DEDICATION

“This report is dedicated to the people of India whose health is our most precious asset and whose care is our most sacred duty”
Mandate for the High Level Expert Group on Universal Health Coverage for India

The terms of reference (ToRs) are as follows:

1. Develop a blueprint for human resources in health, for India.

2. Rework the physical and financial norms needed to ensure quality, universal reach and access of healthcare services.

3. Suggest critical management reforms in order to improve efficiency, effectiveness and accountability of the health delivery system.

4. Identify pathways for constructive participation of communities and the private for-profit and not-for-profit sectors in the delivery of healthcare.

5. Develop systems which will ensure access to essential drugs, vaccines and medical technology by enhancing their availability and reducing cost to the Indian consumer.

6. Develop a framework for health financing and financial protection that offers universal access to health services.

7. Profile the Social Determinants of Health as relevant to Universal Health Coverage.
High Level Expert Group for Universal Health Coverage

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High Level Expert Group Report on Universal Health Coverage for India
The High Level Expert Group (HLEG) on Universal Health Coverage (UHC) was constituted by the Planning Commission of India in October 2010, with the mandate of developing a framework for providing easily accessible and affordable healthcare to all Indians. While financial protection was the principal objective of this initiative, it was recognised that the delivery of UHC also requires the availability of adequate healthcare infrastructure, skilled health workforce and access to affordable drugs and technologies to ensure the entitled level and quality of care given to every citizen. Further, the design and delivery of health programmes and services call for efficient management systems as well as active engagement of empowered communities. The original terms of reference directed the HLEG to address all of these needs of UHC. Since the social determinants of health have a profound influence not only on the health of populations but also on the ability of individuals to access healthcare, the HLEG decided to include a clear reference to them, though such determinants are conventionally regarded as falling in the domain of non-health sectors.

The HLEG undertook a situational analysis of each of the key elements of the existing health system and has developed recommendations for reconfiguring and strengthening the health system to align it with the objectives of UHC, bridging the presently identified gaps and meeting the projected health needs of the people of India over the next decade. In this exercise, it was greatly enabled by the expert advice provided by a number of Indian and international organizations and individuals who shared the varied perspectives of policymakers, health professionals, health system analysts and managers, civil society, private sector, development partners and academia. It drew upon the work and wisdom of several past expert committees and study groups which had provided valuable recommendations on strengthening different elements of the health system in India. The HLEG was provided valuable assistance by the energetic group of researchers who constituted its technical secretariat at the Public Health Foundation of India (PHFI). It also benefited immensely from the intermittent consultations with members of the Planning Commission while its work was in progress.

The HLEG is submitting its report at a time of historically unprecedented opportunity for advancing people’s health through the introduction and effective implementation of UHC. The Prime Minister has declared, in his Independence Day Address on August 15, 2011, that health would be accorded the highest priority in the 12th Five Year Plan which would become operational in 2012. There is a clearly articulated governmental intent to increase the public financing of health to 2.5% of India’s GDP, during the course of the 12th Plan. The growth of India’s economy permits this long overdue increase in public financing of health.
The recognition of investment in health as both a developmental imperative and a pathway for winning popular political support has been evident in many recent initiatives ranging from the National Rural Health Mission (NRHM), the Rashtriya Swasthya Bima Yojana (RSBY) and a multitude of state sponsored health insurance schemes. The social objectives of all of these schemes would need to be merged and their scope considerably expanded to create a valued and viable model of UHC in India.

The adoption of programmes for promoting UHC, by many other countries, provides a stimulus not only to act in conformity with a globally progressive commitment to health equity but also to become a leader of the movement by creating the best contemporary model of UHC. The HLEG has studied the experience of other countries, especially of those in the low and middle income categories, while developing its recommendations for India.

The HLEG’s vision of UHC transcends the narrow, inadequate and often inequitable view of UHC as merely a system of health insurance. UHC, in its understanding, moves beyond ‘insurance’ by providing an ‘assurance’ of healthcare for multiple needs and includes health beyond healthcare, going beyond a mere illness response. UHC should address health in all of its dimensions and emphasize prevention and primary healthcare, which are ignored, neglected or even undermined by the usual systems of health insurance. Such an assurance has to be provided by the government, which has to act as the guarantor of UHC and ensure its success and sustainability, by mobilizing all societal resources and advance multi-sectoral actions. In this perspective, the UHC is linked firmly to the Right to Health and converts an aspirational goal into an entitled provision.

The HLEG also recognizes that, for such a vision of the UHC to be realized, a tax based system of health financing is essential. This is also the global experience, wherein countries which have introduced UHC have mostly depended on general revenues rather than on unsteady streams of contributory health insurance which offer incomplete coverage and restricted services. For UHC to succeed in India, political and financial commitments are required from the central as well as state governments. We hope this report will catalyze those commitments and channelize their concerted actions for the early adoption and effective implementation of UHC.

The HLEG’s report provides a framework for designing the UHC system. Even as that framework is discussed and debated in the public domain, delivery of UHC requires many implementation pathways to be identified and several operational processes to be detailed. Much work lies ahead but we hope this report provides a useful beginning.

K. Srinath Reddy
Chair, High Level Expert Group on Universal Health Coverage
Executive Summary

Defining Universal Health Coverage

We have, for purposes of our Report, adopted the following definition of Universal Health Coverage (UHC):

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.

Our definition incorporates the different dimensions of universal health assurance: healthcare, which includes ensuring access to a wide range promotive, preventive, curative, and rehabilitative health services at different levels of care; health coverage, that is inclusive of all sections of the population, and health protection, that promotes and protects health through its social determinants. These services should be delivered at an affordable cost, so that people do not suffer financial hardship in the pursuit of good health.

The foundation for UHC is a universal entitlement to comprehensive health security and an all-encompassing obligation on the part of the State to provide adequate food and nutrition, appropriate medical care, access to safe drinking water, proper sanitation, education, health-related information, and other contributors to good health. It is our belief that the State should be primarily and principally responsible for ensuring and guaranteeing UHC for its citizens. The State should not only provide health and related services, but should also address the wider determinants of health to effectively guarantee health security.

Ten principles have guided the formulation of our recommendations for introducing a system of UHC in India: (i) universality; (ii) equity; (iii) non-exclusion and non-discrimination; (iv) comprehensive care that is rational and of good quality; (v) financial protection; (vi) protection of patients' rights that guarantee appropriateness of care, patient choice, portability and continuity of care; (vii) consolidated and strengthened public health provisioning; (viii) accountability and transparency; (ix) community participation; and (x) putting health in people's hands.

Intrinsic to the notion of universality, non-discrimination, non-exclusion and equity is a fundamental commitment to health as a human right. Universality implies that no one (especially marginalised, remote and migrant communities as well as communities that have been historically discriminated against) is excluded from a system of UHC. At the same time, while society should pay special attention to the concerns of disadvantaged populations and the poor, a universal system should provide health coverage and care for everyone. This will ensure the creation of a robust and sustainable system of UHC in whose success every section of society has a vital interest. It will
also protect both the poor and non-poor from the risk of impoverishment due to unaffordable healthcare expenditures. A system of UHC can succeed only if it is established on the strong foundations of common interest, social solidarity and cross-subsidisation.

Instituting a system of UHC for India requires a flexible architecture to deal with inequities in health outcomes, regional and sociocultural diversity, and the differential healthcare needs of populations in different locations. It should also take into account the challenges of rapid urbanisation, simultaneous demographic, epidemiological and nutritional transitions underway, as well as social and political changes occurring in the country.

Embedded in our understanding of UHC is recognition of two critical factors. First of all, it will be difficult, if not impossible, to achieve and sustain UHC without addressing the social determinants of health. Urgent and concrete actions addressing the social determinants of health are needed to move towards greater health equity, bridge gaps and reduce differentials in health by class, caste, gender and region across the country. In other words, UHC can be achieved only when sufficient and simultaneous attention is paid to at least the following health-related areas: nutrition and food security, water and sanitation, social inclusion to address concerns of gender, caste, religious and tribal minorities, decent housing, a clean environment, employment and work security, occupational safety and disaster management. Secondly, the very framework and principles of UHC for India will be severely undermined if gender insensitivity and gender discrimination remain unaddressed. An inclusive approach to health should attend to the needs and differentials between men, women and other genders, along with the interaction between social and biological markers of health. In making UHC truly gender-sensitive, we specifically recommend critical actions to improve access for women and girls to health services (going beyond maternal and child health), to recognise and strengthen women’s central role in healthcare provision in both the formal health system and in the home, to build up the capacity of the health system to recognise, measure, monitor and address gender concerns, and to support and empower girls and women.

Finally, our review of the global experience with UHC leads us to make two comments. One, there doesn't appear to be a single ‘universal method’ of financing and financial protection that assures guaranteed UHC in any country. Two, what we are proposing for India is somewhat unique. It is a hybrid system that draws on the lessons learned from India as well as other developed and developing countries.

Our vision and recommendations that follow take cognizance of the extraordinary opportunities that India offers – and the possibility for India to take a lead in introducing a well-designed UHC system that is eminently suited to the needs and resources of countries at a similar level of development.

Our vision

We propose that every citizen should be entitled to essential primary, secondary and tertiary healthcare services that will be guaranteed by the Central government. The range of essential healthcare services offered as a National Health Package (NHP) will cover all common conditions and high-impact, cost-effective healthcare interventions for reducing health-related mortality and disability. A panel of experts should determine the package of services taking into account the resource availability as well as the healthcare needs of the country.
Executive Summary

Healthcare services to all citizens covered under UHC will be made available through the public sector and contracted-in private facilities (including NGOs and non-profits). The High Level Expert Group examined the range of services that could be offered by the institutions participating in the UHC program. Two different options emerged:

1. In the first option, private providers opting for inclusion in the UHC system would have to ensure that at least 75 per cent of out-patient care and 50 per cent of in-patient services are offered to citizens under the NHP. For these services, they would be reimbursed at standard rates as per levels of services offered, and their activities would be appropriately regulated and monitored to ensure that services guaranteed under the NHP are delivered cashless with equity and quality. For the remainder of the out-patient (up to 25%) and in-patient (up to 50%) coverage, service providers would be permitted to offer additional non-NHP services over and beyond the NHP package, for which they could accept additional payments from individuals or through privately purchased insurance policies.

2. The second alternative entails that institutions participating in UHC would commit to provide only the cashless services related to the NHP and not provide any other services which would require private insurance coverage or out of pocket payment.

There are strengths and limitations to each of these approaches. The first option would make it easier for the state and central governments to contract-in private service providers. There is, however, a concern that this could result in diversion of patients from the cashless NHP to the on-payment service provided by the same provider or differential quality of services provided to UHC beneficiaries and paying patients, which may compromise quality of care for the UHC patients. The second option avoids this pitfall but would render it difficult for many medical college hospitals, institutions of excellence (such as the All India Institute of Medical Sciences) and private hospitals which are accredited for post-graduate training by the National Board of Examinations to participate in the UHC system, because teaching and research at those levels would require them to go beyond the NHP package covered by UHC.
Central and State governments may examine these options and choose, based on their assessment of how best the access and equity objectives of UHC can be served. If the former option is chosen, a strong regulatory and monitoring mechanism must be established to ensure appropriate care for UHC beneficiaries even in institutions that provide mixed services. State governments are free to supplement the UHC National Health Package (NHP) through additional funding from their own budgets for services beyond the NHP.

Even with the two options, there will be some or several private hospitals which may not get themselves accredited under the UHC system given the conditionalities. Citizens are free to supplement free-of-cost services (both in-patient and out-patient care) offered under the UHC system by paying out-of-pocket or directly purchasing additional private voluntary medical insurance from regulated insurance companies.

We recognise the need to distinguish between health-related clinical services and hospitality services especially in tertiary care institutions. Service providers registered with the UHC system will be allowed to charge additional amounts from those who seek additional hospitality services not covered under the NHP.

We envisage that over time, every citizen will be issued an IT-enabled National Health Entitlement Card (NHEC) that will ensure cashless transactions, allow for mobility across the country and contain personal health information. Such a card will also help the State to track patterns of disease burdens across the country and plan better for the public provision of healthcare.

**Expected Outcomes from UHC**

India can aspire to achieve greater equity by bridging health disparities and inequities. The creation of a strong and robust health policy platform through the proposed scaling up of public spending and expansion in health service provisioning is likely to improve health outcomes. Moreover, the adoption of an integrated primary health approach is expected to result in a gradual but significant reduction in overall disease burden across the country. A strengthened health system under UHC will result in better health literacy for Indians through improved health promotion, healthier behaviours and lifestyles. Greater emphasis on the use of
information technology to link healthcare networks will improve health surveillance in the country with the establishment of a health information system that will generate valuable data on various health and disease trends and outcomes.

The expansion of the health workforce is also expected to generate almost seven million jobs for young people and women over the coming decade. The provision of free healthcare and medicines for both in-patient as well as out-patient care through financial protection, can be expected to significantly reduce or reverse the high private out of pocket spending. A healthy population in turn can contribute to economic growth through increased productivity and higher earnings. There are other benefits as well. Promoting health equity also contributes to increased social cohesion and empowerment and by joining the global movement towards UHC India now has both the capacity and opportunity to emerge as leading force for equitable healthcare of all. And finally, through implementing UHC with its unique reach and scope of healthcare delivery, India stands to gain the political goodwill and support of 1.2 billion potential beneficiaries.

The new architecture for UHC

It is possible for India, even within the financial resources available to it, to devise an effective architecture of health financing and financial protection that can offer UHC to every citizen. We have developed specific recommendations in six critical areas that are essential to augment the capacity of India’s health system to fulfil the vision of UHC. These areas listed below are the focus of the recommendations in this Report:

3.1 Health Financing and Financial Protection
3.2 Health Service Norms
3.3 Human Resources for Health
3.4 Community Participation and Citizen Engagement
3.5 Access to Medicines, Vaccines and Technology
3.6 Management and Institutional Reforms
3.1 Health Financing and Financial Protection

We have identified three principal objectives of the reforms in health financing and financial protection:

Objective 1: ensure adequacy of financial resources for the provision of essential healthcare to all

Objective 2: provide financial protection and health security against impoverishment for the entire population of the country

Objective 3: put in place financing mechanisms which are consistent in the long-run with both the improved wellbeing of the population as well as containment of healthcare cost inflation

Our key recommendations in this critical area are listed below.

Recommendation 3.1.1: Government (Central government and states combined) should increase public expenditures on health from the current level of 1.2% of GDP to at least 2.5% by the end of the 12th plan, and to at least 3% of GDP by 2022.

Financing the proposed UHC system will require public expenditures on health to be stepped up from around 1.2% of GDP today to at least 2.5% by 2017 and to 3% of GDP by 2022. The proposed increase is consistent with the estimates by government as well as our preliminary assessment of financial resources required to finance the NHP. Even if we assume that the combined public and private spending on health remains at the current level of around 4.5% of GDP, this will result in a five-fold increase in real per capita health expenditures by the government (from around Rs. 650-700 in 2011-12 to Rs. 3,400-3,500 by 2021-22). There will also be a corresponding decline in real private out-of-pocket expenditures from around Rs. 1,800-1,850 in 2011-12 to Rs. 1,700-1,750 by 2021-22 (Figure 1).

Such a planned expansion in public spending on health will change significantly the pattern of public and private spending on health in India (Figure 2).

Increased public expenditures, in our estimate, will lead to a sharp decline in the proportion of
The phenomenon known as adverse selection is a particular type of market failure common to health insurance. Effective risk protection requires that the prepaid pool includes a diverse mix of health risks. Left to purely individual choice, however, healthier individuals will tend not to prepay, while sicker individuals will join (assuming that they can afford it). This leaves the prepaid pool with a much costlier population than the average in the population, and as a result is not financially stable.

Healthcare provisions offered through the UHC programme have several public and merit goods characteristics that justify the use of public resources to finance it. Enhancing public expenditures on health is likely to have a direct impact on poverty reduction, if this increase leads to a reduction in private out-of-pocket expenditures. Financial metrics show that there is a significant imbalance in private spending versus public spending and in fact private spending is almost three times the amount of public spending. Our proposed increase in spending on health will greatly alter the proportion of public and private spending on health and, hopefully, correct the imbalance that exists.

Cross-country data on health expenditures shows that, while broadly speaking, a higher level of government spending on health (whether as a percentage of GDP or in per capita terms) is often associated with a lower dependence of a country’s health system on private out of pocket expenditures, much depends upon the specific way the additional public spending is pooled and spent.

Prepayment from compulsory sources (i.e. some form of taxation), and the pooling of these revenues for the purpose of purchasing healthcare services on behalf of the entire population is the cornerstone of the proposed UHC programme. Such an arrangement will provide a number of financial protection benefits. Both international experience and important concepts in health economics demonstrate that voluntary mechanisms of paying for healthcare cannot be a basis for a universal system. Prepaid funding that is pooled on behalf of a large population is essential for ensuring that the system is able to redistribute resources and thus services to those in greatest need, given that the risk of incurring high health expenditures is often quite unpredictable at the start of any budgetary period. And as noted above, both theory and evidence – no country that can be said to have attained universal coverage relies predominantly on voluntary funding sources – demonstrate that both compulsion (to avoid “opting out” as a result of the adverse selection phenomenon\(^1\)) and subsidisation (to ensure that those too poor or too sick to contribute) are essential for universal coverage. Hence, increased government expenditure on health is essential to ensure a leading role for compulsory pooling as the means to progress towards universal coverage.

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\(^1\) The phenomenon known as adverse selection is a particular type of market failure common to health insurance. Effective risk protection requires that the prepaid pool includes a diverse mix of health risks. Left to purely individual choice, however, healthier individuals will tend not to prepay, while sicker individuals will join (assuming that they can afford it). This leaves the prepaid pool with a much costlier population than the average in the population, and as a result is not financially stable.
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**Recommendation 3.1.2:** Ensure availability of free essential medicines by increasing public spending on drug procurement.

Low public spending on drugs and non-availability of free medicines in government healthcare facilities are major factors discouraging people from accessing public sector health facilities. Addressing this deficiency by ensuring adequate supplies of free essential drugs is vital to the success of the proposed UHC system. We estimate that an increase in the public procurement of medicines from around 0.1% to 0.5% of GDP would ensure universal access to essential drugs, greatly reduce the burden on private out-of-pocket expenditures and increase the financial protection for households. Increased spending on drugs needs to be combined with a pooled public procurement system to ensure adequate supplies and rational prescription of quality generic drugs by the public health system. Distribution and availability of quality medicines across the country could be ensured by contracting-in of private chemists.

**Recommendation 3.1.3:** Use general taxation as the principal source of healthcare financing complemented by additional mandatory deductions for healthcare from salaried individuals and tax payers, either as a proportion of taxable income or as a proportion of salary.

We recommend general taxation as the most viable option for mobilizing resources to achieve the target of increasing public spending on health and creating mechanisms for financial protection. There are few other options given the difficulties of collecting regular premiums from India’s large informal sector workforce. At the same time, the potential for additional revenue mobilisation from taxation is high given the projected rates of economic growth, the anticipated improvements in the efficiency of tax collections, and expected increases in both the organised sector base and the tax-payer base. Special efforts should be made to increase revenues through tax administration reform and, in particular, improved information system for taxes at both central and state levels. The tax ratio in India, at a little over 15% of GDP, is lower than the average for countries with less than USD 1000 (18%) and substantially lower than the average for middle income countries (22% for countries with per capita income between USD 1000 and USD 15000). The enactment of a direct taxes code (DTC) and the introduction of Goods and Services Tax (GST) could improve the revenue productivity of the tax system. Another important area for improving the tax productivity is to review all tax incentives and undertake measures to reduce arrears in taxes. It would, however, be appropriate to complement general taxation with a specific surcharge on salaries or taxable income to pay for UHC and offer cashless healthcare to all sections of the society. While improving the tax-to-GDP ratio is necessary, it is equally important to increase the share of overall public spending devoted to health. As noted, India devotes among the lowest proportion of total public spending to health – at or below 4.4% of total government spending between 1999 and 2009 according to WHO data, and in 2009. Only 9 countries (out of 191) devoted a smaller share of government spending to health than did India.

**Recommendation 3.1.4:** Do not levy sector-specific taxes for financing.

Revenues from specific sources could be potentially earmarked to finance healthcare. However, in our view, these options may not be appropriate for India. None of these options is likely to meet substantially the financial
requirements of Universal Health Coverage. Moreover, the practice of earmarking financial resources distorts the overall fiscal prioritisation. Also, given that most public revenues are fungible, earmarking from a specific tax may not actually add to the health budget if the increased funds from the earmark are offset by reductions from discretionary revenues. Though earmarking is not desirable, higher taxes on tobacco and alcohol have the public health benefit of reducing consumption of these harmful products, while adding to the general revenue pool. Those products should, therefore, be taxed at higher levels. However, depending upon revenue mobilisation from such sin and sumptuary taxes is fraught with perverse incentives. Securing more resources for health sector would, for instance, require increased consumption of alcohol and tobacco products both of which are undesirable. We, therefore, recommend that additional resources for increasing public investments in health (and other social services) should be generated by enhancing the overall tax-to-GDP ratio by widening the tax base, improving the efficiency of tax collections, doing away with unnecessary tax incentives, and exploring possibilities of reallocating funds to health.

**Recommendation 3.1.5:** Do not levy fees of any kind for use of healthcare services under the UHC.²

We recommend that user fees of all forms be dropped as a source of government revenue for health. User fees have not proven to be an effective source of resource mobilization. Global experience suggests that imposition of user fees in many low and middle income countries has increased inequalities in access to healthcare. Even modest levels of fees have led to sharply negative impacts on the usage of health services. Given that people in India already pay a substantial amount out-of-pocket, whether to private providers or in the form of informal payments in public facilities, a differential fees model which charges different fees to people in different economic levels in a society was considered as an approach for leveraging user fees as a financing mechanism and improving the fairness and transparency by which people contribute. However, our assessment is (i) there are practical challenges of means-testing and errors of inclusion and exclusion associated with identifying the economically weaker sections of society; (ii) as a result, it would be very difficult to provide equitable services to all economic sections of the society through a differential fee arrangement; and (iii) limiting corruption and administrative costs associated with receiving payments at the point of care, makes it difficult to implement a program based on differential fees. User fee can sometimes be employed as a means of limiting excessive consumption of unnecessary healthcare but there are other approaches such as effective triaging, providing preventive care etc. that are more effective in controlling this issue. Also as a practical and political issue, increasing official user fees, when they are so low and yet impose financial barriers to access, would be politically and practically difficult to justify. The benefits of such an effort are unlikely to be worth the (financial, administrative and political) costs. Therefore overall, user fees would not be desirable for the proposed vision of the UHC programme.

² One of the HLEG members differed with this recommendation, because he was of the considered view that persons who can afford to pay should be charged for tertiary care services.
Recommendation 3.1.6: Introduce specific purpose transfers to equalize the levels of per capita public spending on health across different states as a way to offset the general impediments to resource mobilisation faced by many states and to ensure that all citizens have an entitlement to the same level of essential healthcare.

Ensuring basic healthcare services to the population, like poverty alleviation or universal elementary education, has nationwide externalities and is also consistent with principles of equity. The fundamental rationales for the central transfers are to (i) ensure that all states devote sufficient resources to ensure the NHP for their entire population; and (ii) reduce inequalities in access and financial protection arising from the fact that poorer states have lower levels of government health spending than do richer states. Therefore, a substantial proportion of financing of these services can and should come from the Central government even though such health services have to be provided at sub-national (state) levels. The extent of Central and state contributions should depend on the perceived degree of nation-wide externality versus state-wide externality as well as the efforts to promote equity and fairness. An appropriate transfer scheme from the Central government to states must be designed to reduce the disparity in the levels of public spending on health across states and to ensure that a basic package of healthcare services is available to every citizen in every state across the country. It is however important, while designing such a transfer scheme, to ensure that states do not substantively substitute Central transfers for their own contribution to health. States should not only continue to contribute as much as they do now on healthcare, but also proportionately increase their budget allocations for health over the years. In other words, the transfers received from the Central government along with the matching contribution by the states should constitute additional public spending on health – and should not be used to substitute spending from own resources by the states. This is all the more important because, as noted earlier, the existing pattern of resource allocation by India’s State and Central governments, collectively result in one of the lowest priorities given to health of any country in the world.

Recommendation 3.1.7: Accept flexible and differential norms for allocating finances so that states can respond better to the physical, socio-cultural and other differentials and diversities across districts.

A major factor accounting for the low efficiency of public spending has been the practice of the Central government to develop and enforce uniform national guidelines for similar transfers for health across all states. Such a practice fails to take into account India’s diversity and contextual differences. It also fails to properly incentivize state governments to draw up their own health plans in keeping with the needs of communities. We, therefore, recommend that the Central government should adopt a fiscal transfer mechanism that allows for flexible and differential financing from the Central government to the states. This will also allow for Central transfers to better meet the diverse requirements of different states, and enable states to develop health plans that are consistent with the healthcare needs and requirements of their populations.
Recommendation 3.1.8: Expenditures on primary healthcare, including general health information and promotion, curative services at the primary level, screening for risk factors at the population level and cost effective treatment, targeted towards specific risk factors, should account for at least 70% of all healthcare expenditures.

We envisage a major role for primary healthcare in the UHC system. The coverage of essential primary care services for maternal and child health, vision, oral health and hearing remains inadequate. The infectious disease burden in several parts of the country continues to be very high. Early identification and treatment of these diseases coupled with prevention at the community level is the only way for us to reduce this burden. The widespread burden of malnutrition including easily treatable conditions such as iron-deficiency anaemia can only be dealt with at the primary care level. At the same time, the surge in chronic illnesses, along with unipolar depression, cardio-vascular disease and diabetes are rapidly becoming dominant burdens of disease. An ageing population is also increasingly likely to require home-based or community-based long-term care. We therefore recommend earmarking at least 70% of public expenditures, both in the short-run and over the medium term, for preventive, promotive and primary healthcare in order to reap the full benefits of UHC.

Recommendation 3.1.9: Do not use insurance companies or any other independent agents to purchase healthcare services on behalf of the government.

Having recommended that general taxation and other deductions from the non-poor should be pooled to provide UHC, this recommendation deals with how pooled funds can be used to provide and, if necessary, purchase healthcare. In the context of delivering UHC, we have examined three options: (i) direct provision; (ii) direct provision plus contracted-in services; and (iii) purchase by an independent agency. We have made the case for complementing the direct provision of health services by the government with the purchase of additional services from contracted-in private providers by the government. This, we have argued, is more practical and desirable than relying exclusively on direct provision of health services by the public sector. Independent agencies in the private sector and insurance companies under schemes such as the Rashtriya Swasthya Bima Yojana (RSBY) have been able to achieve expected enrolment, utilisation levels and fraud control. However, we believe that for a number of reasons, this mechanism is not appropriate for the UHC system. Concerns regarding purchase by an independent agency do not stem from the anxiety that they may perform the assigned tasks poorly, but from more basic design flaws and difficulties in scaling up this approach to deliver UHC. The use of independent agents fragments the nature of care being provided, and over time, leads to high healthcare cost inflation and lower levels of wellness. It becomes necessary, therefore, to either explore a completely different approach towards the use of insurance companies and independent agents – more in the “managed care” framework, where they take on explicit population level health outcome responsibilities or invest further in the capacity of the Ministries and Departments of Health to directly provide and purchase services from contracted-in private providers wherever necessary. We favour the latter option.
**Recommendation 3.1.10:** Purchases of all healthcare services under the UHC system should be undertaken either directly by the Central and state governments through their Departments of Health or by quasi-governmental autonomous agencies established for the purpose.

We recommend that the central and state governments (Departments of Health or specific-purpose quasi-governmental autonomous agencies with requisite professional competencies created by them) should become the sole purchasers of healthcare for UHC delivered in their respective jurisdictions. Provisioning of health services at primary, secondary and tertiary levels should be integrated to ensure equitable and efficient procurement and allocations. We believe that it is possible to substantially reform the manner in which Ministries and Departments operate so that they can become effective purchasers of healthcare services. District-specific assessment of healthcare needs and provider availability, communicated by the Director of District Health services, should provide the basis for state level purchase of services. The example of the Tamil Nadu Medical Services Corporation, which has functioned as an efficient agency of the State in Tamil Nadu, could serve as a possible model.

We recognise the limited capacity within government and envisage that, to begin with, purchases may need to be centralized at the state level. However, over time, it is possible to foresee a system where the district health system managers may eventually be able to purchase and enhance quality of care by using a variety of methods and also keep costs as well under control. State governments should consider experimenting with arrangements where the state and district purchase care from an integrated network of combined primary, secondary and tertiary care providers. These provider networks should be regulated by the government so that they meet the rules and requirements for delivering cost effective, accountable and quality healthcare. Such an integrated provider entity should receive funds to achieve negotiated predetermined health outcomes for the population being covered. This entity would bear financial risks and rewards and be required to deliver on healthcare and wellness objectives. Ideally, the strengthened District Hospital should be the leader of this provider network.

**Recommendation 3.1.11:** All government funded insurance schemes should, over time, be integrated with the UHC system. All health insurance cards should, in due course, be replaced by National Health Entitlement Cards. The technical and other capacities developed by the Ministry of Labour for the RSBY should be leveraged as the core of UHC operations – and transferred to the Ministry of Health and Family Welfare.

Smoothly transforming over time, the RSBY into a universal system of health entitlements and building on its existing capacity and architecture to issue citizens with a National Health Entitlement Card with a minimum amount of disruption, would in our view be the best way forward to satisfy the social objectives of both NRHM and RSBY. A high level of capacity has been developed within the Ministry of Labour for the management of the RSBY. This capacity should be utilized for the roll out of the UHC system even if the functions performed by the insurance companies will now be performed by the Ministries and Departments of Health.

In addition, the proposed UHC system is a modified version of the traditional health
insurance model with a few critical differences in terms of provider network and design which, in our view, are essential for realizing better healthcare access and cost outcomes. It has all the characteristics of traditional health insurance in terms of risk pooling and financial protection. The proposed UHC system focuses on reduction of the disease burden facing communities along with early disease detection and prevention. The emphasis is on investing in primary care networks and holding providers responsible for wellness outcomes at the population level. It places emphasis on an extensive and high quality primary care network, which in turn is likely to reduce the need for secondary and tertiary facilities.

Moreover, effective triaging and management of patients can ensure quick treatment times. Traditional insurance schemes, including those being funded by the government (such as RSBY and the Rajiv Aarogyasri Healthcare Insurance Scheme) are entirely focused on hospital networks rather than primary care services. The advantages of such a network design for consumers are a large supply of hospitals in the network and short waiting times for hospital admissions. However, since there is virtually no focus on primary level curative, preventive, and promotive services and on long-term wellness outcomes, these traditional insurance schemes often lead to inferior health outcomes and high healthcare cost inflation.

The transition to the UHC system resulting from the above recommendations are captured in Table 1 on page 16. (please see next page)
### Table 1: Transition in health financing and insurance to Universal Health Coverage

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2017</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax financing</strong></td>
<td>Relatively low</td>
<td>Increasing</td>
<td>Relatively high</td>
</tr>
<tr>
<td><strong>Private financing</strong></td>
<td>Relatively high</td>
<td>Decreasing</td>
<td>Relatively low</td>
</tr>
<tr>
<td><strong>Employer-employee contribution</strong></td>
<td>Relatively low</td>
<td>Increasing</td>
<td>Relatively high</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>Mostly rich and targeted poor</td>
<td>Expanded coverage to include poor and other targeted communities</td>
<td>Universal</td>
</tr>
<tr>
<td><strong>User fees</strong></td>
<td>Prevalent</td>
<td>Eliminated</td>
<td>Eliminated</td>
</tr>
<tr>
<td><strong>Central Government insurance schemes</strong></td>
<td>Large numbers catering to different groups</td>
<td>Reduced in numbers; merged with the UHC system</td>
<td>None – and integrated fully with the UHC system (including CGHS, ESIS and schemes for the railways and other public sector institutions)</td>
</tr>
<tr>
<td><strong>State government insurance schemes</strong></td>
<td>Option open subject to state government financing</td>
<td>Option open to top up Central Government’s UHC-National Health Package (NHP) funding subject to state government financing</td>
<td>Option open to top up Central Government’s UHC-NHP funding subject to state government financing</td>
</tr>
<tr>
<td><strong>Private (including community-based) insurance schemes</strong></td>
<td>Large variety with option to individuals to top up government coverage</td>
<td>Large variety with option to individuals to top up government coverage</td>
<td>Large variety with option to individuals to top up government coverage</td>
</tr>
</tbody>
</table>
3.2 Health Service Norms

The absence of a dedicated cadre of healthcare professionals at the village level, the inability of people to establish last-mile connectivity with the health system, and the poor responsiveness of public systems to community needs represent major challenges that India faces in the provision of primary healthcare. Service delivery at every level – from the village to district and beyond – needs to be strengthened by providing adequate infrastructure, equipment, drugs, human resources, and technology support at all facilities. Special attention needs to be paid to the health needs of the urban poor as well as tribal and remote populations. Norms of healthcare need to be reconfigured to ensure quality, universal reach, and accessibility of healthcare services.

In this section, we recommend norms for the physical provision of services at different levels.

**Recommendation 3.2.1:** Develop a National Health Package that offers, as part of the entitlement of every citizen, essential health services at different levels of the healthcare delivery system.

A panel of experts should determine the package of services taking into account the resource availability as well as the healthcare needs of the country. Timely preventive, promotive, diagnostic, curative and rehabilitative services should be provided at appropriate levels of healthcare delivery. Packages of healthcare services that cover common conditions and high impact, cost-effective care interventions for reducing health-related mortality and disability should be created at different levels and designed on the basis of recommended levels of care. The packages should correspond to disease burdens at different levels, such that appropriate services can be provided at different levels of care. We envisage five levels of care: Level 1 packages should correspond to services that are guaranteed at the village and at the community level in urban areas, Level 2 packages should be offered at the Sub-Health Centre (SHC), Level 3 packages should correspond to services guaranteed at the Primary Health Centre (PHC), Level 4 packages should be offered at the Community Health Centre (CHC), and Level 5 packages should cover services guaranteed at the district hospitals, medical college hospitals and other tertiary institutions. The Report contains an illustrative listing of essential health services offered as packages at Level 1 through Level 5. Level 1, Level 2 and Level 3 cover primary services; Level 4 covers some primary services and secondary services, while Level 5 includes secondary and tertiary services. Ensuring such an overlap at each of the facilities is intended to ensure much-needed continuum of care.

**Recommendation 3.2.2:** Develop effective contracting-in guidelines with adequate checks and balances for the provision of healthcare by the formal private sector.

We believe, that in addition to the public sector, the formal private sector can play an important role in delivering UHC-mandated healthcare. The contracting-in of private providers (including for-profit companies, NGOs and the non-profit sector) is needed to complement government-provided health services and fulfil the healthcare service guarantees of the UHC system. The private sector has the capacity for innovation and invention; it can supplement capital expenditure requirements for developing necessary health infrastructure, provide an element of choice to the customer and ensure that all the service providers have
competitive quality benchmarks. However, in our view, the engagement model for leveraging the private sector would have to go well beyond the narrow understanding of the conventional Public Private Partnership (PPP) model. We advocate a shift from a primary focus on garnering additional financial resources from the private sector or subsidizing it, to an approach in which there is a well-defined service delivery partnership between government as a purchaser and the private sector as a provider. This would, among other things, require (i) a strong regulation, accreditation, and supervisory framework based on state-level decision-making on the degree of UHC provision (complete at least 75% of out-patient and 50% of in-patient services); (ii) control of the manner in which various inputs are deployed by the provider; (iii) careful tracking of both immediate as well as longer-term outcomes; and (iv) a specifically designated customer group to be served by the provider. We also recommend that all such PPP arrangements should be mandatorily brought under the purview of the Right to Information Act, and be subject to social audits as well as selective audit by the Comptroller and Auditor General of India.

**Recommendation 3.2.3:** Reorient healthcare provision to focus significantly on primary healthcare.

A strong primary healthcare approach, backed by the reallocation of sufficient resources, should guide the reorientation of healthcare service delivery. This is likely to assure citizens greater access to essential health services and better quality of care. The greater focus on prevention and the early management of health problems is likely to reduce the need for complicated specialist care and the costs of curative care treatment. Well-functioning primary healthcare teams can also potentially promote health equity by improving social cohesion, reducing discrimination, and empowering communities to improve their health conditions.

A village-level team should provide appropriate components of the National Health Package of services (*Level 1*) and have 24x7 telecom connectivity to facilities at higher levels. The focus on primary care will contribute to the cost-effectiveness of the UHC system by emphasizing preventive and basic care and linking individuals to secondary and tertiary levels of care only when needed. Sub-Health Centres (SHCs), Primary Health Centres (PHCs), Community Health Centres (CHCs), and district health institutions should have additional mandates, personnel, and facilities to provide more advanced services than presently provided.

**Recommendation 3.2.4:** Strengthen District Hospitals.

The District Hospital has a critical role to play in healthcare delivery and health professional training under the UHC system, both of which should be well attuned to the needs of the particular district, while conforming to national standards of healthcare provision. An adequately equipped and suitably staffed district hospital, backed by contracting-in of regulated private hospitals, should aim to meet the healthcare needs of at least 95% of the population within that district, so that only a small number would need referral to higher level tertiary care centres. This will require the upgrading of district hospitals as a high priority over the next five years.
Executive Summary

**Recommendation 3.2.5:** Ensure equitable access to functional beds for guaranteeing secondary and tertiary care.

It is important to ensure that functional beds are available at appropriate levels to deliver healthcare services corresponding to the National Health Package proposed at that facility. This will require an increase in the bed capacity to at least 2 functional beds per 1000 population by 2022. We believe that when compared with the global average of 2.9 beds per 1000, this is an appropriate target for India since the emphasis on early interventions, prevention, and promotive health practices as well as an increased use of out-patient care under the UHC system are likely to progressively reduce the need for hospital beds. At the same time, it is necessary to ensure equitable distribution so that a sufficient number of functional beds are available in small towns and rural areas. Today, a majority of the beds in government facilities as well as in the private sector are located in urban areas, leaving a large capacity gap in rural and semi-urban areas. This imbalance has to be corrected to achieve UHC.

**Recommendation 3.2.6:** Ensure adherence to quality assurance standards in the provision of healthcare at all levels of service delivery.

We recommend adherence to Indian Public Health Standards (IPHS) by all public and contracted-in private health facilities responsible for delivering the NHP as the starting point of large scale commitment to quality assurance in healthcare service delivery. Such a move should include licensing, accreditation and public disclosure of the accreditation status of all public and private health facilities. All health facilities should be licensed by 2017 to ensure compliance with the latest IPHS standards. Accreditation should be linked to National Health Packages offered at a facility. All healthcare providers should prominently display their accreditation certificate to the public. The public should be educated on services available at facilities through appropriate health communication programmes. We recommend the creation of a National Health and Medical Facilities Accreditation Unit (NHMFAU) – discussed later under section 3.6 on management and institutional reforms - to serve as the regulatory and accreditation body that defines the standards of healthcare offered at different levels, oversee efficient use of resources by facilities and provide supportive services to populations and facilities.

**Recommendation 3.2.7:** Ensure equitable access to health facilities in urban areas by rationalizing services and focusing particularly on the health needs of the urban poor.

We recommend a new urban UHC system that offers the defined package of services at each level through clearly designated primary, secondary and tertiary healthcare facilities. Cities and towns should have the flexibility to design such a system that includes community-based urban nurse practitioners, appropriate service delivery channels and provider partnerships. The efficiency of public health systems in urban areas should be strengthened by improving primary urban health services, urban healthcare infrastructure, and designated referral facilities. Local urban governing bodies should promote enhanced community participation in the healthcare delivery system and inter-sectoral convergence of interventions in order to improve health outcomes.
3.3 Human Resources for Health

India’s healthcare delivery system faces multiple shortages. The increased emphasis on primary healthcare as the core of the UHC system requires appropriately trained and adequately supported practitioners and providers with relevant expertise to be located close to people, particularly in marginalised communities. At the same time, the existing practice of loading managerial functions on to healthcare providers (who do not have the requisite management training) needs to be discontinued, and replaced by a professional public health managerial cadre to ensure a safe, effective and accountable health system.

Our recommendations have two implications. One, they will result in a more equitable distribution of human resources - two, we estimate that the UHC system can potentially generate around 4 million new jobs (including over a million community health workers) over the next ten years.

In this section, we offer recommendations for augmenting and strengthening the performance of professional and technical health workers. Section 3.6 that follows, deals with human resources needed for strengthening the management of health services.

**Recommendation 3.3.1:** Ensure adequate numbers of trained healthcare providers and technical healthcare workers at different levels by a) giving primacy to the provision of primary healthcare b) increasing HRH density to achieve WHO norms of at least 23 health workers per 10,000 population (doctors, nurses, and midwives).

More specifically, we propose the following:

- **Community Health Workers (CHWs):**
  We recommend doubling the number of Community Health Workers (CHWs or Accredited Social Health Activists (ASHAs) as they are now called) from one per 1000 population to two per 1000 population in rural and tribal areas. At least one of them should be female and offered the opportunity to train as an auxiliary nurse midwife in future. We also recommend the appointment of a similarly trained CHW for every 1000 population among low-income vulnerable urban communities. The CHWs should provide preventive and basic curative care, promote healthy life-styles, serve on health and sanitation committees, and enable people to claim their health entitlements. CHWs should be paid a fixed compensation supplemented by performance-based incentives. We estimate that close to 1.9 million CHWs will be needed to meet the requirements of the proposed UHC system.

- **Rural healthcare practitioners:** We recommend the introduction of a new 3-year Bachelor of Rural Health Care (BRHC) degree programme that will produce a cadre of rural healthcare practitioners for recruitment and placement at SHCs. In the short term, health providers from recognised systems of medicine (eg. Ayurveda), dentists and nurses could be deployed upon completion of bridge courses to acquire appropriate competencies to follow standard management guidelines and provide the NHP. In the longer term, rural health practitioners should receive degree training in BRHC courses and be deployed locally at the SHC level. Appropriately trained nurse practitioners at urban health centres will ensure the provision of preventive, primary and curative care.

- **Nursing staff:** The core of the proposed UHC system is its increased reliance on a cadre of
well-trained nurses, which will allow doctors to focus on complex clinical cases and enable routine care to be delivered by other cadres, especially at the CHC level. In our estimate, for instance, the service guarantees under UHC will require an increase in the availability of nurses from around 900,000 today to 1.7 million by 2017 and 2.7 million by 2022. The increased availability and absorption of nurses into the UHC system will ensure that the nurse and midwife (including Auxiliary Nurse/Midwives [ANMs]) per allopathic doctor ratio goes up from the present level of 1.5:1 to the preferred ratio of 3:1 by 2025.

- **Allopathic doctors**: Meeting the requirements of UHC will call for an improvement in the country’s allopathic doctor-to-population ratio from a 0.5 per 1,000 population today to a well-measured provision approaching one doctor per 1,000 by the end of the year 2027. These additional doctors are essential for meeting the requirements of health facilities in both public and private sectors.

- **AYUSH doctors**: The proposed UHC system will require the active engagement and participation of appropriately trained AYUSH practitioners, especially in states where there are existing shortages of allopathic doctors. Selected AYUSH doctors may support the provision of primary care through bridge courses to upgrade skills and broaden access to care via the creation of designated posts at primary health centres, community health centres as well as district hospitals.

- **Allied health professionals**: Ensuring effective delivery of the National Health Package will require the recruitment of adequate numbers of dentists, pharmacists, physiotherapists, technicians, and other allied health professionals at appropriate levels of healthcare delivery. We find that while there are adequate pools of such health worker categories in India, their availability needs to be ensured equitably across all states.

Table 2 summarizes the profile of the nurses and allopathic doctors that is expected to evolve by 2022 as a result of our recommendations.

<table>
<thead>
<tr>
<th>Table 2: Projected availability of allopathic doctors and nurses</th>
<th>2011</th>
<th>2017</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allopathic doctors, nurses and midwives per 1000 population</strong></td>
<td>1.29</td>
<td>1.93</td>
<td>2.53</td>
</tr>
<tr>
<td><strong>Population served per allopathic doctor</strong></td>
<td>1,953</td>
<td>1,731</td>
<td>1,451</td>
</tr>
<tr>
<td><strong>Ratio of nurses and midwives to an allopathic doctor</strong></td>
<td>1.53</td>
<td>2.33</td>
<td>2.94</td>
</tr>
<tr>
<td><strong>Ratio of nurses to an allopathic doctor</strong></td>
<td>1.05</td>
<td>1.81</td>
<td>2.22</td>
</tr>
</tbody>
</table>
It is expected that a 3:1 ratio of nurses and midwives (including Auxiliary Nurse/Midwives) per doctor and coverage of one doctor per 1000 population will be achieved by 2025 and 2027 respectively to meet the requirements of both public and private sectors.

While a substantial scale-up of the health workforce is needed across several cadres, priority should be accorded to the development and deployment of non-physician healthcare providers, ranging from community health workers to mid-level health workers (including BRHC practitioners and nurse practitioners). Doctors are of great value in providing certain types of healthcare, yet primary healthcare services should not be doctor dependent. Even in secondary and tertiary care, skilled support services should be provided by suitably trained nurses and allied health professionals. Planning for health professional education should reflect this paradigm.

We believe that, for UHC, healthcare needs rather than population norms should guide the deployment of human resources at different levels of healthcare service provisioning. In this regard, State governments are best situated to plan for the human resource needs of different districts. Nevertheless, we suggest the following measures (subject to their appropriateness for the local context and conditions) to fill in some obvious gaps in the deployment of human resources at different levels:

- **Village and community level**: We recommend, on average, two community health workers (ASHA) who should work alongside and in partnership with Anganwadi Workers (AWW) and their sahayikas (helpers) in villages. There should also be one similarly trained CHW for every 1000 population among low-income vulnerable urban communities.

- **Sub-health centre level (SHC)**: It would help to ensure that there are at least two ANMs and one male health worker in every SHC as per the existing 2010 IPHS norms. We recommend supplementing the existing staff at this level with the addition of one BRHC practitioner.

- **PHC level**: This is the first level where a team of doctors along with nurses and technicians will be available. In addition to the existing staff prescribed as per the 2010 Indian Public Health Standard (IPHS) norms, we recommend an AYUSH pharmacist, a full-time dentist, an additional allopathic doctor and a male health worker to ensure that primary healthcare needs are adequately met.

- **CHC level**: The CHC should serve as the access point for emergency services including caesarean section deliveries, new born care, cataract surgeries, sterilisation services, disease control programmes and dental care. For a ‘standard’ CHC, we recommend a substantial increase in the number of nurses (to around 19) and the addition of a head nurse, a physiotherapist and a male health worker.

Our Report contains similar suggestions relating to health and technical staff for sub-district, district and medical college hospitals.

**Recommendation 3.3.2**: Enhance the quality of HRH education and training by introducing competency-based, health system-connected curricula and continuous education.

Curricula in medical schools should keep pace with the changing dynamics of public health, health policy and health demographics. Medical education also requires greater orientation of providers to the social determinants of health as well as to gender and equity issues. Health professional
education should be directed towards population-based primary and preventive healthcare instead of being driven by a curative-treatment paradigm. Medical and nursing graduates in the country should be well trained, prepared and motivated to practice in rural and urban environments. It is equally important to ensure that on-going training and advancement opportunities are offered to community health workers serving in villages and urban areas. These workers, who provide essential outreach to patients as well as feedback on emerging problems in the health system, need decentralized, intra-district training. Systems of continued medical education and continued skill improvements – linked to promotions and renewal of license to practice – should be introduced. We recommend the use of Information Communication Technology (ICT) for standardised teaching across institutions and the development of institutional networks to facilitate and disseminate e-learning packages and resource materials.

**Recommendation 3.3.3:** Invest in additional educational institutions to produce and train the requisite health workforce.

We propose the setting up of the following new institutions to meet the additional human resource requirements of the UHC system and to correct the imbalances in the distribution of nursing and medical colleges in the country.

**Nursing schools and colleges:** There have been some improvements since 2005, with the addition of new nursing schools in as many as 12 states. But these are still insufficient to meet the requirements of UHC due to the inequitable distribution of these schools. Some 149 districts in 14 high focus states do not have any nursing school or nursing college as of 2009. We propose setting up new nursing schools and new nursing colleges over the next decade focusing mainly on underserved states.

**Schools for ANMs:** Many Sub-Health Centres (SHCs) face shortages of ANMs. For instance, most SHGs in Bihar and Uttar Pradesh do not have ANMs even though the mandate is to have two ANMs per SHC. We estimate that around 230 additional schools for ANMs would need to be established specifically in underserved states of Assam, Bihar, Gujarat, Jammu and Kashmir, Jharkhand, Meghalaya, Mizoram, Sikkim, Rajasthan, Tripura, Uttar Pradesh and West Bengal.

**Medical colleges:** The highly uneven distribution of medical colleges has resulted in the skewed production and unequal availability of doctors across the country. There is, for instance, only one medical college for a population of 11.5 million in Bihar and 9.5 million in Uttar Pradesh, compared to Kerala and Karnataka who have one medical college for a population of 1.5 million. We therefore recommend selectively setting up (an estimated 187) new medical colleges over the next 10 years in currently underserved districts with a population of more than 1.5 million.

Concerns about ‘over-medicalisation’ must be considered along with the need to correct the severe imbalance in the distribution of medical colleges in the country. We do not view the medical colleges merely as production units for doctors. Instead, we see each medical college as an integral part of the health system, responsive to and partly responsible for the health needs of one or two districts. In addition, medical colleges also serve to train nurses and other allied health professionals. We believe this purpose can be served by functionally linking medical colleges to district hospitals and mandating a substantial proportion of local student enrolment. We recognise that the establishment of such a large number of new medical colleges would pose a logistical challenge.
due to shortage of faculty as well as the limited resources that state governments may be willing to commit for creating the required infrastructure. We believe, however, that once again, linking the new medical colleges to district hospitals will, to a large extent, help overcome these problems.

Table 3 presents illustrative estimates of new educational institutions that would be needed in different states to meet the human resource requirement for the proposed UHC system.

<table>
<thead>
<tr>
<th>States</th>
<th>Medical Colleges</th>
<th>Nursing Colleges</th>
<th>Nursing Schools</th>
<th>ANM Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arunachal Pradesh</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Assam</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Bihar</td>
<td>27</td>
<td>16</td>
<td>102</td>
<td>46</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gujarat</td>
<td>8</td>
<td>-</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Haryana</td>
<td>5</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Jammu and Kashmir</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>10</td>
<td>4</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>18</td>
<td>-</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>3</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Nagaland</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Odisha</td>
<td>10</td>
<td>7</td>
<td>15</td>
<td>-</td>
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<tr>
<td>Punjab</td>
<td>3</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Rajasthan</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>28</td>
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<td>Sikkim</td>
<td>-</td>
<td>-</td>
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<td>1</td>
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<tr>
<td>Tripura</td>
<td>-</td>
<td>1</td>
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<td>2</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>49</td>
<td>9</td>
<td>162</td>
<td>99</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>-</td>
<td>2</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>West Bengal</td>
<td>20</td>
<td>6</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>187</strong></td>
<td><strong>58</strong></td>
<td><strong>382</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>
**Recommendation 3.3.4:** Establish District Health Knowledge Institutes (DHKIs).

We propose the setting up of District Health Knowledge Institutes (DHKIs) in districts with a population of more than 500,000 in order to enhance the quality of health workers’ education and training. These institutes should offer degree and diploma programmes, certificate courses, accreditation and standardized professional training. Their location, at the district level, should make them accessible to local candidates and facilitate uniformity in admissions, curricula and licensing.

The DHKIs should address the severe shortage of educational infrastructure and provide the appropriate level of decentralisation of healthcare education. They should also ensure competency-based training to meet the health needs of local communities. Our recommendation echoes the proposal by the Bajaj Committee that advocated the creation of a 'District Institute of Education and Training' to offer 'integrated training modules.' The DHKIs shall deliver integrated training for all health, nutrition and family welfare programmes. The proposed BRHC degree as well as bridge courses in rural healthcare should be housed in the DHKIs so that locally recruited personnel have opportunities for practicum placements at Sub-Health Centres. Local candidates from various districts should be supported through the reimbursement of tuition-fees and free accommodation. The DHKIs should also be the centre for training allied health professionals.

**Recommendation 3.3.5:** Strengthen existing State and Regional Institutes of Family Welfare and selectively develop Regional Faculty Development Centres to enhance the availability of adequately trained faculty and faculty-sharing across institutions.

The need to upgrade skills of existing health workers as well as recruit new staff requires the rapid scaling up of HRH educational and skill development training institutions for faculty development and continuing education. To begin with, we recommend that the scope of the 44 State and Regional Institutes of Health and Family Welfare (SIHFWs and RIHFWs) should be expanded and strengthened to include support for management cadres and implementers of national health programmes. In addition, we recommend the setting up of 20 regional centres for faculty development and sharing of faculty across educational institutions. The RIHFWs and SIHFWs should become the nodal institutes for the coordination of all induction and in-service trainings and educational programmes, and for this purpose, work closely with DHKIs. This will facilitate the creation of competency-based curricula relevant to local needs for primary healthcare programmes.

**Recommendation 3.3.6:** Establish a dedicated training system for Community Health Workers

Training programmes at the time of induction as well as for continuous upgrading of knowledge and skills will be required for ensuring that the estimated 1.9 million CHWs in rural and urban areas are well-equipped to perform their functions. We recommend the establishment of a dedicated training system that consists of several teams in every district, under the aegis of District Health
Knowledge Institutes. Each team should consist of three members and be responsible for training and evaluating around 300 CHWs on a continuous basis. An appropriate structure of support and supervision for these teams needs to be put in place at the district level. Non-governmental organisations should be actively sought out for providing training and support to CHWs.

**Recommendation 3.3.7: Establish State Health Science Universities.**

We endorse the recommendation of the Bajaj Committee that in 1987 had recommended the establishment of Health Science Universities in states and in groups of Union Territories to award degrees in health sciences and prospectively add faculties of health management, economics, social sciences and information systems. We recommend the creation of Health Science Universities in every state (or a set of states) that will ensure uniformity in admissions, curricula, training and accreditation for all degrees in medical, nursing, pharmacy, public health and allied health professional fields.

**Recommendation 3.3.8: Establish the National Council for Human Resources in Health (NCHRH).**

We strongly recommend and endorse the setting up of the National Council for Human Resources in Health (NCHRH) to prescribe, monitor and promote standards of health professional education. We support the proposed legislation, awaiting parliamentary consideration, that envisages the establishment of a body to provide overarching regulation of competency based medical, dental, nursing, pharmacy, public health and allied health professional education and to serve as a platform for promoting inter-professional education.
3.4. Community Participation and Citizen Engagement

Communities are not just recipients of care. They have the capacities to create and promote health, by means of social and familial support networks, and the application of local health knowledge. Increased community participation in healthcare—its delivery, governance and accountability—represents the deepening of democracy. It can empower people, particularly women, the poor and other marginalised segments of society, and ensure that the delivery of healthcare services remains appropriate and accountable to them.

Our recommendations seek to strengthen institutional mechanisms for community participation and citizen engagement in order to make health planning, review and implementation more responsive to the voices and needs of communities. They are also intended to promote the involvement of communities and other stakeholders (including health providers and people’s representatives) in decision-making on health, and to improve the processes of policy formulation and public decision-making. We believe that planning, review and oversight mechanisms should be decentralized and made participatory in order to ensure effective implementation as well as a high level of transparency and local accountability.

**Recommendation 3.4.1:** Transform existing Village Health Committees (or Health & Sanitation Committees) into participatory Health Councils.

We propose the transformation of existing Health Committees into Health Councils at all levels—from the village and urban settlement level to block, district, state and the national level. Representatives of Civil Society Organisations (including NGOs, Community Based Organisations, membership organisations, women’s groups, trade unions and health providers) should constitute at least 50% of the Council’s membership. Each Council should elect its own Chairperson. The composition of the reconstructed Councils will ensure representation of all members of the previously constituted Health Committees, including members of the Gram Panchayat or other elected representative for the concerned geographical unit and of frontline health workers (such as ANMs, AWWs, ASHAs and CHWs). The reconstitution of existing Committees into Health Councils will expand their roles without adversely affecting their existing functions. The enhanced role of the transformed Councils will include drawing upon the perspectives of the different member-groups and evolving recommendations, by consensus, on health plans and budgets for implementation by designated executive agencies. The Councils should also exercise oversight on performance of the health plan, with monitoring of selected health indicators every six months, and tracking budgeted expenditures. The Councils will thereby bring the strengths of broader representation as well as more frequent monitoring to the existing mechanisms of planning and review.

**Recommendation 3.4.2:** Organise regular Health Assemblies.

The Health Councils should organise annual Health Assemblies at different levels (district, state and nation) to enable community review of health plans and their performance as well as record ground level experiences that call for corrective responses at the systemic level. By organizing such Health Assemblies, the Health Councils will serve as a bridge between the executive agencies responsible for design and delivery of health services and the wider community, which
is the intended beneficiary of such services. Recording the needs and priorities identified by the communities as well as taking note of grievances relating to sub-optimal or inequitable performance of health services would enable the Councils to provide constructive feedback to policymakers and health system managers. This will also provide an opportunity to health system managers to explain to the community and find solutions to the constraints that prevented a prompt response to the expressed needs or complaints. Data from the annual report, finance report, action plan and community monitoring should be presented to the Assemblies for review and feedback.

**Recommendation 3.4.3:** Enhance the role of elected representatives as well as Panchayati Raj institutions (in rural areas) and local bodies (in urban areas).

Involvement of local elected representatives and Panchayats in health governance can significantly increase the motivation, performance and accountability of community health workers. It can also contribute to much-needed convergence of social services at the community level. For this to happen, local health functions and finances should be devolved to PRIs and local bodies with clear directives and guidelines. The participation of PRIs and other elected representatives in health governance and community oversight through the (Village and Block) Health and Sanitation Committees has been generally inadequate due to operational deficits including low capacities and role ambiguity. These gaps should be addressed through better training, role definition, financial devolution, capacity strengthening, and the establishment of mechanisms through Health Assemblies for greater community oversight. NGOs should additionally be engaged to train PRI representatives in health administration.

**Recommendation 3.4.4:** Strengthen the role of civil society and non-governmental organisations.

Civil Society Organisations (CSOs) can contribute effectively to community mobilisation, information dissemination, community-based monitoring of health services and capacity building of community-based organisations and workers. They can energise community-level interventions and enhance popular participation in health governance and oversight. In addition to delivering information on healthcare entitlements, they can campaign for UHC and facilitate as well as coordinate community participation activities (via Health Assemblies for instance) at block, district, state and national levels. We, therefore, recommend that mechanisms should be developed by both Central and state governments to solicit the active engagement of CSOs and non-governmental organisations including Membership-Based Organisations of the Poor (MBPs), self-help groups, unions, cooperatives and other local community based organisations. Financing mechanisms must be specifically developed and financial resources earmarked for the engagement of CSOs. Also, CSOs with adequate capacities should be engaged for capacity strengthening (training, mentoring, follow-up support in local planning and review processes) of members of Health Councils, community health workers and elected representatives at all levels.

**Recommendation 3.4.5:** Institute a formal grievance redressal mechanism at the block level.

We recommend the introduction of a systematic and responsive grievance redressal and information mechanism for citizens to access knowledge of and claim their health entitlements.
Such a mechanism is urgently required at the block headquarters to deal with confidential complaints and grievances about public and private health services in a particular block. Procedures for corrective measures should be clearly enunciated at each level, with defined parameters for grievance investigation, feedback loop, corrective process, no-fault compensation and grievance escalation. Responsibilities of health department officials should be defined in relation to Grievance Redressal Officers and vice versa, supported by sufficient and clear directives and guidelines or orders, as applicable. This should be linked, at the district level, with an Ombudsperson who functions under the aegis of a National Health Regulatory and Development Authority. Serious grievances and unresolved cases should be referred to the Ombudsperson. We recommend the setting up of Jan Sahayata Kendras (People's Facilitation Centres) that should be co-located with the office for grievance redressal in order to locally provide people with information services. But the two should function independently. The Jan Sahayata Kendra should conduct periodic public hearings, and operate a telephone helpline. Wherever possible, these should be managed by local CBOs, MBPs or women's or farmers' groups, trade unions and cooperative societies.
3.5 Access to Medicines, Vaccines and Technology

Ensuring effective and affordable access to medicines, vaccines and appropriate technologies is critical for promoting health security. In making our recommendations, we note that:

- Almost 74% of private out-of-pocket expenditures today are on drugs;
- Millions of Indian households have no access to medicines because they cannot afford them and do not receive them free-of-cost at government health facilities;
- Drug prices have risen sharply in recent decades;
- India’s dynamic domestic generic industry is at risk of takeover by multinational companies; and
- The market is flooded by irrational, nonessential, and even hazardous drugs that waste resources and compromise health.

Our recommendations address the existing inefficiencies in the supply chain and logistics management of drugs and vaccines as well as due to improper drug prescriptions.

**Recommendation 3.5.1:** Enforce price controls and price regulation especially on essential drugs.

We recommend the enforcement of price controls and price regulation on essential and commonly prescribed drugs. The current practice of using monopoly and market dominance measures for consideration of price control on drugs needs to be replaced by the criterion of ‘essentiality,’ which is likely to have maximum spill-over effects on the entire therapeutic category. We recommend the use of ‘essentiality’ as a criterion and applying price controls on formulations rather than basic drugs. Direct price control applied to formulations, rather than basic drugs, is likely to minimise intra-industry distortion in transactions and prevent a substantial rise in drug prices. It may also be necessary to consider caps on trade margins to rein in drug prices while ensuring reasonable returns to manufacturers and distributors. All therapeutic products should be covered and producers should be prevented from circumventing controls by creating non-standard combinations. This would also discourage producers from moving away from controlled to non-controlled drugs. At the same time, it is necessary to strengthen Central and State regulatory agencies to effectively perform quality and price control functions.

**Recommendation 3.5.2:** Revise and expand the Essential Drugs List.

We recommend the revision and expansion of the National Essential Drugs List (NEDL) to include appropriate and approved alternative medicines. Public procurement of NEDL drugs should include identified and approved chemical, biological and AYUSH medicines. This will also ensure that AYUSH drugs are available at health facilities, thereby greatly enhancing the contribution of AYUSH doctors. Including new drugs and vaccines into government drug procurement should, however, be based on scientific evidence and due consideration must be given to safety, efficacy and cost-effectiveness.
**Recommendation 3.5.3:** Strengthen the public sector to protect the capacity of domestic drug and vaccines industry to meet national needs.³

We recommend strengthening the capacity of the public sector for the manufacture of domestic drugs and vaccines. The public sector can play a crucial role in ensuring sufficient national capacity of essential drugs at affordable prices. This will greatly enhance drug and vaccine security and prevent disruptions, shortages, reductions and cessation of supply. Central and state governments should assist and revive Public Sector Units (PSUs) that manufacture generic drugs and vaccines, limit the voting rights of foreign investors in Indian companies, and take other measures to retain and ensure self-sufficiency in drug production. It is also equally important to strengthen safeguards for intellectual property rights. The Central government must ensure that the patents regime does not compromise drug access and affordability.

We also need to urgently revisit India’s FDI regulations to amend the present rules of an automatic route of 100% share of foreign players in the Indian industry to less than 49%, so as to retain predominance of Indian pharmaceutical companies and preserve our self-sufficiency in drug production.

**Recommendation 3.5.4:** Ensure the rational use of drugs.

The extensive practice, in both public and private sectors, of prescribing hazardous, non-essential and irrational medicines should be eliminated. In addition to legislative and other regulatory measures, intensive efforts should be made to educate and encourage doctors and citizens to use generic drugs and avoid the use of irrational medicines. Critical for this is the introduction of an IT-enabled electronic system that tracks patient records – discussed later in the section on management reforms. Standard Treatment Guidelines should also become the basis for mandated and audited rational prescription practices.

**Recommendation 3.5.5:** Set up national and state drug supply logistics corporations.

We recommend the adoption of centralized national and state procurement systems in order to realize economies of scale and create the conditions necessary to drive down the prices of drugs, vaccines, and medical devices. Towards this end, we recommend the setting up of a national and state level Drug Supply Logistics Corporation for the bulk procurement of low-cost, generic essential drugs. This will enable all providers to access generic drugs with significant cost savings. The Government should also consider setting up at least one warehouse in each district to ensure availability of drugs to all providers.

**Recommendation 3.5.6:** Protect the safeguards provided by the Indian patents law and the TRIPS Agreement against the country's ability to produce essential drugs.

We recommend that the strict protection from any dilution of many safeguards in India’s current amended patent law including restrictions on the patenting of insignificant or minor improvements of known medicines (under section 3[d]). Compulsory Licenses (CL) should be issued to

³ This recommendation did not have unanimity within the HLEG. One member was of the view that reviving public sector capacity for pharmaceutical production, without examining the reasons for failure of previous public sector drug manufacturing units, would not be an appropriate use of resources.
companies, as and when necessary, to make available at affordable prices all essential drugs relevant to India’s disease profile. This provision, under India’s own Patents Act and TRIPS as clarified by the Doha Declaration, shall allow countries to use such licenses in public interest and can be invoked in the interest of public health security. Also, the ‘data exclusivity clause’ must be removed from any Free Trade Agreement that India enters into, since such a clause extends patent life through ‘evergreening’ and adversely affects drug access and affordability.

**Recommendation 3.5.7:** Empower the Ministry of Health and Family Welfare to strengthen the drug regulatory system.

It is important to eliminate the multiplicity of responsibilities and jurisdictions of authority relating to pharmaceutical production and regulation by entrusting full responsibility to the Ministry of Health and Family Welfare. The Ministry of Health and Family Welfare must be empowered to introduce interventions for regulating the production of drugs as well as the operation of drug outlets. The functioning of State regulatory agencies should be strengthened by ensuring adequate workforce and testing facilities. Additional financial resources should be earmarked and allocated for setting up drug quality testing facilities in states and for the employment of additional regulators to serve in these facilities and regulatory agencies.

We recommend in public interest the transfer of the functioning of the Department of Pharmaceuticals, which is now under the Ministry of Chemicals and Fertilizers to the Ministry of Health and Family Welfare. By bringing in both the manufacture of drugs as well as drug price control, the Ministry of Health and Family Welfare will not only be responsible for ensuring the quality, safety and efficacy of drugs but also accountable for the unhindered availability of all essential drugs under the UHC system. This will also help better align drug production and pricing policies to prioritize national health needs.
3.6 Management and Institutional Reforms

Effective management systems are crucial to the successful coordination of multiple resources, diverse communities and complex processes. Better management would also allow for effective coordination of public and private sector efforts to ensure Universal Health Coverage. The public health sector needs to assume the roles of promoter, provider, contractor, regulator, and steward. The private sector’s role also needs to be clearly defined and regulated. Systemic reforms must ensure effective functioning and delivery of healthcare services in both rural and urban areas. Good referral systems, better transportation, improved management of human resources, robust supply chains and data, and upgraded facilities are essential.

We recommend the following set of overarching managerial and institutional reforms:

Managerial reforms: This sub-section deals with measures to augment and strengthen the management functions of the healthcare delivery system.

Recommendation 3.6.1: Introduce All India and state level Public Health Service Cadres and a specialized state level Health Systems Management Cadre in order to give greater attention to public health and also strengthen the management of the UHC system.

We recommend the creation of an All India Public Health Service Cadre, a new cadre comprising of public health professionals with multidisciplinary education. This cadre will be responsible for all public health functions, with an aim to improve the functioning of the health system by enhancing the efficacy, efficiency and effectiveness of healthcare delivery. This cadre should be supported by a state level public health cadre starting at the block level and going up to the state and national level. This would be akin to the civil services, which provide for both All-India and state level cadres. While the state-level cadre will provide the operational framework of public health services, the All-India cadre will not only help strengthen state services with a high level of professional expertise but also provide strong connectivity between state and central planning.

We also recommend the creation of a new Health Systems Management Cadre that should be made responsible for managing public sector service provision as well as the contracted-in private sector. Quality assessment and quality assurance for health facilities will be a major function for this cadre. These Health System managers should take over many of the administrative responsibilities in areas such as IT, finance, human resources, planning and communication that are currently performed by medical personnel.

We further recommend the appointment of appropriately trained hospital managers at sub-district, district hospitals and medical college hospitals so as to improve the managerial efficiency and also enable medical officers and specialists to concentrate on clinical activities. Appropriate training of these new cadres is likely to significantly enhance the management capacities at all levels and end the practice of untrained personnel being assigned to manage health institutions. These cadres should be well integrated with other departments and functionaries to address both the management and public health related inadequacies in the present system and to incorporate principles of professional management into decision-making in health institutions.

While health services systems in the states will always have medical professionals within their
ambit, there is an urgent need for appropriately qualified and experienced professionals with public health degrees to fill gaps in critical areas of preventive and promotive services. This will involve broad health system strengthening efforts as well as the design and delivery of specific health programmes. State governments should consider the practice initiated by Tamil Nadu of creating a separate Directorate of Public Health with a dedicated public health workforce, and the practice adopted by states such as Andhra Pradesh, Gujarat, Madhya Pradesh and Odisha of deputing in-service candidates to public health courses to develop public health cadres. Such courses should be made mandatory for all posts with public health responsibilities. There is, however, an urgent need to establish public health training institutions and strong partnerships with health management training institutions in both the public and private sectors. We present below in Figure 4, an illustrative management structure showing the different strands of health professionals that could evolve at different levels of the healthcare delivery system. The organogram also shows the career paths for different cadres of health professionals with options both for promotion as well as shifting streams for advancement of careers.
**Recommendation 3.6.2:** Adopt better human resource practices to improve recruitment, retention motivation and performance; rationalize pay and incentives; and assure career tracks for competency-based professional advancement.

We recommend that transparency in recruitment, clear paths for career progression and performance incentives should be introduced. Among the measures to consider would be the following:

- Creation of requisite posts and filling up of all vacant posts regularly in a time bound manner;
- Implementation of transparent transfer policies;
- Fixed tenure especially in the hardship areas and provision of residential accommodation in hardship areas
- Career progression for doctors through reservation of Post-Graduate seats in medical colleges;
- Bridge courses and study leave, time bound promotions based on performance, contractual appointments based on equal pay which are regularized on satisfactory completion of two or three years of service;
- Monetary compensation and incentives such as rural area allowance, additional hardship area allowance, child education allowance and transport allowance;
- Appointment of doctors and nurses as full-time staff in the public sector, duly compensated and on parity with their colleagues in other sectors; and
- Revision of job responsibilities and duties as well as task shifting and task sharing to appropriate cadres (e.g. administrative tasks shifted to health systems managers, specific clinical functions of doctors and nurses to BRHC practitioners and nurse practitioners).

These steps are likely to improve the ability of the health system to attract, recruit, retain and motivate health personnel in under served areas, optimize their competencies and encourage team work for larger impacts on health outcomes.

Also, critical for improving the efficiency and motivation of health workers is to have well-defined career trajectories. For technical and clinical health workers, we propose the following Figure 5. (please see next page)
We recommend that ANMs, after promotion as LHVs, should be considered for the posts of Public Health Nurses (PHNs), advancing further to District Public Health Nurses (DPHNs) subject to their completion of a year-long DPHN course. The present lateral entry of clinical nurses to the posts of PHN could be retained subject to their completion of a PHN course and a minimum of 5 years working experience in PHCs. The ANM cadre should be provided with year-long courses in midwifery education (diploma in nursing education) so that they can pursue academic careers at ANM schools and LHV training schools. ANMs should be provided opportunities to become staff nurses facilitated through the reservation of seats in nursing schools. Similarly, CHWs (or ASHAs) who are outstanding performers should be provided with opportunities to advance their careers by reservation of seats in ANM and nursing schools.

Similarly, nurses should also have opportunities in the teaching cadre to become a Tutor, Lecturer, Associate Professor and Professor. We recommend that bridge courses be provided for clinical areas such as operation theatres, ICUs as well as clinical super specialty areas of cardiology and psychiatry for their professional development as nurse practitioners. The nursing
cadres should also be provided bridge courses in nursing education, nursing administration, hospital management and health management to enable them to take up administrative posts at facility, block, district and state levels. Such career progression paths are also recommended for male health workers, laboratory assistants, technicians and other categories of health workers.

Effective systems of performance assessment should guide human resources in recruitment, training, mentoring, supervising, and motivating personnel. Managing for equitable results (to ensure equity) and value for money (to ensure efficiency and cost-effectiveness) should drive the performance of the proposed UHC system. Formal systems of performance appraisal should be applied to health workers at every level and used as a basis for awarding individual and group incentives – both monetary and non-monetary.

**Recommendation 3.6.3:** Develop a national health information technology network based on uniform standards to ensure inter-operability between all healthcare stakeholders.

Establishing a credible information technology (IT) system is necessary for ensuring effective implementation of the UHC system. A robust health IT network will help cater to the current and growing needs of over a billion people and navigate the complexities of governance structures, multiple health systems and a combination of public and private providers. Such a system cannot be introduced in one go, and will have to grow as the UHC system itself evolves. It is, therefore, important to ensure an effective IT infrastructure, allocate special funds to build IT infrastructure, and link all facilities and not only public hospitals with a system-wide integrated information network. We propose the adoption of system-wide Electronic Medical Records; this is critical for the health IT network to track and monitor diseases, expenditures and performance to deliver both favourable health and financial outcomes.

A national health IT network should help build an epidemiological database to determine district-wise disease burden, and also monitor outcomes including, for example, mortality rates, hospital admission rates, disease profiles at PHCs and hospital bed occupancy ratios. Process re-engineering should be part of building the IT system to ensure standardized reporting formats from all institutions to track health expenditures accurately at different levels of care. Such information is critical for effective and efficient allocation of financial resources from the Central government. The network should connect all public and private healthcare facilities and governing departments through information exchanges. Common national regulations should govern the IT system.

We recommend the establishment of a health system portal that uses information technology to track services and finances. Electronically linked NHECs should track patients and ensure the portability of medical histories while ensuring full confidentiality of data and preventing misuse and abuse of data by for profit-making purposes. Medical and health service usage should be tracked to create a central database that provides the necessary information to manage the system effectively. The larger IT system should include portals for patients that assist in scheduling visits, sharing of test results, delivering personalized health promotion and communication and interact with communities, support networks, and healthcare providers.

A considerable amount of work has been done in this regard within the Ministry of Labour as a part
of its efforts on RSBY. There is also a proposal with the Ministry of Health and Family Welfare on the Indian Health Information Network Development (iHIND), submitted in March 2010 by the National Knowledge Commission, that proposes to identify a technology and network infrastructure that will create the desired integration, define standards for data sharing, protection of data, and business practices to ensure patient protection while facilitating greater information sharing, define educational and business strategies that ensure appropriate use of greater health information technology and the sustainability of the effort, and identify other technical and non-technical strategies to create health information exchanges.

In our view, the government should examine these proposals and plan for their implementation and roll-out. Given the magnitude and complexity of the information technology challenge, it would be advisable for the Ministries and Departments of Health to collaborate with the Ministry of Communication and Information Technology to explore the creation of a dedicated or shared National Information Utility for this task.

**Recommendation 3.6.4:** Ensure strong linkages and synergies between management and regulatory reforms and ensure accountability to patients and communities.

This recommendation is intended to strengthen community participation in planning and monitoring health services - by linking citizen voice and redressal mechanisms to the regulatory authorities’ accountability mechanisms. Effective systems should be put in place to guarantee patients’ privacy. Ethical considerations in data collection and analysis should be built in and enforced. Links and synergies in management and regulatory reforms and accountability to patients and communities must be established.

**Recommendation 3.6.5:** Establish financing and budgeting systems to streamline fund flow.

We recommend the establishment of a transparent, performance-based system of budgeting and financial management with accountability structures backed by appropriate information technology and qualified financial professionals. This system will ensure smooth and transparent functioning of the administrative workflow at low costs and allow for more resources for clinical care and enhanced citizen satisfaction.

**Institutional reforms:** Regulation of the public and the private sectors to ensure provision of assured quality and rational pricing of healthcare services are essential for the implementation of the UHC system. A structured regulatory framework is needed to monitor and enforce essential healthcare regulations in order to control entry, quality, quantity and price.

**Recommendation 3.6.6:** We recommend the establishment of the following agencies:

1. **National Health Regulatory and Development Authority (NHRDA):** The main functions of the NHRDA will be to regulate and monitor public and private healthcare providers, with powers of enforcement and redressal. This regulator will oversee contracts, accredit healthcare providers, develop ethical standards for care delivery, enforce patient’s charter of rights and take other measures to provide UHC system support by formulation of Legal and Regulatory norms and standard treatment guidelines and management protocols for the National Health Package so as to control entry, quality, quantity, and price. The National Authority will be linked to similar state-level institutions and to the Ombudsman at the district level especially to handle grievance redressal.
We recommend three Units under the NHRDA:

a) **The System Support Unit (SSU):** This Unit should be made responsible for developing standard treatment guidelines, management protocols, and quality assurance methods for the UHC system. It should also be responsible for developing the legal, financial and regulatory norms as well as the Management Information System (MIS) for the UHC system.

b) **The National Health and Medical Facilities Accreditation Unit (NHMFAU):** This Unit should be responsible for the mandatory accreditation of all allopathic and AYUSH healthcare providers in both public and private sectors as well as for all health and medical facilities. This accreditation facility housed within the NHRDA will define standards for healthcare facilities and help them adopt and use management technologies. A key function of this Unit will be to ensure meaningful use of allocated resources and special focus should be given to information technology resources. There should be corresponding state-level data consortium and accreditation agencies (State Facilities Accreditation Unit) under the National FAU to oversee the operations and administrative protocols of healthcare facilities.

c) **The Health System Evaluation Unit (HSEU):** This monitoring and evaluation unit should be responsible for independently evaluating the performance of both public and private health services at all levels – after establishing systems to get real time data for performance monitoring of inputs, outputs and outcomes.

The following diagram (Figure 6) illustrates the division of functions and responsibilities of the three Units under the NHRDA.
2. National Drug Regulatory and Development Authority (NDRDA): The main aim of NDRDA should be to regulate pharmaceuticals and medical devices and provide patients access to safe and cost effective products.

3. National Health Promotion and Protection Trust (NHPPT): The NHPPT shall play a catalytic role in facilitating the promotion of better health culture amongst people, health providers and policy-makers. The Trust should be an autonomous entity at the national level with chapters in the states. It should promote public awareness about key health issues, track progress and impact on the social determinants of health, and provide technical expert advice to the Ministry of Health. The Trust should also conduct key assessments and disseminate knowledge about the impacts of non-health sectors and policies on the health of people, through linkages with the NHRDA, Health Assemblies, and Jan Sahayata Kendras.

The following organogram (Figure 7) gives a snapshot view of the recommended organisational framework and the placement of the National Health Regulatory and Development Authority, HSEU along with other bodies.
Recommendation 3.6.6: Invest in health sciences research and innovation to inform policy, programmes and to develop feasible solutions.

We recommend increasing the research budget in public health and biomedical sciences across all national funding agencies. It is critical for India to augment the research budget and capacity for health sciences research and innovation to inform health policy and to discover affordable, relevant treatments, products and solutions for universal healthcare coverage. State governments should be encouraged to allocate suitable funds for locally relevant research particularly in public health. Investments should be made in centres of excellence, Health Sciences Universities and independent research organisations.

4. The Path Forward

Our Report provides the vision and a blue-print that shows how it is indeed feasible for India to establish a UHC system within the next ten years. Follow-up work by experts is needed for spelling out the modalities of how various proposals may best be implemented. We are conscious that merely calling for additional finances, more health workers, better technology, and new policy and regulatory institutions cannot provide the full solution to the deficiencies in India’s healthcare delivery system. It is imperative to pay attention to the social determinants of health by sufficiently investing in non-health related sectors that have a direct bearing on health outcomes. It is equally important to focus on the cross-cutting issues of gender and health that we have articulated upfront in the Report. A new political, ethical and management ethos is needed to guide both the public and private sectors in health. There has to be much greater political commitment to UHC, as well as an end to corruption, fraud and poor quality of service provisioning in both the public and private sectors.

The transformation of India’s health system to become an effective platform for UHC is an evolutionary process that will span several years. The architecture of the existing health system has to be accommodated in some parts and altered in others, as we advance UHC from an aspirational goal to an operational reality. The design and delivery of the UHC system requires the active engagement of multiple stakeholders and calls for constructive contributions from diverse sectors. Central and state governments, civil society, private sector and health professional associations have to deliberate on the blueprint of the UHC system, debate on choices between different models, move from convergence to consensus and collectively commit to the effective implementation of the agreed action plan.
While our report provides the basis for initiating a broad societal discussion on the desirability and directions of UHC for India, we are not being prescriptive in our recommendations. Given the diversity and dynamic heterogeneity of the country, we recognise that the real power to change lies with state governments. We therefore call upon our state governments who have the power, autonomy and flexibility to swiftly initiate, incorporate and implement the composite recommendations detailed in this report and begin the steps towards UHC through approaches that are innovative, effective and accountable in their scope and action.

We recognise the challenges posed by a multifaceted process that has to contend with the carryover effects of the past and complexities of the present even as it creates a mould for the future. However, the need to create an efficient and equitable health system is so urgent that the task cannot be deferred any longer. We must rise to this challenge and use the next decade to usher in UHC, which the Indian people deserve, desire and demand.