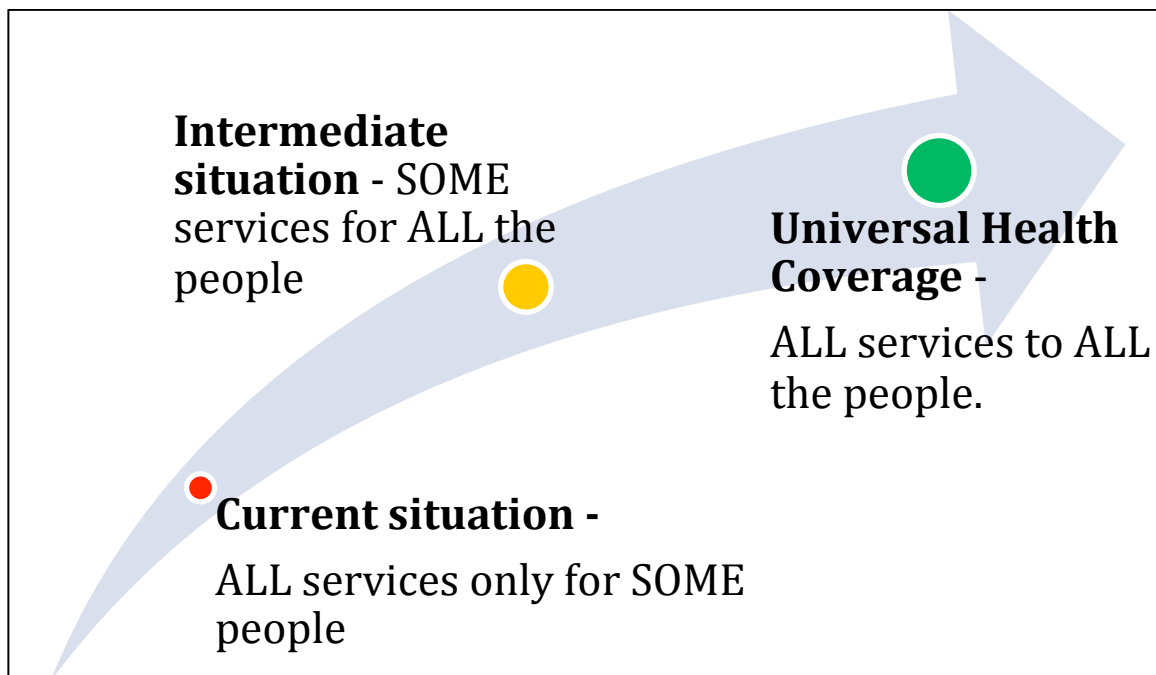


TOWARDS UNIVERSAL HEALTH COVERAGE:

An operational manual for states in India

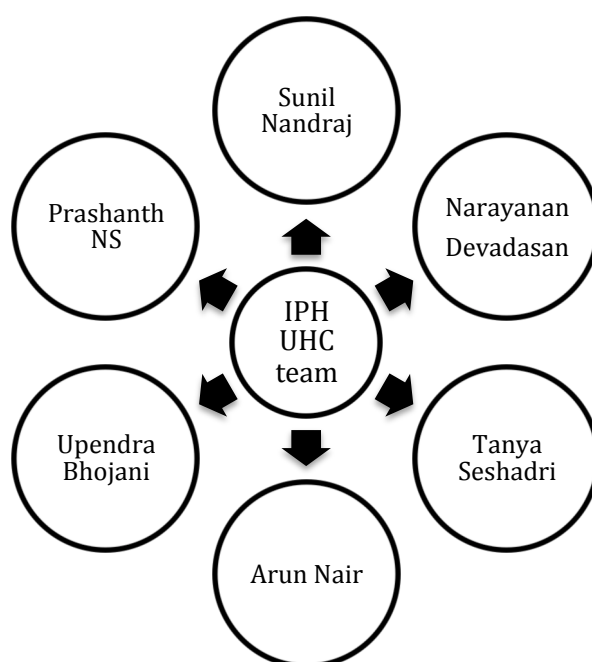


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TOWARDS UNIVERSAL HEALTH COVERAGE

An operational manual for states in India

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Cite as:

IPH UHC team. **Towards universal health coverage: An operational manual for states in India.** Institute of Public Health, Bangalore. 2012.



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PREFACE

There has been much talk about Universal Health Coverage (UHC), both internationally as well as nationally. Presently, there is a major emphasis on moving towards universal coverage, a goal that is laudable and must be encouraged at all cost. So it is heartening that the Planning Commission has taken the lead in commissioning a high level expert group (HLEG) to initiate the debate and discussions on UHC in India.

In India the debates and discussions about Universal Health Coverage have tended to remain at a policy and macro level coupled with inadequate information and much less clarity on the steps required to operationalise the concept of UHC. It becomes more crucial in the context of health being a state subject in India, with the State governments having the responsibilities to implement policies to achieve UHC. Further there is confusion with regard to UHC and its linkages with current health systems and programmes like the NRHM.

In this context some of us felt the need to go beyond broad policy recommendations and come up with steps to operationalise UHC. The Institute of Public Health, Bengaluru undertook this task. The key guiding principles in preparation of the document were that

- Health care services should be accessible and affordable to all sections of Indian society, especially the vulnerable section of the population.
- Health care services should be equitably distributed between urban and rural India, between men and women, between rich and poor, between the castes and among the States.
- Health care services should be aimed at maximizing health gain.

This document attempts to provide an understanding of the concept of UHC, explain in detail the critical aspects with reference to population and services to be covered, financing and the method of delivery. It is specifically targeted for the State level policy makers and implementers, so that they are able to diagnose where their state is vis-à-vis UHC, identify the necessary steps they need to take to prepare a roadmap towards achieving UHC.

This document is not a blueprint, but provides some options for policy makers and those in the decision making process to consider. The document draws from the various discussions held by various stakeholders in the past and several documents and experiences of several countries in achieving UHC. The document brings together a few practical tools (including an excel sheet) necessary to understand how UHC may be planned at the state level. That said, there is no ONE way or the ONLY way in planning for UHC. Any manual on UHC is never likely to be the one-stop-shop for EVERYTHING on UHC. The document is a “work in progress” that may benefit greatly from experiences of policymakers and other stakeholders. We welcome any discussion around shortcomings and critiques of the document, as long as alternatives are

provided. These could be included in subsequent editions of the document to improve its relevance and applicability.

This document does not take any positions regarding, “Public Vs Private”; “Biomedical Vs Social determinants”; “Health Vs Health Services”; “Purchasing Vs Providing”; “BPL list Vs Actual Poor”; etc. Similarly, we are silent on AYUSH services, not because we are pro-Allopathic, but because we are not clear on how to include them in our design of UHC. We would really appreciate experts in this field to give us suggestions to incorporate AYUSH services as well. This document was drafted with the premise that there are existing health services and programmes with its own infrastructure, organisation, governance mechanisms and information systems. Rather than ignore this and start on a clean slate, we decided to build on these see how best to dovetail our suggestions into the existing system.

The document has been written with the assumptions that the State governments are keen on moving towards UHC and are willing to allocate necessary resources (financial and others) to achieve UHC. Each chapter of the document is linked to the preceding and subsequent ones, and so we would request the reader to go through the entire document. To reiterate, this manual is a humble attempt by the Institute of Public Health, Bengaluru, India to assist the governments increase the access to quality health care for all residents (and especially the vulnerable) while protecting them from high medical costs and subsequent indebtedness and impoverishment.

The authors

September 2012

Table of Contents

PREFACE.....	3
BACKGROUND.....	6
WHAT IS UNIVERSAL HEALTH COVERAGE ?.....	8
WHAT IS POPULATION COVERAGE ?	13
WHAT ARE THE SERVICES TO BE COVERED ?	16
HOW WILL THE SERVICES BE FINANCED ?	20
WHERE IS MY STATE ON THE PATH TO UHC?.....	23
HOW ARE THE SERVICES TO BE DELIVERED ?	25
WHAT ELSE IS REQUIRED TO ACHIEVE UHC?	30
Governance.....	30
Monitoring	30
Support services.....	30
Quality and equity	30
CONCLUSIONS.....	31
References	32
Annex 1 – Health indicators in India, vis-à-vis the MDG goals.....	33
Annex 2 - Estimating the cost of UHC	35
Annex 3 – Tool to monitor the status of UHC	37
Annex 4 - Provider payment mechanisms to procure private provider services.....	38

BACKGROUND

It is now 65 years since India became independent and the health sector has achieved much from the pre-independence era. Currently, we have a three-tier government health service providing the spectrum of promotive, preventive and curative health services. National health programmes focus on priority diseases like tuberculosis and malaria. There is also a strong private health sector providing mainly curative services at all levels. Some key milestones in the Indian context are:

1947	Acceptance of the Bhole Committee Report
1978	Acceptance of the Alma Ata declaration of 'Health for all'
1983	The first National Health Policy
2002	The new National Health Policy and the National Population Policy
2005	Launch of the National Rural Health Mission (NRHM)
2008	Launch of the Rashtriya Swasthya Bima Yojana (RSBY)
2011	Presentation of the HLEG report to the Planning Commission on Universal Health Coverage (UHC)

Health services are provided by a mixture of government and private providers, practitioners of Allopathy, AYUSH and herbal medicine, qualified and less than qualified health workers. Given this plurality, there is very little coordination or synergy between them. According to a recent government report (1), there are **only 231 human resources for health (HRH) per 100,000** population; the desirable ratio needs to be 450. So it is clear that we need to produce many more health workers and ensure that they are retained at the desirable places.

Health financing by the government has been abysmally low. Most of health care in India is financed by individual households at the point of care. This in turn leads to barriers to access, catastrophic health expenditure and impoverishment due to medical expenses. Government has tried to infuse resources through various mechanisms, ranging from the NRHM to the RSBY, but even then, the latest figures suggest that the allocation on health has increased from 0.9% to 1.06% of the GDP.

Medicines and consumables are in short supply and there is evidence that most government health facilities suffer from frequent stock outs. This leads patients to purchase medicines from private pharmacies, increasing their out-of-pocket expenses. Articles have suggested that expenses on medicines have been an important reason for impoverishment.

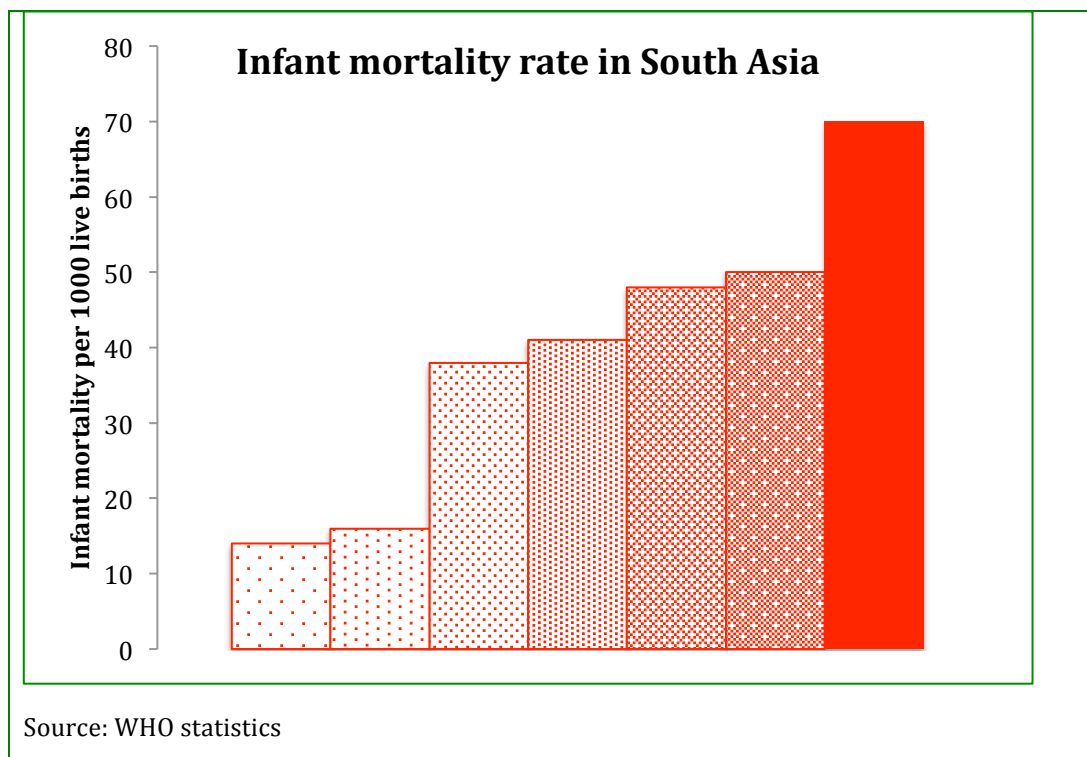
The NRHM tried to provide **a voice for the community** by creating institutions like the village health and sanitation committees (VHSC), the Accredited Social Health Worker (ASHA), the patient welfare committees at each facility (RKS) and independent health societies with civil society and panchayat representatives in them. However, at the end of the first phase of the NRHM, there is unanimity that these bodies have not fulfilled their roles.

Governance was decentralised and bottom up planning was encouraged through the NRHM. Facilities were given the financial powers to receive and use untied funds. Quality was strengthened by developing Indian public health standards (IPHS) and infrastructure was revamped using the additional funds.

However, in spite of all this, the health status of Indians did not improve drastically (Annex 1). Infants and mothers continued to die, we were home to the largest number of malnourished

children, infectious diseases still remained out of control and the health services had begun feeling the burden of non-communicable diseases.

It is a matter of shame for India that many of our neighbouring countries, with much less resources, have caught up with our health indicators. Admittedly, India is a large country compared to our neighbours, but we forget that most of the Indian states are similar in size to these countries



It is in this context that the country decided to move towards UHC. Many middle-income countries like Thailand, South Korea, Philippines, Brazil and South Africa are well on the way to achieve UHC. In the next section, we describe what UHC is and give examples of how some countries have achieved it in the recent past.

Iatrogenic poverty: the effect of no UHC.

S~ was the wife of a middle class businessman in Anand. She owned a three storeyed house with the vegetable business in the ground floor. Her two sons assisted her husband, while her two daughters-in-law helped her in the upkeep of the house.

Her world was turned upside down when her husband met with a traffic accident. He was admitted to a nearby hospital and lived for 40+ days before giving up the struggle. S~'s struggle started only after this. She and her sons had to sell their house to pay the hospital bills. They also had to mortgage all the jewellery in the house to buy medicines.

When I met S~, they were living in a kuchha house and her two sons had gone to vend vegetables in a push cart. Her grandson was removed from school because they could not afford the fees and books.

WHAT IS UNIVERSAL HEALTH COVERAGE ?

UHC is actually part of the WHO mandate to promote health for all (HFA). Unfortunately, the HFA movement did not materialize due to various reasons. In 2005, the World Health Assembly passed a resolution urging all countries to achieve UHC for their citizens as soon as possible (2). The Commission on Social Determinants of Health (SDH) and two World Health Reports (2008 and 2010) further reiterated the concept of UHC (3)(4)(5).

Many of the high-income countries have achieved UHC, but over time and with a lot of resources. Germany took nearly 118 years to achieve UHC (6), while Belgium took 64 years to ensure that 99% of its citizens were protected against both major and minor health risks. Others like Thailand and Korea used a big-bang approach to cover most of its population within a short period of time. There are many examples of countries that have achieved UHC at the global level. An analysis of these country case studies tells us that UHC is not a prerogative of only rich countries. Several middle-income countries such as Mexico and Thailand have been able to achieve UHC. On the other hand, there are several high-income countries that have not been able to achieve UHC in spite of spending a lot of money on health care. The classic example of this latter is the United States of America. Hence, achieving UHC is not merely about resources, but also about “how” these resources are used and the arrangements through which these resources are used to provide healthcare. And, more important, it is about the political will.

UHC has been defined by the WHO as “access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost” (4). On the other hand, the Commission on SDH states “Universal coverage requires that everyone within a country can access the same range of (good quality) services according to needs and preferences, regardless of income level, social status, or residency, and that people are empowered to use these services” (3). In this manual we use the definition as stated by the Steering Committee of the Planning Commission (7).

“Ensuring equitable access for all Indian citizens, resident in any part of the country, regardless of income level, social status, gender, caste or religion, to affordable, accountable, appropriate health services of assured quality (promotive, preventive, curative and rehabilitative) as well as public health services addressing the wider determinants of health delivered to individuals and populations, with the government being the guarantor and enabler, although not necessarily the only provider, of health and related services.

Steering Committee, 12th Five Year Plan, Planning Commission 2012.

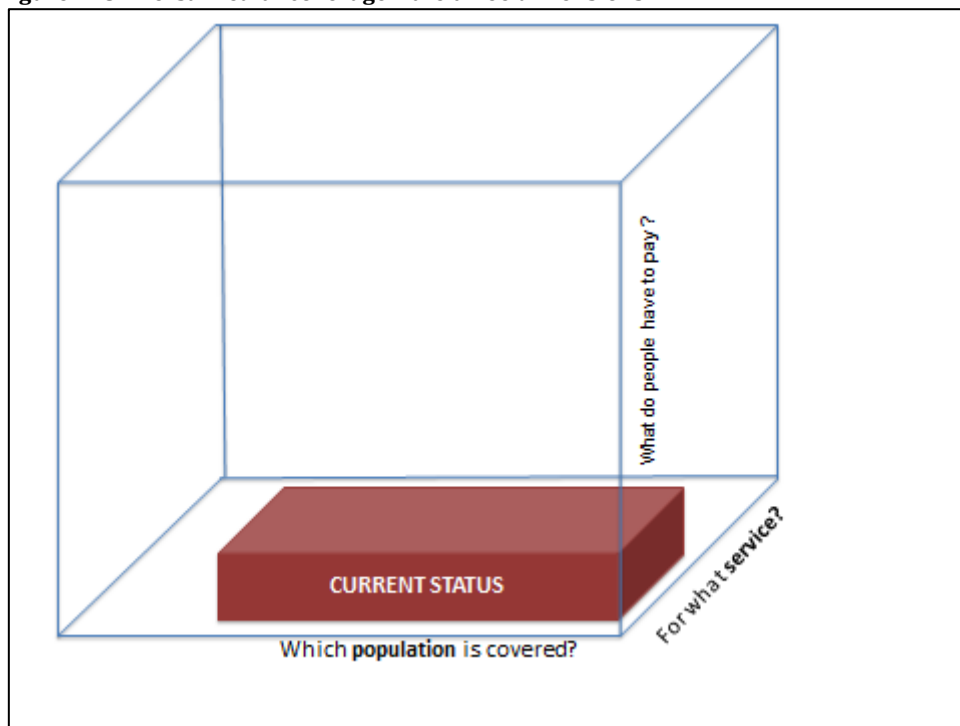
What does this mean in reality? It basically means that should anybody in India fall sick, he/she should be able to seek health care at enlisted health facilities at a cost that is affordable to the patient. To expand this further, be it a manual labourer or a software

engineer, if both suffers from diabetes; they should be able to get their treatment at nearby facilities without having to pay for it at the time of illness. So the key words in UHC are

- **All** citizens **should** be able to access
- **Most** of the health services at reasonable **quality** with
- **Minimal** direct payments because
- Government **guarantees** these services

In moving towards universal health coverage three dimensions have to be considered namely; a **population dimension** - who is to be covered, populations to be reached, with priority to be given to the poor and vulnerable; a **health service dimension** - which services are covered and how services are to be delivered; and a **financing dimension** - how to reduce OOP expenditures by converting direct payments into pre-payments. The famous WHO cube elucidates this very well.

Figure 1: Universal health coverage – the three dimensions



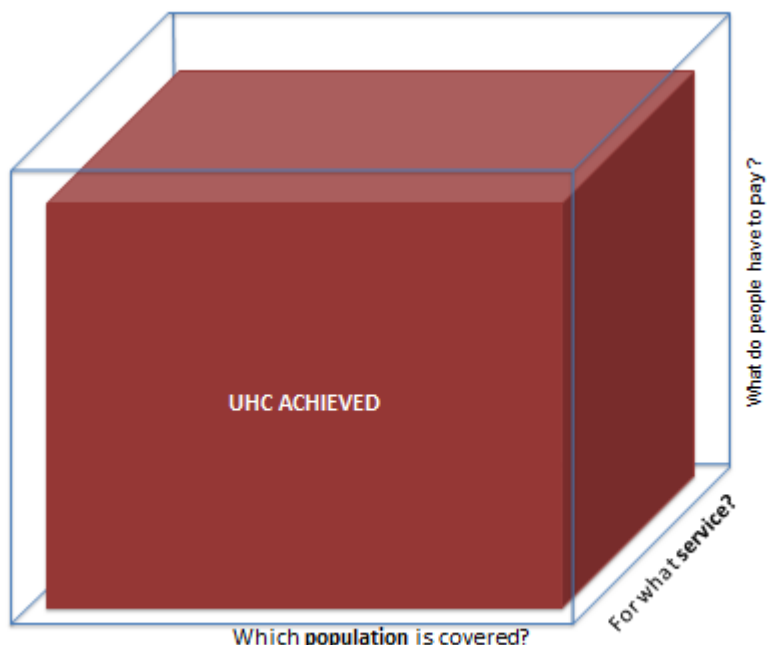
Adapted from the World Health Report 2008.

In a country where there is UHC, this figure resembles a different picture, with most of the cube being filled (Figure 2).

There is increasing interest in UHC because governments have realized that one of the drivers for economic growth is a healthy population. The Commission on Macroeconomics and health (CMH) has clearly identified the financial losses to a country because of illness and has requested countries to invest more resources into the health sector (8). In India, the UHC dialogue was initiated only in 2011. The Planning Commission constituted a HLEG to submit a report on how India can achieve UHC, as a

prelude to the 12th Five Year Plan. The HLEG submitted its report in Oct 2011 which was met with mixed feelings. While many have applauded it for bringing health to the centre of the development debate, others have criticized it for being a wish list. Based on the HLEG, the Planning commission clearly identifies UHC as the way forward for India (1).

Figure 2: The WHO cube in a country with UHC



Narin's experience after head injury

The accident happened on 7 October 2006. Narin came off his motorcycle going into a bend. He struck a tree, his unprotected head taking the full force of the impact. Passing motorists found him some time later and took him to a nearby hospital. Doctors diagnosed severe head injury and referred him to the trauma centre, 65 km away, where the diagnosis was confirmed. A scan showed subdural haematoma with subfalcine and uncal herniation.

He needed an immediate neurosurgical intervention. He was wheeled into an emergency department where a surgeon removed part of his skull to relieve pressure. A blood clot was also removed. Five hours later, Narin was put on a respirator and taken to the intensive care unit (ICU) where he stayed for 21 days. Thirty- nine days after being admitted to hospital, he had recovered sufficiently to be discharged.

What is remarkable about this story is that the episode took place not in a high income country where annual per capita expenditure on health averages close to US\$ 4000, but in Thailand, a country that spends US\$ 136 per capita, just 3.7% of its gross domestic product (GDP). Nor did the patient belong to the ruling elite, the type of person who – as this report shall show – tends to get good treatment wherever they live. Narin was a casual labourer, earning only US\$ 5 a day!

- 2010 World Health Report

While most state governments will aver that they provide 'free health services' to the poor population, the reality is otherwise. Many health services are not available at the government facility and even if they are available, patients may have to pay for it. Some examples are used to illustrate this:

- Immunisation services are available free to all children in India. This is easily available and accessible in rural areas. However, the lack of facilities in urban areas forces parents to go to the private sector and pay for the immunisation of their children. So while immunisation services are available free to most rural children, it is not so for the urban children.
- Outpatient services are supposed to be free in all the PHCs in the country. However, most PHCs do not have enough medicines, so patients are forced to purchase medicines from the private pharmacies (9). Thus once again, an assured service is not provided to the citizen, resulting in deficiency of UHC.
- TB treatment is provided free to all patients suffering from the disease. The network of TB clinics and microscopy centres ensures that these patients have the potential to get free treatment. However, this service is only limited to the TB patients and not to patients with appendicitis or diabetes or pneumonia.
- Employees of the Indian Railway services get comprehensive care for all conditions, be it preventive, promotive, ambulatory or inpatient care. Even catastrophic events are covered by the employer. However, this luxury is limited only to the employees of the railways and their family members. It does not apply to people outside this exclusive circle.

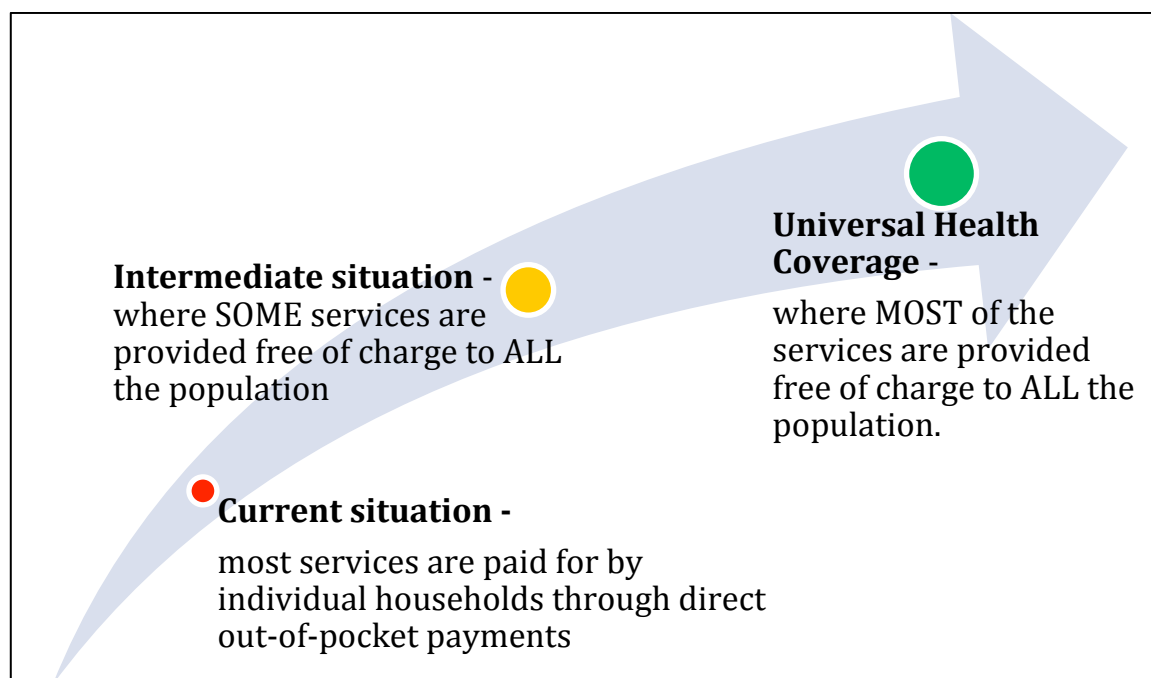
So in reality, governments currently provide

1. **Some services** free of charge **to all of the population** (e.g. immunisation for children, treatment for leprosy, TB, malaria, etc).
2. **Some services** free of charge **to some of the population** (e.g. inpatient services for BPL population groups).
3. **All services** free of charge **to some of the population** (e.g. employees of the Indian railways or the beneficiaries of the Central government health services).
4. **All services** free of charge **to all the population** (currently not provided by any state).

No state has achieved universal health coverage. The important point is to identify where the state is and progress from #1 or #2 or #3 toward #4. More important, it is not enough for a government to say – we are providing XXX services. The government **HAS TO** guarantee that the population actually benefits from these services. This can be achieved either by the government providing the services itself or by purchasing services from the private health sector. A tentative stepwise approach is provided in figure 3.

Other than this, the government should also consider how this entire process should be governed / managed / administered and from where it will mobilize extra resources to finance UHC. In the next sections we take the reader through some of the key steps to achieve UHC.

Figure 3: Potential path to Universal Health Coverage in India.



Adapted from: Carrins G; James C; Evans D. Achieving Universal Health Coverage: Developing the health financing system. WHO: Geneva; 2005.

Some people in our country enjoy total and comprehensive health care without paying money at the point of care. Examples are employees of the Indian Railways, the troops of the defence forces, the members of the CGHS scheme, etc.

India will achieve UNIVERSAL HEALTH COVERAGE the day each Indian benefits from similar complete and comprehensive care that is free at the time of use.

WHAT IS POPULATION COVERAGE ?

The first dimension of UHC is population – who should be covered under the universal health coverage system? Ideally (see definition), all residents in the state should be covered under the UHC system. This means that irrespective of the social, economic, cultural and political background of the household, they are eligible to receive free health care. Currently, the existing government health services do try to provide care to all the population. However, the reality is different. For example, a tribal patient with an acute appendicitis may have to travel all the way to the district hospital to get the necessary treatment. On the other hand, a white collared employee in a private firm can get the treatment in a nearby hospital. Under UHC, ideally both these sets of people should get health care as near as possible to their house, so that patients face the minimal barriers to care. In a health system that has achieved universal coverage, the services must be provided to one and all, irrespective of where they stay (in the state) or who they are.

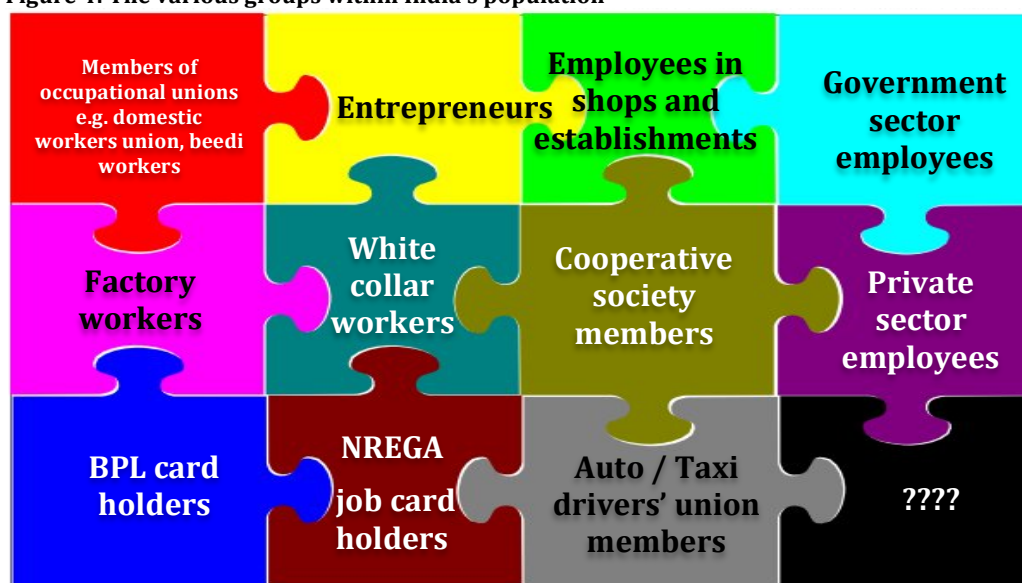
Studies and surveys clearly show that currently, there are vast numbers of people who cannot access health care because of barriers like money, distance, availability, acceptability, etc. Who are these population groups who are excluded? In India, these could be the indigent, the SC / ST households, those living in border districts, families belonging to certain religious minorities and of course those who reside in rural areas. Politically and epidemiologically, the highest priority is to identify and cover the most vulnerable people who are at risk of suffering due to lack of coverage. Therefore, any UHC plan at the state must ideally seek to identify and cover the most vulnerable at the first instance. Once this population is covered, then the government should move onto the next population group. In the long-term, the goal is to cover everybody in the state under the defined services.

How does one identify the various groups? One simple way is to look at them from economic parameters, e.g. BPL and APL. All those with BPL cards will be provided the services initially and then those with the APL cards. This is a simple except that when one comes to APL, then the numbers are large and a state government may not be able to provide to this entire group in one step. So we may need to break down the APL group further. A simple way for this is to use occupational groups; e.g. formal sector and informal sector. While the former is easy to cover, as their details are available with the employers, the latter is once again a nebulous group. To cover the informal sector in instalments, one can use existing natural groups like “unions,” “cooperative societies,” “societies,” “associations,” “welfare boards,” etc. These usually have most of the individuals of that occupational group as members. It may be argued that this will not cover the landless agricultural farmers; but ideally this group should be covered under the BPL category. And, remember that this is a process, once people realise that there is an economic benefit in joining a group, the chances of more such individuals joining these groups become a reality.

The figure below depicts the mosaic that forms India. There are many groups and sub groups and we can create similar mosaics along religious lines or caste lines or linguistic

lines or geographic lines. For the sake of this document, we have used a combination of economic and occupational subgroups as they are easier to identify. Most important is that whatever the mechanism of grouping, it should be easy to identify the subgroups using existing documents and processes. For example, SC / ST populations usually have caste certificates, the poor have BPL cards, domestic workers have union cards, farmers have cooperative society membership cards, drivers have union cards, shop owners have their own association membership cards, Self Help Groups have a list of members, construction workers and beedi workers are enrolled in their respective boards, etc. In this manner, each sub group can be identified by existing documents and systematically brought under the umbrella of UHC.

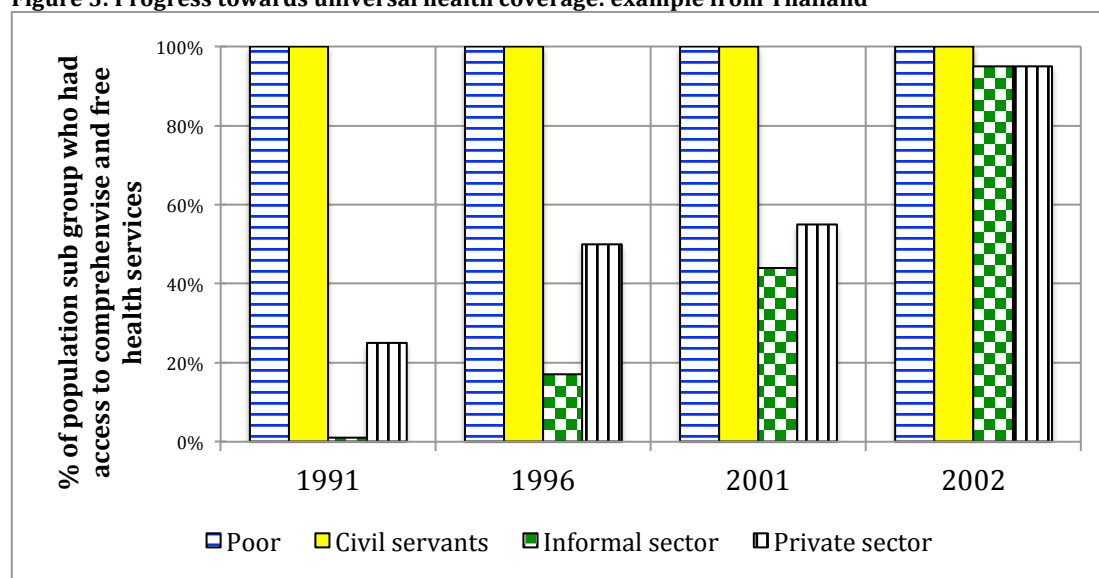
Figure 4: The various groups within India's population



*Thailand is a good example of a country that went about covering its population systematically. In 1991, about 32% of the population had access to free health care (both ambulatory as well as inpatient, preventive as well as curative). Most of these were either the **government employees** (10%) through a civil servants medical benefit scheme or **the poor** (17%) through a welfare scheme. Over the next ten years, they brought the private sector employees under health cover through a compulsory health insurance and the informal sector through the Universal coverage plan.*

While, theoretically all Indians can access 'free' health care, the reality is otherwise. Only 5% of patients seeking ambulatory care do not have to make OOP payments. The situation is worse when it comes to inpatient care. If we dis-aggregate populations in India along occupational lines (Table 1), we note that 77 million Indians have access to complete health care without having to pay at the time of treatment. Another 195 million are protected against hospitalisation expenses for secondary care, either under RSBY or by private health insurance. A hundred and forty five million Indians are protected against hospitalisations for tertiary care because of the catastrophic social assistance schemes in three southern states.

Figure 5: Progress towards universal health coverage: example from Thailand



So the challenge is to identify sub-groups within the uncovered and partially covered population, prioritise based on vulnerability, ease of coverage and financial resources and cover these populations incrementally or totally.

Table 1: Categories of Indians and the health services that they receive. (Population in millions)

Category of population	Number of individuals	Benefits received
Central government employees, MPs judges, etc	3	Free and complete care under CGHS
Formal sector but earning < Rs 15,000 pm	56	Free and complete cover underESIS
Defence troops	11	Free and complete care under AFMS
Indian Railway staff	7	Free and complete care under Railway health services
Formal sector and earning > Rs 15,000 pm	55	Free hospitalisation services for secondary care under private health Ins.
Informal sector – BPL	140	Free hospitalisation services for secondary care - RSBY
Informal sector – BPL (in Andhra Pradesh)	70	Free hospitalisation services for tertiary care under Aarogyasri.
Informal sector – BPL (in Tamil Nadu)	40	Free hospitalisation services for tertiary care under CM's Health Insurance.
Informal sector – BPL (in Karnataka)	35	Free hospitalisation services for tertiary care under Vajpayee Arogyashree Suraksha
Informal sector – Farmers (in Karnataka)	3	Free hospitalisation services for surgical care under Yeshasvini
Formal and Informal sector – who are partially covered	1,123	They receive free hospitalisation services or free preventive services or free ambulatory care

NB: These are estimates based on data from multiple sources including the planning commission chapter on health. It is not to be taken as the final figure.

Each state needs to first identify those populations that are not covered by outpatient / inpatient services. If the numbers of this population are high, then the state can further prioritise depending on the vulnerability and target them first and later expand to other population sections.

WHAT ARE THE SERVICES TO BE COVERED ?

The World Health Organisation defines health services as all the services that deal with the diagnosis and treatment of disease, or the promotion, maintenance and restoration of health (10). Health services are the most visible part of any health system, both to users and the general public. Delivery of health services is an important function and a building block of the health system (11).

Ideally, **all** the health services should be available to **all** the population at a negligible cost. However, that is often not a reality, given various constraints within and outside the health systems. As discussed in the earlier section (Population), there are inequities in access to health services across the population groups. This could be due to various reasons, including non-availability of the required services. For example, pregnant women need access to Comprehensive Emergency Obstetric Care (CEmOC), but if blood is not available at the CHC, then CEmOC services will not be easily accessible for a poor rural pregnant woman. Similarly, if common antibiotics are not available at the PHCs, then children cannot access to treatment for pneumonia or other infectious diseases. Another example is of a government medical college that provides cardiac surgery, but this service is available only in the state capital. And, most who need valve replacement for rheumatic heart disease may not be able to reach this college. So though the services are provided 'free' to all the state's citizens, in reality it is accessible to only those who have the resources. All these examples clearly show how in our country, access to health services is not universal in the government sector. This means that the patients turn to the private sector for their needs, but end up paying high OOP payments to get the benefits. Thus the extent of service coverage in our country is partial.

So one important step, in the path to UHC, is to list all the possible health services that a population needs. This then can be prioritised according to the local demand, the technical needs, the community's demands and the availability of resources. Some examples of a list of health services are provided in table 2 for the readers' benefit. However, this is not exhaustive and is only indicative. What is important is to first make a list of all the services and then highlight the priority services that the government wants to provide at **all** its citizens.

Table 2: Tentative list of health services that may be required by a population in India

Preventive Services	Provided (Yes / No)	Curative Services provided 24/7	Provided (Yes / No)	Promotive Services	Yes / No
Antenatal care		Outpatient care		Safe drinking water	
Immunisation		Emergency services		Nutrition services	
Growth monitoring		Inpatient services		IEC services	
Screening for cancer		Delivery services		Tobacco control	
Screening for DM		CEmOC services		Yoga	
Screening for HT		ICU services		Counselling	
Ambulance services		Surgical services		Anti vector measures	

Yet another way of making a list is to follow the existing national health programmes; e.g.

reproductive health services, child health services, malaria control services, TB control services, blindness control services, NCD control services, etc.

The advantage is that these services are already being provided by most government health services to a certain extent. The government would then need to invest in them systematically so that these services are provided to all the population in the region or state. For example, a

government may state

that it will ensure that ALL children of the state will have access to free immunisation services (including children in the urban areas). Then, it puts the various mechanisms in place to ensure this. Once this service is assured, the government can proceed to the next programme. The drawback of this approach is that ambulatory care and inpatient care are usually not part of most of the national health programmes. And, these are the basic

Defining “essential packages”:

In recent years, many low- and middle-income countries have gone through exercises to define the package of benefits they feel should be available to all their citizens. This has been one of the key strategies in improving the effectiveness of health systems and the equitable distribution of resources. It is supposed to make priority setting, rationing of care, and trade-offs between breadth and depth of coverage explicit. On the whole, attempts to rationalize service delivery by defining packages have not been particularly successful. In most cases, their scope has been limited to maternal and child health care, and to health problems considered as global health priorities. The lack of attention, for example, to chronic and non-communicable diseases confirms the under-valuation of the demographic and epidemiological transitions and the lack of consideration for perceived needs and demand. The packages rarely give guidance on the division of tasks and responsibilities, or on the defining features of primary care, such as comprehensiveness, continuity or person-centredness. A more sophisticated approach is required to make the definition of benefit packages more relevant. The way Chile has provided a detailed specification of the health rights of its citizens suggests a number of principles of good practice.

- The exercise should not be limited to a set of predefined priorities: it should look at demand as well as at the full range of health needs.
- It should specify what should be provided at primary and secondary levels.
- The implementation of the package should be costed so that political decision-makers are aware of what will not be included if health care remains under-funded.
- There have to be institutionalized mechanisms for evidence-based review of the package of benefits.
- People need to be informed about the benefits they can claim, with mechanisms of mediation when claims are being denied.

World Health Report 2008. Primary Health Care – Now more than ever

demands of the community. Without them, the credibility of the government health service suffers, affecting the performance of all other health programmes. So if a woman is not assured of 24/7 delivery services, the chances are that she will go to a private practitioner for antenatal checkup and subsequent delivery. Similarly, if 24/7 ambulatory services are not available, a labourer with cough will return from his work and go to a private practitioner. The latter will then prescribe a series of cough syrups and unnecessary antibiotics and never screen for TB. The patient will ultimately end up in the DOTS programme, but only after spending considerable amounts of money and spreading the disease to all near and dear ones.

Yet another list that has been developed is as per the NCMH report (Table 3). The advantage of this list is that it is costed, so when one wants to estimate the cost of choosing a service, one can just follow the NCMH formula.

Table 3: Examples of services that need to be provided, as per the NCMH report

Childhood conditions	Treatment of ARTI
	Treatment of Diarrhoea
	Immunisation
Maternal health conditions	Antenatal checkups
	Insertion of IUCD
	Normal delivery
Other disease conditions	Treatment of TB
	Treatment of uncomplicated malaria
	Treatment of snake bite

Other examples of benefit packages can be from existing good practices, e.g. the CGHS scheme, the ESIS, the Indian Railways' health services, the Armed Forces Medical Services, etc.

We (the authors) would prefer the checklist as shown in Table 2 as it has certain advantages. For example, if one says that a government will assure free outpatient and emergency care to all the patients and this service is available 24/7; then many disease conditions will be taken care of. Such an assurance will ensure that pregnant women get antenatal checkups, patients with cough will be screened for TB, patients with fever will be screened for malaria, typhoid and even dengue; children with diarrhoea get their ORS, diabetic and hypertensive patients get their medicines and patients with cataract are detected and sent for surgery. So there is a convergence of all the national health programmes at the level of the PHC. However, for this to happen, the PHC must be strengthened by ensuring physicians, nurses, medicines and diagnostics round the clock. This may not be possible with our current staffing and vacancy patterns.

Once the services have been prioritised and a consensus arrived on the universality of the services, then the next step is to decide how these services can be guaranteed to the population. What is required to ensure that these services are provided to all the population with minimal financial barrier? More human resources? More medicines? More health facilities? Specific equipment? This is dealt in more detail in the chapter on delivery of health services.

So to conclude this section, the state needs to define the services that they will guarantee to the population, and then ensure that this is provided to the population. In the case of curative services, this would require provision of the services round the clock.

It is important to define a comprehensive benefit package, which is the ultimate goal. And then move towards it systematically.

HOW WILL THE SERVICES BE FINANCED ?

Health financing systems have **three basic functions**: collecting funds, pooling them and then purchasing care. Funds can be collected either through direct fees or through prepayments. Direct fees are those charges paid by the individual patient at the point of care, and when the patient is sick. This is currently not recommended by most health financing experts (5). This direct payment has the propensity to act as a barrier to accessing health care. It can also lead to catastrophic health expenditure, indebtedness and impoverishment. Nearly all experts recommend prepayments to finance health care. This could be in the form of taxes, or health insurance premiums or deposits into a medical savings account.

Pre-payment is any expenditure made for a future benefit (like health care). People pay a small amount when they are not sick, so that when they are sick, they will be compensated their medical expenses from this fund.

The advantage of both taxes and health insurance is that there is pooling of funds. This means that both the rich and the poor contribute towards a health care fund. To give some examples, the rich pay direct taxes through income tax, wealth tax, capital gain tax, etc. On the other hand, the poor usually do not pay direct taxes, but contribute through indirect taxes like sales tax, excise tax, octroi, etc. Thus both contribute to a common pool, which can then be used for providing health services to both groups of patients when they fall sick.

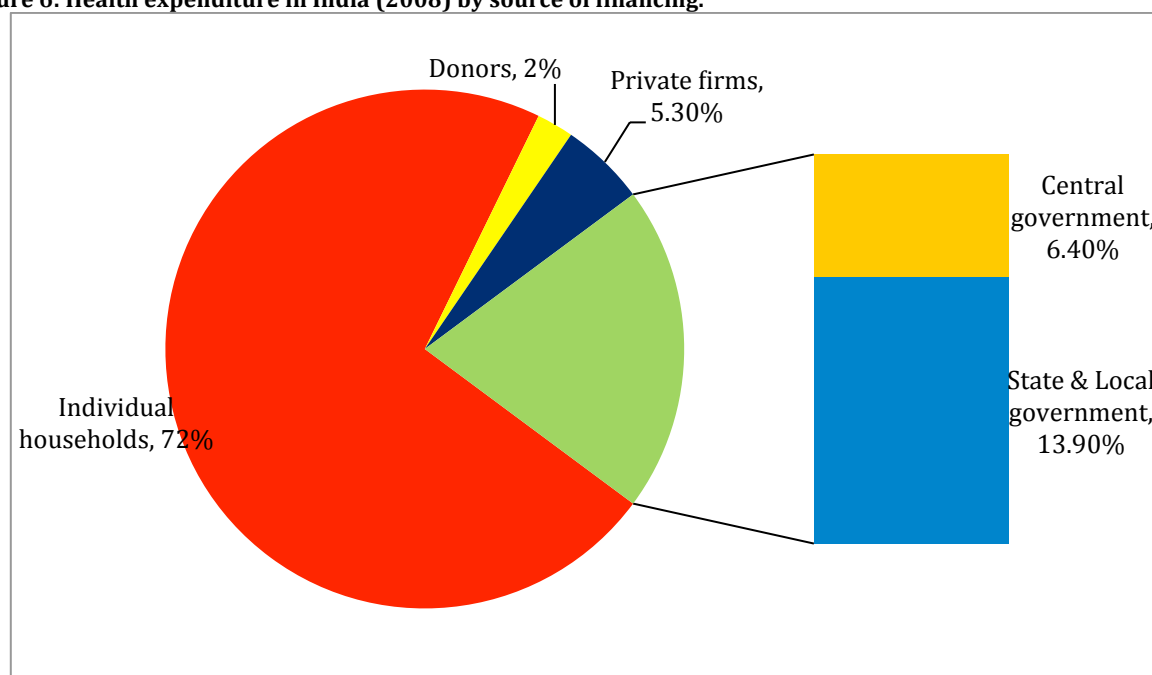
One of the cornerstones of UHC is to convert direct payments into prepayments. This reduces the OOP payments and increases financial coverage. Currently, direct payments form the mainstay of health expenditure in India. In 2008, individual households shouldered 72% of total health expenditure (THE) through direct payments at the time of illness (Figure 6). Government finances contributed only 20% of THE, the per capita expenditure on health by the government was one of the lowest in the world (only INR 540). Health insurance was a negligible amount. In other countries, the ratios are usually reversed. The majority of health expenditure is met through prepayments like taxes and / or insurance and the individual households meet only a small proportion of THE through direct payments. In India we have a long and uphill task to shift from direct payments to prepayments.

So how much money do we need to achieve UHC? There are many guesstimates. A recent article in a journal mentions that we need to spend INR 1,713 per person per year to achieve UHC (12). The NCMH report way back in 2005 estimated that we would need about INR 1,160 per person per year to provide the essential package of services. The HLEG report estimates that by 2022, we would have achieved UHC, but at a cost of INR 5,145 per person per year (at current costs). Of this, the government would have to spend 3,450 and the rest would be by the private sector. As stated, these are estimates as there are many gaps in the data available to make such calculations. Some attempts at calculating the total cost for achieving UHC is provided in Annex 2. Keeping in view, the range of estimates that one is receiving and also that patients will still use the private sector for services in the immediate future, INR 1500 per person per year will be a safe amount to start with. With time, this amount will increase as the population coverage increases and as the services coverage increases.

How does a state raise this amount? One must remember that the state is already spending an average of about INR 500 per person per year on health services. So the state needs to increase this by another 1000 rupees per person.

There are **two options** possible for a state. One is to allocate more money from taxes for health care and then spend it effectively on the public health facilities. By strengthening the government health services and providing better quality free health care, patients may shift from the private sector to the government sector. This will reduce their OOP payments considerably and protect them from financial catastrophe due to medical causes. NRHM tried this by infusing more funds into the health system. The union health budget increased from Rs 8,086 crores in 2004-05 to 21,680 crores in 2009-10 (13). The 12th five year plan has also promised a substantial increase in tax based funds. According to their calculation, the central government's contribution on health is expected to cross 300,000 crores while the state government will also contribute about 700,000 crores for health services. The total contribution to health expenditure from government sources is expected to cross 2% of GDP by 2017 and will be in the range of INR 1,500 per person per year.

Figure 6: Health expenditure in India (2008) by source of financing.



One main challenge for the state will be to raise its allocation to health care. Given that most state governments have a deficit budget, and the tax: GDP ratio is only 17%, this may be a valid objection. However, the health secretary can suggest some options to raise these extra funds:

- One obvious strategy is to allocate taxes from demerit goods (on alcohol and tobacco) for health care. This will raise substantial funds to achieve UHC. While usually taxes on these goods are part of the central excise and are collected by the central government, many states have started introducing entry taxes on tobacco products.

- The other option is to introduce a health cess, similar to the education cess. This can also raise substantial resources for UHC.
- There are many other (more radical) measures like transaction costs (for all financial transactions), etc.

The other option is to increase health insurance coverage among the populations. The important point to note here is that schemes like RSBY, Rajeev Aarogyasri, Vajpayee Arogyashree and CM's health insurance scheme are all financed by tax revenues. So they should be considered in that light. Health insurance should be used to extend coverage rather than generate extra funds. For example, by extending RSBY to the APL families, it is possible to increase the population coverage. Similarly, by making health insurance mandatory for all the formal sector, one ensures that the population as well as financial coverage is enhanced. So in our march towards UHC, we should use health insurance not to raise funds, but to use people's contributions into a prepayment mechanism and thereby increasing the coverage of UHC.

Some suggestions for such expansion are:

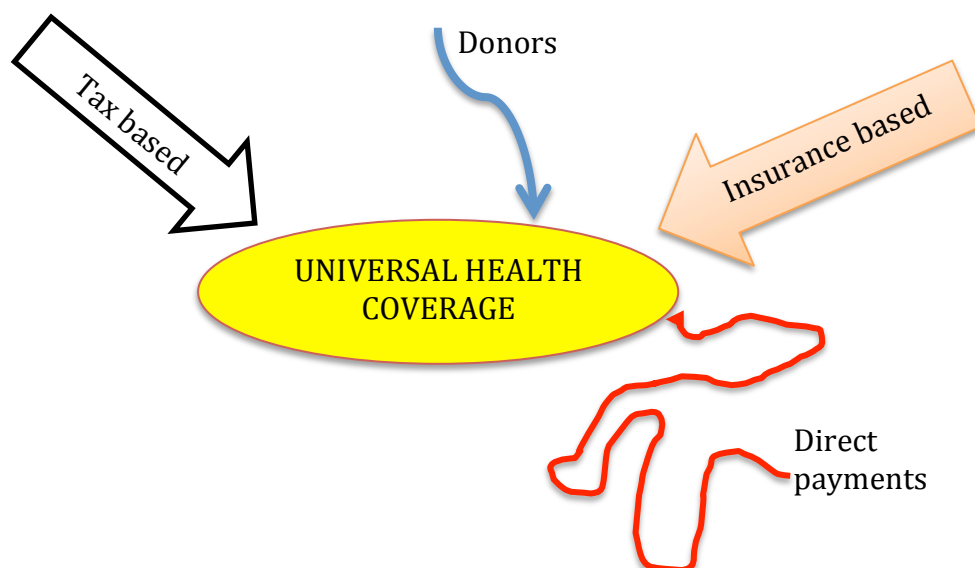
1. Expand RSBY to APL populations through existing groups like trade union members, cooperative society members; self-help group members, resident welfare associations, school children, etc. The government can collect the premiums from the APL and thereby enhance the financing of health care.
2. Expand ESIS to cover the formal sector. Raise the salary limit from Rs 15,000 pm to Rs 150,000 pm. This way most of the formal sector will have to contribute towards this ESIS fund and this fund can be used to finance their health care as well as co-finance the RSBY scheme.
3. Include outpatient services and tertiary health care to RSBY, so that patients get access to comprehensive cover through one single scheme, rather than having multiple schemes and identity cards.

To summarise, UHC should be financed using prepayment mechanisms along with pooling of the collected funds. Direct payments at the time of illness should be converted to prepayments at all cost. The amount required will depend on the services and the population coverage. We share two potentially simple tools to arrive at the actual cost and the cost per capita for this expansion.

<p>People will be protected from catastrophic health expenditure if health care is financed by prepayments.</p>

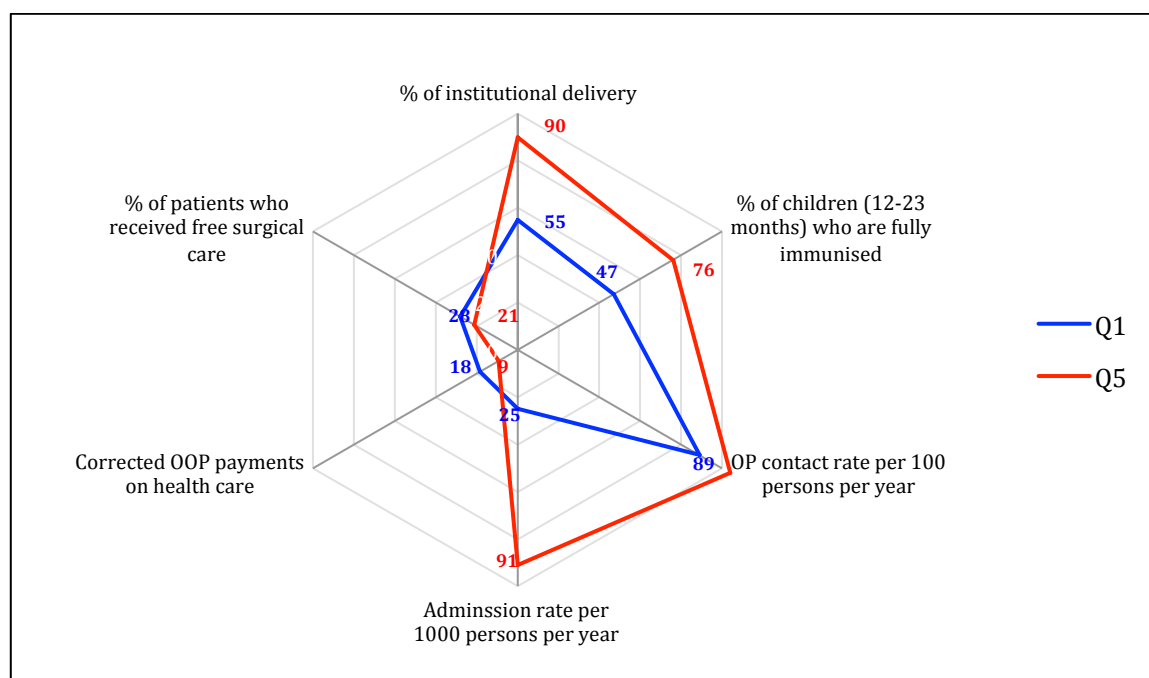
WHERE IS MY STATE ON THE PATH TO UHC?

One must visualize UHC as a goal towards which our society is moving. As stated earlier, there could be many paths to the same goal, but what is important is that we start moving towards the goal. In today's environment, it is unacceptable that people are denied even basic health care because they cannot afford it or households are impoverished because of high medical expenses for common ailments.



To begin with, one needs to know where one is on the path to UHC. Is one's state nearing the goal or is it far away from the goal. There have been many attempts to assess this, but most of these tools are very complex and only not user-friendly. We propose a simple tool that may not capture the minute details, but can give the policy maker a broad idea of where the state is. This tool uses existing data that is easily available and gives a visual depiction of the position of health coverage in a state. We have used this tool to depict the status of health coverage in India in this manual, and the same can be used for each state.

We use six indicators to assess coverage, two for each of the dimensions. For the population coverage, we assess the outpatient contact rate per capita per year and the admission rate per 1000 population per year. For the services coverage, we assess to what extent women are able to deliver in institutions and what proportion of children are fully immunized by the 2nd year. For the financial coverage, we calculate the amount of OOP payments made at the time of illness and also the proportion of patients who did not have to make OOP payments when they sought health care. All this is depicted in a spider diagram, where if one has achieved universal coverage, then all the spokes will show 100%. And, to bring in the dimension of equity, we have two lines, one for the riches quintile and the other for the poorest quintile.



If one uses this to analyse the status of UHC for India, we find that:

- % of children (12 – 23 months) who have completed primary immunisation ideally should be 100%. However, while children in the richest quintile have achieved 76% coverage, children among the poorest families have only achieved 47%. This means that there is a gap in immunisation for the poorer segments of the population. The same is the status for institutional deliveries. From this we can say that while service coverage is good for the rich, and affluent, there is a lot to be done for the poor.
- When one looks at population coverage, one notes that people (both rich and poor) seem to have access to outpatient services. However, when it comes to admissions, then the story is very different. Rich patients have a higher chance of getting admitted compared to the poor patients.
- And, the main reason for this is the OOP payments for health care. We have used “surgical care” just because we had the data readily with us. NSSO data should give the researcher data on how many patients received free treatment (for both outpatient and inpatient care) and how many had to pay OOP. This clearly shows that this is the place that one needs to work on if we went to achieve UHC.

The template for filling up this data and creating a graph is provided in Annex 2. This is a good starting point to identify gaps in the UHC that need immediate correction and also is a useful tool to monitor the progress towards UHC.

HOW ARE THE SERVICES TO BE DELIVERED ?

India's health care delivery is a mix of public & private health sector practising diverse systems of medicine. The provision of comprehensive health care by the public sector is a responsibility shared by the state, central and local governments. More recently, under the NRHM, the central government has emerged as an important financier of state health systems, while encouraging the state governments to strengthen the provision of care.

It is clear from the previous chapter that while there are some populations who are not receiving some services, the immediate issue to tackle is how to convert OOP payments into pre-payments. As stated earlier, it could be either by increasing the allocation for health services or through a health insurance mechanism. While financing UHC may be easy, providing the necessary services may be more difficult. An example of this is given in the box below:

*The current norms provide a PHC for 30,000 population. If all the outpatients had to be seen by the PHC MO, then it would mean an average of 100 patients per day. Obviously one MO cannot provide quality care to these patients **AND** conduct 1 – 2 deliveries a day, supervise the ANMs, conduct school health visits, monitor the malnourished children in the anganwadis, attend meetings at Block, District and Panchayat levels as well as administer the PHC and manage the programmes. Especially if one wants the PHC to be providing 24 x 7 services. One would need at least three MOs at each PHC. In a state like Karnataka, that would mean 4,000 new MOs, which may be difficult to find. Even with reasonable salary and perquisites, Karnataka still has a high vacancy rate at the level of PHCs MOs.*

If one goes to the FRU level, the situation is even worse. Assuming that all normal deliveries will happen at the PHC and only 15% that need specialized attention are referred to the FRU, one can easily expect about 450 to 500 'complicated' deliveries in a year. This has to be managed by a single obstetrician and is very difficult, especially if one expects this obstetrician to also manage the outpatients, conduct tubectomy camps and do night duties. Which means that one needs to recruit more obstetricians (and anaesthetists) to the FRUs. Again, taking the example of Karnataka, in a recent drive to fill up 600 specialist posts, the government advertised widely. Only about 120 came for the interviews and 60 joined. If this is the situation in a doctor surplus state like Karnataka, what will be the situation in other states?

If the government wants to remain both the financier and the provider of health care, then it can adopt various reforms like task shifting (introducing Rural Medical Assistants in place of MBBS doctors; training MBBS MOs for providing CEmOC and LSAS, etc). This can be a short to medium term solution, provided the state governments have the strength to counter the powerful IMA and other medical lobbies.

One another option in terms of providing health care could be to use the existing private health providers. They are available and it may make more sense to co-opt them rather than confront them. The private sector practitioners range from General Practitioners (GPs) to the super specialists, various types of Consultants, Nurses and Paramedics, Licentiates, Registered Medical Practitioners (RMPs) and a variety of unqualified persons (quacks). The practitioners not having any formal qualifications constitute the 'informal' sector. The above practitioners may practice different systems

of medicine, ranging from Allopathy to yoga. The institutions range from single bed hospitals to large corporate hospitals, and medical centers, medical colleges, dispensaries, clinics, polyclinics, physiotherapy and diagnostic centers, blood banks, etc. The private sector in India has a dominant presence in the provisioning of medical care among other areas. Over 75 per cent of the human resources, 68 per cent of an estimated 15,097 hospitals and 37 per cent of 623,819 total beds in the country are in the private sector. In such circumstances, no policy maker can afford to ignore this rich resource.

One feasible option that has been tried in many countries is for the government to purchase care from the private providers, especially for those services that are not provided by the government. One little known example is the case of the National Health Service in the UK. While the government finances the entire health care through tax revenues, it purchases care from the famous general practitioners who are actually private practitioners. Similarly, the German government uses social health insurance to finance health care in the country. It collects payroll contributions from employees and employers, pools the funds together and then purchases care from both private GPs as well as private hospitals. There are no or very few government facilities, the majority of providers in this socialist country is from the private sector. In both the above examples, the main difference between them and India is the strong regulatory framework that exists and is implemented diligently. Thus there are rules on who can practice, where they can practice and what they can practice. There are bodies that oversee the practice to ensure that the providers follow the standards. And if providers do not comply with any of the rules and regulations, there are bodies that take action. Hence the private sector in these countries is made to act for the public good.

So each state needs to make the choice. This choice of delivering and paying for the services would depend on various factors ranging from

		Provision of care	
		Public	Private
Financing of care	Public	<p>Totally government funded and provided. This requires:</p> <ul style="list-style-type: none"> • Enough revenue from taxes • Enough resources (human, infrastructure, medicine and consumables) • Reforms, especially vis-à-vis human resources, medicines, • A good governance structure that can make the staff accountable to deliver the desired outputs and outcomes. 	<p>Purchasing care from the private sector. This requires:</p> <ul style="list-style-type: none"> • Adequate private sector • Capacity of the government to actually purchase care and implement the necessary conditions. • Strong regulatory mechanisms to ensure that the private sector provides the required services
	Private	Not desirable	Current status – not desirable at all.

From the above table, it is clear that the financing of health care should be by the government, either through taxes or through insurance premiums. There is no doubt about that. Financing by individual households is not acceptable in today's environment. Then the debate is about provision of care. This can be provided by the government, or by the private or a mix of the two.

The important question that the state needs to answer is – do we expect the government health services to provide all the services? Does it have the resources in terms of qualified professionals? Or do we need to purchase services from the private sector? In many instances, there may be enough resources within the government to provide the services. However, in other instances, in the short to medium term, it may be more efficient to purchase care from the private sector. A good example of this is immunisation services in urban areas. It may take a lot of resources and time to establish a network of primary health centres to cover the entire city. However, the government can identify select private practitioners and provide them with the necessary equipment (refrigerator, ILR and UPS backup) so that they can store the vaccines and provide immunisation services to the children in their catchment area.

The assumption here is that all state governments have its own health services in place with a primary health centre, a community health centre and a hospital for defined populations. And that there is a thriving private health sector whose services can be purchased

For the sake of clarity, we would like to define some terms that will be used in the coming sections.

Government health providers mean the Primary Health Centres, the Community Health Centres, the Taluk Hospitals, the District hospitals, the Government medical colleges, the government maternity centres, the Urban Health Centres, etc.

Private health providers mean the formal (Allopathic or AYUSH) practitioners like single doctor clinics, nursing homes, polyclinics, multi-speciality hospitals, single speciality hospitals, private medical college hospitals, corporate hospitals, etc.

Purchaser of care is the government health directorate (or department) who purchases care from either the government or the private health providers. One may debate the artificial divide between government health providers and the purchasers of care, but this is necessary as they have two different roles.

However, purchasing care is not easy and requires a lot of skills and knowledge. We have tried to equip the reader with some information about various ways of purchasing care. Details on how to purchase care is provided in Table 4 and Annex 3.

Table 4: Various mechanisms for purchasing health care from the private sector

Purchasing mechanism	Ideal for purchasing		Remarks
	From	The following services	
Through salaries	Government health providers	1* / 2* / 3*	This is the usual mechanism used by most governments
Payment for performance	Government health providers	1* / 2* / 3*	This incentivises performance in government health facilities
Capitation method	Government / Private health providers	1*	Requires the provider to take responsibility of a population and the purchaser to calculate the cost of the services to be purchased
Diagnosis related groups (DRG)	Government / Private health providers	2* / 3*	Requires the purchaser to calculate the cost of the services to be purchased
Per diems	Government / Private health providers	2* / 3* - usually medical care	Requires the purchaser to calculate the cost per day of the services to be purchased
Fee for service	Government / Private health providers	1* / 2* / 3*	Not recommended as it has the potential for escalating costs
Vouchers	Government / Private health providers	1* / 2* / 3*	
Health equity funds	Government / Private health providers	2* / 3*	Useful way of channelizing social assistance funds
Contracting in of clinical services	Government health providers	1* / 2* / 3*	
Contracting out of facilities (PHC / CHC)	Government health providers	1* / 2* / 3*	

1* / 2* / 3* = primary, secondary and tertiary care respectively.

As one notes from the above table, the moment that the private sector is involved, it is imperative that the cost of the service is obtained. This will prevent frauds and cost escalations.

Also one can mix and match these methods; for example a government can decide to purchase primary care services from existing government providers through a salary mechanism and secondary care services from private providers through a DRG mechanism.

Table 5: Some examples of how other countries purchase care

Name of country	Primary health care		Hospital care	
	Provider	Payment mechanism	Provider	Payment mechanism
Thailand	Government	Capitation	Government	Capitation
Indonesia	Government	Salary + Capitation	Government	Fee for service
Canada	Private	Fee for service	Government	Salary
Taiwan	Private	Fee for service	Private	Fee for service
United Kingdom	Private	Capitation	Government	Salary
Germany	Private	Capitation	Private	Salary

However, it is important that the department has a separate cell to prepare the contracts with the private sector, to monitor the utilisation of the scheme and also to ensure that it remains cashless.

To conclude, financing and provision of care by the government has its advantages and disadvantages. Also, given the epidemiological and demographic transition, the challenges of provision may be too many to be handled by the government alone. Instead, it would be more efficient to purchase care from the private sector, so that services reach the needy and vulnerable as soon as possible.

If India wants to achieve UHC by 2022, it would be advisable to use the existing private health providers to supplement the government efforts. The government trying to provide all the services may not be feasible in the short to medium term

WHAT ELSE IS REQUIRED TO ACHIEVE UHC?

While most of the debate and discussion on UHC has been limited to financing UHC and also on the WHO cube, one should not ignore certain important steps that are required to ensure that UHC is achieved.

Governance

Most countries that started on the path to UHC introduced enabling legislation that ensured that the government could move ahead without too many obstacles. For example, Mexico introduced a series of regulatory acts during the SSPH reforms. These varied from regulation of drug safety to certification of providers. These laws enabled the government to ensure that the measures that they introduced were effective.

Monitoring

This is a crucial activity if a country wants to achieve UHC. Monitoring can be through routine data or from special studies. Thailand's research unit regularly conducted studies to monitor access and utilisation of services and the extent to which patients incurred out-of-pocket payments. This body of knowledge helped the government introduce a watertight plan for UHC soon after Mr. Thaksin was elected in 2001. Also, what is important, especially in a country like India is the shift from input based monitoring to outcome oriented information system and performance based monitoring.

Support services

It is not enough to provide resources for UHC, this should be accompanied by expansion of the support services like supply of medicines, use of technology and production of allied health staff.

Quality and equity

In the rush to achieve UHC, it is easy to lose sight of quality and equity. To prevent this, indicators to measure these should be part of the information system and should be monitored incisively. The policy makers should monitor to ensure that the poorest are not the ones falling through the safety net. In an effort to cut cost and be more efficient, quality is not compromised.

CONCLUSIONS

It is not acceptable that lakhs of mothers and children die every year because of inadequate health services in a country like India. It is a shame that millions of Indians are impoverished every year because of medical expenses. It is a matter of concern that every year lakhs of young hypertensive patients end up with a stroke and become economically unproductive. It is time that we come together and put an end to this unnecessary suffering.

The tools are there, the resources are available, it is a question of bringing all this together for a vision where every single Indian will have affordable and equitable access to quality health services. And, in this journey, we cannot afford to delay any further.

If we decide to move towards UHC, then there are certain basic changes we need to bring into the existing health systems. The most important is the way of thinking. We need to go beyond disease control programmes and tailor our services to the needs of the people. And, the people (like all of us) want assured ambulatory, emergency and inpatient care that is affordable. The second change that we need to bring is to infuse more resources into the health services. And, finally we need to stop ignoring a huge resource that exists within our country and needs to be used, the private sector. Having said that, we need to introduce important legislation to regulate the private sector before using them, so that they perform for the public good rather than for profit. One legislation that needs to be introduced into all the states immediately is the Clinical Establishment Act. Until and unless we define the private sector, it will be difficult for us to work with them.

We have been guilty of focussing on the poor in this manual. We have not come up with possibilities for the middle class or the rich. We have neglected them purposely to keep this manual short. However, they are important stakeholders, and needs to be considered when we make plans for UHC in our state.

This manual is a work in progress. It is not the ultimate document on how India can achieve UHC. It is the outcome from years of experience in the field and from observing the way the Indian health system functions. We recognise that much of this experience may be different in different contexts and if seen by different lens. Hence, we welcome suggestions, comments, advise, opinions from our learned and experienced colleagues so that we can improve on the second edition. Please do write to us at mail@iphindia.org

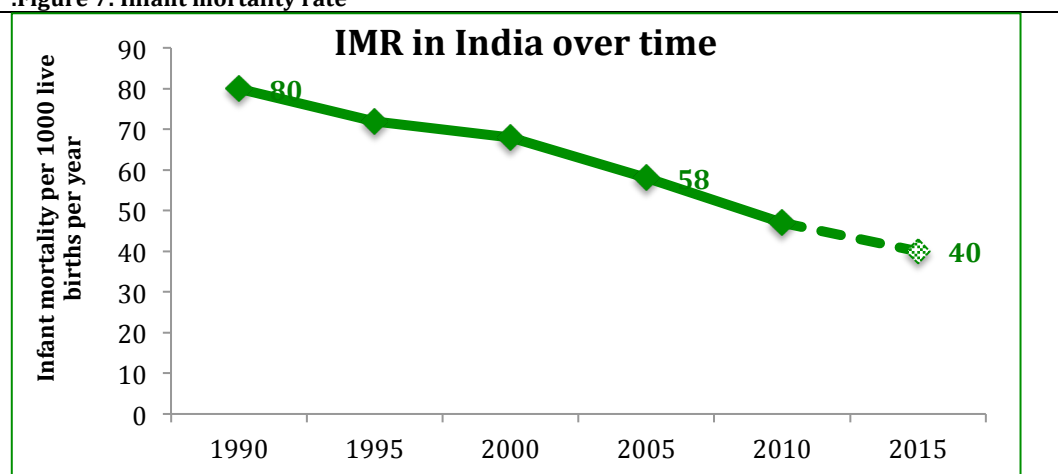
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Annex 1 – Health indicators in India, vis-à-vis the MDG goals

Initiatives, like the NRHM and the RSBY are efforts by the government of India to provide health care to its citizens with minimal financial burden for the beneficiary. However, even today, inspite of all these measures, the health status of Indians is disappointing. Results from various studies show that we are still far away from the Millennium Development Goals (MDG). This is depicted in the figures below. These aggregate figures hide vast disparities between states; between social, geographical and economic sub-groups within states and between programmes.

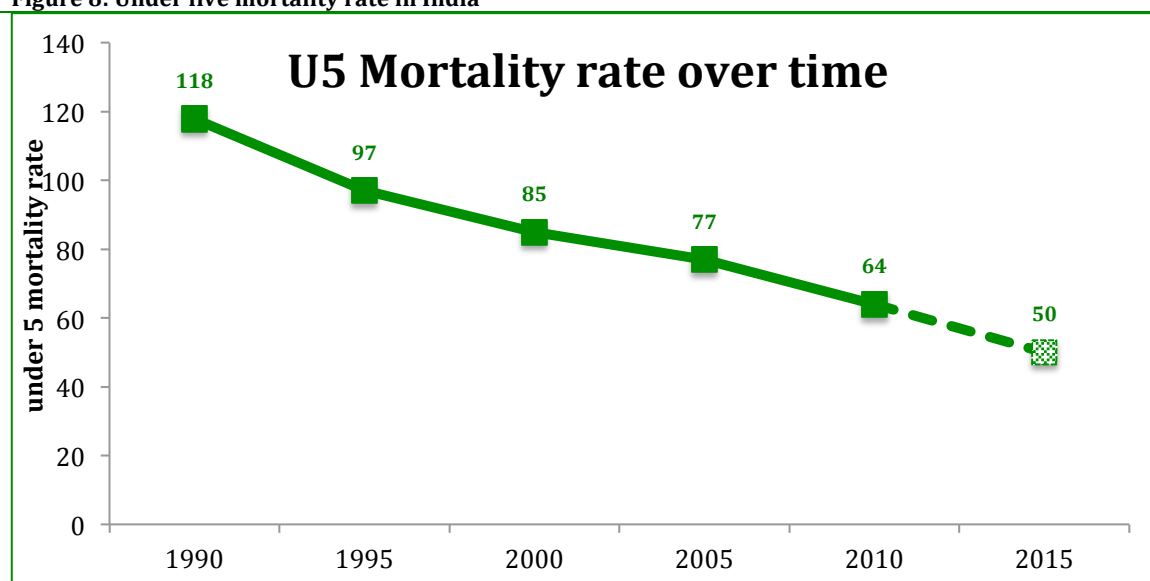
Figure 7: Infant mortality rate



Source: SRS bulletins

MDG target for India for 2015 is 27. NB: the IMR for 2015 is the projected value.

Figure 8: Under five mortality rate in India

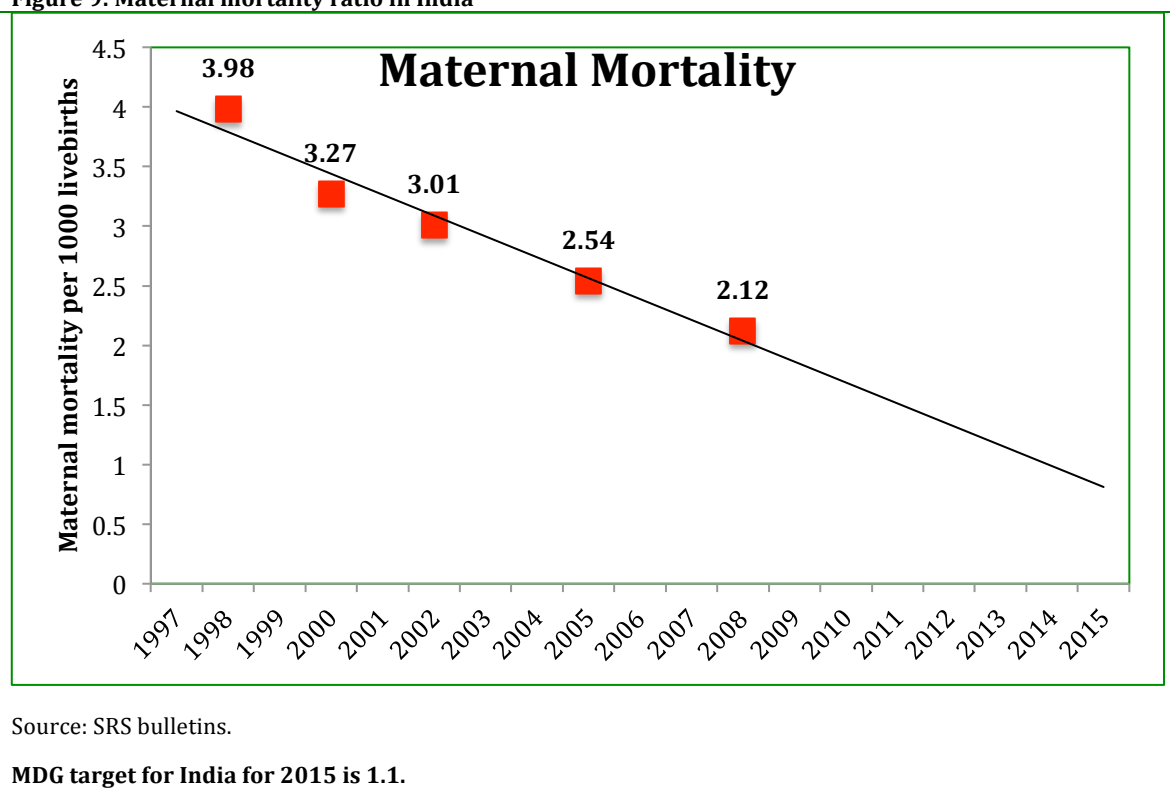


Source: SRS bulletins.

MDG target for India for 2015 is 41. NB: The value for 2015 is the projected value

Eighty per cent of Indians still use the private health sector for outpatient care, many still spend money even for 'free' government health services and more than 60 million are impoverished every year because of high medical expenses. While BPL families are benefitting from the RSBY to some extent, they still need to make out-of-pocket (OOP) payments for outpatient care. On the other hand, there is no such protection for the near poor or for the low and middle-income families. Even basic services like safe drinking water, sanitary toilets and primary immunization are not available for the 'bottom of the pyramid'. A recent UNICEF report states that only 50% of tribal children are fully immunized and that only 40% of pregnant women in the poorest quintile could deliver in a facility.

Figure 9: Maternal mortality ratio in India



Annex 2 - Estimating the cost of UHC

How much will these services cost? This is the million-dollar question that the finance department will ask and which the health secretary needs to answer. This will depend on the services that need to be strengthened and the extra population that needs to be covered. In the following table, we share some of the calculations made by the National Commission on Macro-economics and health (NCMH). While these figures are of 2005, the process of calculation can help each state to estimate the costs for extending services to new population groups, or for introducing new services into existing populations. Note that Table 5 has only a few conditions; the NCMH Report has a more extensive list. The states can use this format, with the caveat that the disease burden estimations and the cost calculations are based on 2005 figures. This (especially the cost) may have changed over time, so the element of inflation needs to be factored in. Also the disease burden estimations were done on a national level, it will vary from state to state. For example, the burden of malaria will be higher among the eastern and north-eastern states as compared to southern and western states. So each state needs to calculate its own burden from the existing data that is available. The purpose of this is to permit policy makers come up with figures to answer the finance ministry queries.

Table 6: Cost estimation of select health / disease conditions (2005)

Diseases / health conditions	Estimation of disease load (1)	Cost of treating one patient ¹ (2)	Cost of treating a population of 100,000 ² (3)	Cost according to components				
				Human resources	Equipment	Diagnostics	Medicines	System cost
Immunisation	~ 2.4% of population	84.51	202,824	32%	21%	0%	12%	35%
ARTI	~ 3% of population	141.49	424,500	12%	0%	0%	4%	84%
Diarrhoea	~ 3% of population	209.82	630,000	51%	0%	0%	5%	44%
Antenatal care	~ 2.4% of population	278.46	667,200	11%	0%	0%	56%	34%
IUCD insertion	~ 0.6% of population	86.89	52,200	30%	2%	0%	0%	68%
TB (sputum +ve)	~ 0.36% of population	840.98	302,760	38%	0%	4%	28%	30%
Malaria (pf)	~ 0.07% of population	150.60	10,542	19%	0%	13%	6%	62%
Snake bite	~ 0.36% of population	462.65	166,554	49%	0%	0%	27%	24%

Source: NCMH: 2005 (<http://www.who.int/macrohealth/action/en/>)

A simpler and cruder method to assess the total cost is given in the table below. It is based on NSSO (60th round) data. We have used the price in the private sector as a proxy for the cost of that service. Similarly, we have calculated, using the 2004 figures in terms of price as well as incidence. Matters would have definitely changed in the interim 8

¹ The cost is calculated based on cost of the medicines, the time spent by individual staff members for that activity and finally on the equipment and infrastructure required.

² The total cost of treatment for a population of 100,000 will be [(1) x (2) x 100,000]/100

years, but again, this rough and dirty method gives us a clue about the amount of finances that the state will require to expand coverage, both of services and of population. From this calculation, one arrives at an expenditure of about Rs. 1,284 per person per year for primary and secondary care. This is substantially lower than the amount that WHO recommends (US\$ 35) for covering the total population with comprehensive care. The reason is that many other health services are not covered, e.g. TB care, many other preventive services, etc.

While there are no exact estimates, these calculations give the policy makers some idea about the amount required to achieve UHC. He /she can estimate that it will cost about INR 1500 per person per year on providing comprehensive care. This can be a safe estimate as at least 40 – 50% of the people anyway go to the private sector for seeking care.

Table 7: Cost estimations based on NSSO (60th round) data for a state with a population of 6 crores

	Incidence rate (1)	Unit cost (2)	Population (crores) (3)	Total cost (crores) (4 = 1x2x3)
OP	1.17	300	6	2,106
Chronic disease	1.43	300	6	2,574
Inpatient	0.03	11550	6	2,079
Tertiary care	0.001	150	6	0.9
Immunisation	0.9	113	6	610
ANC	0.02	300	6	36
Delivery	0.02	2500	6	300
Total cost				7,706
Cost per capita				1,284

Disclaimer: Note that many other services are not covered in this calculation. The state can add as per their requirements, but use the existing formula to arrive at the requirements.

Annex 3 – Tool to monitor the status of UHC

This template is useful to document where each of the states are in their march towards UHC. This template should be copy pasted onto an excel sheet and the data entered accordingly

Indicators	Q1 (poor)	Q5 (rich)
% of women who have delivered in a facility ³		
% of children (between 12 and 23 months) who have received full immunisation ⁴		
Outpatient contact rate per population per year ⁵		
Inpatient admission rate per 1000 population per year ⁶		
Corrected out-of-pocket payment ⁷		
% of patients who received free inpatient services ⁸		

³ Formula = $\frac{\text{(number of women who delivered in a year in a facility} \times 100)}{\text{Total number of women who have delivered in that year}}$

The source for this information is from NFHS or DLHS or from UNICEF's coverage evaluation survey

⁴ Formula = $\frac{\text{(number of children between 12 and 23 months who have received full immunisation} \times 100)}{\text{Total number of children between 12 and 23 months}}$

The source for this information is from NFHS or DLHS or from UNICEF's coverage evaluation survey

⁵ Formula = $\frac{\text{Number of outpatients seen in the entire state in a year}}{\text{Total rural population in the state}}$

The source for this information is from the routine HMIS that the health department collects.

⁶ Formula = $\frac{\text{Number of inpatients seen in the entire state in a year} \times 1000}{\text{Total rural population in the state}}$

The source for this information is from the routine HMIS that the health department collects.

⁷ Formula = $\frac{\text{Median (average) out of pocket expenditure spent by patients for any direct health care (op + ip + ..)}}{1 \times 1000}$

The source for this information is from the NSSO 60th round

⁸ Formula = $\frac{\text{Number of inpatients who did not have to pay any money for inpatient care}}{\text{Total number of inpatients}}$

The source for this information is from the NSSO 60th round

Annex 4 - Provider payment mechanisms to procure private provider services

Salaries

Salaries are an administratively simple remuneration method, but can only of course cover the costs of personnel (and not other provider costs, such as drugs and medical equipment). Salaries have performance-related aspects related to underproduction. It requires strong monitoring mechanisms and supportive supervision to overcome this problem.

Performance based funding

One of the ways of overcoming the problems of salaries is to provide incentives based on performance. Health providers are paid a basic amount and any further increase in funding is paid on the performance of the provider who may be an individual or institutional provider. The main strength of this method is that the provider has an incentive to provide more services to the individuals to increase the performance and would also lead to competition. However in an effort to increase performance, the quality of care (in terms of over performance and performing unnecessary treatment) may suffer if adequate monitoring is not in place.

Budgets

Budgets can be set for providers, (usually in the government health services) which if strictly fixed, help contain costs. As with capitation, this is because there is no link between the quantity and mix of health services given to the individual and the amount received by providers. Their ability to contain overall costs, though, is limited if the budget is insufficient and results in others having to provide the necessary care. Further, when budgets are not entirely strict, and as they are often based on historical costs, there is no incentive for providers to minimize costs, and even an incentive to exceed the budget ceiling. Transfer of cases is also likely, along with underproduction and waiting lists.

Capitation

Many states have problems with providing primary health care for vulnerable populations. Especially in remote areas. Usually there is a shortage of staff, especially medical officers. One way is to use private sector providers. However, one weakness is that monitoring of the services provided by these private practitioners can be difficult. One potential solution for this is to purchase care from the private practitioner using capitation method.

What is capitation method?

It is a way of purchasing care from a provider for specific services on a per capita basis. The steps are as follows:

Step 1: Identify the services that need to be provided by the private practitioner. It could range from just immunisation services to antenatal care to the entire package of primary health services. Capitation is useful for primary care services, but very complex for hospitalisation services.

Step 2: Once the services have been decided, then the cost of delivering these services should be calculated. This will include the cost of medicines, diagnostics, provider fees and overheads. Assume that this is Rs X per person

Step 3: Identify private practitioners who are willing to partner with the government in providing the above-mentioned services.

Step 4: Inform the population that henceforth the specific services will be provided by Dr Q or Dr Z who are private providers. If they desire to receive care from Dr Q, then they will have to register with Dr Q at the beginning of the year. This may involve going to the clinic and receiving a card, by paying a token amount of Rs 5 per family. Or this can be decentralised to the HSC / ASHA level, who will issue the card and receive Rs 5 per family.

Step 5: Once the list of registered households are submitted to the government (District / Block / PHC RKS) by Dr Q and by Dr Z; then they pay the provider upfront Rs X times the number of families (or individuals) registered with the practitioner.

Step 6: In turn, the providers are now expected to provide 'free' services to all those who come to him/her with the card.

Thus, the services are provided by the private practitioners and are reimbursed by the government through an administratively simple method. There is no need to monitor bills, or the number of patients, etc.

Advantages of capitation method of purchasing care:

1. Minimum structural changes in the health department.
2. Monitoring requirements are minimal
3. People can vote with their feet. If a practitioner's performance is inadequate, they can shift over to the competition the next year.
4. It can be used both in private as well as public facilities.

Disadvantages of capitation method

1. There must be some expertise within the state to cost the package of services.
2. Providers (either government or private) must be available.
3. Chances of providers providing inferior quality of services (to maximise profits) are a possibility. E.g. if providers are asked to provide antenatal services through a capitation method; they may not do ultrasound scans for the patient, thereby saving on that cost. This can of course be countered with proper IEC to the community.
4. Providers may unnecessarily refer patients to higher levels to minimise their expenses. Monitoring the referrals and / or placing charges on the provider for each referral can curtail this.

Case based payments

Of late, many government sponsored health insurance schemes have been using private hospitals to provide inpatient care. This is to improve access to hospital care for the population. One unique aspect about these schemes is the way of reimbursing the hospitals. Instead of paying the hospitals on a fee-for-service basis, they pay on a diagnosis related group (DRG) basis.

DRG basis of reimbursement is to pay hospitals a fixed rate for common procedures. For example, if a hernia operation has to be done, then the insurance company will reimburse the hospital a flat rate of Rs 10,000; irrespective of the costs involved for that particular case. It is in the interest of the hospital to provide this surgery at less than Rs 10,000 so that they do not make a loss. The Yeshasvini health insurance scheme in Karnataka was the one who pioneered it, but now this is being used by various schemes like the RSBY, the Vajpayee Aarogyashree Suraksha, the Rajeev Aarogyashree and the CM's health insurance scheme, etc.

The main advantage of this way of purchasing care is that there is minimal administrative burden. The hospital has just to inform that they have conducted the specific surgery and they get reimbursed for that. There is no need for anybody to check the bills, etc.

The disadvantage of DRG, which is being seen in many of the above mentioned schemes is the tendency of hospitals to charge the patients as well as the insurance company. Patients, especially those who are not aware will be asked to buy medicines and consumables (though this is covered under the package). This has to be monitored closely and can easily be done today through a simple phone call on the patient's mobile. Further, there is an incentive for providers to diagnose more severe – and thus lucrative – cases, and/or to transfer the more complicated cases towards other providers (especially government providers).

To introduce such a way of reimbursing private hospitals; one requires that packages need to be costed. While this is a laborious and difficult task, we have the advantage that a lot of secondary care is already priced under the RSBY and most tertiary care is priced under the CGHS, the VAS, the RAS and CM HI schemes. So there is no need to reinvent the wheel.

Per diem

This is yet another easy method to reimburse hospitalisation expenses. It has been used in RSBY wherein the scheme reimburses hospitals a fixed amount (Rs 500) per day of hospitalisation for a medical condition, e.g. pneumonia. So all that the purchaser of care has to do is confirm whether the patient indeed has been admitted for the stated number of days. This can be through document checks or through a simple telephone call to the patient. If validated, then the purchaser has to reimburse the hospital Rs 500 x the number of days hospitalised. To minimise abuse of the system, maximum days for hospitalisation can be fixed for each medical condition.

Its main strength is in its simplicity. However, there is evidence to suggest that it can be abused by hospitals who admit a patient for 1 day and then claim bills for 10 days of hospitalisation. Or actually keep the patient unnecessarily for many days, to increase their income. However, these are not insurmountable problems and can be

managed. One issue that however needs to be addressed is to fix the price per day. It needs to be an average of the costs of medical conditions that are common to that area. For example, in some states, malaria may be the main problem; but in others diabetes and hypertension may be the main problem.

Fee for service

Fee-for-service for both ambulatory and inpatient care is a mechanism whereby providers are paid for each service or act provided to a patient. Its perceived strength is in terms of quality: by encouraging providers to provide health services. However, this incentive effect is also its main source of criticism: fee-for-service is often criticized for encouraging an overproduction of health services (supplier-induced demand), as providers are paid for each service given. Fee-for-service payments also encourage doctors to increase their volume of services rendered, most often by decreasing the quality of each service. Further, administrative costs are likely to be high, because of billing costs, reimbursing fees and monitoring/adjusting fee schedules.

This is the traditional manner in which insurance companies have been purchasing care from private providers. It is a process that is understood by hospitals but has many disadvantages:

1. It encourages the hospitals to perform unnecessary investigations and provide unnecessary treatment, so that they can maximise their income.
2. It is administratively very difficult as the company has to go through each item in the consolidated bill – will have check if there are documents for the 6 IV fluids, if there are prescriptions for the 20 paracetamol tablets, etc.

Most health economists do not encourage Fee for service as a mechanism to reimburse health care as it encourages cost escalation and unnecessary treatment to maximise profits.

Contracting in of services

Many times government health services may not have the required skilled professionals to provide the necessary services. A classic example is the dearth of obstetricians and anaesthetists at the FRU. On the other hand, there may be many obstetricians in the private sector, working in nearby private hospitals. One possibility is to acquire the services of the required professional through a “contracting in” mechanism. This has been tried out under NRHM with varying success. In some states, it has proved successful, in others, specialists have been reluctant to join the services even after being promised reasonably high salaries. There are many reasons for this, ranging from inadequate compensation, to the work culture in a government facility to the lack of technical and administrative support. To overcome some of these obstacles to contracting in, one may need to take the following steps:

1. In blocks / taluks / districts where the government has not been able to fill up the vacancies of essential specialists like obstetricians, paediatricians, anaesthetists, the district health society should be given the permission to contract in of these services.
2. The district health society then should be able to negotiate with the concerned specialists for the services. This may range from one specialist providing the entire service or a group of

specialists agreeing to a rota system, wherein the specialist who is free arrives to provide the service. To give an example, there may be 3 anaesthetists in the district who are working in the private sector. While ideally, one of them should be contracted in, it may happen that none of them may be willing to provide full time services to the district hospital. One way out of this is to use a rota system, wherein the anaesthetists are contacted in turn and whoever is free at that time is invited to help out with the surgery. The District Health Society needs of course to negotiate a mutually acceptable price for the service, either by the numbers or by the time required, etc. And most important, the payment should be made as soon as possible and with minimum administrative work. Also it must be made very clear who takes the responsibility of the patient after the departure of the specialist.

The main advantage is that the government is optimising the use of scarce human resources by using available manpower. The disadvantage is that it is difficult for the contracted in specialist to take on the responsibility, without being given the powers to execute.

To contract in services, one requires that financial and administrative powers be delegated to the district level. Without this, it is difficult to manage contracts from the state level. Second, there must be enough private practitioners who are willing to partner with the government health services. And finally, the district health society should have the capacity to draw up a contract and also monitor its implementation. This would require that the society review the performance of the contracted in staff in terms of number of services provided, the time required to reimburse the staff and sort out any problems that may have risen during that month.