cities is recommended, and may be undertaken through government departments specializing in remote sensing and spatial mapping or by outsourcing to private agencies. Alternatively, states may conduct the mapping exercise manually, by obtaining a current map from the city administration (Urban Development Department, Municipal Affairs Department) and updating it through physical verification. For physically verifying, the city may be divided into zones or clusters, and a mapping team assigned to each cluster. This team shall update the map for their zone through discussions with key informants and field visits.

The city map must essentially depict the following elements:

- ▶ Location of slums, slum-like habitations and vulnerable pockets with population: Spread and distribution of slum settlements (location of settlements of notified, un-notified, mobile population/migrants, etc.)
- ▶ Health facilities of all types (primary, secondary and tertiary, public, private, charitable), with their catchment areas, if demarcated
- ▶ Anganwadi centers
- ▶ Administrative boundaries (administrative divisions such as zones, municipal ward boundaries, government land, private land, etc.)
- ▶ Environmental features (agriculture land, water bodies, natural drains, landfill sites, low lying areas)
- ▶ Physical infrastructure (major road networks, major landmarks, factories)

In addition, it is desirable, though not essential to depict the following elements also:

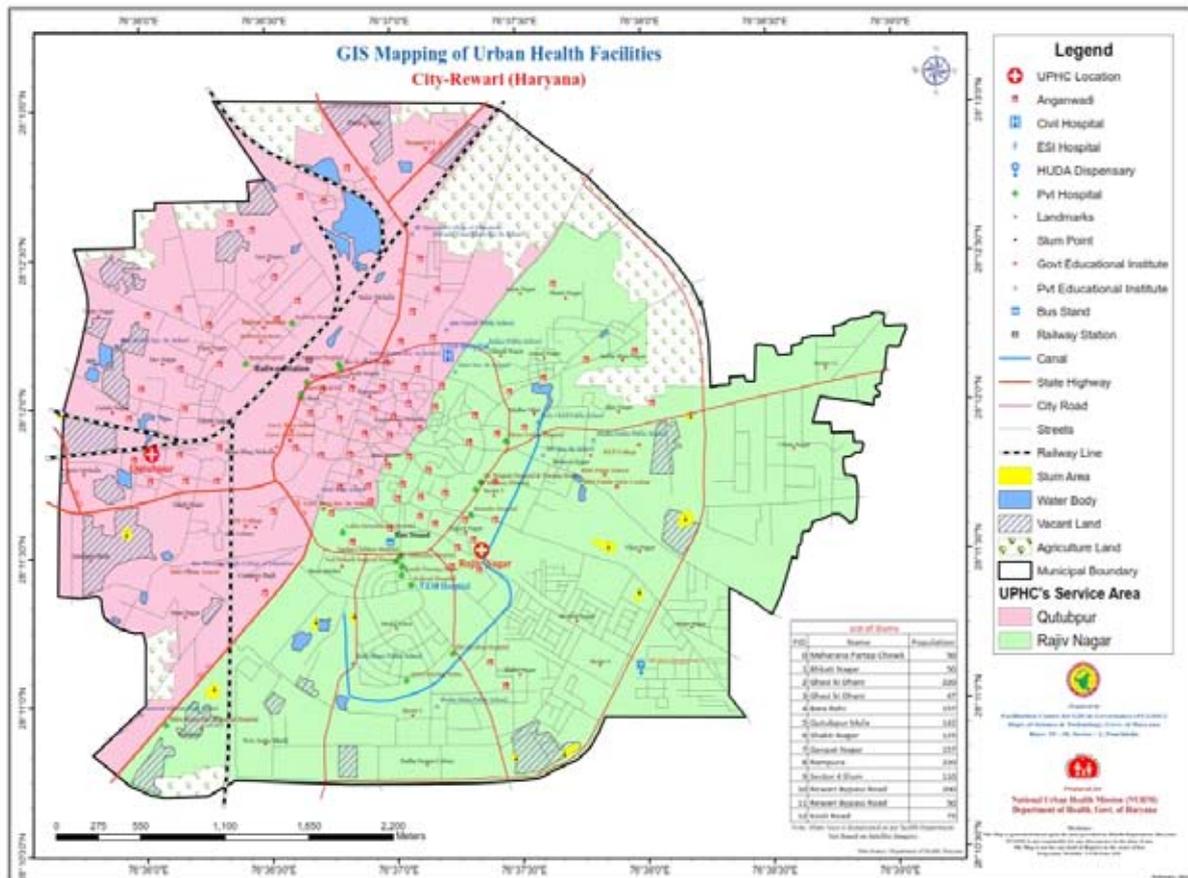
- ▶ Community infrastructure developed under urban development programs such as Rajiv Awas Yojana, Jawaharlal Nehru National Urban Rejuvenation Mission etc.
- ▶ Educational institutions (public and private)
- ▶ Other services (orphanages, old age homes, night shelters, de-addiction centers etc.)

The following elements shall emerge from a well conducted mapping exercise:

- ▶ List of all public health facilities in urban areas
- ▶ List of UPHCs with catchment areas
- ▶ List of major private health facilities
- ▶ List of slums with population numbers
- ▶ List of anganwadi centres in the slum areas
- ▶ List of government and private educational institutes
- ▶ Municipal and ward boundaries
- ▶ Major road networks
- ▶ Major landmarks
- ▶ Agricultural land
- ▶ Incorporation of available major water bodies

This mapping exercise maybe outsourced, conducted by a government IT department or spatial mapping agency.

Figure 9: Sample GIS Map of Rewari city (Haryana)



2. UPHC Catchment Area Mapping

The catchment area of the UPHC should be depicted on a map, which may be prepared by the Public Health Manager in consultation with the MO and the ANMs. The map should depict the areas of each ANM, slum locations, and other major landmarks of the area.

The UPHC map will enhance the understanding of the population served among the UPHC staff. It will also ensure that no pockets in the UPHC's catchment area are left out from the purview of the UPHC team. The process of map preparation may be a community led activity, in which MAS members can also be involved. Participation from the community will also generate awareness about the UPHC, its location and services among the community.

3. Vulnerability Assessment

The Vulnerability Assessment in the context of NUHM means assessing the level of vulnerability of a slum or household towards ill-health. The question it should answer is: *What factors put a household at a greater risk of falling sick?*

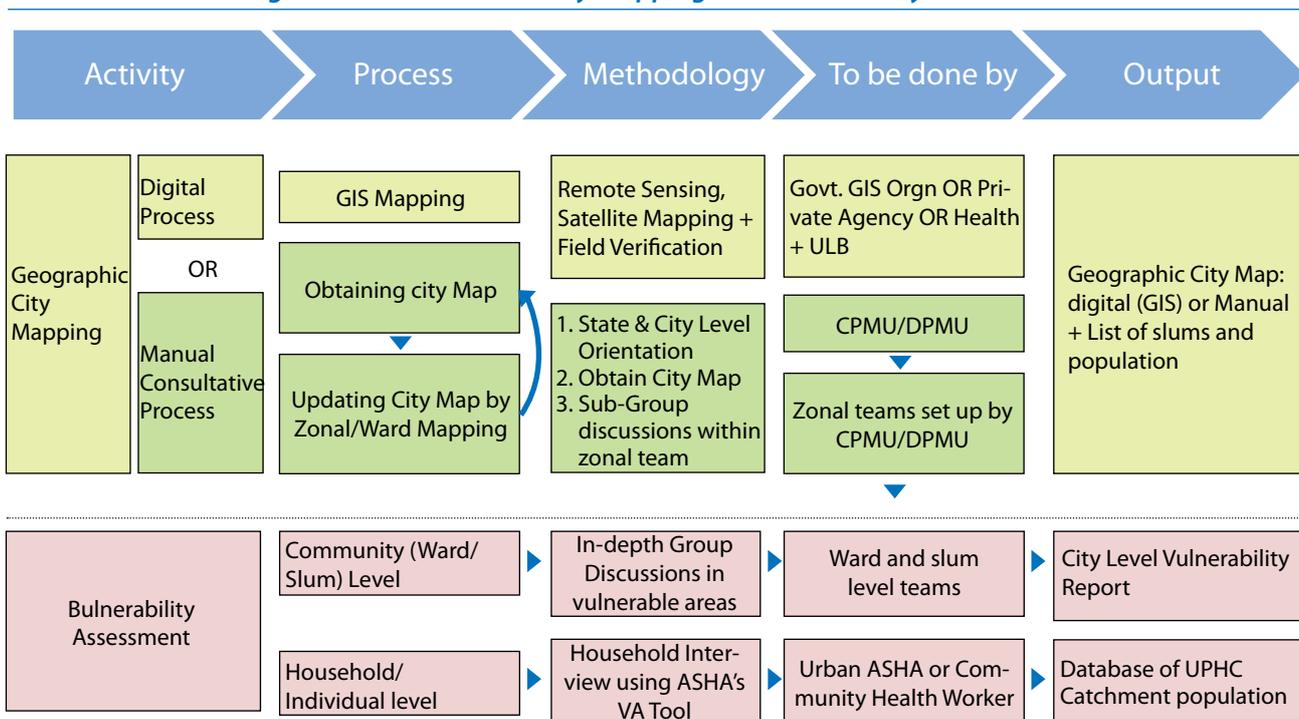
It has been well established that various vulnerable groups may face disproportionate burdens of ill-health. Vulnerability is commonly associated with poor economic and nutritional status, but many other overlapping social vectors such as quality of housing and public services, occupation, gender, disability, marital status, age, stigmatized and debilitating ailments and many other aspects are not recognized.

This is a qualitative assessment of the vulnerability status of wards, slums and slum households in the city, to understand the vulnerability status of a particular slum and each household in the slum. This process will be conducted at two levels, namely, Slum level Vulnerability Assessment and Household Vulnerability Assessment:

1. **Slum or ward level Vulnerability Assessment:** Teams (comprising ASHA, ANM, PHM, RKS members, ULB members) for each city zone (ward or UPHC catchment area, or cluster) need to be identified to undertake slum level group discussions as per a defined tool.
2. **Household level Vulnerability Assessment:** States may decide whether to undertake survey of the entire urban population or of the urban slum and vulnerable population only. However, as part of the UPHC’s mandate, the UPHC staff must visit each house for a survey to register the family and provide them with a health card. The exercise can be merged with the Vulnerability Assessment process and a common demographic and vulnerability survey may be conducted by the UPHC team. Urban ASHAs may also be additionally incentivized to conduct the survey.

More details on Vulnerability Assessment Process can be found in “Guidelines and Tools for Vulnerability Mapping and Assessment for Urban Health, MoHFW, 2017”

Figure 10: Flowchart for City Mapping and Vulnerability Assessment



Learning outcomes:

- ▶ Vulnerability Mapping and Assessment in urban health means understanding the locations of various vulnerable communities as well as their health needs and health seeking behaviour.
- ▶ While spatial mapping may be done through GIS or a manual process, vulnerability assessment should be done by community health workers, using specially designed formats at the household or at the slum level.
- ▶ In addition, each UPHC should map out their catchment area and clearly define the households of each ANM and ASHA.
- ▶ Mapping will ensure that we do not miss any vulnerable household and provide services that respond to their specific needs.

3.3 Urban Health Planning

The key question guiding the planning process should be: How can we plan our services to improve the health status of the urban population?

The objectives of urban health planning are:

1. Strengthening of primary health facilities
2. Ensuring access to primary health services through outreach, awareness, and efficient ASHAs and ANMs
3. Addressing specific urban health issue of the city such as Malaria, Heat stroke, road safety, air pollution, water quality
4. Identification and strengthening of multi-directional referral linkages
5. Prevention of ill health

Integrated City Health Planning

Cities are advised to develop an integrated urban health plan covering the above issues, and ensuring that stakeholders from various departments are involved in the planning process. This will also help minimize overlap between NRHM and NUHM implementation. The key to comprehensive planning is good convergence and coordination between all stakeholders. This is further elaborated in the section on convergence.

Most of the planned activities would already be covered either under NUHM or under routine activities of other departments. The planning exercise will only ensure that the various activities by health, ULBs and other departments are being done in a coordinated and systematic manner. The process of planning shall flow from bottom to top, and shall include the following steps:

1. Situational Analysis of health and social determinants
 - a. Number and distribution of the urban population, poor and vulnerable groups
 - b. Assessment of health profile (numbers facing specific health conditions) and health outcomes (IMR, MMR and other important indicators) of the population
 - c. Assessment of the health services available (distribution, access, health personnel per population)
 - d. Assessment of the water supply
 - e. Assessment of the sanitation and waste disposal system
 - f. Assessment of other state specific issues
2. Analysis of specific gaps emerging from above assessment
3. Assessment of resources available (institutions, partners and experts, funding, other resources)
4. Plan for establishing necessary services, processes and other mechanism, including preparation of a time bound plan, with strict timelines and officers responsible to achieve the deliverables.

The above assessments may be done through secondary data, if available with the state under schemes of other departments or with the ULB. If not, the state may have to collect primary data. The data from vulnerability assessment activities may also be utilized for this. The assessments should be done by community level staff (ASHAs, ANMs, and other community workers from other departments, if possible), and should be compiled at the ward level, zonal, city and state levels. This would ensure a participatory approach to planning. The expectations of the community may also be understood through this process.

Case Example 1: Urban Mapping and Planning by Ahmedabad Municipal Corporation

The total population of Ahmedabad is more than 60 lakhs, out of which 34 lakh slum residents are served by the NUHM's UPHCs. Serving so many people requires a careful mapping process. Ahmedabad Municipal Corporation followed a systematic and comprehensive process of mapping urban health needs, followed by service delivery planning. The process was as follows:

Area Demarcation of UPHC: First of all, catchment areas of all UPHCs were clearly demarcated. A variety of resources were used to create maps of catchment areas; the estate department map, the election map and the Polio Program map were used to ensure that all the societies, *chawls*, peri-urban areas and factory area were included. Although each UPHC is supposed to cater to its the entire catchment population, ASHAs are dedicated to slum and slum-like areas. So, each UPHC is divided into service area (which include slum and slum-like populations) and non-service area populations (Non-slum/elite population) to improve targeted service delivery.

Family Health Survey: An extensive Family Health Survey was done by MPHWs, ANMs and ASHAs covering every household in the service area. Basic information regarding the population profile, health status and care seeking was collected, including details about reproductive and child health, common diseases incidence and maternal and infant mortality were gathered in the register.

GIS mapping: All the UPHCs and other health facilities including anganwadis, government primary schools were plotted in the GIS. Slums and slum-like areas (around 4200 *chawls*) were also plotted with dots sized according to the slum population (with bigger dots for larger populations). Using disease incidence data, high risk areas for water-borne and vector-borne diseases were also plotted.

Proximity Analysis: Then a proximity analysis was conducted, looking at a 1 km radius of all UPHCs to identify any slums that were not captured in the UPHCs service area. Moreover, the analysis helped identify locations where new UPHC should be constructed, to ensure full service coverage.

Health Service Delivery: Once the baseline data were prepared, human resources (MPHWs, ANMs, ASHAs) were rationalized and population distribution was done for ANMs (each allocated 10,000 to 12,000 residents) and ASHAs (each allocated 2000 slum residents). Mamta Day, outreach sessions and UHND planning was done according to the mapping data, with service delivery coordinated between AWWs and the UPHCs. Nearby anganwadis were tagged with Mamta Day services to improve the service delivery. As a result, anganwadi workers are also actively involved in social mobilization of beneficiaries during session.

Utilizing Mapping and Vulnerability Assessment for Better Planning

How shall the findings of the mapping and vulnerability assessment be utilized for better planning of health services? City mapping, UPHC area mapping and vulnerability assessment can provide very rich and in-depth information on the location, type and extent of health needs of the population. It is then important to utilize that information to plan and deliver the necessary services to the population through the most appropriate platform. The mapping processes act as a guide on the following points:

- 1. Site Planning for new UPHCs:** The uncovered and the left-out pockets of the vulnerable populations may be the priority for locating new UPHCs sanctioned under NUHM. Alternatively, such pockets may need Mobile Medical Units - MMU (like PHC on wheels), till the time a new UPHC comes up. Also, existing facilities which have many vulnerable pockets may need additional human resource and supplies of drugs and vaccines.

2. **Urban Health and Nutrition Days (UHND):** A detailed assessment would help prepare an effective micro-plan for UHND with fixed site and personnel such as ASHA, ANM, Anganwadi worker in the city.
3. **Special Outreach sessions:** Data on characteristics of vulnerability and the health needs of vulnerable groups would facilitate in better planning of Special outreach service. Such sessions, organized in existing community structures or make-shift kiosks would enable systematized delivery of opportunistic health care services as per the migration cycles, seasonality of health risks and other key factors typical to the vulnerable groups.
4. **Community Process:** The mapping exercise will assist in robustly defining the catchment area and households for the ASHA and also build her capacity for delivering services as per the needs of the vulnerable groups under her coverage. The formation of Mahila Aarogya Samitis per 50-100 households is also facilitated by mapping of all households in the slum.
5. **Public Private Partnerships:** Areas of service delivery emerging from the assessment process shall make it clear whether there is any need for support from the private sector. In case the ULB or state administration requires support in any area such as MAS formation, referral transport and recruitments, the state may request for proposal from the private sector with the specific deliverable. An assessment of available resources and stakeholders shall also indicate which partners would be the best for a particular activity. Therefore, health service delivery could be strengthened by establishing effective linkages with the private sector, for provision of services not available at the UPHC.
6. **Convergence:** Vulnerability assessments will guide the Health Department on all the stakeholders they need to reach out to in order to address the various health issues identified such as water, sanitation, urban development, roads, transport and police. Vulnerable pockets reporting health issues related to drinking water, drainage, sanitation and solid wastes, may be taken up with the ULB for more focused preventive actions.
7. **Surveillance, Monitoring and Evaluation:** The vulnerable pockets with a history of frequent outbreaks of diseases (like hepatitis, gastroenteritis, dengue) may necessitate identification and notification of field health functionaries (for reporting on Form-S) and laboratories (for reporting on Form-L) under IDSP. Mapping shall guide managers on which specific areas to focus on for surveillance.
8. **Referral Transport Network:** The City Mapping and Vulnerability Assessment shall provide an in-depth understanding of the location of available services vis-à-vis the location of vulnerable pockets. This will help the health officials in planning towards a robust referral network, connecting the supply with the demand. Based on population estimates and health burdens, the adequate number of vehicles, their location, human resources and best mechanism for coordinating referral chain can be planned better.

Outcomes of the Planning Process

After the planning activities have been completed, the expected outcomes are as follows:

- ▶ The entire urban population (covered under NUHM) is included under UPHC catchment areas.
- ▶ All identified slum, slum-like areas and vulnerable pockets have an urban ASHA assigned. AHSAs and ANMs are aware of their assigned households.
- ▶ Health services are delivered as per population needs through appropriate platforms.

- ▶ The administrative divisions of the city (wards, zone, cluster) coincide with the UPHC catchment area boundaries as much as possible.
- ▶ The patient load at the secondary and tertiary health facilities is effectively reduced by strengthening primary health care facilities.
- ▶ Coordination committees must be constituted at the state level, city level and sub-city level and UPHC level.
- ▶ Measures are implemented to create healthy cities ie, cities which encourage healthy behaviours such as walking, cycling, effectively process waste, reduce pollution and have open spaces for outdoor activities with safe environment.

Learning Outcome:

- ▶ In order to plan urban health services, we need to first conduct a comprehensive situational assessment. The assessment should be done not just for health services, but also for various determinants of health such as water, sanitation and waste management systems.
- ▶ For such a cross cutting assessment and planning exercise, various stakeholders need to be involved.
- ▶ The assessment should be followed by identification of areas of focus for the planning period. Accordingly, key activities need to be decided, with consensus of all stakeholders.
- ▶ The focus must be on appropriate health service delivery, and creation of a healthy and safe city for all.

3.4 Operationalizing UPHCs and UCHCs

After the mapping and planning exercise, the actual implementation of the Mission begins with the operationalization of the UPHCs and UCHCs. The number and locations of the facilities and services offered will emerge from the urban health planning exercise. This section elaborates on the various aspects to be considered while operationalizing services at NUHM facilities.

Location of the UPHC

UPHC should be located as close to the slum area as possible, and preferably be inside the slum or slum-like habitation it aims to cater to. Many a time, one UPHC will aim to serve the population from multiple slums in various locations. Then it should be so located that maximum beneficiaries can access it conveniently.

Finding land in such locations is not easy. Slum and slum-like areas by definition are overcrowded and congested with a perpetual space constraint. The Urban Local Bodies can play a major role in facilitating procurement of land. While in the short term, facilities may be operationalized in rented facilities, in the long term they must be in a government owned building.

Constitution of Rogi Kalyan Samitis

All facilities should have a Registered Patient Welfare Committee or Rogi Kalyan Samiti (or any other state specific name). Guidelines for RKS defining the constitution, functioning, roles and responsibilities have been formulated and released by the Ministry of Health. The Samiti is responsible for expenditure of the untied funds received by the facilities.

Minimum services to be provided

The UPHC shall be the epicentre from which the core primary healthcare team operates and manages outreach sessions, special camps, home visits, oversees community mobilization through MAS, coordinates referrals and provides care at the facility. The package of services that the UPHC is expected to provide spans preventive, promotive, curative, rehabilitative and palliative care.

Thus, under NUHM the UPHC shall be the focal point for integration of all the national health programmes to provide services which will include OPD (consultation), basic lab diagnosis, drug and contraceptive dispensing, apart from distribution of health education material and counselling for all communicable and non-communicable diseases.

To further strengthen service delivery, cities can also engage specialist doctors to provide services periodically at UPHC. UPHCs can also serve as collection centre for diagnostic tests in partnership with empanelled private diagnostic centres. The essential health services to be provided at UPHC Level are given in Table 4 (**a detailed list of services to be provided at community, household, UPHC and UCHC level is attached as annexe B**).

Suggested Diagnostic Services

The diagnostic services to be provided at the UPHC level are as depicted in table 3, below.

Table 3: Diagnostic Services available at the UPHC

Activities	Name of Diagnostic Tests
Clinical Pathology	<ul style="list-style-type: none"> ▶ Haemoglobin Estimation (Hb) ▶ Total Leukocyte Count (TLC) ▶ Differential Leukocyte Count (DLC) ▶ Platelet count ▶ MP (Slide Method) ▶ ESR ▶ Clotting Time (CT)/Bleeding Time ▶ Blood Group (ABO-RH typing)
Biochemistry	<ul style="list-style-type: none"> ▶ Blood sugar ▶ Serum Bilirubin ▶ Lipid Profile (Blood Cholesterol)
Sero Microbiology	<ul style="list-style-type: none"> ▶ Rapid Plasma Reagin (RPR) Kit Test ▶ HIV Test(ELISA Kit) ▶ Sputum for AFB ▶ Dengue (Rapid test) ▶ Malaria (Rapid test) ▶ Typhoid (Widal Test/Typhi dot test) ▶ Hepatitis (HBsAg Test)
Urine Analysis	<ul style="list-style-type: none"> ▶ Urine Sugar / Albumin/Leucoyte Esterase ▶ Urine Pregnancy test (UPT)
Stool Analysis	<ul style="list-style-type: none"> ▶ Stool for OVA and cyst ▶ Water Quality Testing-H2S Strip test for Faecal Contamination ▶ Estimation of chlorine level of water using ortho-toludine reagent

Identification of catchment area

As explained under UPHC mapping, the catchment area of the UPHC should be depicted on a map, which may be prepared by the Public Health Manager in consultation with the MO and the ANMs. The map should depict the areas of each ANM, slum locations, and other major landmarks of the area. The MOIC should obtain a broad written mandate from the Nodal Officer in the Municipal Corporation / Chief Medical and Health Officer (CMHO) of the district, regarding the area to be covered. The entire UPHC staff should be clear regarding the extent of their catchment population which will be roughly 50,000 (or between 30,000 to 70,000).

The population should be divided equally between all ANMs such that an ANM gets allocated roughly 10,000 population. All slum and slum-like habitations must be covered by an Urban ASHA, under the supervision of an ANM.

Registration of Households

In the beginning, over a period of three months, each household to be catered to by the UPHC should be visited by the ASHA or ANM along with other UPHC staff to register the population covered by the UPHC. The process must start from the slum areas and vulnerable pockets and then extend to the entire urban population. Areas not covered by ASHAs (non-slum areas) may be visited by the ANM of that area.

The information collected should capture basic demographic data: name of each member, age, sex, relationship with head of household, occupation and current need and access to primary healthcare services, number of under-five children, immunisation status, pregnant women with ANC history, eligible couples, and it would also include vulnerability category. The survey would also include information related to vulnerable individual's risk factors and chronic illnesses. The data base would include listing the migratory or homeless population based on the *Vulnerability Assessment Guidelines*. This could be done in a paper format or in an electronic format. It may also be updated periodically as per requirement.

After the assessment, each family member should be given a **health card, placed in a Family Folder** for future reference and follow ups.

From the data base that is created, separate lists of eligible couples, pregnant women, infants, children aged one to four, elderly, and those with different specific chronic illness should be prepared. All services as applicable to each of these should be appropriately provided.

Timings

- ▶ The UPHC must be operational for 8 hours every day.
- ▶ Each UPHC must have morning and evening OPD. The timings should be decided as per the needs of the community, ensuring that timings make it convenient for the community to access the facility. OPD timings may vary as per state norms.
- ▶ The laboratory timings must match the OPD timings. The timings should cause as little inconvenience to the patients as possible. Care may be taken that Patients donot have to make repeat visits for tests, collection of reports and post-test consultation.

3.5 Linking Disease Control Programs to NUHM

As per the Framework, NUHM would aim to provide a system for convergence of all communicable and non-communicable diseases programmes including HIV/AIDS. The mission would bring all the disease control programs listed below, under one umbrella:

- ▶ National Vector Borne Disease Control Programme (NVBDCP)
- ▶ Revised National Tuberculosis Control Programme (RNTCP)
- ▶ Integrated Disease Surveillance Project (IDSP)
- ▶ National Leprosy Elimination Programme (NLEP)
- ▶ National Mental Health Programme (NMHP)
- ▶ National Deafness Control Programme (NDCP)
- ▶ National Tobacco Control Programme (NTCP)
- ▶ and other Communicable and Non-communicable diseases such as NPCDCS

This helps in providing an effective urban health platform for the urban poor at all levels. Since the challenges in urban areas are very different as compared to those of rural areas, the Mission will specifically address the peculiarities of urban health needs, with a focus on non-communicable diseases (NCDs) which forms a major proportion of the urban burden of disease.

The main objective would be to enhance utilization of the system through the provision of a common platform and availability of all services at one point and through mechanisms of referrals. The Mission would focus on integrated planning - both annual and prospective, sharing of funds and human resources and joint monitoring and evaluation at city, state, district levels for all communicable and non-communicable disease programmes.

The NRHM has developed a transparent mechanism for appraisal of State Programme Implementation Plan (SPIPs) and subsequent release of funds. The NUHM will also follow norms as has been developed under NRHM for programme appraisal and fund release. Each City would develop a City PIP(*), which would be consolidated at the state level as State Programme Implementation Plan (SPIP) incorporating additionalities at the state level.

The CPIP would be a reflection of the comprehensive resources available to the city under the various ongoing national health, state and ULB programmes alongside other sources of funds including State Health Systems projects, State Partnership Projects, Finance Commission awards, projects funded through global funds and partnerships in the health sector and projects being (or proposed to be) funded outside the state budget as an illustrative but not an exhaustive list. Clear delineation of funds allocated under RCH, NRHM Flexipool, RNTCP, NVBDCP, IDD, NLEP, NMHP, NPCB, NACP, UFWC, UHP etc. would have to be enunciated in the PIP. The city or state PIP would also clearly articulate the funds required for the urban component of the various National programmes and the funds would be released by the Programme Divisions. The NUHM similar to the NRHM would also try to provide a platform for integrating all the programmes for urban areas as is being done under the NRHM. Till the time this process is put in place and institutionalized the fund flow mechanism under the NRHM would be adopted.

Note (*)-Seven mega cities namely Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad and Ahmedabad

Table 4: Services under various Disease Control Programs

Sl.No	Services Areas	Services to be provided	Programme Covered
1.	Maternal Health	ANC, PNC, initial management of complicated delivery cases and referral, management of regular maternal health conditions, referral of complicated cases	Reproductive Child Health Programme
2.	Child health and Nutrition	Diagnosis and treatment of childhood illnesses, referral of acute cases/ chronic illness Identification and referral of neonatal sickness	
3.	Family Planning	Distribution of OCP/CC, IUD insertion, referral for sterilization, management of contraceptive related complications	
4.	RTI/STI (including HIV AIDS)	Symptomatic Diagnosis and primary treatment and referral of complicated cases	
5.	Nutrition deficiency disorders	Height/weight measurement, Hb testing, distribution of therapeutic doses of IFA, promotion of iodized salt, nutrition supplements to identified children and pregnant/ lactating women. Diagnosis and treatment of seriously deficient patients, referral of acute deficiency cases	
6.	Vectorborne Diseases	Slide collection, testing using RDKs, DDT Counselling for practices for vector control and protection, Diagnosis and treatment, referral of terminally ill cases	National Vector Borne Diseases Control Programme
7.	Mental Health	Initial screening and referral	National Mental Health Programme
8.	Oral Health	Initial screening, Diagnosis and referral	National Oral Health Programme
9.	Chest infections (TB/Asthma)	Symptomatic search and referral, ensuring adherence to DOTs, other treatment, Diagnosis and treatment, referral of complicated cases	Revised National Tuberculosis Control Programme
10.	Cardiovascular Diseases	BP measurement, symptomatic search and referral, follow-up of under treatment patients, Diagnosis and treatment and referral during specialist visits,	National Programme for Prevention and Control of Diabetes, Cancer, Cardiovascular diseases and Stroke.
11.	Diabetes	Blood/urine sugar test (using disposable kit), Diagnosis and treatment, referral of complicated cases	
12.	Cancer	Identification and referral, follow-up of under-treatment patients	
13.	Trauma care (burns and injuries)	First aid, emergency resuscitation, documentation for MLC (if applicable) and referral	
14.	Other surgical interventions	Identification and referral	
Other support services			
15.	IEC/BCC	Distribution of health education material	All Programmes
16.	Counseling	Patient/attendant counseling	All Programmes

Beside the above, there are other national health programmes such as the National Programme For the Control of Blindness (NPCB), National Programme for Healthcare of the Elderly (NPHCE) and the National Iron Deficiency Disorders Control Program (NIDDCP) whose services can also be provided at the UPHC Level.

3.6 Organizing Outreach services

Outreach is a critical component of primary health care. A strong outreach program is critical to connect with the most marginalized and vulnerable populations. It serves to expand the reach and coverage of health services to the urban poor population living in listed and unlisted slums and other vulnerable groups such as the homeless, rag pickers, street children, migrants, men and women suffering from physical violence, discrimination and exploitation. Community based outreach sessions in the slums are the first step in the continuum of care linking primary to secondary and tertiary care services. Operational guidelines for conducting outreach camps under NUHM have been prepared. The ANM should refer to these guidelines for smooth conduct of these activities. As per the guidelines, two types of Outreach services are envisaged under the NUHM:

I. Outreach through Urban Health and Nutrition Days (UHND)

The UHND is a platform for people to access services for a package of preventive, promotive and basic curative care. It is held at the Anganwadi Centre (AWC) or a suitable community space where these services can be provided on a regular basis. ASHA and MAS members are responsible for mobilizing the community to the UHND which is intended as a convergence platform for services to be provided by the ANM and the Anganwadi Worker (AWW). The UHND is also an occasion for health promotion on a number of key health related issues.

Organizing a UHND:

Organizing a UHND is based on the spread and distribution of the catchment area of each Urban PHC and on the health seeking behaviour of its population. In order to minimize barriers to geographic access, the UHND should be organized in areas which are distant from the Urban PHC or other primary care facilities provided by the government. Its timings should be flexible and take in to account the occupation of its inhabitants, especially being sensitive towards daily wage earners. The space for the UHND is to be facilitated by the Urban PHC/City Health Society/Urban Local body. If more than one AWC exists in the catchment area of the ANM, the feasibility of merging UHND sessions for two or more AWCs should be explored while ensuring that there is minimum inconvenience to the community. If this option is not feasible, then a rotational plan should be introduced covering one AWC at a time on a pre-agreed fixed day basis. In such cases two days in a week may be chosen for organizing UHNDS. The roles of the different UPHC staff in relation to UHNDS is outlined in Table 5, below.

Table 5: Roles and Responsibilities for UHNDS

UPHC Staff	Role
MO-IC	<ul style="list-style-type: none"> The MO/IC of the Urban PHC is responsible for ensuring the development of an annual calendar for the UHND in their catchment area, and reviewing the coverage and quality of UHND services and ensuring the timely submission of monthly and quarterly reports by the ANM.
ANM	<ul style="list-style-type: none"> It will be the responsibility of the ANM to provide services to UHND clients, including pregnant women, new-born and sick children, adolescents and eligible couples and a basic level of curative care for minor illness/injury - with appropriate referral where needed. Screening: For screening and management of chronic diseases particularly common cancers, diabetes and hypertension, the ANM will undertake screening, including blood pressure and blood glucose measurement. Those with abnormal findings will be referred to the appropriate facility for confirmation and initiation of treatment plans. The UHND can also be used for the follow-up management of these patients.
ASHA	<ul style="list-style-type: none"> The ASHA with the support of the MAS will prepare a list of people requiring services at the UHND and make a special effort to include marginalized individuals and families such as new migrants and the homeless and those living in distant areas. She will also inform the community and the MAS members about the date and timing of the UHND to ensure improved coverage and access.
MAS	<ul style="list-style-type: none"> Along with ASHA, MAS members shall disseminate information and mobilize the population from local community to attend outreach sessions.

II. Special Outreach sessions

Special outreach sessions are designed for hard-to-reach groups and communities. These sessions are in addition to the routine outreach services provided through the UHND. Special outreach sessions could focus on specialized services such as chronic diseases screening, detection of developmental delays, childhood disability, geriatric care and dental services. Though the special outreach sessions are not designed to provide routine RCH services, these sessions/camps should not miss the opportunity to provide these routine services to the needy.

Organizing a Special Outreach Session

Special Outreach sessions may involve provision of services by specialists (including gynecologists, dermatologists, ophthalmologists, ENT surgeons, orthopaedic surgeons, psychiatrists and dentists) and other health professionals such as nurses, laboratory technicians, physiotherapists, occupational therapists, optometrists, clinical psychologists, medical social workers and pharmacists.

1. ASHAs and MAS, facilitated by the ANM have a key role in mapping their populations, to identify vulnerable subgroups and understand their health needs.
2. Based on the needs identified, the UPHC will plan services to be provided through Special Outreach camps.
3. The local UPHC should develop a calendar of services to be provided each month, which could offer different specialist services, rehabilitation and other curative services.
4. Point of care diagnostics will facilitate management and initiation of treatment (e.g. for blood glucose, urine protein, Hb, Malaria). Test results must be reported back promptly to ensure timely management.
5. The ASHA will serve as the focal point person for both communicating the test reports and enabling follow up action. The use of mobile phones would facilitate this process.
6. There must be a mechanism for the UPHC to follow up after these special sessions. Such follow up should be facilitated by the ANM/ASHA.
7. Convergence: Planning and implementation of such special outreach sessions should engage with relevant departments and NGOs to ensure that social support services are made available for example, access to food, clothing, shelter and prosthetic support. For example, special outreach sessions for the homeless population should involve engagement with de-addiction centres if this is identified as an issue with this population.

Case Example 2: Leveraging Existing Community Structures in Hyderabad

In Telangana, as in many cities, there are insufficient ASHAs and ANMs to conduct outreach to the urban poor. A solution to this is to work cross-sectorally to leverage existing community structures. The Mission for the Elimination of Poverty in Municipal Areas (MEPMA) was registered as a society in 2007 under the Department of Municipal Administration and Urban Development. They are an umbrella group for self-help groups: they have 142,120 members including self-help groups, slum level federations and town level federations; which are all platforms to address access to credit, health, unemployment, gender inequalities, disabilities and vulnerabilities. They are the nodal agency for the development of National Urban Livelihoods Mission, Housing For All (HFL), Urban Statistics for HR and Assessments (USHA), Socio-Economic and Caste Census (SECC), and the National Urban Health Mission – which means they have an important role in facilitating cross-sectoral dialogue and coordinating efforts. In this way, they provide systems strengthening support across many sectors. The results have been impressive:

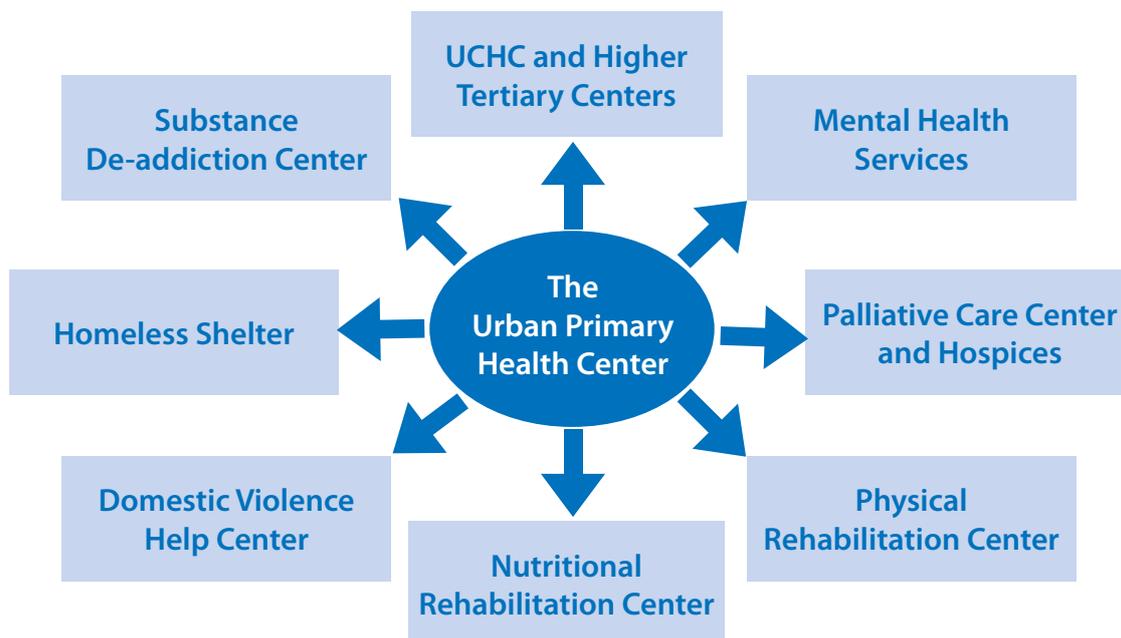
- ▶ MAS meetings have increased ANC compliance through ANC registers, follow up sessions, and improved referral linkages.
- ▶ 63% of UPHCs had all pregnant mothers completed a full suite of ANC check-ups for the first quarter of FY 2016-17.
- ▶ 68% of UPHCs achieved full immunization coverage in FY 2016-17. There have also been impressive increases in the areas of mobilization for UHNDs, water and sanitation, savings, and non-communicable disease prevention.

3.7 Organizing Referral Services

With its focus on continuity of care, the UPHC shall develop strong upward (with higher facilities) and downward (with community) linkages to develop a robust chain of referral to ensure availability of required services, while effectively gatekeeping the health seeking behaviour of its population, to prevent overcrowding at secondary and tertiary institutions.

1. The UPHC must identify the secondary and tertiary facilities to refer patients to, according to the speciality required. In addition to clinical facilities, UPHC must identify centers providing services such as de-addiction, mental health services and others as per population needs.
2. UPHC must identify a contact person/desk in each referral center to inform and take information regarding the patients referred, ensure that they receive the necessary consultation to enable follow up by UPHC.
3. All referrals should be in writing on a referral slip.
4. At the site of registration, the referring facility and provider should record the information in digital form or if not digitized, then in a referral register. A feedback referral form could be attached to the case-sheet or OPD slip at the time of referral.
5. To establish an effective linkage, digital platforms can also be used for sending patients information to the referred clinician/ facility, through email, fax, mobile messaging or other applications.
6. Irrespective of providing the information in writing, the health provider should also inform the patient on reasons for referral and risks of non-referral. They should also provide details on how to reach the referral facility, location and transport, whom to see, what is likely to happen, and follow-up on return. A handout/ card could be prepared at the UPHC mentioning the details of the higher facility where the patient is referred.
7. All relevant diagnostic results (laboratory, radiological studies, previous referral information, etc.) should accompany the patient referral form.
8. The referral register should be developed and updated by the appropriate personnel for all referred cases to help in follow up and treatment compliance.
9. The UPHC staff would communicate and if possible schedule an appointment with the receiving clinic/hospital. This is mandatory if the referral is an emergency. If possible, the referral form will be faxed/e mailed to the referral unit prior to sending the patient.
10. For emergency referral, transport must be made available by the UPHC. It is the responsibility of UPHC staff and ambulance staff to ensure safety in transit, monitoring, and documentation.
11. In case no information is received from the hospital on the outcome of the referral, the UPHC staff should follow up, make an enquiry and note the referral outcome even if it was a no show.
12. Follow up is an essential element of a good referral strategy. Once the patient is back after taking treatment at the higher level, the treatment protocol undertaken must be recorded at the UPHC level and the frontline health worker must be oriented on the follow up protocol for all referred cases.

Figure 11: Recommended multi-directional Referral Linkages for UPHC



Case Example 3: Establishing Dynamic Referral Systems in Mumbai

Mumbai Municipal Corporation, along with the NGO SNEHA set up a local referral system to help ensure easy flow of patients from primary to secondary and tertiary care as required, improving the continuum of care and the patient experience. They did this through regular meetings of providers, facilitated by unbiased outsiders, to ensure everybody felt they had an equal voice. This facilitation fostered a systems-wide perspective among all stakeholders. One of the key lessons learned was that the referral system must be dynamic, to take into account changing circumstances at the facility level (for example, turnover of specialist staff).

Establishing the regular meetings for the referral system solidified complementary partnerships with a variety of stakeholders; beneficiary communities, the municipal corporation, ICDS, NGOs and other local facilities. This coordination ensured that duplication was avoided. This was made easier by SNEHA's familiarity with the municipal corporations' systems and commitment to working in partnerships.

3.8 Reporting Mechanisms

Reporting mechanisms are important for keeping track of the progress and performance of programs. Effective and efficient reporting mechanisms need to be put in place to document and understand the program implementation process. Reporting mechanism are of various types:

1. Service delivery reporting
2. Patient data reporting
3. Staff performance reporting

1. Service Delivery Reporting

The performance of NUHM and status of service delivery is captured and analysed through various data collection tools and processes. In this section, we briefly touch upon the various ways in which data on health service provision and performance of NUHM is captured. A detailed process of Monitoring and Evaluation of NUHM is described in Section 4.6. These various tools of data collection are HMIS and Quarterly Progress Reports.

A. Health Management Information System

Reporting of health information from urban health facilities shall be done through the Health Management Information System (HMIS). Health Management Information System (HMIS) is a web-based monitoring system put in place by Ministry of Health and Family Welfare (MoHFW) to monitor its health programmes and provide key inputs for policy formulation and interventions. It is a tool which was launched during October, 2008 with uploading of district consolidated figures. To make HMIS more robust and effective and to facilitate local level monitoring, "*facility based reporting*" was initiated in April, 2011.

The HMIS format for PHC shall also be filled by the UPHCs. Some data elements have been added to the standard HMIS formats to capture NUHM data as well. However, no new HMIS formats have been created specifically for NUHM. The flow of data shall also remain largely similar to NRHM, with some changes to incorporate data reporting for and from Municipal Corporations as well.

The reporting mechanism will be from UPHC to UCHC to district hospital or municipal corporation then to the state MIS centre and the National MIS Division each month. The present NHM MIS captures all the details related to health system strengthening under NUHM and all the major national disease control programmes. Data is captured at the UPHC level with the ANM including the data from Health Kiosks, UHNDs and special outreach sessions.

Data reports are presently being made available to various stakeholders in the form of standard and customized reports, factsheets and score-cards. HMIS data are widely used by the Ministry and States for policy planning, monitoring and supervision purposes. The data is collected in various formats like monthly, quarterly and annual reports on service delivery, infrastructure and HR. The data on various items in monthly formats is collected under following heads:

- ▶ Ante Natal Care Services
- ▶ Deliveries
- ▶ C-Section deliveries
- ▶ Pregnancy outcome and weight of new-born
- ▶ Complicated pregnancies
- ▶ Post-natal care
- ▶ Medical Termination of Pregnancy
- ▶ RTI/STI Cases
- ▶ Family Planning
- ▶ Child Immunization / Vitamin A doses
- ▶ Childhood Diseases
- ▶ Blindness Control Programme
- ▶ Patient Services
- ▶ Laboratory Testing
- ▶ Monthly Inventory Status
- ▶ Mortality Details

B. NHM- MIS Quarterly report under NUHM (Quarterly Progress Reports)

Quarterly Progress Reports or QPRs are used to collect data on implementation progress from the State level. These reports NHM quarterly reports help monitor the progress, performance and quality of the program with data collected from all the states and union territories, and from both the NRHM and the NUHM.

The combined NHM-MIS reporting format is broadly covers 13 activity heads with respect to NUHM:

- | | |
|--|---|
| 1. City Planning and Mapping | 8. Operationalization of UPHCs/U-CHCs/Maternity Homes |
| 2. Institutional framework | |
| 3. Appointment of ASHA including MAS information | 9. HR for health facilities |
| 4. Training for community Action | 10. Progress of Infrastructure |
| 5. Orientation training under NUHM | 11. Mobile Medical Units |
| 6. Health Kiosks | 12. Innovations and PPP |
| 7. 24x7 services | 13. Quality Assurance |

The information on progress reported by the facilities is first collected, compiled at district/city level and then consolidated at State level. The states are expected to submit the hard copies and the soft copy of the MIS reporting format by end of each quarter duly signed by Mission Director. These reports are also compiled and analyzed at the center.

Program Specific Reporting Systems

Certain disease control programs have set up their own specific systems of data collections and analysis to monitor the progress of their program. For example, the Revised National TB Control Program's data portal – NIKSHAY, and Malaria control program's data portal – NAMMIS (National Anti-Malaria Management Information System) record data only for these vertical programs.

UPHC and UCHCs under the NUHM are only to adopt the mechanisms once they are designated as nodal points for the various disease control programs. It is however essential that NUHM implementers and planners have access to all data pertaining to urban health, to get a holistic understanding of the urban health scenario and better planning.

2. Patient Data Recording and Reporting

Patient data includes patients name, age, sex, ailments for which services are sought, and other characteristics. These data are recorded by health service providers at the UPHC, UCHC or outreach sessions. These data are recorded in various records and registers maintained at these facilities, designed for specific purposes. ANMs maintain various registers for their population such as Eligible Couple Register, Family Planning Register, ANC Register, Laboratory Register, NCD Register etc. Specific registers have been designed for each program to be placed at facilities. New registers are also added with each new service or service platform introduced as part of any program.

While such detailed information, specially identifying information, is not shared up to the state or district level, it is used to keep track of service delivery. It is useful for follow up of patients undergoing prolonged treatment such as for TB or chronic diseases.

3. Staff Performance Reporting

Each staff member has a defined supervisor and supervisee. It is essential for every facility to have a well-defined reporting line or chain. The performance of staff should be regularly recorded. Each staff member should have clearly understood responsibilities and deliverables, based on which their performance should be measured. For example, the ANMs have defined criteria based on which their performance is scored and measured.

Additionally, all staff must have an annual appraisal, in which they are provided written feedback on their performance during the year. Well performing staff members should be rewarded through appropriate incentives, while those performing un-satisfactorily should be guided in the right direction and provided inputs for improvement.

3.9 Intersectoral Convergence for Urban Health

LEARNING OBJECTIVES

- ▶ *Concept, need and challenges for inter-sectoral action for health*
- ▶ *Ways of establishing collaboration mechanisms and the roles of various stakeholders*
- ▶ *Points of Action for engaging with different sectors (sanitation, water supply, air pollution, nutrition and health impact assessments)*

Why do we need Intersectoral Convergence for Urban Health?

It has been well established that health outcomes are determined more by factors outside the purview of health than by the health sector itself. The health sector alone cannot ensure good health outcomes, until illnesses are prevented with active intervention of other sectors. Addressing the other determinants entail building partnerships with institutions and actors both *within* the health and *across* other related sectors. Reducing health inequalities for sustainable improvement in health status of urban populations requires alignment of all sectors together with health sector. Achievement of health and equity through intersectoral convergence has also been established internationally:

- ▶ Article 2 (i) of the World Health Organization (WHO) constitution highlights inter-sectorality as an essential function to 'promote, in co-operation with other specialized agencies where necessary, the improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene.'³
- ▶ Article VII (4) of the Alma Ata declaration states: "In addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors." The primary health care approach therefore encompasses elements of inter-sectoral approach.⁴

Areas of convergence

In urban health, there are many different components and areas which need to join hands for better health outcomes and for creating a responsive health system. These include various sectors, as well as departments even within health. Thus, convergence would be of two types:

- ▶ **Intersectoral:** Intersectoral convergence would bring together different sectors such as water, sanitation, waste management, nutrition, education, housing etc.
- ▶ **Interdepartmental:** Inter-departmental convergence would bring together various departments and divisions within health such as TB, Vector Borne Diseases, Non-Communicable Diseases, HIV/AIDS, Maternal and Child Health, Family Planning etc.

3 WHO. Constitution of the World Health Organization, Basic Documents, Forty-fifth edition, Supplement, October 2006

4 WHO. Report of the International Conference on Primary Health Care, Alma Ata, 1978.

Major challenges in inter-sectoral approach

While there is general consensus that involvement of other sectors is important for prevention of ill-health and better health outcomes, there is little clarity on how to bring about such involvement. There is in-fact apprehension and discomfort towards the idea of involving 'outside' actors in one's core area of work. There are various reasons for such attitudes:

- ▶ Lack of perceived significance of other stakeholder's role in one's areas of work
- ▶ Lack of understanding about systems and processes of other sectors and departments
- ▶ Sense of loss of control over processes and procedures during collaborative processes
- ▶ Unpredictable delays as a result of following a collaborative process
- ▶ Official hurdles in involving multiple stakeholders from the government
- ▶ Hierarchical and isolated work environments, with non-participatory processes even within a particular sector
- ▶ Discomfort with others entering one's 'turf' or domain and perceived as interference
- ▶ Difficulty in involving stakeholders at senior levels

It has been experienced that convergence is easier to achieve at lower levels of implementation such as community level of the ward level, but becomes more and more difficult as we move up in hierarchy.

Engaging with Different Sectors for Improving Urban Health

For improving urban health outcomes, the health department needs to engage and collaborate with various departments. The following paragraphs give details on sanitation, solid waste management, water supply, road safety, nutrition as areas which impact health. However, as per the local context of each state and ULB, there may be other players, which may need to be engaged.

1. Sanitation and Solid Waste Management

Monitoring of the coordinated action between the health and engineering departments and providing necessary support regarding the waste management at the local level is important for prevention of water and vector borne diseases. The NUHM may actively provide technical assistance and advocacy to ensuring this is done. The frontline health workers can communicate the list of sites of accumulated garbage that may cause health hazards to the Sanitation Department on a weekly or emergency basis. Coordination needs to be maintained with frontline sanitation engineering units for channelization of stagnant water for prevention of vector breeding.

An occupational health, safety and hazard prevention program is required for sanitation workers and rag-pickers. Municipal bodies must be asked to put a minimum protective and responsive health program in place that includes protective clothing, health promotive activities, immunization against hepatitis, regular health check-ups and access to medicines and diagnostics through special designated centers and a health registry that measures a list of what would be considered occupation diseases in their context. This would apply both to sanitary workers in the employment of the ULB, and also to those sanitary workers and rag-pickers who are in private employment or self-employed.

Most urban bodies do not have an adequate system in place for bio-medical waste management. There is a need to build a system that is compatible with the rest of solid waste management, yet does not allow a mix up. Health Officers need to strongly engage in advocacy measures and build feedback loops with the Sanitation Department for setting up and monitoring bio-medical waste management systems.

2. Water Supply and Sewage Disposal

An important element in prevention and control of water borne diseases is regular water quality surveillance, particularly during the endemic seasons and in vulnerable colonies. In specific the health officers and frontline workers need to operationalize the following:

- a. Maintain a list of areas where safe drinking water is not available, as these are potential areas of disease outbreak.
- b. Conduct epidemiological investigations of outbreaks and notified cases of water borne diseases in collaboration/coordination with Water Department officials. All point sources need to be located and communicated to the Water Department.
- c. Conduct water quality surveillance by testing for residual chlorine and sharing the lists with the Water Department for remedial action.
- d. Provide technical assistance to improve safe water supplies to vulnerable communities; e.g. distribute liquid chlorine or chlorine tables for domestic chlorination.
- e. Maintain surveillance for leakages in sewage lines and potential contamination of water pipelines and sources; share the list with the Sewage Department for repair and rectification.

3. Air Pollution

Air Pollution has become a serious issue impacting health of urban residents in the recent times. A recent study found that 40% of school children in Delhi suffered from reduced lung function, owing to high pollution levels in the city. Other cities too face similar situations, which worsen during winters. High levels of pollution get directly reflected in increased incidence of respiratory disease and even deaths, especially among the elderly. Respiratory diseases have become common and an increasing cause of urban deaths.

Air pollution has been rising due to various reasons: vehicular and factory emissions, traffic congestion, fuelwood and biomass burning, fuel adulteration, large scale burning of crop residue in some states, and reduction in green spaces and forests. While Pollution Control Boards monitor, control and certify vehicles for pollution emissions, they are often ineffective in actually reducing air pollution. There is a need to emphasize the urgency of this issue and advocate with the related stakeholders. Some of the action points in this regard are:

- ▶ Analysis of rising levels of air pollution
- ▶ Collection of data on incidence of respiratory disease from public and private sectors
- ▶ Conduct studies to understand causes and impact of rising air pollution in your state/city
- ▶ Advocacy with respective stakeholders to address causes of increasing pollution

4. Road Safety

Road traffic accidents are recorded by the Police department. Epidemiological analysis of this data provides critical feedback and advocacy to road transport and safety officers of the transport department and to the traffic police on the areas where preventive action is required. Some steps which may be taken in this regard are as follows:

- ▶ Collection of data on road traffic accidents
- ▶ Advocacy with concerned department on measures to reduce road injuries

- ▶ Creation of joint task force for reduction of road injuries involving health department, traffic police, department of transport, ULBs, research institutions
- ▶ Traffic police to ensure compliance to road safety rules and regulations by all
- ▶ ULBs to ensure designated parking spots, elimination of encroachment on roads
- ▶ Develop data analytics based public health feedback loops
- ▶ Creation of public feedback mechanism regarding accident prone areas, report issues/individuals making roads unsafe

5. Food and Nutrition Security

The significance of food and nutrition security on health cannot be over emphasized. To ensure that all urban population, especially vulnerable groups have access to safe nutrition, the following actions may be taken:

- ▶ Frontline health workers need to have data on location and functioning of ICDS centers for coordinated action and effective implementation of ICDS.
- ▶ Food security programs need to be under the purview of both the MAS and the Ward Health Committee, which should collaborate for health, sanitation and nutrition programmatic components of the municipal ward.
- ▶ Obtain access to data on malnutrition in your state, city, ward
- ▶ Identify specific causes of malnutrition in your area through ICDS data, research studies and national/state level surveys
- ▶ Establish joint task force to identify, address and combat malnutrition in your state involving health, ICDS, research centers and national/state level institutions on nutrition
- ▶ Identify needs for nutritional rehabilitation centers, and facilitate their establishment if needed

Health Impact Assessment

Health Impact Assessments need to be included as a part of urban health development efforts. Large scale urban projects and urbanization projects must go along with measures to ensure occupational safety and healthy working and living conditions of huge inflows of the labor that they create. The impact of the project on health of urban populations, other than their own workforce, should also be a part of the routine. Experts and organizations specializing in Health Impact Assessments, using appropriate tools for the same, may be engaged.

Establishing Intersectoral Action for Health

Multisectoral collaboration depends on shared understanding and interests, driven by supportive and joint accountability. Structures by themselves cannot ensure the success of multisectoral efforts, and the creation of structures, without the necessary supportive environment, often generates redundancy. These challenges can be overcome by taking the following measures:

1. **Systematic process of collaboration:** Before implementing joint activities, it is extremely important to define the objectives, process, responsibilities and outcomes clearly. The following questions should be answered:
 - i. What are the agreed upon objectives?
 - ii. What are the expected outcomes?

- iii. Who will lead the process?
- iv. What are the responsibilities of each partner?
- v. How will the outcome be measured?
- vi. How will the partners communicate and take decisions?
- vii. Decide on deadlines as appropriate
- viii. How will the progress be monitored and by whom?

- 2. Multi-stakeholder teams and committees at various levels:** While at higher levels (national or state levels), inter-ministerial or inter-departmental committees may be established, at lower levels (city or ward level) cross-sector action teams may be formed. NUHM already facilitates this by establishing coordination committees at state and city level, but more 'action-oriented' teams may also be formed.
- 3. Joint Workshops:** Joint workshops for collaborating partners to understand, share and disseminate each others' work and find common ground, may be conducted. This will also build understanding on each other's systems, processes, strengths and weaknesses enabling members to complement each other during joint activities.
- 4. Advocacy:** Make the case for inter-sectoral action, using sound epidemiological and other evidence, to convince other sectors to participate.
- 5. Mutually Benefitting Process:** While undertaking collaborative processes, strategic needs of other sectors should also be taken into account. Activities should be shared rather than taking prime responsibility for all the stages of developing, implementing and evaluating initiatives.
- 6. Goal Setting:** Set explicit goals and objectives that give a clear mandate, are clearly linked to activities and yield visible results that help build morale as well as provide a good basis for evaluation.
- 7. Trust Building:** Build trust-based teams, drawn from actors in different sectors, levels of government and parts of civil society, who together combine the range of skills to develop, implement and evaluate convergence initiatives, and manage complex communication and negotiation processes.
- 8. Cross-cutting information and evaluation systems:** Data and information need to be shared, which will create basis for joint evaluation and monitoring of program progress.
- 9. Integrated Workforce Development:** Capacity development of personnel from various department may be undertaken jointly, to facilitate collective understanding and shared vision.

Three broad types of multi-sectoral action have been envisaged (and may overlap in some cases):⁵

1. Supporting actions within single sectors that form their core business (such as access to safe water for the water and sanitation sector), and have positive or negative implications for health.
2. Health sector supports cross sectoral policies to address issues (such as inadequate water and energy supplies to health facilities) that drive disparities.
3. Identifying, promoting, and co-financing actions that require collaboration between two or more sectors (inter-sectoral work) to produce joint or "co-benefits" and to maximize health benefits (such as cleaner stoves to reduce indoor air pollution).

⁵ Rasanathan K, Damji N, Atsbeha T, et al. Ensuring multisectoral action on the determinants of reproductive, maternal, newborn, child, and adolescent health in the post-2015 era. *BMJ* 2015; 351: h4213.

Case Example 4: Peri-urban Agriculture to Prevent Flooding in Gorakhpur

The city of Gorakhpur in Uttar Pradesh is prone to frequent flooding caused by poor planning, improper waste management and local geographical factors. In addition, urbanization is straining natural resources and absorbing agricultural land. These factors lead to reduced green spaces, interrupted food supply chains, disrupted livelihood patterns, and reduced natural drainage of excess storm water. Farmers are especially vulnerable as there are few alternative sources of income when flooding disrupts their agricultural practices. This disruption is likely to increase with the extreme weather events caused by climate change.

A project by the Gorakhpur Environmental Action Group and funded by the Rockefeller Foundation introduced micro-planning at the ward level within the city, addressing multiple sectors such as agriculture, solid waste management, water and sanitation, drainage, health, housing and education. Through the micro-planning process the city decided to expand agriculture in 8 peri-urban target villages across 450 hectares to increase the flood retention capacity outside the city, and reduce chronic water-logging and salinity within the urban core. At the same time, increased supply of fresh produce from local sources will reduce vulnerability to food supply chain disruptions. Sector-wide interventions such as this are likely to have multiple benefits to health; fewer waterborne and vector borne diseases and improved nutrition through safer water and better food security.

Available Mechanisms for Converging with the Urban Local Bodies

The establishment of institutional mechanisms under the NUHM, such as state and city level committees, has facilitated convergent planning and implementation with ULBs and other critical stakeholders. This coordination is delivered through the platform of the district health societies in smaller towns. In addition to performing their core public health roles of environmental sanitation and vector control among others, ULBs can be actively engaged by the health departments. The support occurs at the decision-making level through the Municipal Commissioner's participation in the committees; at the implementation level through the participation of the Municipal Health Officer in coordination with the City Nodal Officer or the District Medical and Health Officer.

Various inter-departmental convergence structures exist in different forms at the city, and ward levels, although some are formalized and some are informal and leadership dependent. Some examples of convergent action for urban health are given below:

- ▶ Informal coordination of UPHC officials with elected representatives and NGOs for organizing outreach camps; coordination with ICDS apparatus for selection of ASHAs in various states
- ▶ Formalized platform in West Bengal at UHC, ward and higher levels with structured interactions
- ▶ Informal coordination with elected officials in Mysuru, Karnataka
- ▶ Partnership with externally funded NGO for strengthening community participation (pilot)
- ▶ Presence of State Urban Development Agency (SUDA) structures at all levels, although not leveraged for coordinating urban development programs
- ▶ Mandated interaction of the NGO managed UPHCs in Telangana with other stakeholders
- ▶ Ward Kalyan Samitis (ward welfare committees) were established in Chhattisgarh under the Mukhya Mantri Shahari Swasth Karyakram. They are composed of representatives of health, ULB,

ICDS, schools and elected officials in these states are leveraging social groups and community level leadership for promoting health seeking behavior, infrastructure, and monitoring of developmental inputs (including WASH) at the ward level.

- ▶ In Pune, the ward level coordination committees are addressing issues beyond health such as stray dogs, traffic jams and electricity connections.
- ▶ Similarly in Bhilai, Chhattisgarh, a park was created by the informal ward level group, in an area which was being used for open defecation earlier. Madhya Pradesh has nutrition committees at decentralized levels; similarly there exist other ward level platforms for other developmental areas such as neighborhood committees under SJSRY and ward committees under JnNURM. These have the potential for being leveraged for health purposes as well.

Table 6: Example of Convergent Action Plan: Pune Municipal Corporation (PMC)

Department/ Program	Strategies
ICDS Program	<p>Provide contacts list of ANMs and ASHAs working in slums to the respective <i>Anganwadi</i> staff and supervisors.</p> <p>Share data being recorded and collected by <i>Anganwadi</i> staff and supervisors with the health department.</p> <p>Develop a micro plan for routine immunization in slums at <i>Anganwadi</i> centers and other sites in close coordination with the <i>Anganwadi</i> workers, supervisors and CDPOs.</p> <p>Conduct a GIS based spatial analysis to assign primary health care center(s) to each <i>Anganwadi</i> center in the city and establish a strong referral system to U-PHC and other secondary/ tertiary facilities.</p> <p>Geographically rationalize ICDS projects according to the 15 administrative wards in Pune Municipal Corporation. Invite <i>Anganwadi</i> workers and supervisors to participate in ward level coordination meetings.</p>
Urban Community Development (UCD), PMC	<p>There are close to 11,000 women self-help groups established in slums with the support of the Urban Community Development (UCD) department. These groups are being federated into Mahila Arogya Samitis (MAS).</p> <p>UCD department also has facilitated the construction of several community structures in slum areas which are currently used by the women self-help groups for various activities. This infrastructure is being leveraged for health purposes such as for conducting immunization camps and outreach sessions. These structures are used as <i>Anganwadis</i> in some slums where space availability is a constraint.</p> <p>PMC facilitates upgradation of these community structures such as construction of additional stories for health purposes.</p>
PMC Engineering Department	<p>Dedicated civil engineer from the Engineering Department is assigned to the health department of the ULB to monitor regular maintenance of facilities as well to facilitate upgradation and new construction of health facilities.</p>
JNNURM cell	<p>The most vulnerable slums with high number of very poor households and high rate of water and vector borne diseases as identified under NUHM are prioritized for provision of basic services under the JNNURM grant.</p>

Case Example 5: Convergent Planning and Action by Mysuru City under NUHM

The health department has engaged the ULBs through the platform of city urban health committees. The city health planning (identification and restructuring of facilities, slum population, health needs and program implementation needs) has been developed in collaboration. Upon the inception of the NUHM, the health department constituted the committee and oriented the ULB functionaries about the program. Key activities were discussed during the meetings of the committee and a decision was made to develop city health plan as a precursor to PIP. Enabling factors for convergence in Mysuru include robust leadership, pro-active officials, and defined levels of coordination as well as fair capacities to implement traditional public health roles.

The District Health Office coordinates with the Municipal Commissioner; the Urban Nodal Officer with the Chief Municipal Health Officer; the Taluka Health Officer with the Zonal health officers; and the MOs with the Ward Assistant Commissioners. At the decentralized levels the ANMS and ASHAs coordinate with the Health (sanitation) inspector. Issues pertaining to solid waste management and water contamination are being identified and resolved by the Ward Councillors (elected representatives) interactions at the field level revealed the need to strengthen this coordination.

The Municipal Commissioner takes an active interest in urban health and has designated an assistant Municipal Commissioner to monitor the support being provided by the ULB. The urban health officials of the health department ensure that ULB counterparts are updated about the program, involve them in planning and seek their support for resolving identified problems. For example, any outbreak of water borne disease when reported through the health information system is discussed with the ULB for coordinating activities of the environmental engineering unit of the ULB. Similarly at the decentralized level, the UPHC MOs coordinate with the elected representatives as well as Ward Assistant Commissioners to identify gaps in solid waste management, water contamination, vector control issues. The elected representatives are encouraged by the MO UPHC to advocate for the utilization of health services by the communities. The engagement of the elected representatives by the health apparatus results in a collateral benefit for the program. The involvement of the elected representative encourages an accountability mechanism for the UPHC.

Learning Outcomes:

- ▶ Intersectoral and interdepartmental convergence, although challenging, is essential for urban health.
- ▶ Implementing convergent actions require advocacy, planning, transparency, mutual trust, goal setting, consensus building and following a participatory approach.
- ▶ For urban health, water, sanitation, nutrition, road safety, pollution and housing are important aspects, which must be involved for health planning.
- ▶ There are several examples of best practices of convergent actions. Urban Local Bodies are ideal grounds for convergent action, as has been demonstrated in many states.

ESSENTIAL PROCESSES AND PROGRAMS UNDER NUHM

This section elaborates on the specific processes under NUHM, which support the effective and quality implementation of NUHM. These include:

1. Community Processes
2. Prevention, Screening and Control of Non-Communicable Diseases
3. Quality Assurance Program
4. Managing Disease Outbreaks in Urban Areas
5. Implementing Public Private Partnerships
6. Monitoring and Evaluation

4.1 Community Processes

LEARNING OBJECTIVES

- ▶ *Selection, training processes and key roles and responsibilities of the ASHA*
- ▶ *MAS Formation and activities*
- ▶ *Support, Monitoring and Supervisory Mechanisms*
- ▶ *Financing*

Overview of Contents: Participants will understand the process of community selection of ASHA, her roles and responsibilities, support structures, including her payments, mechanisms for training, payments, monitoring and supervisory structures. They will also learn about Mahila Arogya Samiti, their tasks and functioning.

Community Processes: ASHA and Mahila Arogya Samiti (MAS)⁶

The Community Processes component in the National Urban Health Mission, as in its counterpart National Rural Health Mission, is a key pillar of the health systems strengthening approach. The Framework for Implementation of the National Urban Health Mission places special emphasis on improving the reach of health care services to vulnerable groups among the urban poor such as, the homeless, beggars, street children, women working as commercial sex workers, construction workers, rag pickers, rickshaw pullers, elderly poor, disabled people and people with mental illness. Thus, the strategy for community health in urban areas is to ensure equitable access to available health facilities by rationalizing and strengthening of the existing capacity of health delivery for improving the health status of the urban poor.

6 Framework for Implementation, National Urban Health Mission, 2013, MOHFW and Guidelines for ASHA and MAS, 2013, MOHFW.

Selection of Urban ASHA

One of the foundational activities in community processes is selecting the ASHA workers. The following guidelines have been laid out to guide this process.

- a. **Population Norm:** The general norm for selecting ASHA in urban area is “One ASHA for every 1000-2500 population”. When the population covered increases to more than 2500 another ASHA can be engaged. In case of geographic dispersion or scattered settlements of socially and economically disadvantaged groups the “slum/vulnerable clusters” and in cases where a geographic area with more than one ethnic/vulnerable group, ASHA can be selected at a smaller population, and may also be desirable. In such cases, one ASHA can be selected for (and from) a particular vulnerable group.
- b. **Criteria:**
 - ▶ She must be a woman resident of the “slum/vulnerable clusters” and belong to that particular vulnerable group.
 - ▶ She should be preferably ‘Married/Widow/Divorced/Separated’ and preferably in the age group of 25 to 45 years.
 - ▶ She should have fluency in language of the area/population she is expected to cover, leadership qualities and be able to reach out to the community.
 - ▶ She should be a literate woman with formal education of at least Tenth class. Women with class XII, if interested and willing, should be given preference since they could later gain admission to ANM/GNM schools as a career opportunity.
 - ▶ The educational and age criteria can be relaxed if no suitable woman is available in the area / in the particular vulnerable group.
 - ▶ Adequate representation from disadvantaged population groups should be ensured. A balance between representation of marginalized and education should be maintained.
 - ▶ She should have family and social support to enable her to carryout her tasks.
 - ▶ Existing women community workers under other schemes like-urban ASHAs or link workers under NRHM or RCH II, JnNURM and SJSRY may be given preference provided they meet the norms of residency, age and educational criteria.
- c. **Process:** The designated nodal officer should form an Urban ASHA Selection Committee comprising of members such as- CMHO or CDMO, DPO (ICDS), representative of Urban Local Body, and Programme Officers of JnNURM, District Urban Development Agency (DUDA), SJSRY as appropriate, and headed by the member of the Urban Local Body, particularly in the case of seven metros. Members from NGOs and civil society can be involved, based on the local context. The City or District Level Urban ASHA Selection Committee will form UPHC- Unit level ASHA selection committees. The catchment area of the UrbanPHC (UPHC) would form the unit for selection process. The selection committee will provide the guidelines for the selection of ASHA and will monitor and support the ASHA selection, and approval of the list of selected ASHAs. The selection guidelines must adhere to the following principles:
 - ▶ Selection of ASHAs should involve consultation with local community based organization, existing self- help groups or other organizations representing the vulnerable sections.
 - ▶ Selection of potential candidates should be done in consultation with MAS if it exists. Otherwise a meeting of local women’s group should be done, for building awareness of the group about

the programme and carry out consultation for selecting the candidates. This women's group can potentially become the MAS for the designated area.

d. Criteria for declaring an ASHA as a “drop out”: ASHA is to be considered as drop out if;

- ▶ She has resigned, in writing, on her own,
- ▶ She has not attended last three UHNDs or outreach sessions AND not given reasons; or
- ▶ She has not been active in most of her activities, and ASHA facilitator/community organizer has visited the slum cluster of the ASHA and ascertained this through discussions with community and / or MAS members.

Roles and Responsibilities for Urban ASHA

The Urban ASHA's responsibilities are described in the table below:

Table 7: Urban ASHA's role and responsibilities

Social mobilization	<ul style="list-style-type: none"> ▶ She will work on issues of water and sanitation in coordination with MAS and enable construction and use of household and community toilets and promote sanitation and hygiene.
Counselling, awareness creation	<ul style="list-style-type: none"> ▶ She will take steps to create awareness on social determinants and entitlements related to health and other related public services. She will give information to community, especially the vulnerable groups, on determinants of health such as nutrition, basic sanitation and hygienic practices, healthy living & working conditions, health services & facilities and the need for timely use of health services. ▶ She will counsel women, families and adolescents on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception and prevention of common infections including reproductive tract infections and sexually transmitted infections (RTIs/STIs), care of the young child, substance abuse, prevention of domestic violence and sexual violence. ▶ She will work with the MAS to promote convergent action on social determinants of health and take action to increase access of vulnerable groups for various public services.
Facilitating care seeking	<ul style="list-style-type: none"> ▶ ASHA will mobilize the community and facilitate people's access to health and health related services available at the AWC, UPHCs and urban secondary and tertiary health centres, for institutional delivery, immunization, ante natal check-up (ANC), post-natal checkup (PNC), ICDS, sanitation ▶ She will arrange an escort, as required, pregnant women and children to the nearest health facility i.e. UPHC, UCHC or FRU.
Providing health commodities	<ul style="list-style-type: none"> ▶ She will be as a depot holder for essential health products, like ORS-zinc, iron and folic acid pills, chloroquine, condoms, oral contraceptives, sanitary napkins and others such items as appropriate to local community needs. A drug kit will be provided to each ASHA.
Providing care	<ul style="list-style-type: none"> ▶ She will provide community level curative care for common ailments such as diarrhoea, fevers, care for the normal and sick newborn, childhood illnesses, first aid, and other communicable diseases like malaria, Japanese encephalitis, chikungunya and leprosy. She will measure blood pressure and blood glucose as part of follow-up, and be a DOTS provider. ▶ States can provide graded training to ASHAs to provide geriatric and palliative care, and conduct screening for non- communicable diseases, childhood disability and mental health and other services being provided by the government.
Data collection, mapping, reporting	<ul style="list-style-type: none"> ▶ She will undertake a vulnerability assessment of the households in her area. ▶ She will provide information on the births and deaths and any unusual health problems or disease outbreaks in the community to the UPHC.

The ASHA will fulfill her role through five activities:

- 1. Home Visits:** For up to two hours every day, for at least four or five days a week, she should visit families living in her area, prioritizing, vulnerable groups and marginalized families, for health promotion and preventive care. Home visits should take place at least once in a month.
- 2. Attending the Urban Health and Nutrition Day (UHND) and supporting outreach activities:** The ASHA should facilitate and promote attendance at the monthly Urban Health and Nutrition day by those who need Anganwadi or auxiliary nurse Midwife (ANM) services and help with counselling, health education and access to services.
- 3. Visits to the health facility:** This involves accompanying a pregnant woman, sick child, or some member of the community needing facility based care. This is not mandatory, but often desirable for enabling access. ASHA will also attend monthly review meeting at the urban PHC.
- 4. Promotion of MAS:** ASHA along with her ASHA Facilitator and ANM will support MAS. She will be the member secretary of two to five MAS, formed in her designated area and will help convene their monthly meeting and provide leadership and guidance to their functioning.
- 5. Maintain records:** She will maintain records for organizing and planning her work.

The first three activities relate to facilitation or provision of healthcare, the fourth is mobilizational and is supportive of other roles.

ASHA Support Mechanisms

The community processes programme in urban areas should also have a strong network of supportive structures woven around it, to facilitate ASHA's work, strengthen MAS and make ASHA more effective as a community health worker. These support structures are in place at different levels of the health system, as described in the table below:

Table 8: ASHA support mechanisms at different levels of the health system

Level of the health system	Support required
State Level	<ul style="list-style-type: none"> The State Community Processes Resource Centre as established under NRHM will be expanded with a team of members to support and supervise ASHAs and MAS in urban areas, and a team of state trainers will provide training support. State AMG should be expanded to involve experts familiar with urban health situations.
District/city Level	<ul style="list-style-type: none"> The existing district Community Processes Team as established under NRHM will support and coordinate activities of the urban community processes as well. In contexts where required this existing support structure could be expanded if needed. For large cities, a City Programme Management Unit will be established. Setting up a Grievance Redressal Committee - District Structure: Under NRHM a five-member committee is notified by the District Health Society (DHS) (under the leadership of the Chief Medical Officer (CMO) and District Collector). The same committee can be expanded to seven members to address grievances of urban ASHAs and the composition of the Committee will need to have representation from members of ULBs.
Facility level	<ul style="list-style-type: none"> ASHA Help Desk- ASHAs regularly refer pregnant or sick mothers, children, and people with complications to the health facilities. An ASHA Help desk should be established in U-CHCs, district hospitals or tertiary health care facilities, to ensure facilitation and navigation support to patients. Monthly Review Meetings- Monthly review meetings at Urban PHC, will serve as forum for performance review; problem solving, sharing and validating information related to payments, replenishment of drug kits and refresher trainings. It will be attended by the Medical Officer, Community Mobilizer (Public Health Manager of UPHC), ASHA Facilitator/community organizer and ANMs working in the UPHC.

Level of the health system	Support required
Unit Level	<ul style="list-style-type: none"> ▶ There will be one ASHA Facilitator/community organizer for about twenty ASHAs and her MAS. Where they have not been selected an ANM will play the role of the ASHA facilitator. ▶ She will provide support in a wide range of activities such as ASHA selection and training, formation and capacity building of MAS, performance monitoring, supportive supervision and release of ASHA payments, distribution and replenishment of ASHA kits and training material. ▶ ASHA Facilitator/community organizer/ANM will provide on the job mentoring, supervision and day-to-day mentoring support. ▶ The ANMs will conduct outreach sessions in their area every month with support from ASHAs and would organize once a week Medical/ Health camps for slum/ vulnerable population. The Public Health Manager of UPHC, would also support the ASHA and MAS.

In addition, the support structures listed in the table above, the ASHA's work will be defined by the following support mechanisms.

Capacity Building

Building ASHA's knowledge base and skills is critical in enhancing her effectiveness to achieve the desired healthcare outcomes. Capacity building of ASHA is a continuous process, and it visualizes thirty days of training in the first year for every newly inducted ASHA, and subsequently fifteen days of training every year. States can set their own upper limit on the number of days of training.

ASHA Drug Kit

ASHAs should be provided drugs to provide curative first aid care before referral, as per the protocols she has been trained in. The ASHA Facilitator should be in charge of refills.

Working Arrangements

An ASHA should have a flexible work schedule and her workload should be limited to about three to four hours per day, four days per week. But on mobilization events such as pulse polio, or while escorting a patient, and for attending a training, she may spend a full day, in which case she must be compensated accordingly.

Compensation to the ASHA

She is primarily an "honorary volunteer" but is compensated for her time in specific situations (such as training attendance, monthly reviews and other meetings). In addition, she is eligible for incentives under various programmes. She can also earn from social marketing of certain healthcare products like condoms, contraceptive pills and sanitary napkins. States may consider giving other non-monetary incentives such as, group recognition or awards, sarees, id cards, supporting further education, preferential admission in ANM/ GNM training schools and other social security schemes.

Fund Flow Mechanism for the Community Processes Programme

Funds for making the payments to ASHA and untied funds to MAS flow from NHM to State Health Society and from State Health Society to District Health Society and finally to UPHC. As part of NUHM Flexipool, the fund allocation for ASHA programme is specifically earmarked. The budget provisions for ASHA includes, training, supervision and support mechanism, as well as kits and other job aids. This illustrative cost for training and post training support and supervision has been fixed to a ceiling amount of Rs.16000. Incentives to ASHA under various programmes come from programme funds. Mechanism of payment should be single window for all the performance incentives earned and should be paid on a fixed day in a month from these sites.

Monitoring and Evaluation

ANMs, ASHA Facilitator or Community Organizers with support from district Community Processes team will monitor the functionality of ASHA on a set of indicators, which will be based on the key tasks undertaken by her. Some of these indicators can include undertaking vulnerability assessment in coordination with MAS, preparing health resource map for her designated cluster with MAS, ensuring home visits to the marginalized and vulnerable households, organizing monthly meetings of MAS, and undertaking locale specific action. A system will be developed to monitor the functionality as well as the outcomes of the ASHA programme at UPHC, district and state level.

Mahila Arogya Samitis (MAS)

MAS is a key intervention under National Health Mission aimed at promoting community participation in health at all levels, including planning, implementing and monitoring of health programmes. MAS are expected to take collective action on issues related to Health, Nutrition, Water, Sanitation and social determinants at the slum level. It is envisaged as being central to 'local collective action,' which would gradually develop to the process of decentralized health planning.

Objectives and Goals of MAS

The major objectives of MAS are to:

- ▶ Provide a platform for convergent action on social determinants and services related to health
- ▶ Provide a mechanism for the community to voice health needs and issues on access to health services
- ▶ Generate community awareness on local health issues and promote the best practices
- ▶ Focus on preventive and promotive health care activities and management of untied fund
- ▶ Support and facilitate the work of ASHA and other frontline workers
- ▶ Provide an institutional mechanism for the community to be informed of health and other programmes and to participate in their planning and implementation
- ▶ Organize or facilitate community level services and referral linkages for health services

Membership of the MAS

The membership in the group would be a natural process, guided by the ASHA and the ASHA facilitator. Some characteristics for preferential inclusion of members are;

- ▶ Women who desire 'well-being of the community' have social commitment and leadership skills
- ▶ Membership from pockets of all different communities under the area of MAS shall be ensured
- ▶ Women involved in existing or past collective efforts (like SHG etc) should be involved
- ▶ Service users (like pregnant women, mothers of small children) should be involved
- ▶ ASHA will be the Member secretary of MAS

Potential members of the MAS include; members of local CBO, opinion leaders, the ASHA, local women, service users, existing SHGs members and ICDS frontline staff.

A MAS should have 10 -12 (but must be between 8 to 20) members. In case of a slum with different social groups, all groups and pockets of the slum should be represented.

Process of MAS formation

The ASHA and the ASHA facilitator or Community Organizer play a key role in the process of MAS formation. The steps involved in the formation of MAS are elaborated in the table below.

Table 9: Steps in MAS formation

Step	Details
1 Constitution of a team at the slum level	To mobilize the community, firstly a team has to be constituted at the slum level. The ASHA, ASHA facilitator/Community organizer, with support of NGO field functionary (if any), AWW and ANM will constitute a team for selecting the MAS members. Each ASHA will supervise the formation of two to five MAS.
2 Initial meetings with slum women	The team (ASHA and others) conducts meetings with community to understand the health conditions and to sensitize the women for their active participation.
3 Identification of active and committed women	Women are given 1-2 weeks to reflect and decide their commitment. By 3rd or 4th meeting, only interested women attend the meeting, and active, interested and committed women are identified and encouraged over a period of time, to work collectively on community issues to form the base of the MAS. Each community takes its own time to crystallize, and process need to be in alignment. Social and family acceptance should be ensured.
4 Formation of MAS and selection of its office bearers	Once the women decide to work as a local collective, a resolution is passed for formalizing the MAS formation. The newly constituted MAS are oriented about its roles and responsibilities and the names and details of MAS members are recorded in the MAS registration sheet. Thereafter, ASHA facilitates the selection of the Chairperson of the MAS unanimously by the group members. Documentary evidence for MAS formation includes Resolution copy, and MAS registration sheet. MAS reconstitution is to be done in case of death of member or any attrition.

Table 10: The roles and responsibilities of the MAS office-bearers

Office bearer	Role and responsibilities
Chairperson	MAS members will unanimously elect the chairperson of the group; who will: <ul style="list-style-type: none"> ▶ Be responsible for ensuring that MAS meetings are held regularly on a monthly basis. ▶ Lead the MAS meetings and ensure coordination among members for effective decision-making. ▶ Develop community health plan for the slum/ coverage area in consultation with all MAS members. ▶ Ensure that all the records and registers of MAS are adequately maintained. ▶ Represent the MAS during interface with service providers and government departments. ▶ Support the member secretary in her functions.
Member Secretary	ASHA will be the Member Secretary and Convener of MAS. As the member secretary of the MAS, she will: <ul style="list-style-type: none"> ▶ Fix the schedule and venue for monthly meetings of the MAS. ▶ Ensure that MAS meetings are conducted regularly with participation of all members. ▶ Help MAS in understanding their health status and undertake planning ▶ Make arrangements for the Urban Health and Nutrition Days (UHNDs). ▶ Ensure Utilization of untied fund as per the decisions by MAS, facilitate regular fund disbursement, and update of the cashbook, jointly with the Chairperson. ▶ Provide information to MAS on fund utilization, on month and quarterly basis. ▶ Work with Chairperson for presenting activities and expenditures of MAS in the meetings of urban local bodies (ULBs), and for making annual statement of expenditure (SOE) and Utilization certificates (UCs).

MAS Bank Account

A joint account of MAS will be opened in the nearest nationalized bank, (facilitated by local authorities), to which the annual untied fund of Rs. 5000/- shall be credited. The chairperson and Member secretary (ASHA) will be the joint signatories, All withdrawals from MAS account must be done by a joint signature of both signatories, only after a written approval of MAS. The member secretary may be authorized to incur expenditure of up to Rs. 500 for emergencies or undertaking any urgent activities.

Coverage of MAS

The MAS will be formed at Slum level, and cover approximately 50-100 households. However, this can be modified based on the ground realities in each slum area, e.g. small slum of less than 50 families or presence of disparate groups within each slum. In case of existing Anganwadi Centres in the slum, the coverage of each MAS should be aligned with the coverage area of the Anganwadi Centre and has to cover all pockets of the slum.

Mahila Arogya Samiti Responsibilities

The responsibilities of the MAS are as follows:

1. Mapping and listing of slum households; and identifying vulnerable disadvantaged groups.
2. Monitoring and facilitating access to essential public services
3. Organizing local collective action for preventive and promotive health activities
4. Facilitating service delivery in the community

MAS will play these roles by:

- ▶ Supporting ANM, AWW and ASHA in organizing the Urban Health and Nutrition Day, immunization sessions and outreach sessions (both routine and special).
- ▶ Mobilizing pregnant women and children, particularly from marginalized families.
- ▶ Encouraging outreach workers and community service providers to articulate their problems in the MAS meetings. The meeting should identify who the ANM, anganwadi worker and the ASHA are unable to reach and help these providers to reach these sections.
- ▶ Maintaining records of births and deaths in the slum cluster.
- ▶ Monthly Meetings: Meetings of MAS should be at least once every month, preferably on a fixed regular date, and a regular venue fixed at a convenient place like AWC or school. A minutes register and meeting attendance register would also facilitate proper functioning. Normally, 50% will be a minimum quorum, but in large Samitis the meeting quorum could be fixed at even 33%.

Management of untied funds

The annual untied fund of Rs. 5000, can be used by MAS for any purpose aimed at improving health of the community, as per the decision of the MAS taken during its meetings. Nutrition, education, sanitation, environmental protection, public health measures, emergency transport are the key areas where these funds could be Utilized. The fund shall only be used for community activities that involve benefit to more than one household. Exceptions to this are in case of a destitute woman or very poor household, for health

care needs, especially for enabling access to care. MAS fund should preferably be not used for works or activities for which an allocation of funds is available through urban local bodies or other departments. The MAS is encouraged to contribution additional funds to its account. Decisions taken on expenditure should be documented, and preferably adopted as a written resolution that is read out and then incorporated into the minutes in a meeting which had an adequate quorum.

Monitoring of Mahila Arogya Samitis

Every ASHA Facilitator/community organizer shall assist CPMU/DPMU in maintaining a detailed database on MAS. The database should have information on:

- a. Number of slums under each UPHC, number of MAS formed and number of MAS with Bank accounts opened
- b. Composition of the Samiti and the monthly meetings held
- c. Dates of release of the untied fund, and total fund spent by each MAS – as per UCs received

Other than this, the district community processes team reviews all aspects of MAS once a month, if possible conducts a monthly meeting of the ASHA facilitator/community organizers who similarly conduct once a month meeting with the ANMs and ASHAs. In these meetings, the information regarding functionality is received and the ASHA facilitators/community organizers and ASHAs are trained to provide assistance in solving the problems they face. All supervisory staff must conduct a sample visit to MAS meetings and ANMs and ASHA facilitators/community organizers must try to attend MAS meetings, at least once in 2 months.

Key Learnings:

- ▶ Community Processes are an essential component of NUHM which connect the UPHC with the community it serves, as well as with other community based stakeholders
- ▶ Urban ASHAs have defined roles and responsibilities to identify and address health care needs at her level, for approx. 2000 population allocated to her through home visits and community based activities
- ▶ Mahila Arogya Samitis, ie, groups of community women should meet every month to discuss community health issues, mobilize community for healthy behavior and develop linkages with ULB members.
- ▶ ASHAs and MAS along with the Anganwadi worker should work as a team to identify and address health needs of the community

Further Reading :

1. Framework for Implementation, NUHM
2. Guidelines for ASHA and MAS in urban areas
3. Thrust Areas for NUHM for states: Focus on Community Processes

4.2 Prevention, Screening and Control of Non-Communicable Diseases

LEARNING OBJECTIVES:

Participants will learn about:

- ▶ *Background and rationale for population based screening for Non-Communicable Diseases*
- ▶ *Process of population enumeration and registration to cover the eligible population*
- ▶ *Service Delivery Framework*
- ▶ *Screening and health promotion*
- ▶ *Referral and treatment*
- ▶ *Drugs and diagnostics*

Introduction

The World Health Organization (WHO) has identified four major NCDs, namely cardiovascular diseases (CVD) such as heart attacks and stroke, diabetes, chronic respiratory diseases (chronic obstructive pulmonary diseases and asthma) and cancer. The list of non-communicable disease is of course much longer than these four. However, these four conditions account for a high proportion of premature mortality in India (WHO 2014).

Cardiovascular diseases and diabetes share common risk factors and for which there are a set of similar public health approaches related to health promotion, prevention and management. Key factors linked to these four NCDs are tobacco use and exposure, unhealthy diet, physical inactivity, alcohol misuse, indoor and ambient air pollution, stress, poverty (as a cause and consequence), poor health seeking behaviours and low access to health-care services. Diabetes and hypertension can cause stroke, heart attack or kidney failure, and all are amenable to prevention, early detection and treatment.

The three most commonly occurring cancers in India are those of the breast, uterine cervix and oral cavity. Together, they account for approximately 34% of all cancers in India, and constitute a public health priority. Breast cancer has emerged as one of the leading causes of cancer among women (14.3%) in India with 1,44,937 new cases and 70,218 deaths reported in 2012 (Globocan 2012). Cervical cancer in India is the second most common cancer in women (12.1%). Every year, around 1.23 lakh new women are diagnosed with cervical cancer and 67,500 of these women die of the disease in India (Globocan 2012). Oral cancer accounts for around 7.2% of all cancers in India with 77,003 new cases and 52,067 deaths reported in 2012 (Globocan 2012).

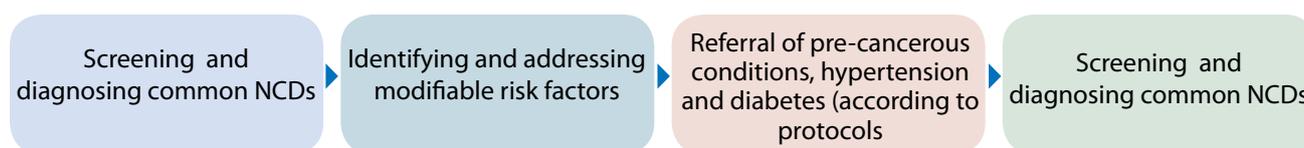
The National Programme for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), was initiated in 100 districts in 2010, and expanded to about 468 districts in 2012. The focus of NPCDCS is to enable opportunistic screening for common non-communicable diseases, at District and CHC levels, through the setting up of NCD clinics. At the PHC and sub centre levels, additional funding for glucose testing was provided for all those over 30 years of age and all pregnant women from 2012 onwards.

However, in order to expand the basket of services available for primary health care in the public health system, it is necessary to integrate screening, early detection and management of these common non-communicable diseases as close to communities as possible. The risk assessment, screening, referral, and follow up for selected NCDs amongst all women and men aged 30 years and above, would be included in

the set of services being offered as part of comprehensive primary health care. This intervention would be a part of the NPCDCS and leverage existing resources under this programme.

In urban areas, states would need to develop strategies that combine effective outreach and facility based primary health care services to serve as a platform for the delivery of this intervention. Screening is envisaged to take place at the level of the Urban PHCs and the Urban CHCs.

Figure 12: Key Processes of the NCD Program



Population Enumeration

The first step in the process is the active enumeration of the population and registration of families through individual health cards placed within a family health folder. The initial enumeration would also list existing health issues, diseases, disabilities and exposure to risk factors among individuals to estimate disease and risk burden; which can be utilized to prioritize health interventions. While initially register based, the cards will be converted to electronic formats. First time population enumeration will be a manual process which will take time to be completed. Once these manual records are converted into electronic data-base; the ANM using tablets or laptops would be able to update the population record based on information provided by the ASHA or Anganwadi worker (AWW) as and when any event (birth, death or migration) occurs in the community.

ASHAs will normally undertake completion of the health cards. In some urban areas where ASHAs are currently not available, the ANM will undertake such enumeration. The family and individual members would be allocated a unique health ID; which will help in identification of family members.

The Ministry is also working to develop an IT application to develop and maintain Electronic Health Records (EHR), to facilitate continuum of care. This would be shared with the states as and when finalized.

Service Delivery Framework

At the start of the programme, the ASHAs will complete a Community Based Assessment Checklist (CBAC) for all women and men over 30 years in their population. This checklist is provided in Annexure C. This form is intended to capture data related to age, family history, treatment for any of the NCDs, waist circumference, and risky behaviours such as physical inactivity, use of/or exposure to tobacco and alcohol use. A section of the form has questions that are allocated a score. A score of below four implies low risk. ASHA/ANM will be sensitized to the fact that a low risk score **does not mean** that the individual is to be exempted from screening, as NCDs could exist, even in the absence of risk factors. **The scoring is not a point of elimination but a means to highlight risk factors.**

The purpose of the form is to help the frontline workers use it as memory trigger, highlight the fact that the six variables in the tool increase the risk of these NCDs, and generally serve as a way of educating the community on these issues. The information from the form should not be used for estimating population prevalence or for elimination of individuals from screening and early detection. Once this exercise is completed, the ASHA will ensure that all those in this age category, particularly those who appear to be at risk for an NCD are informed of the benefits of being screened and actively mobilized to attend the screening day at a fixed location on a specific day.

Screening for cancers will take place once in five years, and for hypertension and diabetes it should be done annually. The principles of screening at the community level are that:

- ▶ No individual should need to travel more than half an hour to be screened
- ▶ Screening is conducted at a site where privacy is assured
- ▶ Screening for all conditions, including cervical cancers (where Visual Inspection by Acetic Acid is to be undertaken) are carried out according to standard protocols.

While hypertension, diabetes, oral and breast cancer screening can be offered in the outreach services during outreach sessions, since the processes are relatively simple, cervical cancer screening requires a space where speculum examinations and visualization with acetic acid can be done, including facilities for sterilization of equipment. Where cervical cancer screening is also involved, it should be done under supervision and support of a trained Lady Health Visitor, Staff Nurse or even a Medical Officer.

Screening days should be preceded by mobilization events in coverage area to enable awareness and high levels of participation. The screening days should be conducted with the ambience of a *mela* or festive gathering to highlight the importance of the process.

States could rollout the screening for all five conditions at the selected health-centres and UPHCs in Year One, and expand progressively to cover all health centres. Alternatively, similar to the Urban Health and Nutrition Day, screening for Hypertension, Diabetes, Oral and Breast Cancers can be undertaken at the outreach sessions, provided the principles elucidated above are adhered to. For cervical cancer screening alone, women could be screened at UPHC equipped for the purpose.

Such screening should be prioritised in UPHCs and at health centres that have two ANMs (or one ANM and one Male Multi-purpose Health Worker), and the requisite number of ASHAs in the coverage area of the health centre. Mahila Arogya Samiti (MAS) would be actively involved in this endeavour.

Concerned ANMs, LHVs, SNs, and mid-level providers would be trained in Oral Visual Examination (OVE) and Clinical Breast Examination (CBE). They would also be trained in Visual inspection using Acetic Acid (VIA) for cervical cancer screening. LHVs and SNs should serve as mentors and trainers to the sub centre staff and also assist when there are shortages and absences.

States could consider engaging one additional Staff Nurse or Lady AYUSH provider to manage the screening programme for the entire UPHC area. At the district level, an additional position of one Programme Officer and an MIS officer would be required to oversee the planning and entire implementation of the NPCDCS programme (at all levels), including facilitating and supervising the continuum of care. Existing human resources of the NPCDCS programme would also be involved at various levels as appropriate.

For cancers of the oral cavity and breast, the first level of referral is the UCHC or the SDH and then the DH for biopsy of confirmed cases. For cervical cancer, the UCHC could offer colposcopy, wherever possible, for those that are VIA positive and cannot be managed by cryotherapy at the level of the UPHC. The biopsy cases would need to be referred to the DH, or to the nearest tertiary centre. Management and treatment of cancers above the level of the UPHC are dealt with in the *Operational Framework for Cancer Screening and Management*.

Screening Days

On a fixed day in a week, possibly in outreach mode, the ANM, assisted by the ASHA and members of the MAS, would screen for common NCDs. The target population for screening is as follows:

- a. all men and women over 30 years for Oral Cancer, Hypertension and Diabetes Mellitus;
- b. all women over 30 years for Cervical and Breast Cancer

Key tasks on the screening day include:

- ▶ Community awareness and active mobilization
- ▶ Organising the venue
- ▶ History taking of all patients
- ▶ Management of patient flow
- ▶ Recording feedback to patients
- ▶ Monitoring of already diagnosed cases, and
- ▶ Referral advice

This will need a coordinated team effort: ANM, ASHA, ASHA facilitator, AWW), and volunteers. Such volunteers could be members of the MAS or adolescent groups, or local organizations.

In order to roll out this component at scale, it would help to pilot different modalities for different contexts to better understand the ideal provider mix and process to follow. The District NCD cell should provide support for planning, monitoring and reporting.

Health Promotion

Adopting healthy behaviours is critical for prevention and control of hypertension and diabetes and some other forms of non-communicable diseases. For this reason, behaviour change communication is an important part of the NCD Programme. States will 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 (see Table 11 below). States should develop an integrated health promotion strategy that envisages convergence, multitasking and pooling of resources from various programmes.

IEC messages should cover the following topics:

- ▶ Increasing awareness on risk factors of NCDs
- ▶ Healthy lifestyle; diet exercise and avoiding tobacco and excess alcohol. 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.
- ▶ Benefits of screening and treatment compliance

Table 11: Different BCC strategies at different levels of the health system

Level	Strategies
Individual & family	<ul style="list-style-type: none"> ▶ IEC material and patient brochures that promote healthy behaviours, exercise routines, dietary advice, avoiding substance abuse and compliance with treatment ▶ Yoga ▶ Individual and family counselling for those who have started treatment for treatment compliance and lifestyle modifications ▶ Social media and SMS
Community	<ul style="list-style-type: none"> ▶ MAS ▶ The use of traditional media such as Kala Jathas ▶ Local gatherings, religious festivals, camps

Level	Strategies
Facility	<ul style="list-style-type: none"> ▶ Patient support groups facilitated by the ASHA or ASHA facilitator to improve motivation and share challenges and success related to life style changes, behaviour modification, reduction of substance abuse and adherence to treatment should be created. ▶ The Rogi Kalyan Samiti at the level of the UPHC or UCHC, would be sensitized to the intervention, to enable addressing issues of procurement and supply of drugs and diagnostics, support for diagnostics, referral to secondary or tertiary care centres and follow up.
Systems level	<ul style="list-style-type: none"> ▶ States should make the effort to link with AYUSH systems to incorporate appropriate prevention and promotion strategies, including the practice of yoga. ▶ Linkages would be made with existing tobacco cessation programmes. ▶ States may also use MMUs to display audio visual messages related to prevention and health promotion.

Referral and Treatment: Ensuring Continuity of Care

- i. Those diagnosed with hypertension and diabetes, would be referred to a Medical Officer (MBBS), at the nearest facility, for confirmation, conducting relevant laboratory investigations, and initiation of treatment.
- ii. Those who are found positive for cancer and precancerous lesions will be referred by ANM or Staff Nurses in specified screening sites to the appropriate level of health facility for confirmation and treatment by trained specialists.
- iii. It will be unethical to screen patients without ensuring the appropriate treatment plan. Providers would be oriented in the use of standard treatment guidelines for diagnosis and treatment of common NCDs. The ANM and ASHA should also be aware of the complete treatment protocol. Referral pathways are illustrated in Table 12 below.

Table 12: Referral pathways

Conditions	Referral pathway
Hypertension and diabetes	Referred to a Medical Officer (MBBS), at the nearest facility, for confirmation, conducting relevant laboratory investigations, and initiation of treatment.
Cancer and precancerous lesions	Referred by ANM or Staff Nurses at the screening site to the appropriate level of health facility for confirmation and treatment by trained specialists.

Once the diagnosis of hypertension or diabetes is established, the patient must receive at least a month's supply of drugs from the UPHC. Once the condition is stable, the state could also decide to provide the patient with a three month supply, with the ANM/ASHA visiting the patient each month for ensuring compliance, checking on diet and life style modification, and measuring the blood pressure or blood glucose. The patient will need to go the UPHC for the first follow up at the end of the first three months after diagnosis, and sooner if required. An annual specialist consultation at the nearest nodal UCHC with an NCD clinic, is also recommended, based on the decision of the MO at the UPHC.

For those individuals who are already on treatment under the care of a private practitioner, they could be offered the choice of taking drugs from the public health system, after appropriate confirmation. However, these individuals would be visited regularly by ASHAs, monitored for treatment compliance or lifestyle changes and details recorded in the health card. The ASHA will prioritize those households where there are treatment defaulters or those who experience complications. The aim is to minimize treatment defaulters and to achieve hypertension and glycaemic control at an individual and population level. The ANM would also conduct regular home visits.

Drugs and Diagnostics

Drug supplies would be as per the state Essential Drug List, and buffer stocks would be maintained at all levels. The ANM and ASHA team would need to have a glucometer, sufficient strips, a BP apparatus, a tape measure, and a torch in working condition. This would be reviewed at the monthly meeting, and supplies ensured. Equipment for screening of cancers are as follows: examination lamp with white light, autoclave, Cusco's speculum, dental mouth mirrors, and torch with a white light. All BP instruments and glucometers have to be periodically calibrated. This would be facilitated by the Biomedical Equipment Maintenance Programme. An ICT mechanism to capture complaints about shortfalls or defects would also need to be created.

Capacity Building Plan

All health workers will need to be trained for the NCD Programme. The different training topics for each cadre are described in Table 13.

Table 13: NCD training for different cadres

Position	Training required
ANMs or MPWs	Three-day module on hypertension, diabetes and screening of oral and breast cancers
ASHA	Five-day module on hypertension, diabetes and screening of oral and breast cancers, with one day of overlap for integrated training with ANMs/MPW, so that they are able to better function as a team.
ANMs, Staff Nurses and LHVs	Two weeks training at a DH/ tertiary care institutions for training in VIA.
MOs	Five days training in a tertiary care setting

Monitoring and Supervision

The overall responsibility for monitoring and supervision of field activities is with the UPHC Medical officer. Review of the programme should be an integral part of monthly review meetings, field supervision, and data monitoring. Recording and reporting at all levels would be aligned with NPCDCS guidelines.

Key Learnings

- ▶ NCDs such as Diabetes, Cardiovascular diseases and cancers (oral, breast, cervical, lung) have become the major cause of death in urban areas.
- ▶ NCD screening and treatment is an important component of Comprehensive Primary Health Care. Under CPHC provision, registration of families will be done to provide each member a health card.
- ▶ Population based NCD screening shall be done on fixed days in outreach mode by ANMs and ASHAs.
- ▶ Screening, referral and treatment shall be done as per protocol, with ensured continuity of care.

Further Reading:

- ▶ Operational Guidelines on Prevention, Screening and Control of common Non-Communicable Diseases
- ▶ Operational Framework - Management of Common Cancers
- ▶ Report of the Task Force on Comprehensive Primary Health Care Rollout

4.3 Quality Assurance in Urban Health

Implementation of National Quality Assurance Program in Urban Health care facilities

LEARNING OBJECTIVES:

After completing the material, learners will understand:

- ▶ *The importance of quality in urban health*
- ▶ *The National Quality Assurance Program (NQAP)*
- ▶ *The institutional framework for quality assurance at the state, District and facility level.*
- ▶ *The key features of NQAP*
- ▶ *Steps for implementation of the QA program under NUHM*

Overview of Content

This section acquaints the participants with concepts of quality, the importance of quality in public health and different perspective in context of urban health. An overview of the National Quality Assurance Program, how it came into existence and key features of the program are also described. A brief description on 8 Areas of Concerns, 35 standards and measurement of standards by a set of measurable elements and checkpoints is given. The organizational framework for developing a quality structure in the facility, district and state under NQAP is described. The activities that should be undertaken to ensure quality at different levels of the health system (facility, city, district, state) are described in detail for participants.

Quality Assurance for Urban Health Facilities

Quality is a measure of excellence or a state of being free from defects, deficiencies and significant variations. It is brought by strict and consistent commitment to certain standards that achieve uniformity of product or services in order to specific customer or user requirements. There are many ways to define "quality" such as fitness for purpose or use; free from defects and deficiencies; compliance to pre-defined standards; measurement of its attributes; "to do the right thing right, the first time and always" ; and meeting customer needs and expectations. Quality in health care is particularly important as it can increase access to care, ensure continuity of care, and prevent mortalities.

The Ministry of Health and Family Welfare, Government of India, is committed to support and facilitate the Quality Assurance Programme, with a commitment to ensuring the healthcare system meets the needs of the population in a way that is sustainable. The main focus of the proposed Quality Assurance Programme would be enhancing patient satisfaction among users of Government Health Facilities and establish trust in the public health system. Quality in the health system has two components:

1. **Technical Quality:** on which, usually service providers (doctors, nurses and para-medical staff) are more concerned and which has a bearing on outcome or end-result of services delivered.
2. **Service Quality:** pertains to aspects of facility based care and services, which patients are often more concerned with, and have a bearing on patient satisfaction.

Quality of healthcare services includes six subsets, as illustrated in Table 14.

Table 14: Six components of quality healthcare services

Subset	Definition
Patient-centered	Delivering health care that takes into account preferences and aspirations of the service users, and is in congruence with their culture. It implies that patients are accorded dignified and courteous behavior. Their reasonable beliefs, practices and rites are respected.
Equitable	Delivering health care which does not vary in quality because of personal characteristics such as gender, caste, socioeconomic status, religion, ethnicity or geographical location.
Accessible	Delivering health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to the medical need.
Effective	Delivering health care that is based on the needs, and is in compliance with available evidence. Therefore, observance of treatment guidelines and protocols is important for ensuring this component of quality of care. The healthcare delivered results in improved health outcomes for individuals and the community.
Safe	Delivering health care which minimizes risks and harm to the users.
Efficient	Delivering health care in a manner which maximizes use of the available resources. Wastage is minimized.

However, while understanding the definitions of quality, it is important to keep in mind that quality is perceived differently by different stakeholders such as by patient, community, clinician and administrators. These different perspectives are laid out in Table 15, below.

Table 15: Stakeholder perspectives on quality of care

Stakeholders	Their perception
Patient expectations	Clean and inviting atmosphere, correct, speedy, low cost and lasting treatment, courteous behavior, personalized approach, no new diseases, psychological well-being, no harmful procedures or complications
Service Provider expectation	Investigation reports are available on time, drugs are available in the dispensary, and patients are getting cured quickly.
Administration Expectations	Optimal and rational utilization of resources, maximum satisfaction by the users of health facility, delivery of all components under the health programmes, compliance to treatment guidelines & clinical protocols and improvement in health status of the population
Societies Expectation	Cost effectiveness, equal access and equity in service delivery, transparency and extent of out of pocket expenditure, protection of health rights especially of marginalized and vulnerable populations

Framework for Quality Care

The most accepted framework for assessing the quality of care is the 'Donabedian model', which classifies quality of care in terms of three aspects – structure, process and outcome.

- Structure (Inputs):** Structural aspects of quality of care includes material resources like infrastructure, drugs and equipment; and human resources such as availability of adequate number of personnel, who have requisite knowledge and skills. Evaluations of quality often only focus on structural components – some may assume that well qualified people working in a well-organized setting would ensure delivery of high quality of care. However, this is not always true. Further, the proposed quality system strives to provide quality of care within the constraints of non-availability of sanctioned human resource, usually encountered by the public health facilities.
- Process:** Quality of care must also be evaluated in terms of processes and sub-processes, required for the delivery of care. For example, how quickly a patient is registered and attended to, behaviour of the service providers, respect for dignity and privacy of the patient and patient satisfaction.

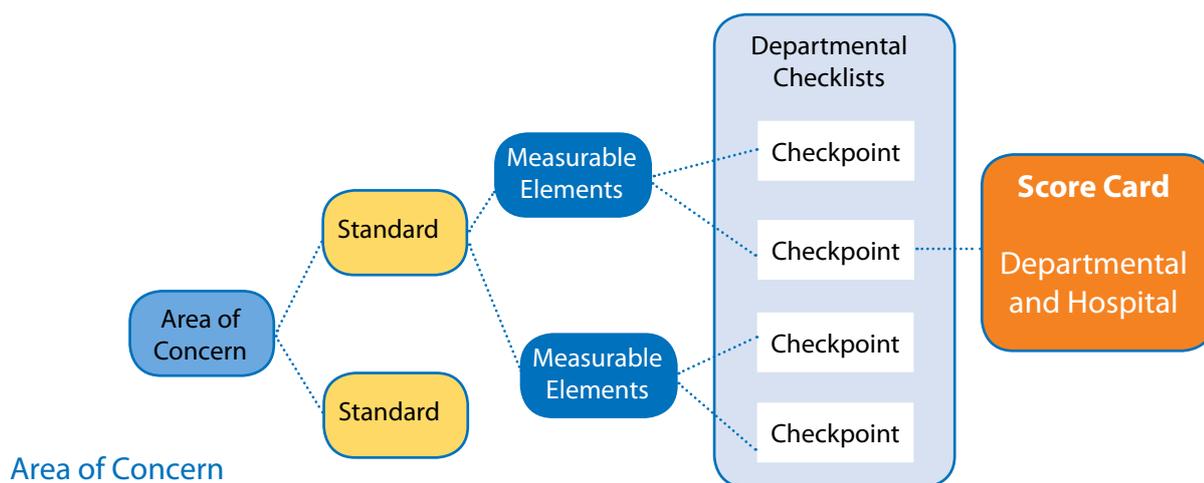
- ▶ **Outcome:** Quality of care is also assessed in terms of outcome measurements, which denote the extent to which goals of care provision are achieved.

So, to measure quality of urban healthcare facilities requires a system which addresses the above mentioned aspects of quality, tailored to the urban context existing in cities, districts and towns.

National Quality Assurance Standards (NQAS)

Quality assurance standards for UPHCs have been developed and are in congruence with the “Operational Guidelines for Quality Assurance for Public Health Facilities”. There are 35 standards categorised into 8 ‘Areas of Concern (AoC)’. Furthermore, each standard has specific measurable element. These standards and measurable elements have been compiled into 12 departmental checklists. All the relevant check points have been assembled for each department or programme and together constitute a checklist. The checklists then further generates score cards for each area of concern, department, overall facility and standard wise. It helps the facility, district and state to monitor facilities’ progress in term of quality.

Figure 13: Relationship between Area of concern, Standard, Measurable Elements and Department Checklist



Area of Concern

The areas of concern are illustrated in Table 16 below. Each area of concern is further divided in standards, which further divided in to Measurable Elements and checkpoints. A list of checkpoints, in line with standards and measurable elements, constitutes a checklist.

Further details about the standards and measurement system may be further read in *Quality Standards for the Urban Primary Healthcare Centre*, a Jan 2016 publication of Ministry of Health and Family Welfare, Govt of India.

Table 16: Areas of concern and associated standards

Name of Area of concern (AoC)	Number of Standards in each AoC
A. Service Provision	5
B. Patient Rights	3
C. Inputs	4
D. Support Services	5
E. Clinical Services	9

Name of Area of concern (AoC)	Number of Standards in each AoC
F. Infection Control	4
G. Quality Management	3
H. Outcome	2

NQAS standards for the UPHC include 12 thematic checklists, namely:

1. General Clinic
2. Maternal Health
3. New born and child Health
4. Immunization
5. Family planning
6. Communicable diseases
7. Non communicable diseases
8. Dressing and Emergency
9. Pharmacy
10. Laboratory
11. Outreach
12. General Administration

ADB Role in NUHM

The Asian Development Bank is supporting Ministry of Health and Family Welfare in establishing a well-integrated health system in urban areas. One of the objectives is to improve the quality of services in public health institutions in urban areas. Certain disbursement-linked indicators (DLIs) have been framed to monitor the progress of this work. These are depicted in Table 17 below.

Table 17: Disbursement Level Indicators Related to Quality

Financial year	Disbursement level indicators
2016 -17	<ul style="list-style-type: none"> ▶ 15 states, union territories, ULBs have set up organizational arrangements for quality assurance for health facilities. ▶ Quality assessment of 50% of urban health facilities against defined National Quality Assurance Standards and ensure the system for collection of patient feedback in all selected facilities. <p>(the 15 states taken up for FY 2016-17 are Bihar, MP, Orissa, Jharkhand, Chhattisgarh, Uttarakhand, Himachal Pradesh, Nagaland, Arunachal Pradesh, Sikkim, Karnataka, Punjab, Haryana, Delhi and Chandigarh)</p>
2017-18	<ul style="list-style-type: none"> ▶ 20 cumulative states, Union territories, ULBs have to set up organizational arrangement for QA. ▶ 80% of Urban Healthcare facilities would be assessed against national quality assurance standards and ensure the system for collection of patient feedback in all selected facilities.

Implementation of NQAS Program at State and District levels

The following activities are required to implement the NQAS at the municipal, state and district levels:

1. Institutional Framework for QA under NUHM

It is imperative that the quality of service be enforced throughout the system through standardisation and standard protocols. A framework and dedicated human resources are already in place to strengthen quality in public health institutions under the NHM (see the *Operational Guideline for Quality Assurance in Public Healthcare Facilities*, Ministry of Health and Family Welfare, Govt of India). This framework is described in Table 18.

Table 18: Institutional Framework for QA

Level	Name of Committee/Unit	Main Function
National Level	Central Quality Supervisory Committee (CQSC)	<p>Consists of Representatives from Program Divisions. QI at NHSRC will be the nodal agency to operationalise QA.</p> <p>Functions:</p> <ul style="list-style-type: none"> ▶ Development of technical guidelines and protocols ▶ Recruitment of state QA assessor ▶ Mentoring of state team ▶ Monitoring of QA activities
State Level	State Quality Assurance Committee (SQAC)	<p>Consists of Secretary, MD, Director Family Welfare, Director ME, Clinical Specialists, Nursing Advisor and NGO/ private sector hospital.</p> <p>Function:</p> <ul style="list-style-type: none"> ▶ Developing quality assurance policy and guidelines ▶ Ensuring attainment of standards ▶ Mentoring and reporting at the state and district ▶ Review and adjudicate compensation claims ▶ Periodic review of quality assurance progress ▶ Review KPIs
	State Quality Assurance Unit (SQUA)	Consists of Additional/JD (FW)/ DD/ equivalent, State nodal officer of Program division, State Consultant (3), Administrative Assistant. SQUA is the working arm under SQAC.
	QA Assessor (Empanelled)	
District Level	District Quality Assurance Committee (DQAC)	<p>Consists of District Collector or Deputy Commissioner, CMO or equivalent, District Family Welfare Officer or equivalent, Deputy Superintendent, Incharge PHC and CHC, Nodal Officer - Program division, clinical specialist, nursing representative, legal cell, NGO/private hospital representative, representative from medical professional bodies.</p> <p>Function:</p> <ul style="list-style-type: none"> ▶ Dissemination of QA policy and guidelines ▶ Ensuring standard of quality care ▶ Review, report and process compensation claims. ▶ Capacity building ▶ Supporting the quality improvement process ▶ Coordination with the state ▶ Reporting
	District Quality Assurance Unit (DQAU)	<p>Consists of District Family Welfare officer or Equivalent, one clinician, District consultant (3), Administrative assistant</p> <ul style="list-style-type: none"> ▶ Function as working arm to DQAC.

It is important to mention here, the same institutional framework and human resources will support urban healthcare facilities for implementation of quality standards, capacity building for quality, assessments, monitoring, evaluation, and reporting, state level and external certifications.

Every state or union territory needs to ensure that their Urban Nodal Officers (or equivalent) are part of the quality assurance committee and units and show their representation in state and district level quality activities like meetings, assessments, monitoring and reporting. In larger cities like Ahmedabad, Bangalore,

Hyderabad, Chennai, Delhi, Kolkata, Mumbai and Pune, where health is taken care of by the Municipal Corporations, a dedicated person for QA activities may be recruited.

2. Training

Under NQAS for UPHC there are 2 types of training:

1. One day orientation training on Quality Standards for Urban Health Facilities. Training may be attended by SQAC members, State level program officer, Civil Surgeons, CDMOs, DHO or any other equivalent.
2. Two day training for quality assurance may be planned at the state, district, regional or city level, in order to acquaint the participants with the approach and methodology for implementing QA program across facilities in their respective area. For implementation at facility level 3 participants from each UPHC and 5 participants from each UCHC are usually invited.

3. Periodic Review of QA activities

The SQUA or DQUA will form linkages with the urban local bodies (ULBs) and urban nodal officers and conduct monthly and quarterly meetings with the quality team at the facility, district and corporation levels.

Table 19: Periodic review of QA at different levels of the health system

Level	Factors the review covers
Facility level	<ul style="list-style-type: none"> ▶ Number of internal assessment targeted and completed ▶ Number of gaps identified and traversed ▶ Number of rounds of patient satisfaction survey targeted and conducted ▶ Number of Quality meetings targeted and completed. ▶ Facility wise issues which need to be flagged at district state level may be taken up and addressed
District level	<ul style="list-style-type: none"> ▶ Number of facilities targeted for Baseline assessment and completed ▶ Number of facilities targeted for district level assessment and completed ▶ Number of facilities taken up for state level assessment and completed ▶ Number of facilities taken up for National level assessment and applied for assessment and achieved the certification ▶ Facility wise issues which need to be flagged at district and state level may be taken up and addressed ▶ Number of monitoring visits targeted and completed ▶ Number of facilities reported KPIs on monthly basis
State level	<ul style="list-style-type: none"> ▶ Number of districts targeted for assessment and completed ▶ Number of facilities targeted for state level assessments and completed ▶ Number of facilities targeted for state level assessments and completed ▶ Number of monitoring visits targeted and completed ▶ Number of districts reported KPIs on monthly basis ▶ Number of review meetings targeted at district and state level and completed

4. Fund allocations

The NUHM unit may propose budget for training, review meetings, monitoring visits and certification. Implementation of QA activities at facility level may require budget for facility upkeep and ensuring quality

activities which may include signage, patient satisfaction surveys, employee satisfaction surveys, fire systems, and calibration of equipment and printing of SOPs. The budget may be proposed under appropriate head of SPIP (Designated FMR Code in SPIP for QA under NUHM is P.5).

5. Assessments and certification of UPHC:

State NUHM ensure internal and state level of each urban facilities every year from state and district level. Each district has to plan assessment of facilities at defined intervals. These assessments may be clubbed with the facility's own internal assessments. Once facility got 70% of scoring, the same may be informed to state who conduct an independent assessment and if facility got 70% of scoring in assessment they may be certified at state level.

Steps for Implementation of QA in Urban Health Care Facilities

Implementation of quality assurance at the facility level needs to follow some basic steps which are enumerated below:

1. Sensitization of service providers for quality

A formal half-day workshop can be organized at the facility, where, the facility in charge or representative from District Quality Assurance Unit (DQAU) should orient the staff about quality assurance programme, quality standards, assessment process and incentives linked to quality in brief.

2. Setting up a Quality Team

A multidisciplinary team involving doctors, nurse, technician, ANM, ASHA, members of MAS shall be constituted at the facility for implementing quality improvement activities at the facility.

3. Baseline Assessment and Addressing Gaps

The quality teams at the facility level those have been trained and will assess the facilities against the NQAS for UPHC and find gaps for quality improvement initiatives. If facilities do not have any trained person, the District Quality Officer or their representative may be invited for half day training to orient the facility for the initial assessment. The quality team at the facility level shall ensure the gap identified are addressed through a concrete action plan. The District or City quality assurance unit shall follow up with the quality team at the facility level for transferring gaps.

4. Action Planning and Prioritising

The gaps found during assessment shall be prioritized based on the severity of the gap whether they are directly or indirectly affecting patient care along with that the level of the support required for its closure and what payoff facility have after fulfilling the gap. According to gap category, a time bound action plan needs to be prepared. The plan shall clearly indicate the action to be taken with the time line and person responsible for its closure.

5. Measuring Key Performance Indicators

A system of measurement needs to be put in place to measure the different aspects of facility performance and quality of care. A set of indicators has been defined for each level of facility in term of productivity, efficiency, clinical care and service quality. There are 16 KPIs which every facility needs to report to DQAU every month. DQAU should then compile district data and send it to the SQAU.

6. Patient Satisfaction survey

The Quality teams at the facility shall conduct Patient satisfaction surveys for at least once in quarter and analyze the data to know attributes or services for which users are not satisfied. Every month facility will take action on lowest performing attributes to enhance customer satisfaction.

7. Setting Quality policy and objectives

Quality Policy and objectives needs to be framed by the facility in consultation the staff and other stakeholders. Every month facility will review the progress of their objectives in monthly review meeting.

8. Implementation of Standard Operating Procedures and Work Instructions

Standard Operating Procedures (SOPs) is a tried and tested tool for standardizing processes in various setups. Facilities should document all its processes that are critical to quality service delivery so they can be standardised and replicated elsewhere.

9. Periodic Assessment and Improvement

A system of periodic internal assessment should be carried out at the facilities at least once in quarter to sustain quality activities. Assessments can be carried out using departmental checklists.

10. Certification

Once a facility is confident that the quality score has reached 70%, they should inform the DQAC (District Quality Assurance Committee) to initiate the certification process. Members of DQAU (District Quality Assurance Unit) verify the score by undertaking independent verification. If facility gets the required score, it would be recommended for state level assessment by SQAU (State Quality Assurance Unit) and it will carry out the assessment. If facility gets the required score, a state level certification would be provided to the facility. Simultaneously, actions would be taken for obtaining national certification.

Learning Outcome

- ▶ Quality in urban health services enhances access to care, ensures continuity of care and reduces morbidity and mortality.
- ▶ The National Quality Assurance Program aims to measure quality in health facilities through a standardized and systematic process. 12 thematic checklists have been developed for measuring quality in UPHCs.
- ▶ NQAP needs to be implemented in the States through establishment of State level and District level committees and teams.
- ▶ Various types of trainings and orientations are given under the program to a range of health cadres to ensure smooth implementation and enhancement of quality in health facilities.

Further Reading

- ▶ Quality Standards for UPHCs.
- ▶ National Urban Health Mission – Framework for Implementation.
- ▶ Operational Guidelines for Quality Assurance in Public Health Facilities

4.4 Managing Disease Outbreaks in Urban Areas

LEARNING OBJECTIVES:

- ▶ *To understand disease outbreaks and significance of early identification of outbreaks in urban areas*
- ▶ *To understand the process of disease surveillance under Integrated Disease Surveillance Program (IDSP)*
- ▶ *Understand the role of each health personnel in disease outbreak management*

With increasing globalization and the high connectivity of cities, urban populations face a high level of exposure to infectious diseases. Most diseases can be kept under control with routine activities such as anti-mosquito spraying, clearing drains, ensuring clean water and adhering to treatment protocols. Sometimes, however, even common endemic diseases can lead to infectious disease outbreaks – which is disruptive to communities and the health system. The many stressors faced by urban populations can create environments where diseases quickly spread. Unfortunately, the risks of disease outbreaks are only increasing with climate change and extreme weather events – which increase the risk of vector and water borne diseases.

The urban environment poses both opportunities and threats in terms of disease control. There is a high level of vulnerability to infectious diseases, and the opportunity to combat infectious diseases at scale. For this reason, managing disease outbreaks is central to the success of the National Urban Health Mission.

Ending deadly epidemics such as HIV and TB will depend on urban local bodies to control transmission and ensure those who are already dealing with infections have access to affordable and respectful care, and are adhering to treatment. This will require the capacity to **identify those who are at risk and those who are already infected**, and to extend the reach of prevention, treatment and care services. In addition, cities must address the factors that contribute to the spread to these diseases through intersectoral coordination to ensure there is appropriate water and sanitation services, mosquito control and other measures that address disease determinants. Strengthening these systems will build social and system resilience as new disease outbreaks emerge.

What is a disease outbreak?

An outbreak is the occurrence of a disease or syndrome clearly in excess of the norm in a given area over a particular period of time, or among a specific group of people. When there is a sudden increase in the number of cases with similar signs and symptoms as compared to previous weeks, or compared to the same month in the last three years, then there are chances of an outbreak. Clustering of cases can occur during a particular period (time), in a defined geographical area (place), or among a similar group of individuals (people).

Disease Surveillance

One of the key ways infectious diseases can be controlled is through **disease surveillance**. Disease surveillance is defined by World Health Organization (WHO) as “the systematic ongoing collection, collation and analysis of data for public health purposes and the timely dissemination of public health information for assessment and public health response as necessary”. The primary objective of disease surveillance is to immediately detect and rapidly respond to epidemic-prone diseases. In other words, it helps the health services to keep a close watch on health events occurring in the community and detect

outbreaks in timely manner. Surveillance can be active or passive:

- ▶ **Active Surveillance:** When a health worker goes into the area or house to house and collects information.
- ▶ **Passive Surveillance:** When people come to the health center and information is collected through different registers.

There are a number of different vertical programs to monitor infectious diseases in India, including the **Revised National TB Program** and The **National AIDS Control Organization**. There are also other disease tracking mechanisms such as **cancer registries**. The most comprehensive is the **Integrated Disease Surveillance Program**, which monitors incidence of a wide variety of diseases.

The Integrated Disease Surveillance Programme

The Integrated Disease Surveillance Program (IDSP) was launched in November 2004 to:

- ▶ Strengthen and maintain decentralized laboratory based IT enabled disease surveillance for epidemic prone diseases
- ▶ Monitor disease trends
- ▶ Detect and respond to outbreaks in early rising phase through Rapid Response Teams (RRTs).

Under the IDSP, data is collected on epidemic-prone diseases on a weekly basis from different reporting units (sub centres, primary health centres, community health centres, hospitals including government hospitals, private hospitals and medical colleges) through email, or the web based portal (www.idsp.nic.in). The information is collected on three specified reporting formats, namely:

- ▶ "S" syndromic cases – filled by health workers (ANM, Village Volunteers, and non-formal providers)
- ▶ "P" presumptive cases – filled by clinicians at the PHC, CHC or hospital
- ▶ "L" laboratory confirmed cases – filled by laboratory staff

For a summary, see Table 20, below. All IDSP Reporting Formats are available on IDSP website at: <http://idsp.nic.in>. This data is collated and analysed by district and state units to provide on the disease trends across different seasons and geographies. Whenever there is a rising trend of illnesses in any area, it is investigated by the Rapid Response Teams (RRT) to diagnose and control the outbreak. Emphasis is now being given to encourage reporting from major hospitals and also from infectious disease hospitals.

Table 20: Surveillance under IDSP: A Summary

Types of incident reported	Syndromic	Presumptive	Lab confirmed
Definition	Diagnosis on the basis of signs and symptoms	Diagnosis on typical history and clinical examination	Clinical diagnosis confirmed by an appropriate laboratory test
Form type	Form S	Form P	Form L
Form filled by	Health Workers	Medical Officers	Lab technician

In addition to reporting from facilities, event based surveillance is conducted through scanning the media. A media scanning and verification cell has been established under IDSP for detecting unusual events or outbreaks as reported in media. These alerts are shared with the concerned states and districts for verification and response.

IDSP functions through three administrative levels across the country:

- ▶ Central Surveillance Unit (CSU) in Delhi
- ▶ State Surveillance Units (SSUs) at all state and union territory headquarters; and
- ▶ District Surveillance Units (DSU) at all districts.

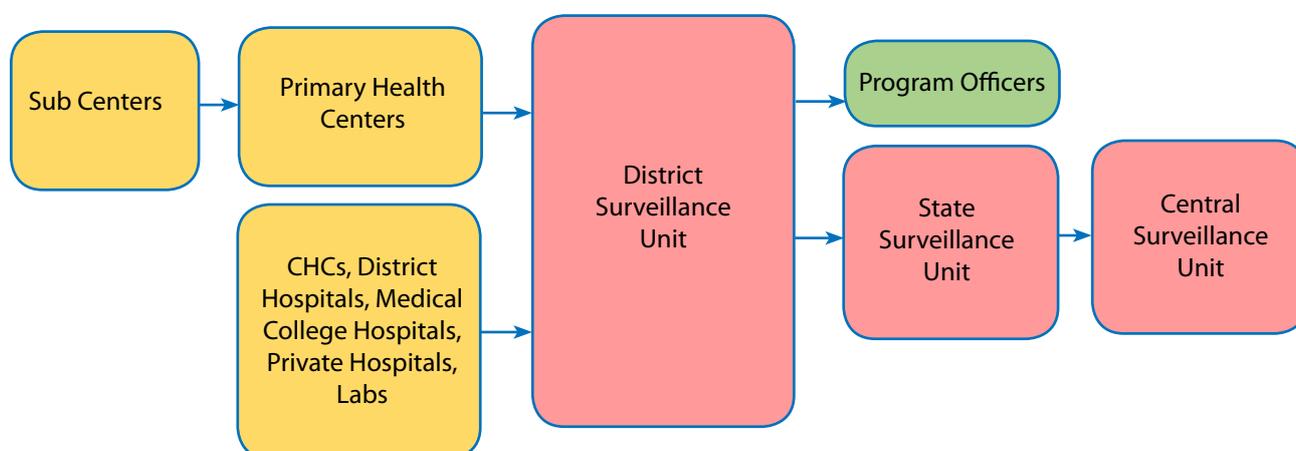
Funds are released under the IDSP to all the states as grant-in-aid to undertake diseases surveillance activities. The districts and states have been strengthened by additional contractual human resources, training of identified Rapid Response Team (RRT) members for outbreak investigations, strengthening of laboratories for detection of epidemic prone diseases, ICT equipment for data entry, analysis and data transfer, and provision of funds for operationalization.

Data Flow

On an average, 30-40 outbreaks are reported every week by the states as part of IDSP. All disease outbreaks reported from the states/UTs are compiled in the form of a “Weekly Outbreak Report” and is available on the IDSP website (<http://www.idsp.nic.in>). A unique code (outbreak ID) is assigned to each outbreak in the Weekly Outbreak Report for easy data storage and retrieval.

The flow of information under the IDSP is presented below in Figure 14. For a case study on how this flow of information works, see the case study on Gujarat (given as case example at the end of the section).

Figure 14: Information Flow under IDSP (IDSP boxes are coloured pink)



The Laboratory Network

A state based referral laboratory network has been put in place by utilizing the existing labs in medical colleges and other major centres, and linking them with labs in adjoining districts. These referral labs provide diagnostic services for epidemic-prone diseases during outbreaks. Presently this network covers 24 states and union territories, with 107 labs. In addition, 12 labs have been strengthened and made functional under IDSP for H1N1 influenza surveillance (Avian flu). To ensure coverage for all urban areas, additional labs will be identified within medical colleges and tertiary care centres in each municipal area to serve as a referral lab under the NUHM. IDSP is also establishing District Priority Health Labs (DPHL) which are usually attached to District Hospitals. These labs are being supported by IDSP with trained human resources, funds for essential equipment and an annual grant of Rs. 4 lakh per lab for reagents and consumables.

IDSP and the NUHM

Disease surveillance will be key to strengthening and scaling the National Urban Health Mission. Urban Primary Health Centres (UPHCs) and Urban Community Health Centres (UCHCs) will be the key reporting units at the city level – and they will submit the “P” form (the form for presumptive cases). However, as the private sector is so strong in urban areas, there will also need to be a big push to get private facilities to report. As the program rolls out, key priorities will be the training and capacity building of functionaries at different levels; strengthening of labs and UPHCs and implementation of the Clinical Establishment act to ensure private sector reporting.

Presently, IDSP it is being implemented in three metro cities, namely Mumbai, Kolkata, and Chennai. In addition, Gujarat is presently doing active surveillance and reporting to IDSP in its major cities. Based on population criteria, the following cities have been selected for the first stage of implementation: **Mumbai, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, Pune, Jaipur, Lucknow, Kanpur, and Nagpur.** Delhi will not be included in the list since it is deemed to be a State. Surveillance activities in Delhi will be undertaken in line with IDSP’s plans at the state level.

Roles and Responsibilities

The responsibilities of some key personnel who may be working in urban settings is as follows:

Epidemiologist:

- ▶ Organize and monitor timely collection of data from all reporting districts (may be wards or boroughs in urban setting).
- ▶ Administer collection, compilation and analysis of passive surveillance data not only from peripheral health institutions but also from hospitals and colleges.
- ▶ Analyse surveillance data and prepare weekly surveillance graphs and charts.
- ▶ Identify outbreaks of diseases targeted in IDSP for all reporting districts using triggers agreed with Central Surveillance Unit.
- ▶ Collect monthly summaries of the disease situation from the district surveillance units.
- ▶ Prepare and send monthly summaries of the disease situation to the Central Surveillance Unit and Regional Project Coordinators.

Diseases Monitored under IDSP

- ▶ Acute Diarrhoeal Disease (inc. Acute Gastroenteritis)
- ▶ Acute Encephalitis Syndrome (AES)
- ▶ Acute Flaccid Paralysis <15 years of age
- ▶ Acute Respiratory Infection (ARI)/Influenza Like Illness (ILI)
- ▶ Bacillary Dysentery
- ▶ Chicken Pox
- ▶ Chikungunya
- ▶ Dengue/Dengue Haemorrhagic Fever (DHF)/Dengue Shock Syndrome (DSS)
- ▶ Diphtheria
- ▶ Dog Bite
- ▶ Enteric Fever
- ▶ Fever of Unknown Origin (PUO)
- ▶ Leptospirosis
- ▶ Malaria
- ▶ Measles
- ▶ Meningitis
- ▶ Pertussis
- ▶ Pneumonia
- ▶ Snake Bite
- ▶ Viral Hepatitis
- ▶ 2 other State specific diseases

- ▶ Initiate outbreak investigations promptly following the standard operating guidelines of IDSP.
- ▶ Coordinate movement of Rapid Response Team and participate in all outbreak investigations.
- ▶ Ensure timely submission of FIR (First Information Report) and detailed Outbreak Report to SSU or CSU and Regional Project Coordinators.
- ▶ Ensure timely submission of annual project report and annual surveillance report of DSUs, prepare and timely submit annual project report and annual surveillance report for the SSU to CSU and Regional Project Coordinators.
- ▶ Support effective operational integration of disease control efforts based on the surveillance data.
- ▶ Coordinate involvement of Medical Colleges, Private Sector, Community and Media in surveillance activities.
- ▶ Provide regular feedback to all reporting districts on disease trends and outbreaks.
- ▶ Organize, coordinate and monitor training of state or district staff under IDSP.
- ▶ Identify emerging training needs and revise training calendars accordingly.
- ▶ Organize dissemination of training manuals and materials for training courses.
- ▶ Assist in organizing independent evaluation studies under IDSP and its outcome.
- ▶ Supervise Data Manager and Consultant Finance or Procurement appointed under IDSP to ensure timely submission of quality information required in relation to data and finance and procurement matters.
- ▶ Monitor proper use of IT networking towards data transfer, training, e-conferencing.
- ▶ Coordinate regular meetings of State and District Surveillance Committee and assist in inter-sectoral coordination for effective IDSP implementation. Also organize regular meetings of IDSP stakeholders.
- ▶ Make supervisory visits to DSUs to monitor implementation of project activity.
- ▶ Support state surveillance officer in carrying out other works related to effective implementation of IDSP.

Data Managers

- ▶ Assist State Surveillance Officer or District Surveillance Officer and other officials in carrying out IDSP activities.
- ▶ Supervise functioning of MIS unit of Integrated Disease Surveillance Project and IDSP Portal.
- ▶ Supervise functioning of Data Entry operators.
- ▶ Organize information received from District Surveillance Units (maybe Municipal areas in urban setting).
- ▶ Preparation of reports required under the project.
- ▶ Organize maintenance of IT hardware, software and WAN.
- ▶ Supervise and Maintain IT equipment for Video Conferencing and Data Transference.
- ▶ Familiarize and operate VC equipment, undertake preventive maintenance and troubleshooting for small problems, and coordinate with service providers for major breakdowns.
- ▶ Analyze S, P, L data for time and place in spreadsheet for identifying Rising Trend of Disease over time or Early Warning Signals.
- ▶ Prepare Periodic and Annual Reports.

Public Health Managers:

- ▶ Co-ordination with existing mechanism of disease reporting under IDSP, ensure periodic disease surveillance in the catchment area of the UPHC and notification of the same to the appropriate Authority on timely manner.
- ▶ Ensuring disease notification from private and non-profit organization in the field of health. This will help in liaising with community and health workers on one hand and IDSP and specific diseases control programmes on the other.
- ▶ To provide valuable feedback and evidence based advocacy for provision of clean water, sanitation services and garbage disposal on behalf of the community to the agencies responsible for these services.
- ▶ In case of Outbreak, must assist the MOI-C in identifying the cause and initiating remedial measures and necessary public health action.
- ▶ Collaboration and maintaining good working relationships with the ULB or the agencies responsible for provisioning of services like water supply, sanitation and waste disposal.

Role of Health Workers (ANMs, ASHAs)

The health workers are the most important workers at the primary reporting units in the surveillance system. They participate in IDSP in the following ways:

- ▶ Collection and collation of weekly surveillance data: Health workers should collect data on various syndromes under surveillance in IDSP from their UPHC catchment area and enter the information in their 'Register for Syndromic Surveillance'.
- ▶ Analysis and interpretation of weekly surveillance data: Health workers should do a preliminary analysis of syndromic surveillance data to find out clustering of cases or occurrence of unusual events in their area.
- ▶ Reporting: Health workers should fill the Form S from the data entered in Register for Syndromic Surveillance and send it to MO PHC every Monday. During the regular meetings (weekly/monthly) called by MO PHC the analysis of weekly disease surveillance data should be discussed and MO PHC shall provide feedback to Health Workers and Health Assistants and Health Inspectors on necessary action to be taken in the field.
- ▶ Public Health Action: Health worker should inform MO PHC immediately if they notice any clustering of cases/unusual events in their area. They should carry out syndromic surveillance so as to prevent, detect and respond to outbreaks in a timely and effective manner. They also carry out some important public health measures in response to outbreaks, for example, distribution of ORS packets, testing fever cases (with RDT kits), providing treatment to fever cases and providing health education.

Role of Urban Local Bodies and Other Departments

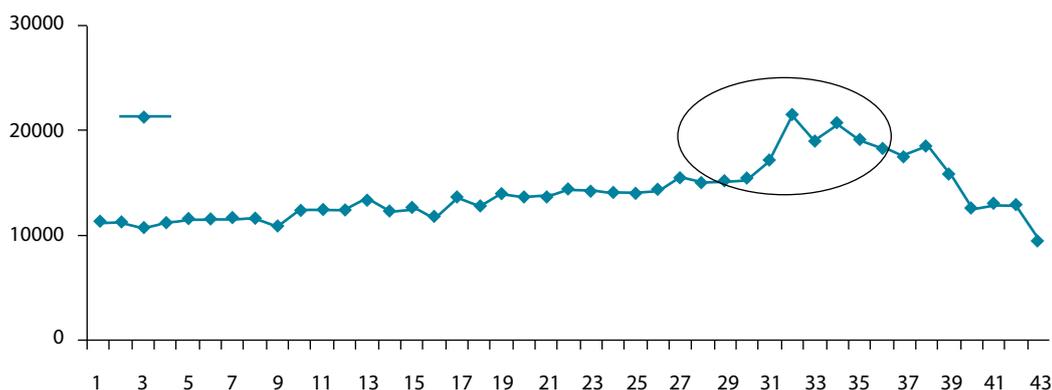
- ▶ Currently most of the outbreaks reported under the programme are either Water borne or Vector borne so cooperation of these departments would be required.
- ▶ Health workers working under different local bodies may be sensitized to fill 'S' form for syndromic surveillance.
- ▶ Ward members should be sensitized to urgently address situations of water logging, garbage disposal, open drains, mosquito breeding which lead to seasonal outbreaks.
- ▶ ULBs should employ innovative information channels to generate awareness among urban population on outbreak prevention and control, and on where to go if infection is suspected in a patient.

Case Example: Tracing Acute Diarrheal Disease Outbreak in Gujarat

As an example, the points below show how an acute diarrheal disease (ADD) outbreak in Gujarat was evaluated in 2014 at CSU, IDSP:

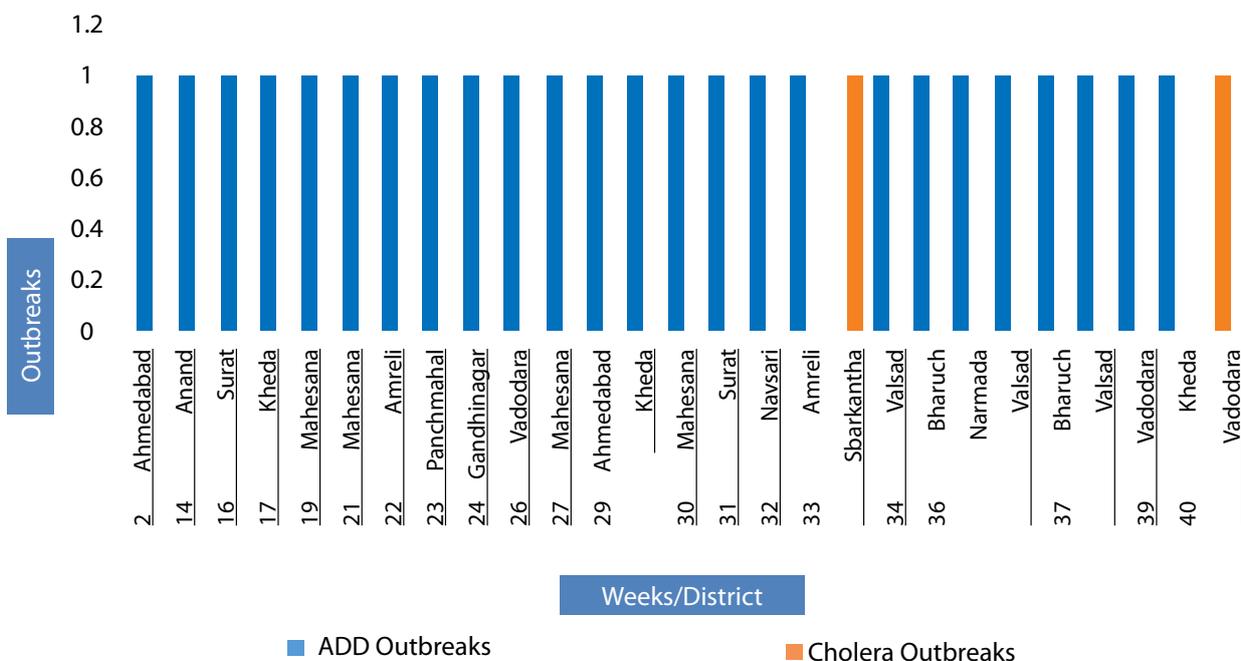
1. On analysis of week-wise data, a peak in number of cases is found between weeks 31 and 36.

Week wise number of cases of ADD (P form) reported under IDSP for Gujarat



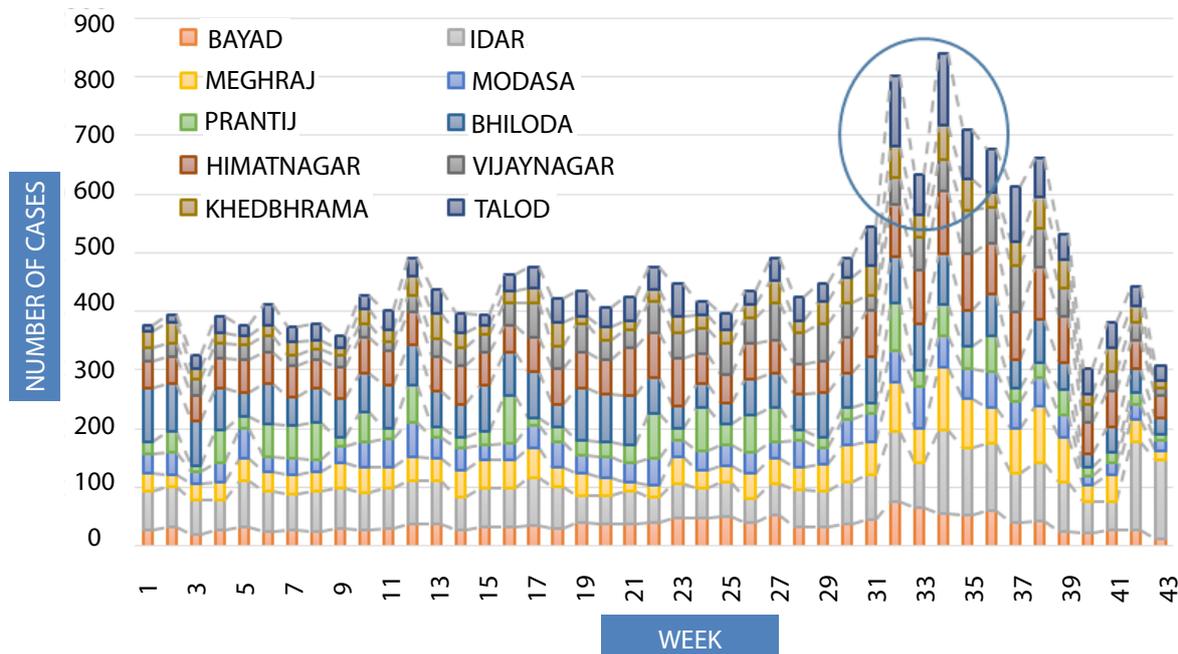
2. Analysis was done regarding the districts which were reporting outbreaks of ADD during these weeks for more detailed analysis. Sabarkantha district was selected for further analysis since it was reporting a cholera outbreak.

ADD and Cholera Outbreaks from Gujarat reported under IDSP-2014



3. Next, week-wise analysis was done of ADD cases in Sabarkantha district which demonstrated a similar pattern with peak between weeks 31-36.
4. Block-wise analysis of all blocks in the district was done. It showed that Cholera outbreak was reported from Modassa block in week 33.

Block Wise ADD cases from Sabarkanta-Gujarat



- The outbreak was discussed with state officials. They confirmed that a cholera outbreak occurred in Modassa block and samples were tested in Himatnagar lab. The outbreak was then further investigated and control measures instituted.

Case Example 6: Tackling TB in Mumbai

India is home to the highest absolute burden of TB in the world with an estimated 2.3 million cases. TB typically spreads easily in cities, with high population density and often poor drug adherence. If people do not take a full course of TB medication, the disease mutates resulting in a drug-resistant form. With many cases not being treated properly, multiple drug resistant TB (MDR-TB) cases are on the rise. MDR-TB is a more potent form of the disease and is very expensive to treat, posing a huge public health threat. In 2014, Mumbai registered 2951 MDR-TB cases, over 12% of the cases in the entire country. However, this is likely an under-estimate of the total number, as the private sector was not contributing to reporting.

In 2014, the **Mumbai Mission for TB Control**, was jointly set up by the Mumbai Municipal Corporation, the WHO and the Bill and Melinda Gates Foundation to help improve access to TB diagnostics, treatment and care for the city's population. The mission has achieved the following:

- Established public-private partnerships to expand the referral network (through the Private Provider Interface Agency or PPIA), which allows 3670 informal and formal private providers to offer vouchers for chest x-rays, CB-NAAT tests, and first line anti-TB drugs. PPIA has also networked with 670 hospitals, 390 chemists, and 282 X-ray centers across 24 wards in Mumbai. Private providers now follow standard protocols for diagnosis and treatment.
- Scaled up the number of labs from one to 268, providing free rapid TB diagnostics.
- Set up a patient information system – Universal Access to TB Care (UATBC) to facilitate referral and tracking. Treatment adherence data for patients getting treated in private sector is available for the first time
- Connected patients to the Central Government's Universal Access to TB program, where patient drug adherence is supported through a call centre
- Established a network of community health field workers to ensure drug adherence.
- PPIA has enabled a four-fold increase in TB case notification rate from the private sector from 53 per 100,000 in 2014 to 227 per 100,000 in early 2016.

4.5 Public Private Partnerships for Urban Health

LEARNING OBJECTIVES:

This training module aims to provide a basic understanding of:

- ▶ *What is PPP*
- ▶ *Why Governments choose PPPs for delivery of health services*
- ▶ *Challenges in Urban Health*
- ▶ *Steps of PPPs*
- ▶ *Different model in PPP in urban health*
- ▶ *How to make PPPs successful*

Overview

PPP is a form of contract between a government and a private entity, wherein these two bodies jointly provide public services in line with the pre-defined terms of contract. PPPs are being increasingly used in primary healthcare delivery services. However, there are many challenges in implementing PPPs and critical steps need to be followed to ensure a successful PPP.

Introduction

The health system in India has undertaken several reforms to improve the efficiency and equity in healthcare delivery. One such reform has been the collaboration of the public and private sectors through public private partnerships (or PPPs). Respective state governments are experimenting with various such partnerships - to reach the poor underserved and vulnerable sections of the population and reap maximum benefits from the untapped potential of private bodies.

Defining PPPs

A PPP exists when members of the public sector, such as state or local officials and agencies, join with members of the private sector, for example: service providers, employers, philanthropic organizations, media, civic groups, families and other service providers, in pursuit of a common vision and goals.

Health services and facilities have been delivered under different public-private collaborative arrangements in many well-performing health systems around the world for many years. The term PPP is widespread but often misunderstood, leading to misunderstandings amongst government, the general public and potential partners. Different countries have adopted different terminologies and frameworks to talk about PPPs.

PPPs in Health Care

Governments need to strike a balance between rising healthcare costs and escalating demands for healthcare services in the midst of ongoing budget constraints. The key factors that push governments from across the world to turn towards PPP are:

- ▶ To improve operation of public health services and to expand access to quality services
- ▶ It is an opportunity to leverage private investment for the benefit of the public
- ▶ Involve the non-profit partners in formal management, owing to their important contribution in delivering public services
- ▶ Government can have a greater pool of potential partners with the maturing private healthcare sector

Need for PPP under NUHM

There are many challenges in primary healthcare service delivery in the urban context, some of which include:

- ▶ **Human resource constraints:** Non-availability of doctors and specialists; Difficulty in posting and retaining staff
- ▶ **Limited reach:** Inability of the state to reach the urban poor and vulnerable populations to provide healthcare services; Inadequate number of health centres or facilities which are accessible to poor population
- ▶ **Limited range of services:** A limited range of services, with a strong focus on maternal and child health and infectious diseases. Limited access to diagnostic services; lack of information of the available services to the target population
- ▶ **Infrastructure limitations:** Space and land constraints at desired location in cities and lack of infrastructure

Services under NUHM which can be delivered through PPPs

- ▶ Clinical services provided at Urban Primary Health Centers
- ▶ Specialist outreach services
- ▶ Community outreach services (awareness programs, screening etc.)
- ▶ Laboratory and Radiology Diagnostic services
- ▶ Services provided through Mobile Health Units

Key Challenges for PPP in Urban Primary Healthcare

While there are health systems challenges that can be addressed through implementing PPPs, they are not without their own challenges. Some of these are described below:

- ▶ **Limited presence of established private providers in primary care:** The private sector market in India at the primary care level is highly fragmented and is mainly constituted by individual practitioners and informal providers. In large cities some established chains of private clinics are present, however, in smaller towns it is difficult to find private partners who can take up the entire operations of a set of primary health centres.
- ▶ **Existing payment mechanisms do not incentivize better performance:** In order to utilize the availability of existing private clinics and practitioners in urban areas it is important to consider other payment mechanisms like cross subsidization, capitation fees and performance based payments which increases the financial viability as well as promotes performance improvement through proper incentive mechanism.
- ▶ **Delays in payment to the private service provider:** In many cases the PPP models have failed due to regular delays in the payment to the private providers. Payment security is a critical element of a PPP. The main reasons for delays in payment are lack of specific and measurable performance parameters; lack of robust monitoring mechanisms; and inadequate capacity of public officials managing the PPP contract. The reasons are further discussed below. Apart from the above bureaucratic approval processes for payment also leads to payment delays.
- ▶ **Lack of specific and measurable performance parameters:** Unlike traditional infrastructure PPPs, healthcare PPPs are more service oriented and require both quantitative as well as qualitative parameters to appropriately measure the performance of the private partner. Qualitative indicators are harder to capture and report.

- ▶ **Lack of robust monitoring mechanism:** Supervision and monitoring of services has persistently remained a challenge for the government in PPP projects. In some PPP projects, where local-level facility or service managers have to supervise and monitor delivery of services by the PSP, adequate training in monitoring and supervision is required. Contract design in PPP projects must also have adequate performance indicators.
- ▶ **Inadequate capacity of the public officials managing the PPP contract:** PPPs, are complex arrangements as they attempt to draw up partnerships between two different kinds of the organizations with different interests and risk profiles. Ensuring a harmonious working relationship requires clearly structured working arrangements which include, a defined scope of work, measurable performance indicators, a monitoring framework and payment mechanism. Further it requires capacity building of the government officials who would be engaged in contract management during the operation period.

Steps for PPP

The state will need to undertake the following steps to establish a successful PPP:

1. Undertake a needs assessment or situational analysis to identify the gaps in service delivery.
2. Identify private sector availability through a market study which can help to bridge the gaps in service delivery.
3. Identify the required type and scope of PPP model.
4. Seek support from professional PPP consultants, the state PPP cell, the Urban Health division; or states with successful PPP models in place, to develop and design a transparent process of tendering.
5. Prepare RFPs and SLAs taking into consideration the healthcare needs and local conditions with key performance indicators (KPIs).
6. Develop a robust and reliable mechanism to monitor the performance and service delivery standards.

Different Models of PPP in urban health

I. PPP model of Urban PHC Management

Under this PPP model a cluster of PHCs or a single PHC in an urban area will be provided to the private partner for operation and maintenance. The state governments shall provide the space in government premises for operating the PHCs. In exceptional cases where the space is not available under government ownership, a private partner will be obligated to rent a premise for the contract period. In such cases, additional payment to the private partner for rent of the premises shall be budgeted. The private partner will pay for the utilities (water and electricity). The state government will transfer all the equipment, or the appropriate budget to the private partner according to the financial bid submitted by the private partner. Additionally, a set of key performance indicators (KPI) will be provided to the private partner including both quantitative as well as qualitative indicators. An incentive will be added to the fixed payment, based on the performance against the KPIs.

II. PPP model for engaging private service providers for Special Outreach camps

The Implementation Framework of the NUHM envisages provision of primary healthcare to slum dwellers and other vulnerable groups through targeted outreach services. There are two types of outreach sessions planned under NUHM: routine outreach i.e. Urban Health and Nutrition Day (UHND) and Special Outreach

sessions or camps for identified slum and vulnerable pockets on a regular basis, as per the specific local healthcare needs.

This model highlights engagement of private specialists through competitive bidding for organizing special outreach camps in the slums on a periodic basis. During these outreach camps the private partner shall provide specialists such as dermatologists, ENT, dentists, gynaecologists and paediatricians depending upon local needs and the nature of the special outreach camp, along with the arrangements for the required diagnostic tests to be conducted during the outreach sessions. The Authority shall provide the drugs to be dispensed to the patients during the outreach camps (or private partner may be provided funds for provision of drugs). The District Health Society or Urban Local Body may invite tender for the engagement of private service providers. This model would be suitable for participation by charitable institutions, private specialist clinics or multispecialty hospitals.

The DHS or ULB shall provide the venue in the slums for organizing special outreach sessions. The frontline workers and MAS would also be engaged for community mobilization. The Authority will make a fixed payment to the organization. The payment to be made to the private partner will be based on the financial bid submitted by the private partner. Additionally, a set of key performance indicators (KPI) will be provided to the private partner, including both quantitative as well as qualitative indicators (qualitative indicators may be independently verified through a third party).

III. Capitation model for engaging private service provider in slum areas

The NUHM aims to create an enabling environment for private sector engagement. As per the NUHM implementation framework, instead of creating only new infrastructure, the existing private sector may also be engaged for providing services to the urban poor. A few challenges which may be overcome by engaging private providers are:

- ▶ Availability of medical and paramedical personnel
- ▶ Availability of diagnostic services
- ▶ Existing infrastructure and access for vulnerable and poor sections

This PPP framework provides the mechanism of engaging already existing private service provider in the close vicinity of the slums for providing primary health care services. This model would be suitable for participation by private clinics, nursing homes and charitable institutions.

The State Health Society, District Health Society, Urban Local Body may invite tenders for the engagement of private providers. The private partner would be appointed through competitive bidding for providing primary health care services in a catchment area, for example slums adjoining health care facilities. The private partner, with the assistance of the community health workers, would identify and register the beneficiaries in the catchment area of the private health facility through registration camps on a regular basis with a small token fee. The fee amount would be decided based on the number of beneficiaries. A primary health care provider would be identified for a catchment population to ensure quality services and geographical access. The government would lay out basic minimum eligibility criteria for staffing, availability of diagnostic facilities and area of the health facility for submitting the tender. The government will make a fixed payment to the private a partner based on the per capita capitation fees for the beneficiaries registered. The per capita capitation fees will be based on the financial bid submitted by the private partner.

Additionally, a set of key performance indicators (KPI) will be provided to the private partner, including both quantitative as well as qualitative indicators. An incentive payment will be added to the fixed payment based on the performance against the KPIs.

Critical Success Factors for Private Sector Participation in Primary Care

The following are the key success factors for working with the private sector for improved urban health:

- ▶ **Effective governance structure:** A governance structure that fits the needs of the partnership is necessary to ensure that the public health outcomes and the objectives of all the stakeholders involved are being met, this should be explored in the light of the objectives of the partnership, the principles of good governance, and the existing governance structures of the partners in the PPP.
- ▶ **Sharing of responsibilities based on capabilities:** Partnerships should leverage the full capabilities and expertise of the respective partners. Partnerships in primary healthcare should be designed with a purpose to leverage the efficiency and effectiveness of private sector in delivering quality services to the population. The responsibility of the respective partners, performance indicators, and contribution from the partners in terms of resources, expertise and institutional capability must be clearly outlined in the project structure and agreement.
- ▶ **Incentivizing performance:** Creating provisions which incentivizes private sector players for better performance can enhance possibilities of successful partnerships. Such provisions will encourage private partner to improve the performance through financial benefits linked with the achievement of targets.
- ▶ **Effective monitoring:** Continuous and effective monitoring is essential to ensure that program outcomes are met and principles of equity and fairness are being observed.
- ▶ **Minimal bureaucracy and delay in payment:** Timely payments is the lifeline for any business. PPP structures must have effective financial management to ensure that payments are timely as well as they are insulated form transformation in institutional and political context.
- ▶ **Standardizing practices for PPPs in similar activities in the value chain:** There will be higher number of small scale PPP projects in the primary healthcare space. Standardizing bidding and transaction structures along with documentation will benefit in terms of:
 - ▶ Higher scalability and replicability of projects in different geographies and activities
 - ▶ Reducing transaction costs for both the parties
 - ▶ Reducing the project preparatory and partner appointment time
 - ▶ Better transparency in project execution and partner appointment
 - ▶ Higher certainty in risk sharing mechanism
- ▶ **Government commitment for investment and infrastructure:** Private sector participation in public health service delivery can be enhanced considerably if the government provides necessary investment and infrastructure. It is difficult for private sector to invest in creation of infrastructure and equipment for primary health care due to small scale of several providers as well as the non-profit model of the NGOs. The government is in a better situation to contribution as it has the budget along with access to existing infrastructure. Private sector role will be primarily restricted towards bringing operational efficiency and effectiveness.

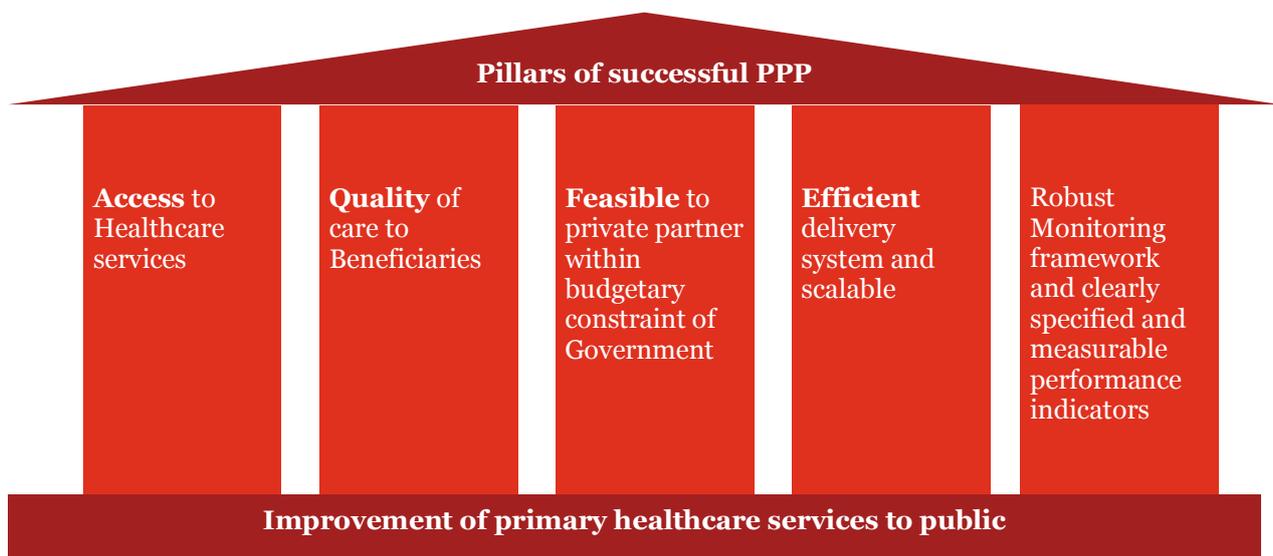
Principles for Successful PPP Projects

The pillars for evaluation and chalking out appropriate PPP models for primary healthcare in urban sphere are described below, and in Figure 15:

- ▶ **Access:** The model must improve access to healthcare services for the inaccessible and general public. Also the services must be affordable / free for the poor.

- ▶ **Quality:** Quality of healthcare service delivered by the system must be respectable, unbiased and standardised.
- ▶ **Feasible:** The structure should be feasible for both the private and the public players. Though it is important that the private players must be incentivized to invest resources in the project considering the returns, however there must not be significant increase in burden on the government's budget and finances.
- ▶ **Efficient:** The delivery model and structure must be simple to monitor and perform, impact the key outcomes and must be scalable or replicable in different geographies or activities.
- ▶ **Monitoring:** The structure of the model should envisage robust monitoring framework against clearly specified and measurable performance indicators for monitoring the service delivery in conformity with the objectives of Government.

Figure 15: Pillars of a Successful PIP



Key Messages:

- ▶ PPP is an important strategy to reach the poor and underserved, which the public sector by itself is unable to reach
- ▶ Urban health is challenging hence PPP could be experimented upon
- ▶ Different models of PPP in urban health exists
- ▶ Steps for implementing a successful PPP

4.6 Monitoring and Evaluation

LEARNING OBJECTIVES:

Upon completion of this module, the reader will be able to:

- ▶ Define a program cycle
- ▶ Define and differentiate between monitoring, evaluation and supervision
- ▶ Describe the various steps in monitoring
- ▶ Understand the various data needs per level of the system
- ▶ Understand issues in data quality and how to resolve them

Before we understand the concepts of Monitoring and Evaluation, we must understand how programs are developed. Programs should be understood as a process of problem solving, where the means are as important as the solution.

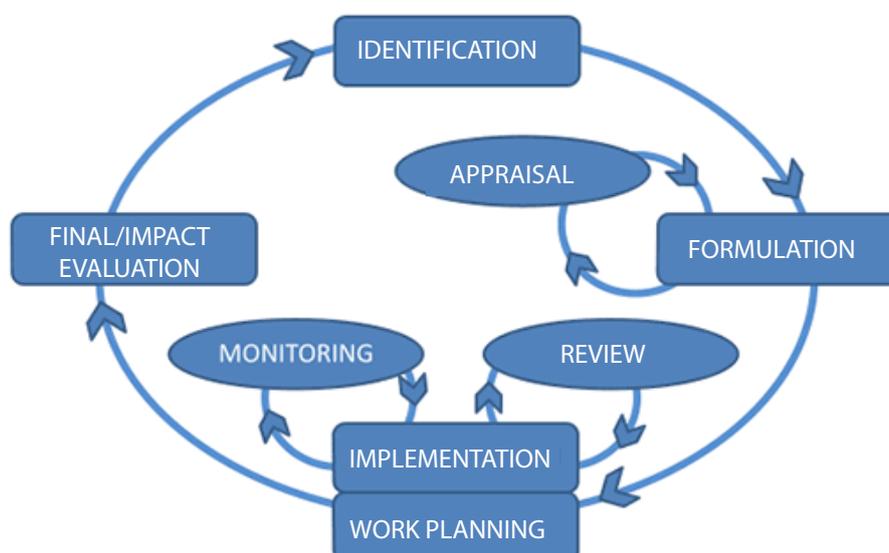
The Program Cycle

A problem (an issue) that we seek to solve, may have many solutions. Of all the various solutions, we identify a strategy or intervention to solve the problem, based on various evidence, constraints and social, political and cultural factors. We believe that our intervention is the best way to solve our problem. While planning and implementing the intervention, we provide inputs, establish processes and get outputs and outcomes. The program outcomes create an impact on the population.

Thus, the Program Cycle of every health program or project involves a defined sequence of activities, as shown in the diagram above. These are:

1. **Problem Identification:** Identification of health-related problems, which the program intends to address (such as poor health status, gaps in health seeking behaviour, gaps in health care services, continuum of care, quality of care, etc.).
2. **Planning:** The formulation of plans (e.g. 5-year plan and annual PIP) that address the gaps. Plans needs to be periodically appraised – and hence an inner loop within the formulation stage (see figure below).
3. **Implementation:** The implementation of these plans including clear work plans with tasks and responsibilities assigned. Implementation needs to be periodically reviewed and monitored, which is depicted with smaller loops within the program cycle.
4. **Evaluation:** The evaluation of the program or project.

Figure 16: Project Cycle



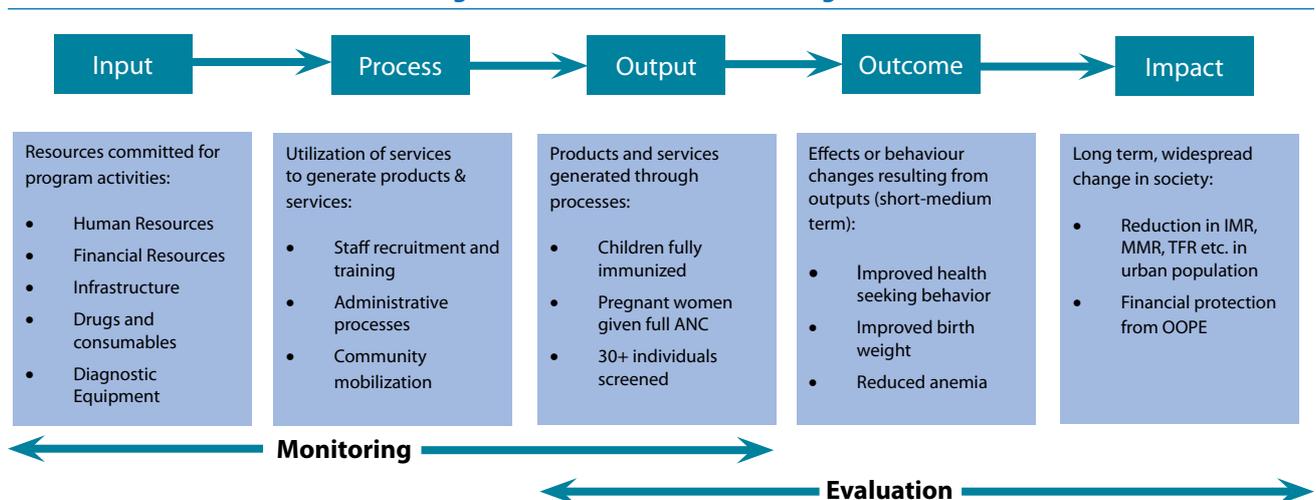
In the above process, we periodically need to check our progress and take corrective action. There are various methods to see whether we are on the right track, and whether the program is successful. Monitoring, Supervision and Evaluation are some methods by which we can check whether we are headed in the right direction and are meeting our objectives.

The Results Chain

Every program needs have a defined objective and the results or impact the program wants to achieve. Before we want to measure results, we need to define results. For many years programme management was focused on inputs and activities as the main focus for planning and decision making. Nowadays results are mainly defined in terms of outcome and impact. Some also regard outputs as results, if defined as the ultimate deliverables of activities. Thus, the Results Chain comprises of the following components:

- ▶ **Input:** All resources that feed into the program such as funds, human resources, drugs and supplies, infrastructure
- ▶ **Process:** All activities conducted using the inputs
- ▶ **Outputs:** Results of activities, i.e. the deliverables of the programme
- ▶ **Outcomes:** Immediate effect on the behaviour of the population
- ▶ **Impact:** Changes in the long run

Figure 17: Results Chain of a Program



The fine line between Outputs & Outcomes, and Outcomes & Impact may be ambiguous at times. However, these should be well defined for a program.

Monitoring

Monitoring is a routine process used to determine the extent to which a programme has been effectively implemented at different levels (with a focus on inputs, processes and outputs.) in time and at what cost. It is part of the management information system (MIS), and is basically an internal activity. It helps you to detect any deviations from your planned activities and help you in taking remedial actions at the earliest.

Monitoring is the responsibility of overall project managers and provides feedback to the management team. Monitoring should be conducted by those responsible for project implementation at every level of the management hierarchy. It should be carried out regularly, for example, monthly, quarterly, half-yearly or annually. Its primary purpose is to achieve the best possible project performance by providing feedback

to project management at all levels. This enables management to improve operational plans and to take corrective action in the case of shortfalls and constraints.

For example, the need for monitoring is apparent when you implement the National Health Programmes. In your own particular situation you may find many operational factors in your area which affect performance of the programs and these might not have been considered during the planning stage of the programs. With monitoring, you come to know of these factors and may accordingly modify the activities to better achieve program goals and objectives.

Evaluation

Evaluation may be defined as "a collection of activities designed to determine the value or worth of a specific programme or project" (UNAIDS, 2000), that is, it links a result directly to the design of the particular intervention. Three sequential levels or phases of evaluation are: process evaluation, effect or outcome evaluation and impact evaluation.

Process evaluation: Aims to assess a) programme/project content, b) scope and coverage, and c) quality and integrity of implementation. If the process evaluation reveals that the project is not actually being implemented, or is not reaching its intended clientele, then it is not worth going on to the next phase, namely, outcome evaluation.

Outcome or effect evaluation: Aims to assess immediate effects or outcomes, which are often related to behaviour changes (health risk and health care seeking behaviour) and underlying changes in knowledge, attitudes and beliefs of patients or clients of health care. The main difference between monitoring effects and evaluating effects is that in order to carry out the latter successfully, it is necessary to design special studies. As described above, effect monitoring simply describes changes in effects and cannot alone produce evidence that a specific programme caused the change. To do that, a specific effect evaluation design must be applied.

Impact evaluation: Impact evaluation aims to assess the longer-term effects of a programme/project against its ultimate purpose. Once adequate evidence is available that a programme/project has achieved or is achieving (if the project is ongoing) its immediate or short term-objectives, then the longer-term impact can be evaluated.

Impact evaluation cannot always be easily distinguished from effect (or outcome) evaluation, but the following examples should help to clarify the distinction:

- ▶ In many family planning projects, contraceptive use is often taken as a measure of effect, but a reduction in unwanted or unintended pregnancies might be taken as an appropriate measure of impact.
- ▶ In safe motherhood projects, the percentage of births attended by a trained medical or paramedical staff could be a key measure of effect, but the ultimate impact should be defined in terms of reductions in the proportions of pregnancies that result in severe complication or the mother's death.

Impact evaluations per se are rarely done largely because they take a long time and are expensive and complex.

Monitoring and evaluation of the National Urban Health Mission (NUHM)

The following tools are used to conduct monitoring and evaluation of NUHML

1. HMIS
2. Quarterly Progress Reports

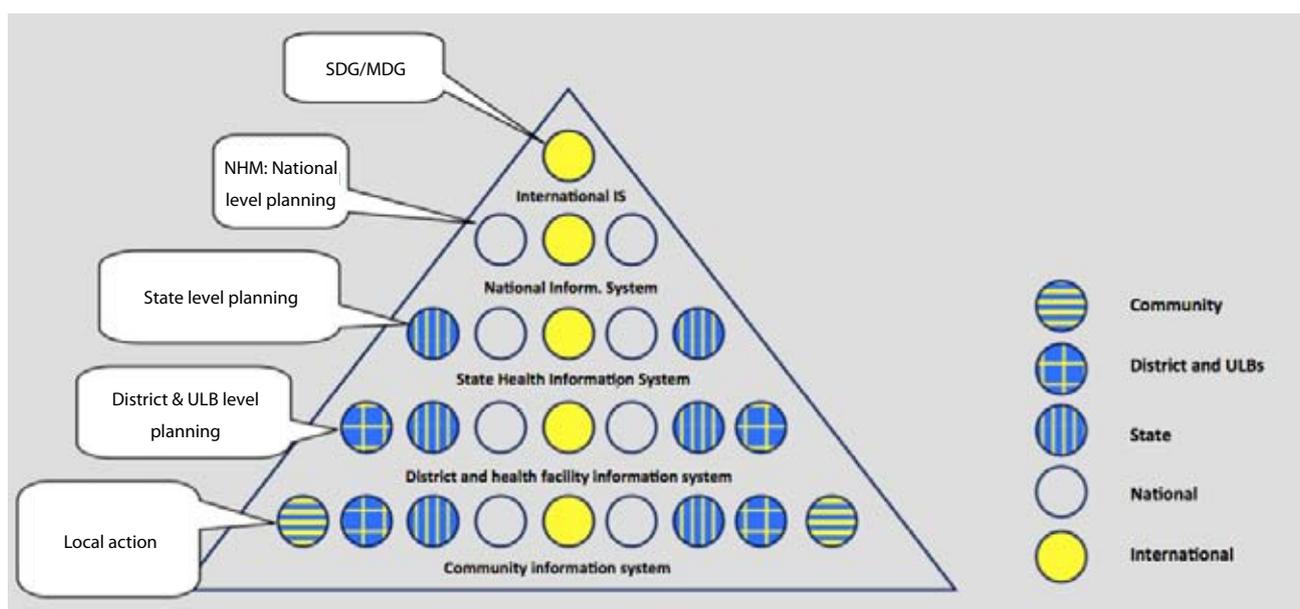
3. Monitoring Visits
4. Periodic Evaluation

1. HMIS

As also explained in the brief section of Reporting Mechanisms, HMIS is the primary source of facility based data on various elements of service delivery. HMIS is the portal by which the facility based data reaches upto the central level. However, there may be other information management systems which work at the local, district, ULB or state level. This is because, different levels of the health system have different needs in terms of information. For international purposes (e.g. the Sustainable Development Goals (SDG)) a core set of standard indicators is needed. At the national level, together with the international ones, an additional set of national indicators measures NUHM.

At state level, extra state specific indicators may be needed. Also at district and/or UB level additional indicators could be defined to serve the specific local information needs, either temporarily or for a longer period. The same applies to the local level, where specific community level indicators may be needed to plan health care in the community.

Figure 18: Health management information pyramid for NUHM



Issues that have affected the functionality of the HMIS:

- ▶ The HMIS, as it has historically evolved, is led by statisticians, rather than by public health experts. A primary tool for national aggregated data, it lacks the fine tuning data verification and validation at the local level and the importance of data use for local planning.
- ▶ As HMIS is used as a tool for top down monitoring of performance rather than as a tool for local planning, data may be subject to purposeful manipulation on the road upwards;
- ▶ HMIS having the initial function of a data repository that can be accessed at all levels, has evolved over time in a portal for data entry rather than for data access and analysis.

The above mentioned shortcomings notwithstanding, HMIS is an important tool for data collection and review. With improvement in quality of data entered, it can be a strong tool to concurrently monitor progress on services delivery right down to the facility level.

2. Quarterly Progress Reports

QPRs, as described in the section on data reporting, QPRs reflect implementation progress at the state level. These are submitted by the states on a quarterly basis, and cover progress on 13 NUHM elements.

3. Monitoring Visits

Monitoring visits are made periodically from the Center and State level to review the field implementation of the Mission. Monitoring visits are aimed to look beyond the data and understand challenges in implementation. The monitors also guide the officers and health workers on ways to improve implementation. Usually, the monitors submit a report at the appropriate level, which is communicated back to the relevant personnel of the facility or state/city, who are then expected to take action based on the recommendations of the monitoring report.

4. Periodic Evaluations

Evaluations are done less frequently than monitoring. As NUHM has been implemented for only 3 years, no evaluation has been done so far. However, evaluations may also be done for a component of the Mission as well. For example, evaluations may be done on the performance of ANMs, or public health managers, or the efficacy of establishing health kiosks, or to evaluate the involvement of MAS groups.

Data Quality

Data quality is essential for its effective use in decision making: Quality is what engenders trust in data, and data perceived to be of poor quality are unlikely to be used. Moreover, managers require accurate, complete, and timely data in order to accurately target resources for effective management of the health system. Data quality involves a complex mosaic of issues relating to organizational procedures, processes, and institutional capacity, and cannot be assessed just by looking at one factor in isolation.

Most data quality issues are related to organizational factors and management errors rather than data collection error. If data quality is poor, the following questions should be addressed:

- ▶ What is the minimum required data set, which will not put excessive data collecting burden on staff?
- ▶ Are reporting protocols clear, defining who should report what data and when? Is staff informed of these protocols through guidelines, standard operational procedures (SOP) and regular supervision?
- ▶ Are there clear definitions for each indicator and data element collected?
- ▶ Are the data collection tools (e.g., registers) and periodic reporting forms well designed, standardized, and consistently used? Are there sufficient blank copies of the tools and forms available?
- ▶ Has all staff responsible for data collection, indicator compilation, and reporting been appropriately trained?
- ▶ Do staff adequately understand the routine data information system (including HMIS) and have the necessary analysis and problem-solving skills?
- ▶ Are there logistical impediments to timely data transmission (e.g., lack of Internet connection, removable storage media, and/or vehicle to transport data)?
- ▶ Are resources (e.g., funds) available to maintain computer hardware/software and to ensure Internet connectivity?
- ▶ Are facilities meant to be providing the services they are not reporting on? Do they have the necessary capacity perform the services?

Current issues related to data quality in the Health Informations Systems :

- ▶ Completeness of data reporting
- ▶ Adequacy of reporting
- ▶ Timeliness of reporting
- ▶ Errors due to poorly designed primary registers - missing elements, computation feasibility
- ▶ Data definitions and misinterpretation, consistency of terms used
- ▶ Data aggregation problems - both random and systemic
- ▶ Data entry errors
- ▶ Confirmation and error management procedures and guidelines
- ▶ Logistical problems
- ▶ Data duplication and the issue of area reporting
- ▶ The zero problem – reporting of non-utilisation, non-availability or non-reporting v/s an actual zero for service delivery reporting
- ▶ Death reporting issues - line listing and formats
- ▶ Wrong denominators
- ▶ Poor indicators
- ▶ False reporting and falsification

Essential Elements of Data Quality

Data are considered to be of good quality if they are accurate, complete, timely, and consistent. These elements of data quality can be further defined as follows:

Accuracy: Refers to the correctness of data collected in terms of actual number of services provided or health events organized. Inaccurate data will yield incorrect conclusions during analyses and interpretation. Small errors at facility level will cumulate into bigger mistakes since data from various providers/facilities are aggregated.

- ▶ Do data reflect what is actually happening at the facility?
- ▶ Are there data entry mistakes?
 - ▶ Are the correct values being recorded in the appropriate places?
 - ▶ If there are errors, are they systematic (i.e., the same error being made consistently, such as because the indicator definition has been misunderstood), are they accidental (i.e., random), or are they intentional?
- ▶ Are calculation errors being made when indicators are being compiled?

Completeness: Refers to the number of facilities reporting and the number of data elements that they collected.

- ▶ Are all facilities reporting, including the private sector and parastatals (e.g., military and prisons)?
- ▶ Of facilities reporting, are they transmitting all forms as expected?
- ▶ In each report, are all required data elements reported? What is the percentage of “zero” reporting (i.e., for cells for which there is a true null value, reflective of no service delivery, there is a zero was recorded rather than a blank, which could be mistaken for a “missing” value)?

Timeliness: Refers to making data available 'in time' as planned in order to be able to generate a complete picture of the situation for a determined period.

- ▶ Are facilities reporting by the reporting deadline established by the MOHFW? Are reporting periods standardized nationwide (i.e., starting and ending on the same dates in all facilities and districts)?

Consistency: Refers to the reliability of comparing data.

- ▶ When compared to previous months, is the pattern consistent (i.e., with a similar distribution of cases of disease, or age/gender proportionality)?
- ▶ Do any facility or district indicator values differ strikingly from values for similar facilities or districts (i.e., are there outliers)?

Selected indicators for monitoring of NUHM

Process indicators:

- ▶ Number cities/population where Mission has been initiated
- ▶ Number of City specific urban health plans developed and operationalized
- ▶ Number of U-PHCs with outreach made operational
- ▶ Number of Cities/population with all slums and facilities mapped
- ▶ Number of Slum/ Cluster level Health and Sanitation Day
- ▶ Number of MAS formed
- ▶ Number of U-PHCs with Programme Managers
- ▶ Number of ASHAs trained and functioning

Output level indicators:

- ▶ Increase in BPL referrals from U-PHCs/ referral availed
- ▶ Increase in complete immunization among children < 12 months /Achieve universal immunization in all urban areas.
- ▶ Increase in case detection for malaria through blood examination
- ▶ Increase in case detection of TB through identification of chest symptomatic
- ▶ Increase in referral for sputum microscopy examination for TB
- ▶ Increase in number of cases screened and treated for dental ailments
- ▶ Increased Tetanus toxoid (2nd dose) coverage among pregnant women
- ▶ Strengthened civil registration system to achieve 100% registration of births and deaths

Outcome level indicators:

- ▶ Increase in OPD attendance
- ▶ Increase in ANC check-up of pregnant women/ 100% ANC coverage (in urban areas)
- ▶ Increase in institutional deliveries as percentage of total deliveries/ Achieve universal access to reproductive health including 100% institutional delivery

Impact level focus on urban poor:

- ▶ Reduce IMR by 40 % (in urban areas) – National Urban IMR down to 20 per 1000 live births by 2017
- ▶ 40% reduction in U5MR and IMR
- ▶ Reduce MMR by 50 %
- ▶ 50% reduction in MMR (among urban population of the state/country)
- ▶ Achieve replacement level fertility (TFR 2.1)
- ▶ Achieve all targets of Disease Control Programmes

Supervision and mentoring

The terms monitoring and supervisions are sometimes used synonymously, and, in practice, supervisory and monitoring activities do overlap to some extent. However, there is a difference in that the direct supervisor 'on the floor' carries out daily supervision of project inputs and operational processes, and reports to the project manager. Monitoring, on the other hand, aims to assess the overall implementation of the project at different levels, and focuses not only on inputs and processes, but also on project outputs.

Therefore, supervision may be defined as an art or a process by which designated individuals or group of individuals oversee the work of others and establish controls to improve the work as well as the worker. The concept of supervision is to guide and help the subordinates to enable them to perform their work. Training, guidance, demonstration, individual counselling, and checking are the components of supervision. No organization can function well, if its supervisory force does not function. Two styles of supervision may be distinguished:

Traditional style of supervision: Supervision is primarily concerned with individual employees, tasks and task accomplishment. The task oriented supervisor is only concerned about the completion of the task and has minimum concern for the subordinate. It is rather authoritarian thus dictating solutions to the subordinates.

Mentoring or development style of supervision: Development supervision is concerned with team efforts, personal growth of individual employees and facilitating and creating favourable conditions and an atmosphere of trust in order to achieve organizational goals and growth of the individual and teams. As such the supervisor provides on the job training to subordinates while seeking their views and solving problems together.

Mechanisms used in supervision

- ▶ Field visits
- ▶ Meetings
- ▶ Records & reports

Difference between Supervision, Monitoring and Evaluation

In short, evaluation is one time, special activity and indicates the degree to which we have achieved the objectives of a programme, so as to suggest changes in strategies of the programme. Monitoring is a continuous inbuilt mechanism to detect any deviation of activities from planned ones, so as to take corrective measures at earliest.

	Supervision	Monitoring	Evaluation
Responds to	Are we doing the thing right? How can I help you?	Are we doing the thing right?	Are we doing the right thing?
Measurement	Through on the job interaction	Describe change over a shorter period	Analyses causality/attribution over a longer period
Focus on	Process	Input, process, output	Outcome, impact
Timing	Continuous	Regular and periodic (e.g.: Every 3 months)	Periodic (eg once in 5 years)

Key messages

- ▶ Monitoring is a routine, continuous inbuilt mechanism to keep track of different activities in the organization or under various National Health Programmes.
- ▶ Monitoring helps in detecting any deviations from the planned activities in the program and helps in taking remedial action at the earliest.
- ▶ Supervision may be defined as an art or a process by which designated individuals or group of individuals oversee the work of others and establish controls to improve the work as well as the worker. Training, guidance, demonstration, individual counseling, and checking are the components of supervision.
- ▶ For monitoring we need to develop indicators. An indicator has a numerator, a denominator and is multiplied by a constant.
- ▶ As a manager try to be certain that the gap in performance is true. Causes for spurious discrepancies may be due to faulty data collection, due to faulty data handling or compilation and due to faulty data processing.

Further Readings

- ▶ National Urban Health Mission, Ministry of health & Family Welfare, Government of India, New Delhi, 2013.
- ▶ Text book of Public Health and Community Medicine. Edited by Rajvir Bhalwar and others published by Department of Community Medicine, Armed Forces Medical College, Pune in collaboration with WHO, India office New Delhi first Edition 2009.
- ▶ Contemporary public health- policy, planning, management, Prof. J.P. Gupta & Prof. A.K. Sood, Apothecaries foundation, Delhi, 2005.
- ▶ Service Provider's Manual 'Understanding Health Management Information Systems (Vol I) (<https://nrhm-mis.nic.in>)
- ▶ Health Programme Manager's Manual 'Understanding Health Management Information Systems (Vol II) (<https://nrhm-mis.nic.in>)

ADMINISTRATIVE ISSUES IN NUHM

5.1 Human Resources for Health under NUHM

Human Resource for Health is one of the critical health system components for effective and efficient service delivery under NUHM. While there are many private service providers in urban areas, however the availability and retaining Public health professionals is the major challenge. Currently, the overall rate of recruitment under NUHM is around 40% nationally. The overall shortage of human resource is aggravated by skewed distribution within the country, even within the States movement of personnel from public to private health sector is the major challenge.

Human Resource

Under NUHM support is provided to States/UTs to engage Human Resources ranging from clinical service providers and paramedical workers to Program management staff on contractual basis. While planning for personnel and health services in both urban and rural areas it may be ensured that there is rationalization of staff and facilities so that entire area is covered and no area is left out e.g. regular staff at the then Urban Family Welfare Centres (UFWC) and Urban Health Posts (UHP) can be posted at the upgraded U-PHCs and U-CHCs.

a. Clinical & Paramedical staff

U-PHCs- The NUHM Framework for Implementation provides for following persons at U-PHCs- Doctors (2) one regular and one part time, Staff nurses (3), Pharmacist (1), Lab technician (1), ANMs (4-5) (depending upon the population covered), clerical and support staff one each and a Public Health Manager. From FY 13-14 onwards support has been provided to States/UTs for engagement of Doctors, ANMs, Staff Nurses, Lab-technicians, Pharmacists, Public Health Managers for operationalizing the U-PHCs and U-CHCs. The effort, however should be towards rationalization of HR as per case load, population covered and services to be provided etc.

U-CHCs- The UCHCs must have specialists as Medicine, Paediatrics, Gynaecology, Surgery, Eye etc. and can be hired, if not available from the regular cadre. Such Specialists may be engaged for providing fixed day services in the UPHCs/UCHCs and may also provide services at UPHCs during Outreach services. They can also provide services on rotational basis to UPHCs. The other option can be hiring a single specialist to work on a rotational basis in different UPHCs.

b. Program management staff

For effective implementation and monitoring of health programmes and administration of urban facilities support has also been provided for engagement of programme management staff. This includes program managers, Urban health consultants/co-ordinators, Accounts/Finance personnel, data entry operators etc. at state, district and city level. In case of larger ULBs, programme management support has also been provided at zonal/division level.

Health programs including NUHM have faced challenges in ensuring complete recruitment of adequately skilled personnel. There are several reasons for this:

- ▶ **Inequitable distribution of health workers:** Highly skilled workers often shift from the public to the private sector. While concentration of health professionals in cities is well recognized; regional and international migration has led to a shortage of health workers in public health facilities in deprived urban areas.
- ▶ **Doctors:** Potentially there is greater availability in urban areas but in practice, there are numerous vacancies in the public health system. This is compounded by a failure to adequately fill sanctioned posts due to complexities of recruitment. Private practice also cuts into public health care, more so in urban areas
- ▶ **Nurses:** Availability of nurses at public health facilities is generally better as the Government pays more than many private players. The scope for private practice limited and hence provides an opportunity for creating nurse-led facilities (mostly for primary care) - and use doctors in a more supervisory role. This will facilitate outreach activities, home visits and better penetration.
- ▶ **Para-Medicals:** Routine tests continue to be provided at primary facilities while more complex tests are conducted at government run specialist laboratories. The role of pharmacists will become increasingly important as the 'free drugs initiative' is rolled out across states.
- ▶ **HR conflicts:** There are situations of conflict between State and ULB where clinical staff belongs to ULB and is managed/posted by State and vice versa. There are also pre-existing health workers from previous health programs who have resisted the intake of new staff. States have also faced resistance from staff in operating evening shifts and changed working hours under NUHM.

Human Resource Management

In order to overcome the above challenges, NUHM needs to employ effective means of Human Resource Management, which include Recruitment, Capacity Building, Performance Monitoring and Professional Support.

a. Recruitment

- ▶ Recruitment of various HR approved under the Program can be at State/District/ULB level as per decision of the State. While planning new HR, the gap may be identified first and proposal is as per the requirement and need.
- ▶ All approved and vacant positions in both clinical and managerial positions to be filled on priority basis.
- ▶ Competency (skill based) tests to be made an integral part of selection process to ensure quality of recruited candidates. A transparent and competitive selection process should be followed.
- ▶ In case of recruitment by ULBs the State officials may also be involved in developing ToRs and also the recruitment process. State/ULBs to take active and responsive role in selection of HR where NUHM implementation is through State/ULBs as the case may be.
- ▶ Wherever State/ULB needs support in recruiting good quality workforce and managing large scale recruitments external agencies may be utilized. MoHFW has empanelled 10 HR Recruitment Agencies for States/UTs to be utilized for large scale recruitments. Further, innovative mechanisms may be employed for quicker recruitment e.g. creating empowered selection committees, walk-in interviews, campus recruitments, drawing up a list of reserve candidates after the selection process (valid up to 1 year).

- ▶ State level agencies like SHSRC, SIHFW may also be involved in selection process where they are existing and well-functioning.
- ▶ Medical Colleges may be tapped for sourcing Specialist services particularly for outreach and fixed day Specialist care. States/ UTs can adopt Flexible Norms for Engaging Specialist Services issued by MOHFW.
- ▶ Campus recruitment for engaging freshly graduated post graduates may be conducted for filling gaps in specialist positions.
- ▶ To minimize delays in the recruitment process, make recruitment plans with timelines for various stages of approval. Identify dedicated personnel accountable for expediting the process
- ▶ To reduce attrition, competitive and differential salary for difficult-to-serve facilities, reservations/ grace marks PG examinations for in-service candidates working in such areas may be paid. Pay fixation to ensure equivalence with prevailing market trends to attract and retain the best talent and help sustain staff morale.

b. Training and Capacity Building

- ▶ Orientation of all staff is required for basic concept, implementation and deliverables of NUHM. For this, GoI has prepared a Capacity Development Framework. All stakeholders and personnel involved need to be trained and oriented as per the CDF.
- ▶ The first step for orientation and capacity building is Training Needs Assessment and identifying institutions which will support the state in undertaking the trainings.
- ▶ A robust monitoring and follow up plan should be put in place to ensure that the trainings are useful in trainee's work and trained personnel are being utilized properly in the system.
- ▶ In addition to Induction training on NUHM for all new medical, paramedical, program management staff and ULBs at state, district, and city level, appropriate refresher and skill-up gradation trainings for both clinical and managerial cadre should be planned and implemented
- ▶ A specific plan for continuous professional development should be identified and supported through performance appraisal process.
- ▶ Lastly, NUHM staff to develop soft skills in for improved coordination, collaboration and liaising with Urban Local Bodies for effective inter-sectoral co-ordination.

c. Monitoring and Supervision

- ▶ Monitoring and reporting lines should be well defined and monitoring processes and mechanisms shared with the employees.
- ▶ A robust mechanism for performance appraisal including both team and individual based performance incentives should be in place. This should be linked with incentives and contract renewal.

d. Professional Support

- ▶ Staff should be provided with adequate professional support and personal development opportunities.
- ▶ In addition to supervisory support, all staff must have access to skill building and opportunities for skill enhancement.
- ▶ Staff must be given adequate benefits, as affordable by the State.
- ▶ State may initiate innovative mechanisms to keep staff motivated such as peer support programs, employee awards etc.

SELECTION PROCESS	<ul style="list-style-type: none"> ▶ All sanctioned vacant positions in both clinical and managerial positions should be filled on priority basis. ▶ Competency (skill based) tests should be made an integral part of selection process to ensure quality of recruited candidates. ▶ MoHFW has empaneled 10 HR Recruitment Agencies for States/UTs to utilize for large scale recruitments, including for NUHM
PLACEMENT	<ul style="list-style-type: none"> ▶ Well-defined and fair workforce management policies should be in place (e.g. HR Policy for fair and transparent postings and transfers, well-defined career opportunities) ▶ Clear roles and responsibilities e.g. Guidebook for Enhancing Performance of ANMs in Urban Areas ▶ States/ UTs can adopt Flexible Norms for Engaging Specialist Services issued by MOHFW
TRAINING AND CAPACITY BUILDING	<ul style="list-style-type: none"> ▶ Induction training on NUHM for all new medical, paramedical, program management staff and ULBs at State, District, City level ▶ Sensitization of NUHM staff to deal in an empathetic and courteous manner with beneficiaries, specifically from marginalized groups ▶ Skill upgradation and Multi-skilling - Create training curriculum, and modules especially on Non-communicable diseases, Palliative care, Outbreaks, Emergency care etc.
EMPLOYEE MANAGEMENT	<ul style="list-style-type: none"> ▶ HR Cell under NHM/DHS with a separate section for NUHM ▶ Establishing/strengthening of Human Resource Management Information System which will includes NUHM personnel ▶ A performance based appraisal system be introduced (both team and individual) and linked to incentives and contract renewal ▶ In case of recruitment by ULBs, the State officials may also be involved in developing ToRs and is the recruitment process.
SERVICE DELIVERY	<ul style="list-style-type: none"> ▶ Dual functional hours of UPHCs (specifically an evening OPD) ▶ Wide-ranging Outreach activities to adequately cover dis-advantaged population ▶ NUHM staff to develop skills in liaisoning with Urban Local Bodies for effective inter-sectoral co-ordination ▶ Medical Colleges may be approached for running Special services particularly for outreach and fixed day Specialist care. ▶ Monitor service delivery through appropriate social and community audits
PAY AND BENEFITS	<ul style="list-style-type: none"> ▶ Pay fixation to ensure equivalence with prevailing market trends will attract and retain the best talent and help retain staff morale. ▶ Incentives and dis-incentives should be linked to performance ▶ A clear pathway and timelines for career Opportunities should be defined

DOCUMENTS FOR REFFERAL (available at www.nhrsindia.org)

- ▶ Competency based Recruitment: D.O. Number NHSRC/15-16/HRH/22 Competency Based Recruitments-28/04/2015; D.O. Number 7(45) 2014-NRHM-I -Competency Based Recruitments-19/01/2015
- ▶ Recruitments under NHM: D.O. Number Z-18015/10/2015-NRHM-II - Empanelment of HR Recruitment Agencies-22/01/2016.
- ▶ Specialist Engagement: D.O. Number 7 (162)/2015-NRHM-I -Strengthening specialist services in Public Health facilities-03/02/2016

5.2 Financial management and Budgeting for NUHM

Structures

In most of the States, human resources for financial management has been approved at the state, city and district levels for the NUHM. At the district and city levels, the NUHM finance managers will work with the District and State Accounts Managers to ensure integration, cross learning, timely release of funds and monitoring of expenditure under the NUHM.

At the City level, particularly for the big metro cities, finance managers have been approved. These finance managers should work in coordination with the NUHM finance managers at the State level so as to ensure integration, regular reconciliation and monitoring of expenditure under NUHM.

Funding for the NUHM

The Centre-State funding pattern is 60:40 for all the states except North-Eastern states including Sikkim and other special category states of J&K, Himachal Pradesh and Uttarakhand where the centre-state funding pattern is 90:10. All the Union Territories with or without legislature are 100% centrally funded. As in case of NRHM, funds under NUHM do not lapse at the end of financial year and are carried forward to next year.

All the existing guidelines issued under NRHM are equally applicable for NUHM also unless specifically mentioned otherwise. The Department of Expenditure, Ministry of Finance has laid down certain conditionalities for release of funds under NHM. These conditionalities are depicted in the table below.

Table 21: Conditionalities for release of funds under the NUHM

Conditionalities for release of 1st tranche of funds i.e. 75% of Budget Estimates	Conditionalities for release of 2nd tranche of funds i.e. 25% of Budget Estimates
<ul style="list-style-type: none"> ▶ Clearing of the matching state share contribution against releases by Gol. ▶ Submission of Provisional Utilization Certificates of the preceding financial year. ▶ Submission of Financial Monitoring Reports and Statement of Fund Position for the last quarter. 	<ul style="list-style-type: none"> ▶ Clearing of the matching State share contribution against releases by Gol. ▶ Submission of Annual Audited Accounts along with UCs for the preceding Financial Year. ▶ Submission of Financial Monitoring Reports and Statement of Fund Position for the last quarter of the preceding financial year.

PIP Planning

Funds released under the NRHM do not lapse at the close of the financial year but are carried over to the next Financial Year in the form of committed and uncommitted unspent balances. **Committed balances** is the amount available for activities that are already underway, but full payment has not been made, and which may shift to next year. The following balances are considered as committed:

- ▶ Paid to the various implementing agencies, peripheral units to carry out health related activities but expenditure has not been incurred or reported and remained as advances.
- ▶ Carried out and completed during the year but the payment (partly or full) is yet to be made.
- ▶ Activities which may have initiated, partly executed but not completed yet
- ▶ Activities which have been ordered administratively but not delivered or completed.

The **uncommitted unspent balance** is the amount remaining with the state or union territory at the end of financial year, after deducting the committed balances from the total unspent balance.

After PIP approval, the resources allocated to a particular state for any given financial year is termed as the **resource envelope**. The resource envelope for a financial year for new approvals consists of:

- ▶ Uncommitted unspent balance
- ▶ GoI allocation (BE) proposed for the year
- ▶ State share contribution due for the year

Clear Demarcation of Committed Unspent and Uncommitted Unspent Balances

While submitting the state PIP for the financial year, the state must indicate the activity-wise committed unspent balance available with the state. The state PIP must also separately show the uncommitted unspent part of the funds available with the state.

The interest earned on unspent funds not likely to be expended during the financial year would be part of uncommitted unspent balance and to be reported in PIP for fresh approvals. Further, interest accrued on the funds provided to the implementing agencies for civil works or procurement. If it remains unspent for more than a year, it would form part of the uncommitted unspent balance.

Key Points for PIP Planning

The following points should be kept in mind while planning for the PIP:

1. The state does not need to carry over the activities more than a year old in committed balances.
2. The state is required to share the activity wise breakup of the committed balances with the PIP submitted.
3. The proposals should be prepared strictly as per the prescribed FMR format. Any additional activity can only be added under existing sub heads.
4. The budget requirement of the Municipal Corporations needs to be budgeted as per the PIP guidelines.

Funds Flow Mechanisms

NUHM funds are released under the NUHM Flexible Pool to the states or union territories. Thereafter, funds are released to the districts or municipal corporations by the SHS. The funds are then expected to be released to the UPHCs or UCHCs by the DHS, ULB or CHS - as the case may be. All the urban health facilities should have bank accounts and funds are transferred through PFMS. The fund flow mechanisms under NUHM varies according to whether the health department is implementing the NUHM or the municipal corporation is implementing the NUHM. The different fund-flow pathways are illustrated in the diagrams below (see Figures 19 and 20).

Figure 19: Fund Flow in States where NUHM is implemented by Health Department

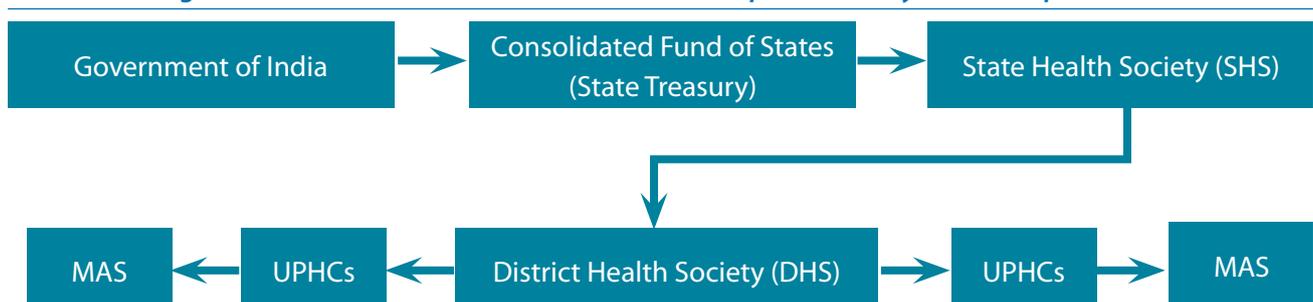
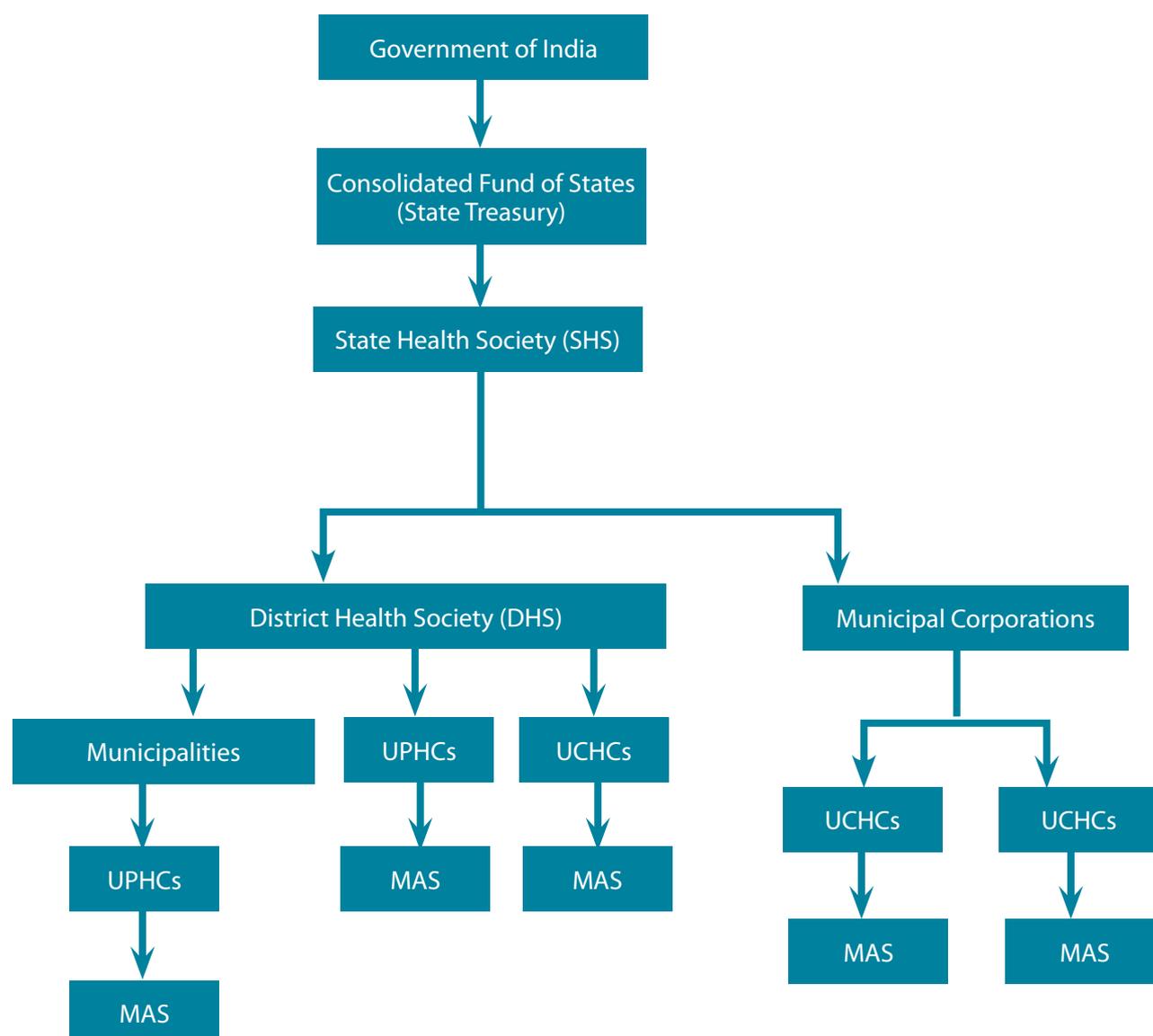


Figure 20: Fund Flow in States where NUHM is implemented through Urban Local Bodies



Bank Accounts

All the urban health facilities where the funds under NUHM have been transferred should keep a separate bank account for NUHM funds operated under joint signatures, with at least one signatory must be from regular government service. All the corporations (including seven metro cities) must have clear Delegation of Financial Powers for NUHM funds.

Monitoring and Reporting

At the end of each month, the state government is required to send the monthly Financial Management Report (FMR) and Statement of Fund Position (SFP) to the Ministry. In turn, the State Government may also obtain monthly and quarterly FMR/SFP from districts, municipal corporations and UPHCs and UCHCs. The summary of reporting requirements for each level is given in Table 22.

Table 22: Reports to be sent by states and union territories

Unit/ Level	Financial Reports and their Timelines		
	Monthly	Quarterly	Annually
State to Gol	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ UC (Audited) ▶ Provisional UCs on demand
Municipal Corporations/ ULBs to State	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ UC (Audited) ▶ Provisional UCs on demand
District to State	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ UC (Audited)
UPHCs/UHCs to their Supervisory Units (including RKS)	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ FMR ▶ SFP 	<ul style="list-style-type: none"> ▶ RKS Audit Report

The following are important points to keep in mind related to financial reporting:

- ▶ All urban units should report the expenditure strictly in the FMR format as given in Annexure-A.
- ▶ Expenditure of all the reporting units needs to be clubbed before submission of FMR to the supervisory units.
- ▶ In case of changes in expenditure figures, the adjustment entry needs to be done in the next quarter. Figures once reported to Gol need not be changed.
- ▶ The state officials should carry out the following activities:
 - ▶ **Budget Vs. Expenditure Analysis** – to identify the activities for low booking of expenditure and to identify the reasons for action taken
 - ▶ **Physical Vs. Financial Performance** – To compare the status of physical and financial progress to identify the activities where short booking of expenditure is done in comparison to the good/substantial physical progress is reflected in Quarterly progress report.

Supervision and Monitoring

Monitoring activities need to be performed at each supervisory level. The financial monitoring activities expected to be carried out are depicted in the table below (see Table below).

Table 23: Financial monitoring at different levels of the health system

Level	Monitoring Activities
State	Monthly financial review of expenditures and unspent balances to be undertaken with the District Accounts Manager along with the review of the implementation of activities of NUHM.
ULB	The officials of the Municipal Corporations and ULBs should also hold monthly meetings to review the expenditures of units including UPHCs and UHCs as the case may be.
Facility	Regular field visits by state, municipal and district officials should be undertaken for the UHCs and UPHCs for monitoring.

Audits

An **audit** is an independent examination of the financial information of the entity. The process of audit includes vouching, ticking, ledger scrutiny, balance confirmations and verification of financial statements. The key objectives of an audit are as follows:

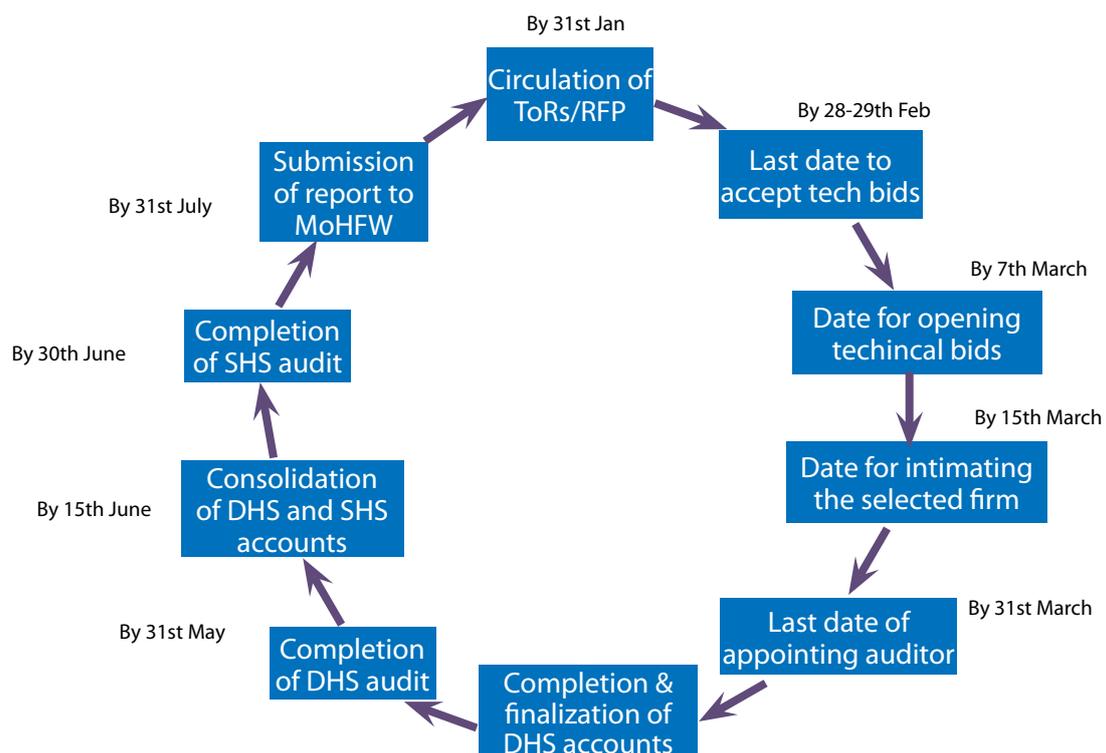
- ▶ To assess and provide an opinion on whether the Financial Statements present a “True and Fair” view:
 - ▶ the financial position (Balance Sheet) at the end of the period; and
 - ▶ the financial performance (Income and Expenditure account) during the period
- ▶ To test whether requisite internal controls are in place, commensurate to the size and volume of operations of the entity

There are two types of audit; a **statutory audit** and a **concurrent audit**. These are both described below.

1. Statutory Audit

The statutory audit shows that whether the financial statements represent a “True and Fair” view of the financial position as at end of the financial year or not. The **Statutory Auditor** is appointed at the state level and it covers all the programmes under NHM including NUHM. Separate guidelines or instructions are issued by the NHM-Finance every year regarding the terms and conditions for the appointment of the Statutory Auditor. The statutory audit should cover the NUHM finances. An overall statutory audit cycle indicating the tentative timelines is given below in Figure 21.

Figure 21: Financial Cycle



The Statutory Audit Report should be submitted to the Ministry by 31st July every year unless stated otherwise. The compliance report on the observations of the Statutory Audit relating to the NUHM programme should be sent to the Ministry.

2. Concurrent Audit

A concurrent audit is a systematic and timely examination of financial transactions on a regular basis to ensure accuracy, authenticity, compliance with procedures and guidelines. The emphasis under concurrent audit is not on test checking but on substantial checking of transactions. It is an ongoing appraisal of the

financial health of an entity to determine whether the financial management arrangements (including internal control mechanisms) are effectively working and identify areas of improvement to enhance efficiency. The **concurrent audit** is to be conducted on a monthly basis by all the states, districts and municipal corporations. However, the report needs to be submitted on a quarterly basis. It must be ensured that the Concurrent Audit Report should cover and lists the observations on the NUHM programme. The observations of the Concurrent Auditor on the NUHM programme should be timely settled.

5.3 Information and Communication Strategy for NUHM

LEARNING OBJECTIVES:

- ▶ *Understand measures to enhance understanding of NUHM among all stakeholders*
- ▶ *Create communication strategy and plan for NUHM*
- ▶ *Institutional visibility for NUHM*
- ▶ *Ways of effective communication for desired change*

Introduction

Launched in 2013, the National Urban Health Mission is a relatively new program, knowledge about which is still limited among various stakeholders. In addition to information on the Mission, understanding of urban health as an issue and its various dimensions needs to be developed among all stakeholders. Thus, in order to mobilize support for urban health, advocate for uptake of services and initiate partnerships with public and private stakeholders, it is recommended that all States and ULBs prepare a communication strategy and plan.

The specific objectives of the communication strategy will be to:

- ▶ Generate awareness about NUHM program and its services.
- ▶ Advocate for urban health issues and facilitate collaboration and convergence with public and private stakeholders.
- ▶ Enhance health seeking by the urban vulnerable from population UPHCs in their area.
- ▶ Encourage preventive health behaviour and increase knowledge about endemic health problems among beneficiaries.

States and ULBs may take the following measures for meeting the above objectives:

1. Institutional visibility of NUHM under NHM

- ▶ Uniform signage should be used for the UHPCs and UCHCs across all urban health facilities in the State/City with standardized size, colour, font and content. This will make the facilities easily identifiable for the public and enhance recall. There should be uniformity in the presentation of the content of the hoardings and banner and same sequence of presentation of contents should be maintained.

- ▶ All facilities to be painted in same colour scheme.
- ▶ All facilities should have standardized essential displays such as: list of services available, facility timings, entitlements under various schemes, essential drug list, Citizens Charter, Composition of RKS.
- ▶ Mobile Medical Units to also have uniform branding with IEC corner at MMU station sites.

2. Awareness Generation on NUHM and Urban Health Issues

States/ULBs shall need to utilize various communication channels to reach out to different stakeholders. The communication strategies will be different for the beneficiary population and potential partners and collaborators.

a. For Beneficiaries:

Beneficiaries need to be made aware of the following aspects of NUHM and urban health issues:

- ▶ Information on NUHM program components
- ▶ Information on availability of health services at UPHC & UCHC highlighting different aspects
- ▶ Timings and location of health facility, no cost of services
- ▶ Outreach and special outreach locations and timings
- ▶ Special days observed by the health department
- ▶ Endemic diseases and preventive measures for them eg Dengue, Chikungunya, Filariasis
- ▶ Healthy practices and behaviours
- ▶ Any other issue identified by state/ULB

The above information may be disseminated to the target audience through the following channels:

- ▶ **Through community health workers:** Being the first point of contact for the community, frontline health workers are the best sources of knowledge and information. This is because one-to-one interpersonal communication is the most effective, providing opportunity for two-way interaction. Audience can ask questions and clarify concerns with the community health workers and other health providers. Effective communication through these 'messengers' of the health system is also more likely to influence them to change behaviours.

Health workers may use various opportunities to convey the above-mentioned information such as during community visits, home visits, vulnerability assessment process, interactions during care provision and follow up etc. Frontline health workers should be trained in interpersonal communication and counselling skills. Further, they would require communication aids/tools to interact with the community such as flip charts, booklets, posters, stickers, pamphlets and hand bills, use of ICT like applications on mobile phones.

- ▶ **Health facility based IEC (Information, Education, Communication):** All health facilities should display essential information on the NUHM program, as well as health messages for the beneficiary population.



A community health worker uses IEC material to generate awareness among community women.

These include IEC – BCC (Behaviour Change Communication) messages for all national health programs, immunization, ANC, hygienic practices etc. They should be strategically placed at appropriate height to enhance visibility. These materials may also be displayed at places of community gathering such as public toilets, water collection points, local shops, schools etc.

▶ **Through effective use of media:**

Various print and electronic media such as newspapers, magazines, TV and radio and public announcements may be used to generate awareness on the desired issues as follows:

- ▶ Placement of hoardings at strategic locations like bus stands, railway stations, prominent public places in the form of hoardings, banners, posters etc.
- ▶ Radio and TV spots, jingles and advertisements
- ▶ Announcements Advertisements in local newspapers and magazines.
- ▶ Through various exhibitions organised by state governments, tableau on national days, etc.
- ▶ Wall paintings using folk art
- ▶ Street plays
- ▶ Public Announcements through loudspeakers in neighbourhoods
- ▶ Pamphlets and hand bills in slums, in public gatherings like festivals, melas, local bazaars, etc.

The above are especially helpful in generating awareness on outreach camps, special events, Health Days or other events organised under urban Health.

▶ **Innovative mechanisms**

States may innovate on the mechanisms of generating awareness on urban health and NUHM. For example, school children may be involved through quiz competitions, painting competitions, health walks, cleanliness drives can also be done as a regular feature in local schools. State may organize celebration of special days such as Health Day, TB Day, Malaria Eradication Day and initiate various activities around them.

b. For partners and stakeholders

Potential collaborators, partners and other stakeholders need to be engaged in a systematic way. In addition to disseminating information on the Mission, there should be clarity of the expected action at their end during the communication process, if action is desired. The following methods and tools may be employed:

- ▶ Policy briefs and brochures
- ▶ Advocacy meetings
- ▶ Participation in state level conferences and seminars
- ▶ Targeted communication for specific stakeholder groups such as medical colleges, professional bodies and organizations, other government departments, private sector collaborators, development partners etc.

Effective Communication and Messaging

The objective of communication, especially in the context of public health, is for the audience to understand our message and be influenced to take desired action. Messaging for different stakeholders needs to be customised as per their orientation, level of education and expected action. For example, for communities, we want them to understand that unhygienic storage of water causes water borne diseases, and to practice safe storage practices. For the ward level officer, we want her/him to understand the issues of garbage disposal in the neighbourhood, and for him to ensure that waste is collected timely. To influence such behaviour change, our messaging has to be clear, effective and influential. It is immensely helpful to provide supporting evidence, and use data and examples.

ANNEXURE A: SUGGESTED AGENDA FOR TRAINING PROGRAM (2 DAY PROGRAM)

Time	Session
DAY 1	
9:00 am – 9:30 am	Welcome and Introductions
Session I: Perspective Building on Urban Health	
9:30 am – 9:50 am	Urbanization, Migration and Marginalization of Urban Poor
9:50 am – 10:15 am	Understanding and Responding to Urban Health Needs
10:15 am – 10:45am	Discussion (Experience sharing by participants on urban health problems and needs in their cities)
10:45 am – 11:00 am	Tea
Session II: NUHM Overview	
11:00 am – 11:30 pm	Overview and Key Features of NUHM: Administration, HR, UPHC, ASHA, MAS
11:30 pm – 11:45 pm	Discussion
Session III: Implementing NUHM	
11:45 pm – 12:00 pm	Institutional Mechanisms
12:00 pm – 12:20 pm	City Mapping & Vulnerability Assessment
12:20 pm – 12:40 pm	Urban Health Planning
12:40 pm – 1:15 pm	Discussion
1:15 pm – 2:00 pm	Lunch
2:00 pm – 2:30 pm	Operationalizing UPHCs and UCHCs, Linking Disease Control Programs
2:30 pm – 2:45 pm	Discussion
2:45 pm – 3:10 pm	Organizing Outreach Services
3:10 pm – 3:30 pm	Organizing Referral Services
3:30 pm – 4:00 pm	Reporting Mechanisms
4:00 pm – 4:30 pm	Discussion + Q&A
4:30 pm – 4:45 pm	Tea
4:45 pm – 6:00 pm	Intersectoral Convergence + Discussion (15 mins)
DAY 2	
9:00 am – 9:15 am	Recap from Day 1
Session IV: Essential Processes and Programs	
9:15 am – 10:15 am	Community Processes
10:15 am – 11:15 am	Prevention, Screening & Control of NCDs + Discussion (15 mins)
11:15am – 11:30 am	Tea
11:30 am – 12:30 pm	Quality Assurance in Urban Health + Discussion (15 mins)
12:30 pm – 1:30 pm	Managing Disease Outbreaks in Urban Areas+ Discussion (15 mins)
1:30 pm – 2:15 pm	Lunch
2:15 pm – 3:15 pm	PPPs for urban health + Discussion (15 mins)
3:15 pm – 4:15 pm	Monitoring and Evaluation + Discussion (15 mins)
Session V: Administrative Issues under NUHM	
4:15 pm – 4:35 pm	Human Resource Management under NUHM
4:35 pm – 5:00 pm	Financial Management
5:00 pm – 5:15 pm	Communication Strategies under NUHM
5:15 pm – 5:30 pm	Discussion
5:30 pm – 6:00 pm	Feedback & Thank you

ANNEXURE B: SERVICES TO BE DELIVERED AT VARIOUS LEVELS – COMMUNITY, OUTREACH, UPHC AND UCHC

Area	Community Level	Outreach Level	UPHC Level	UCHC Level
Reproductive Maternal and Child Health				
Reproductive Health and Family Planning Services	<p>Preventive education for early marriage, identify eligible couples, motivation for family planning – delaying first child and birth spacing, information and access to spacing methods - OCP, ECP, condoms; Recognition of gender based violence. Referral for sterilisation, follow-up of contraceptive related complications.</p> <p>Counselling for family planning, access to all spacing methods</p> <p>RTI/STI: Knowledge of and referral for RTI/STI, follow-up for ensuring adherence to treatment regime of cases undergoing treatment.</p>	<p>Early registration, regular Ante natal check-ups, screening for hypertension, diabetes, anaemia, immunization for mother – TT, iron-folic acid calcium supplementation, MCH card, Identification and referral of high risk pregnancy, postnatal high risk cases, abortions</p>	<p>Counselling for family planning, access to all spacing methods including IUCD insertion, referral for sterilisation, management of contraceptive related complications.</p> <p>Medical abortion</p> <p>RTI/STI: diagnosis and treatment</p> <p>UTI treatment, menstrual disorder,</p> <p>First aid for gender based violence – link to referral center and legal support services</p> <p>ANC by MO, high risk ANC, PNC, esp. high risk PNC, early assessment of complicated delivery cases and referral, normal vaginal delivery (if resources are available to conduct delivery as per protocol)</p>	<p>IUCD, Vasectomy, tubectomy, manual vacuum aspiration, safe abortions, Sterilisation operations, infertility treatment.</p> <p>Complications in contraceptive usage, hormonal and menstrual disorders, infections etc.</p> <p>RTI/STI: Management of complicated cases, hospitalisation (if needed)</p>
Care in Pregnancy: Maternal Health	<p>Early diagnosis of pregnancy, support throughout pregnancy, motivation for institutional delivery, nutrition information, hygiene, enabling Take Home Rations (THR) for pregnant woman through AWW, identify high risk births, anaemia cases, facilitating referrals, helping birth planning, identification of postpartum complication, postpartum support</p>	<p>Early registration, regular Ante natal check-ups, screening for hypertension, diabetes, anaemia, immunization for mother – TT, iron-folic acid calcium supplementation, MCH card, Identification and referral of high risk pregnancy, postnatal high risk cases, abortions</p>	<p>Normal vaginal delivery, assisted vaginal delivery, C-section, ante partum and post-partum haemorrhage, eclampsia, puerperal sepsis, obstructed labour, hospitalisation and surgical interventions, including blood transfusion. Safe abortions.</p>	<p>Normal vaginal delivery, assisted vaginal delivery, C-section, ante partum and post-partum haemorrhage, eclampsia, puerperal sepsis, obstructed labour, hospitalisation and surgical interventions, including blood transfusion. Safe abortions.</p>
Neonatal and infant health (0-1 yrs. of age)	<p>6 household visits in neonatal period for improved new-born care practices, Home based new born care, identification and care of low birth weight/preterm new-born (with referral as required), counselling and support for exclusive breastfeeding, complementary feeding, improved weaning practices; nutrition counselling; Education of prevention of infections; identification of ARI/diarrhoea and treatment (ORS)</p>	<p>Complete immunization, Vitamin A supplementation, height and weight measurement, Care of common illnesses of new born, Identification of congenital anomalies, and appropriate referral</p>	<p>Birth asphyxia, severe ARI, diarrhoea management, acute gastroenteritis with dehydration, pneumonia case management, Treatment and stabilization and referral of severe cases,</p>	<p>Congenital anomalies, Management of complicated paediatric/ neo-natal cases, hospitalisation, surgical interventions, blood transfusion.</p> <p>Management of severe acute malnutrition (SAM), Hospitalisation, treatment and rehabilitation of severe undernutrition.</p>

Area	Community Level	Outreach Level	UPHC Level	UCHC Level
Child Health and Adolescent Health	1-5 years: Growth monitoring, prevention through IYCF counselling, access to food supplementation through ICDS; Detection of SAM, referral and follow up care; Prevention of anaemia, use of iodized salt, de-worming; Prevention of diarrhoea, prompt treatment and referral if needed. Pre-school and school children: biannual screening, eye care, de-worming, school health records Adolescent health: anaemia detection, peer counselling, sexual health education, personal hygiene	Detection and treatment of anaemia and other deficiencies in children and adolescents; Early detection of growth abnormalities, developmental delays and disability; Prompt management of ARI and fever; acute diarrhoea; Adolescent – counselling referral as per need	Immunization, management of SAM, severe anaemia, persistent malnutrition and nutritional deficiencies; severe diarrhoea and ARI management; Diagnosis of disability and developmental delays and referral, Skin infection Diagnosis and treatment of childhood illnesses, Referral of acute deficiency cases and chronic illnesses	Treatment of childhood illnesses and infections; Treatment of disability and developmental delays;
Communicable Diseases				
Vector-borne Diseases	Identification of suspected cases, Slide collection, testing using RDKs. Counselling for practices for vector control and personal protection. Community education	Identification, examination and referral to UPHC for suspected cases	Diagnosis and Treatment/management, referral of acute and chronic cases, report to IDSP	Diagnosis and treatment, Management of terminally ill cases, hospitalisation.
Management of chronic communicable diseases TB, HIV, Leprosy, Malaria, Kala Azar, Filariasis, other vector borne diseases	Vector control measures, education for prevention; identification, use of RDT, Follow up on medication compliance, Mass drug administration in Filariasis prevention, immunization of Jap B, RDK testing for malaria	Identification, examination and referral to UPHC for suspected cases	Diagnosis and treatment plan, Lab testing for all vector borne diseases; Drug dispensation for TB Maintenance or records for all cases of TB, leprosy UPHC to serve as DOTS center, regular follow up to ensure compliance to drug regimen	Diagnosis and treatment of complicated or severe cases, hospitalization.
Management of common communicable diseases	Identification and referral for testing at UPHC, symptomatic care for fevers, diarrhoea, aches and pains		Diagnosis and management of fevers, ARI, diarrhoea, skin infections. Management of aches, pains, rash, gastritis, acute febrile illness; Referral for severe and complicated cases	Diagnosis and management of all fevers, infections etc.

Area	Community Level	Outreach Level	UPHC Level	UCHC Level
Non-Communicable diseases				
NCD (Hypertension, Diabetes, Cancers – oral, breast, cervical)	Risk assessment of 30+ persons through prescribed format Inform all 30+ about advantages of screening, screening day and ensure they attend, esp. high risk persons Counselling on mitigation of risk factors. Ensure treatment compliance for those on medication through visits. Referral of at-risk cases to UPHC.	Organize NCD Screening Day Test/examine BP, blood sugar, oral lesions/cancer. Breast examination with proper privacy. Refer persons with >140/90 BP and >140 random sugar to UPHC, breast lumps. Counselling regarding risk factors, diet management.	Comprehensive NCD screening for 30+ patients who missed screening day. Cervical cancer screening using acetic acid. Diagnosis and treatment plan for HT and DM cases. Provision of regular drug supply for diabetes and hypertension. Referral for complicated and severe cases	Diagnosis and treatment/management of all NCDs, hospitalization if needed.
Mental Health	Silicosis, Fluorosis – preventive action and early case identification Chronic Obstructive Pulmonary Diseases – prevention and early detection, referral Epilepsy – early case identification and referral Identification of cases, referral and follow up; community education and sensitization on mental health issues, substance abuse	Detection and referral of mental illness, community education and preventive measures against substance abuse	Initial screening and referral. Referral to de-addiction centers, if needed. Management of violence related concerns	Psychiatric services, including hospitalisation, if needed.
Oral Health	Education on oral hygiene Identification of cases, referral and follow up; community education and sensitization on mental health issues, substance abuse	Dental hygiene, screening for cavities, gingivitis, dental caries, ulcers. Treatment or referral	Diagnosis, treatment of infections and referral; oral health clinics on specific days	Treatment for Tooth abscess, dental caries, scaling, extraction, etc. Referral for further care.
Hearing Impairment/Deafness	Identification of cases (if reported by family/ community), referral for testing		Identification of cases and referral	Management of complicated cases hospitalisation (if needed).
Eye/ENT	Identification of glaucoma, trachoma, and referral to UPHC Early identification of squint, lazy eye in children, other eye disorders	Eye care in new-born, screening for visual acuity, cataract, refractive errors, Nose, throat infections	Treatment for conjunctivitis, Management of colds,	Diagnosis and management of infections, disorders, further referral of complicated cases.
Trauma Care (burns and injuries)	First aid and referral.		First aid, emergency resuscitation, documentation for MLC (if applicable) and referral.	Case management and hospitalisation, physiotherapy and rehabilitation.

ANNEXURE C: HISTORY TAKING/RISK ASSESSMENT FORM FOR NON-COMMUNICABLE DISEASES (TO BE FILLED BY URBAN ASHA)

General Information				
Name of ASHA	Ward/Zone			
Name of ANM	Slum/Area			
UPHC	Date			
Personal Details				
Name	Any Identifier (Aadhar Card, UID, Voter ID)			
Age	RSBY beneficiary: (Y/ N) _____			
Sex	Telephone No.			
Address				
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 years	2		
2. Do you smoke or consume smokeless products such as Gutka or Khaini?	Never	0		
	Used to consume in the past / Sometimes now	1		
	Daily	2		
3. Do you consume Alcohol daily?	No	0		
	Yes	1		
4. Measurement of waist (in cm)	Female	Male		
	<80 cm	<90 cm		0
	80-90 cm	90-100 cm		1
	>90 cm	>100 cm		2
5. Do you undertake any physical activities for minimum of 150 minutes in a week?	Less than 150 minutes in a week	0		
	At least 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				
A score above 4 indicates that the person may be at risk for these NCDs and needs to be prioritized for attending the weekly NCD day				

Part B: Early Detection: Ask if patient has any of these symptoms			
B1: Women and Men	Yes/No	B2: Women only	Yes/No
Shortness of breath		Lump in the breast	
Coughing more than 2 weeks		Blood stained discharge from nipple	
Blood in sputum		Change in shape and size of breast	
History of fits		Bleeding between periods	
Difficulty in opening mouth		Bleeding after menopause	
Ulcers /patch /growth in the mouth that has not healed in two weeks		Bleeding after intercourse	
Any change in the tone of your voice		Foul smelling vaginal discharge	
In case the 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.			



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