Perspective

Universal coverage challenges require health system approaches; the case of India

Antonio Duran [a],[*], Joseph Kutzin [b], Nata Menabde [c]

[a] *Técnicas de Salud, Sevilla, Spain*
[b] *WHO HQ, Geneva, Switzerland*
[c] *WHO Country Office India, Delhi, India*

ARTICLE INFO

ABSTRACT

This paper uses the case of India to demonstrate that Universal Health Coverage (UHC) is about not only health financing; personal and population services production issues, stewardship of the health system and generation of the necessary resources and inputs need to accompany the health financing proposals.

In order to help policy makers address UHC in India and sort out implementation issues, the framework developed by the World Health Organization (WHO) in the World Health Report 2000 and its subsequent extensions are advocated. The framework includes final goals, generic intermediate objectives and four inter-dependent functions which interact as a system; it can be useful by diagnosing current shortcomings and facilitating the filling up of gaps between functions and goals.

Different positions are being defended in India re the preconditions for UHC to succeed. This paper argues that more (public) money will be important, but not enough; it needs to be supplemented with broad interventions at various health system levels. The paper analyzes some of the most important issues in relation to the functions of service production, generation of inputs and the necessary stewardship. It also pays attention to reform implementation, as different from its design, and suggests critical aspects emanating from a review of recent health system reforms.

Precisely because of the lack of comparative reference for India, emphasis is made on the need to accompany implementation with analysis, so that the "solutions" ("what to do?", "how to do it?") are found through policy analysis and research embedded into flexible implementation. Strengthening "evidence-to-policy" links and the intelligence dimension of stewardship/leadership as well as accountability during implementation are considered paramount. Countries facing similar challenges to those faced by India can also benefit from the above approaches.

1. Background

International experience reveals a move towards Universal Health Coverage (UHC) as promoted by the World Health Report 2010 "Agenda for Action" [1]. Raising and pooling funds provides the base for population coverage, and these mechanisms are most effective when prepayment comes on behalf of a large number of people, creating an enabling environment in which the healthy subsidize the sick, the rich subsidize the poor, those of working age subsidize those beyond it, and health services purchasing is used strategically to promote efficient use of resources.

International experience also shows that general government revenues have been at the core of recent UHC

* Corresponding author. Tel.: +34 954282767; fax: +34 954280614.
E-mail address: aduran@tecsalud.com (A. Duran).

reforms in low and medium income countries with large informal sectors and numbers outside of salaried employment (where direct taxation is harder to implement). This approach moves away from a principal focus on earmarked payroll taxes and a contributory basis for entitlement, given the structure of the labor market yet recognizes the need to rely on compulsory funding sources (taxation) to move towards universal population coverage [2]. Such is the lesson from recent innovations in Brazil's expanded "right to health" [3], Kyrgyzstan's Mandatory Health Insurance Fund [4], Mexico's "Seguro Popular" [5] and Thailand's Universal Coverage scheme [6] among others.

These approaches are aligned with the concept of UHC which shifted the underlying public policy rationale for health coverage from being a condition of labor status (as was the case from the time of Bismarck until shortly after World War II) to being a condition of citizenship, underpinned by emergent concepts of health as a human right and human security often reflected in national constitutions [7,8]. Recent international experiences also show that reforms in large federal systems (for example, China and Mexico) must devote attention to the role of local governments, with the center using intergovernmental incentives to stimulate attention to health at state/provincial levels.

Those features can also be observed in India, with its schemes since independence (including one for civil servants and another one based on Social Health Insurance contributions from the formal sector). During the past decade, national-level reforms de-linking coverage from employment and increasing public spending by transferring health-specific funds to States have been introduced via two innovative schemes[1]:

- The National Rural Health Mission (NRHM), an umbrella program departing from earlier trends of financing specific health care lines for identified diseases and health conditions. Since 2005 it fosters district and village health plans aggregated up to state level, plus primary care services and infrastructures, from Union level government, encouraging States to match grant money in varying proportions [10]. NRHM takes into account disparities in revenue capacity and differentiates *non-focus states*, with a weight of 1 in the allocation of resources (Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu and West Bengal), *high-focus north-eastern states* (Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, and Tripura, with a weight of 3.2) and *high-focus large states* (Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu and Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttarakhand and Uttar Pradesh, with a resource allocation weight of 1.3).

[1] Several State-level initiatives have been introduced as well, most notably the Rajiv Aarogyasri hospital insurance scheme that covers about 80% of the population in Andra Pradesh, funded by state-level tax revenues [9]. Though state-level schemes are very important both within the states where they are implemented and for informing future policy reforms, in this paper we only focus on national level programs.

- The Rashtriya Swasthya Bima Yojna (RSBY) is a hospitalization costs insurance scheme launched in 2008 to protect below poverty line households – the vast majority of people in the unorganized sector, including agriculture [11]. While managed nationally by the Labour Ministry, at state level (where implementation occurs) the Health and Labour Ministries each manages the program in about half the states. The usual funding split is Union Government 75% and State government 25%, which in Northeastern states and Jammu and Kashmir goes up to 90:10. About 33 million families have been covered and 4.3 million persons used hospitalisation services under RSBY, according to the 12th Five-Year Plan document [12]. While nearly completely tax-funded, implementation is contracted at state level to private insurance companies based on a tender process to become the single insurer for a state or for a defined geographic region of a state. Beneficiaries can choose from public and private providers contracted ("empanelled") by the insurer.

These programs are quite different in size and focus. Financially, the resources provided for NRHM are about 10 times the amount provided for RSBY. NRHM is predominantly a supply-side funding mechanism, whereas RSBY involves an explicit purchaser–provider split, with public funds flowing to contracted private and public insurers that purchase inpatient care on behalf of the covered population. While difficult to fully identify the consequences, a major concern has been the absence of explicit coordination between these two mechanisms [13].

Analyses of each of these schemes have shown mixed results – both achievements as well as problems in implementation. In the Sixth Common Review Mission for NRHM, progress was reported in key health outcomes – notably in child survival, population stabilisation and maternal mortality reduction plus improvements in immunisation in all states, increased outpatient attendance and in-patient admissions. The *Janani Shishu Suraksha Karyakram* (JSSK) provides free cashless services to normal deliveries and caesarean operations and care for sick new born in Government health institutions [14]. On the down side, problems have been reported concerning lack of accountability and poor quality of spending [15] and even financial scandals [16].

RSBY has also been thoroughly analysed and achievements as well as problems have been hotly debated. By both leveraging increased levels of state spending on health and channelling the combined public subsidies to an insurance fund to purchase services on behalf of covered persons, the scheme has enabled an increase in public spending on health while introducing a purchaser–provider split for an explicit benefits package with no patient cost sharing (cashless care); it has also fostered improved access to both public and private hospitals and enhanced financial protection for the target population. RSBY has implemented an innovative IT platform to support enrolment and provider payment; it assesses regularly information on service use [17] and patient satisfaction; in Delhi a survey of 390 hospitalized beneficiaries found that 18% were highly satisfied, 67% were satisfied and only 3% dissatisfied [18]. Problematic areas include a large remaining gap in reaching the

target population, evidence of overuse or unnecessary service provision driven by the provider payment incentives used, and the cap on financial protection offered to beneficiaries [19–21].

Despite this mixed picture, one positive feature shared by each of these schemes is that they have found ways around two core constitutional and administrative obstacles to allow the central government to influence and support health system development at state level: (a) enabling the Union government to play a catalytic role in health financing despite the reality that "health is a State subject"; and (b) enabling the use of some (State and Union) budget funds for health free of the rigid line-item constraints that characterize the public sector financial management system.

Recently India has approved a UHC program that can usefully build on those foundations; as suggested by the High Level Expert Group) [22] and pioneered by both NRHM and RSBY, the Government of India (GoI) is looking to rely primarily on general tax revenues, rather than trying to collect explicit insurance contributions from the informal sector.

The attention given to the above issues may lead some to put the spotlight on health financing in isolation, perhaps over-emphasizing the effects attributable to this part of the health system alone. This paper, as a matter of contrast, suggests that UHC is about more than financing. Without well thought out proposals on personal and population services production, stewardship of the entire health system and the assembling of required inputs, any health system reform would fall short of the expected results. All countries struggle to turn good intentions into results (policy implementation), but the size and complex health governance in India make the magnitude of the challenges daunting; specific attention needs to be paid also to reform implementation, not merely its design.

After this introduction/background, the structure of this paper is as follows:

- Section 2 includes the essentials of the WHO health systems framework;
- Section 3 addresses the implications of UHC in India;
- Section 4 finally outlines some implementation issues, using the lessons of recent international experience;
- A table with conclusions and recommendations and the bibliographic references close the document.

2. The health systems framework

According to the review by the World Health Organization of what "determines" health, *inter-sectoral actions* addressing the social determinants of health plus a mix of preventive, diagnostic, therapeutic, rehabilitative and caring *personal-* and *population-based health services* are required [23]. The "ensemble of all public and private organizations, institutions and resources *mandated* to improve, maintain or restore health within the political and institutional framework of a given country", i.e. the health system [24] achieves its results by the inter-play of four interdependent sets of repeated activities: (i) provision of the necessary services; (ii) financing, i.e. collection, pooling and

allocation of resources to providers and services; (iii) generation of the human, physical and other inputs that make service provision possible; and (iv) setting rules and providing strategic direction for the actors involved. Those functions interact in the pursuit of common *final* goals (improving health levels and equity, protecting people against the catastrophic financial consequences of paying for health care, improving responsiveness to citizens' expectations, and performing) as well as generic *intermediate* objectives: effective coverage (reducing the gap between the need for and use of services in the population, and improving quality) and efficiency (Fig. 1).

Those functions, generic to all systems, are organized by countries in response to national history, political and social values and preferences – thus no readymade solution or approach to be "copied" or "imported" exists. The framework can support countries in diagnosing their outcome "problems" around pathways between the functions, intermediate objectives and goals, i.e. to explore how and why the health system is under-performing as a basis for defining a country-specific reform agenda. Poor health outcomes usually reveal problems at various levels (e.g. inadequate service provision and/or poor information and/or difficulties with human resources, and/or inappropriate financial incentives, and/or insufficient supply of technologies, and/or weak regulation, etc.). Indeed, the values and political reality of each society will in the end determine the adequacy of the solutions proposed, many of them unavoidably subject to debate.

The framework facilitates aligning financial arrangements and services against the burden of diseases (maternal, child health and nutrition, accidents, communicable and non-communicable diseases). Since service access and quality are intrinsic components of UHC, shortcomings in service delivery need at least as much attention as financing problems. The stewardship function – which subsumes most of the old "policy and planning" and "regulatory/legal issues" – contributes in turn to the attainment of health system goals by providing vision and direction for other players through formulating strategy, regulating and collecting and using intelligence while stakeholders are held accountable for the resources endowed to them, etc.

Only core approaches with selected illustrations will be identified in this paper, in the understanding that subsequent work by the stakeholders concerned should expand on the arguments made. It is understood that this analysis might be important for other countries facing similar challenges (see conclusions and recommendations at the end of the document).

3. UHC and the health system functions in India

3.1. Financing

The *Economic Survey of India* 2012–13 shows that although government expenditure more than doubled nominally during the period 2007–08 to 2012–13, expenditure on health as a proportion of total government expenditure shifted only from 4.6% to 4.8% and from 1.27% and 1.36% as a proportion of GDP [25]. Although the HLEG
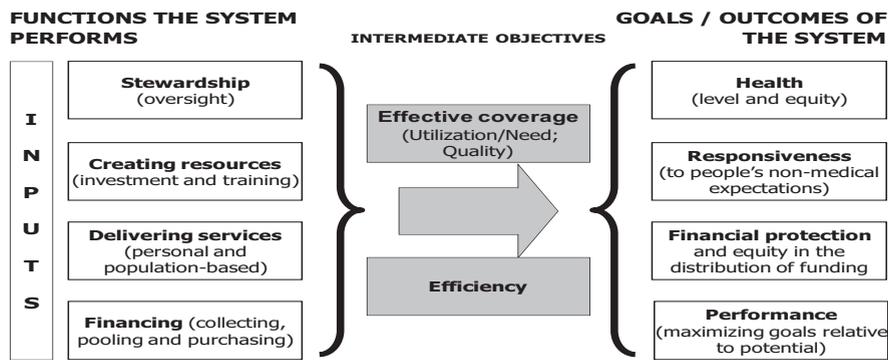
Duran, Kutzin, Martin and Travis, 2011, p.28

Fig. 1. Health system framework.

advised to increase public spending on health from slightly more than 1% to 2.5% till 2017, and to 3% of GDP till 2022 [26], the Planning Commission has settled to bring the proposal to 1.87% till 2017 [12] amidst substantial interest and debate in the country.

While the authors of this paper agree with the general opinion that more money is necessary, we however sustain that it is not sufficient condition for improvement. Also, although allocation re-prioritizing is key, expressions like "Expenditures on primary health care, 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 health care expenditures", "both in the short run and over the medium term" [27] should not be interpreted to suggest that meeting such a target is a sufficient condition for improvement either.

Maintaining public accountability for the funds while addressing current "absorption capacity" issues (e.g. massive volumes, short periods of time, complex institutional map, etc.) also remains a major challenge. One observer noted that "the stunted public health system is hardly geared up to absorb the new increased allocation; already state governments are returning money" [28]. A key cause of this "absorption" problem is the rigid public sector financial management system, with strict line item controls, which constrain the authority of line managers to reallocate resources to address problems on the ground – so some budget lines are unspent despite the evident need. Alternatives are needed like the NRHM *flexipools* and the transfer of funds to intermediaries as in RSBY (or even perhaps a third option of quasi-public autonomous "funds" that may be the state-level UHC single payer).

3.2. Service delivery

Recent reviews of performance-related provider payments [29] and results-based financing in general [30] suggest that such payments could promote productivity, increased use of priority services, and perhaps foster

quality of care[2]). How will Indian service delivery facilities react?

3.2.1. What services?

India is endowed with a third of facilities, beds, doctors and nurses per capita compared to countries with similar income levels [33,34]. Service delivery institutions range from dysfunctional poorly staffed facilities [35] to very solid hospitals in the All India Institute of Medical Sciences, AIIMS, to world-class organizations such as the Narayana Hrudayalaya Hospital [36] or the Aravind Eye Care System [37].

The private sector has a dominant position in the delivery of both outpatient and inpatient personal care, human resources and medical technology as well as diagnostics, pharmaceuticals, hospital construction and ancillary services – except some health programs [38]; it has around 80% of an estimated 52,000 hospitals and around 63% of 1,555,000 total functional beds, most in urban areas [39], a fact that generates much debate in the country.

In this context, what matters is ensuring that patients do benefit from quality services by increased access and utilization – not producing a super-detailed "list of services covered". Many diseases require for their control more than one intervention category – e.g. immunization usually involves both a personal service that benefits the individual clients who receive it (in this case, administering the dose) and a population service delivered to groups or the population (in this case, producing an education leaflet). Both personal and population services need to be organized and delivered with the systematic approach to health system reform and the corresponding financing policy in mind [40].

India also needs to avoid problems faced elsewhere, notably in several ex-USSR countries [41] with over-detailed planning of the quantum of primary and hospital services; beyond the planning, "the package" ultimately has to be translated into a form that enables (and thereby

---

[2] Other authors, however, reject them on ethical and professional bases [31]; or claim that pay for performance has not translated into breakthrough quality improvements [32].

empowers) citizens to understand their entitlements and obligations in the system.

3.2.2. Delivered where and how?

India has made extensive use of vertically integrated "public health programs", defined as separated from the funding, organizational and delivery arrangements of the rest [42], a solution under conditions of health system weakness by which authorities thought the uptake of services would be facilitated [43]. The dual burden of NCDs and CDs now calls for other solutions; policies involving multisectoral action (e.g., raising taxes on tobacco, enforcing bans on tobacco advertisement in media, salt reduction in processed foods, subsidies for healthier edible oils, etc.) and an enabling environment for the community to adopt healthy habits through information/education are crucial. Early detection and control of high blood pressure and diabetes; screening for common and treatable cancers; cost-effective prevention of complications and recurrent events; providing rehabilitation/palliative care when facing incurable disease, etc. are also needed [44].

For the emerging burden of disease to be confronted, facilities and structures will require transformation with emphasis on guaranteeing access and quality. Vertical elements will have to become parts of well-organized, functionally integrated, professionally run service networks with efficient referral and counter-referrals; links with the voluntary and private sector will need overhauling, something already visible in the internal debates preparing the service delivery schemes for the nascent Urban Health Mission.

Re-converting vertical programs (especially Polio, TB and AIDS, but also vector-, water- and food-borne diseases, etc.) into component parts of state-managed district models will challenge organizational skills. The process of implementing changes in service delivery will probably need to be done in phases -some issues could be addressed simultaneously while others only during a second phase.

3.3. Relevant input generation

In addition to money, providing quality services depends on the availability, mix, etc. of many inputs, an area in which problems in India are extraordinarily complex. Being human resource-intensive, the services to be funded first require sufficient *workforce* with the right knowledge, skills and attitudes. For a start, however, doctors with recognized medical qualifications under the Medical Council of India Act and registered with state medical councils are (mostly because of migration) below 1/1000 inhabitants and predominantly concentrated in urban areas. A realistic human resources plan is an obvious must; it should deal with the need for both clinicians (doctors, nurses, paramedics, etc.) and health system workers (managers, economists, lawyers, etc.) plus efficient timeframes for continuing education while encouraging staff to move to remote and underserved areas.

In October 2012, however, the National Commission for Human Resources for Health Bill aimed at reforming the regulatory framework and improving skilled personnel supply was returned by the Parliamentary Standing Committee on Health and Family Welfare. The recommendation to the Ministry to "bring forward a fresh bill after sufficiently addressing the views, suggestions and concerns expressed by discussions with all the stakeholders including the State Governments" was a clear expression of the existing debate in the country [45].

In the absence of such a bill, major HRH reforms are difficult to undertake and remain a "critical field for progress in introducing change" [46]. Yet even in the absence of such legislation, administrative measures are being introduced – e.g. the 21st May 2013 President of India Ordinance on amending the Indian Medical Council Act 1956, which allows Overseas citizens of India to practice medicine in the country and removed the restriction on foreign doctors to practice only for the purpose of teaching, research or charitable work [47].

Mainstreaming the Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy AYUSH traditional medicine systems, using their strengths (preventive and promotive care, women and children and older persons' conditions, stress management, palliative care, rehabilitation and health promotion) is another possible development. The 12th Five-Year Plan suggests the practice and promotion of AYUSH in States to be carried out under the broad umbrella of the National Health Mission, with cross-disciplinary learning with modern systems at post-graduate level and career tracks for professional advancement of nurses; it also suggest to develop district hospitals and Community Health Centres (CHCs) into training institutions; organise bridge courses for (AYUSH) graduates, empower them legally to practice as primary care physicians; and encourage career progression of Accredited Social Health Activists (ASHA) and Anganwadi workers (AWW) into Auxiliary Nurse Midwives (ANM).

Reliable supply of consumables, diagnostic and other technologies are also needed. Essential pharmaceuticals in UHC have to be seen in the context of proper quality, availability, prices and procurement systems. First, drug pricing is a concern in relation to the World Trade Organization (WTO) and the Trade-Related Aspects of Intellectual Property Rights agreement (TRIPS), which set minimum standards for protecting intellectual property with potential negative impact on access to treatment [48]. Bulk purchase, distribution, prescription and delivery of drugs at central and state level are also required. Following the success in Tamil Nadu and to a lesser extent Karnataka, Kerala, Delhi and Rajasthan in 2011, a quick push on providing universal access to free medicines has been heard of, although the proposal has not been yet made formal. Parallel massive interventions are also required in the fields of logistics and office technologies.

Health facilities are another problem input. It has been reported that about 12% of PHC centres and 28% of sub-centres lack regular water supply; 14% and 29%, respectively had no electricity; 8% in both groups lacked an all-weather, motorable approach road; and 54% and 47% of PHC centres had no telephone or computer respectively. The situation is worsened by poor functional building design and non-availability of clinical and maintenance support staff, making half the beds in the public sector and one third in the private sector "non-functional" [49].

Although thousands of PHC clinics, hundreds of hospitals and six super-specialty AIIMS-like centres are being built [50], efforts are required to align facilities with the challenges of service network re-design, for which reporting and IT requirements will also be crucial.

3.4. Stewardship issues

The right to health has top legal attention in India as it is recognized under article 21 of the Constitution [51]. States have highest responsibility, with support and coordination from the Union (broad policies, strategic framework, financial resources and medical education). After in past decades many Committees proposed improvements with arguable results [52], the stewardship challenge in developing UHC is in our opinion three-fold: (a) clear policies, so that more people will be effectively covered; (b) shifting the focus from inputs-based to outcome-oriented goals; and (c) ensuring States' involvement in collaborative health policy to deliver on Constitutional guarantees.

In terms of regulation and influence, Transparency International ranks India 95th out of 183 surveyed nations on a corruption perception index [53]; the Karnataka's Lokayukta estimates that "nearly 25% of the health budget gets siphoned off due to corruption at various levels; dishonesty in service delivery is a concern in many areas-from recruitment, to transfers, to promotions-and at all hierarchical levels, from low-paid workers to investigation officers" [54].

In 2010 the Central Government enacted the Clinical Establishments (Registration and Regulation) Act, setting minimum standards (facilities and services) in all clinical establishments, in all systems of medicine, public and private. However, until recently the Act has been adopted only in Arunachal Pradesh, Himachal Pradesh, Mizoram, Rajasthan, Jharkhand, Sikkim, Uttar Pradesh, and all Union Territories. The approval by other states is "pending", proving the existence of different positions on the subject in the country [55]. Transparent standards for contracting and rules of engaging as well as unambiguous reporting duties are also major issues.

Defining stewardship relationships with other sectors/outlining what is expected from "inter-sectoral actions" is another gigantic duty, especially regarding water and sanitation, where evidence of cost-effectiveness is indisputable [56]. Producing population services – for example, public health surveillance – requires good reporting from all stakeholders. The 12th 5-Year Plan recommends the creation of a dedicated cell within the Ministry to assess the impact of existing and new policies of non-health sectors which have a bearing on health [57].

In addition, priority actions are needed to create a unified, inter-operable information system, without which good stewardship will be impossible. India needs better *health intelligence*, understood as higher level of data/information. The ability of the Ministry of Health to guide the health system has been considered sub-optimal due to limited evaluation, monitoring and analysis capacity [58], as well as an absence of a unified information system. If service monitoring, law enforcing and policy partnering with state governments is to reach a new dimension in the context of UHC, the organizational capacities of many stakeholders will need to be strengthened [59].

Given the census limitations, an independent evaluation suggested a few years back that the Sample Registration System in use only captured 85% of deaths [60]; consolidating the current progress towards a (near) universal death certification would be a fair aspiration for a UHC system.

A Citizen Health Information System (CHIS) has also been proposed as a biometric-based system, updating every citizen-family's health record (birth registration, deaths certificates, maternal and infant death reviews, nutrition, etc.); telemedicine should link district hospitals, tertiary care centres and service providers in a network; public and private laboratories will in this context generate figures for policy making as well as the alerts needed for disease surveillance [61]. Pending a closer scrutiny of implementation, plans have been presented for a unique identification health card in the 12th 5-Year Plan; it remains to be seen how it will relate to the Unique Identification Authority of India (UDAI)/National Population Registry – recently issued "Aadhar" card.

4. Implementing UHC in India

4.1. Evidence of what works in implementing health system reforms

This paper builds on the analyses of the challenges faced by India as described in the Lancet Series [62], the HLEG Report [63], the Country Cooperation Strategy 2012–17 between the GoI and the WHO Office for India [64] and a non-systematic review of a substantial number of international articles and books on the topic [65].

Attention has been paid to the role of evidence to sustain reforms, the influence of international organisations, the reactions of those affected, the timing and interactions across different policy areas and the type of institutions to support implementation [66]. The WHO's message that any effective health financing strategy needs to be "home-grown" [1] applies equally to a wider health system reform strategy. There is clearly no readymade solution or approach to be "copied" or "imported" by other countries; each one needs to arrive at its own solutions.

Although no single mix of policy options works in every setting and there is likely to be variation in both the sequencing and mix of reform instruments in different places, potentially relevant lessons can be identified from the efforts devoted to review what has worked and what has not in reforming health systems in middle- and high-income countries. After in-depth review of reforms in Finland, Korea, Mexico, Switzerland and Turkey, OECD identifies the following as key issues specific to the health sector [67]:

- The role of professionals (as service providing monopolists in many cases);
- The role of information/analysis/evidence of each country's system and reforms;
- The role of international system performance comparisons;
- Clear diagnosis and compelling design for a reform;

- Taking advantage of political 'windows of opportunity';
- Communication/engagement between proponents of reforms and key stakeholders – especially with veto power;
- The use of incentives, to align the interests of stakeholders with the intentions of the reform;
- Sufficient resources to 'oil the wheels of change'.

The core empirical lesson from Brazil, China, Mexico and Thailand these days is that reforms to make progress towards UHC can (and indeed, must, given the expectations of the population) be implemented at a faster pace than in Europe in the last century.

Implementation has been confirmed as the most important aspect in any health sector reform, as stakeholders support is paramount. A seminal work in developing countries identified as equally critical as the proposed *content of reform* (a) the *actors* (i.e. professionals, citizens, policy elites, lobbies) as individuals and as members of a group, (b) the *context* (i.e. social values, macroeconomic situation, political environment) and especially (c) the *processes* (i.e. operationalization of the reform policy, distribution of power and authority, pace of reform implementation, etc.) [68]. Difficulties have been reported that reflected inadequate planning of implementation, be they with the timing of the steps needed to introduce reform (number and sequence), the central and local governance/distribution of power, the technical infrastructure (information systems, management skills, etc.), the way in which the reform was presented to public and private stakeholders, the resources needed for the new organizational arrangements, etc.

The main lesson is that the same degree of thought and effort that goes into developing policies should also go into developing an implementation strategy, distinguishing between the long steady necessary processes (including peaks and valleys) and the importance of seizing political windows of opportunity when they arise [69], something consistent with previous findings about collective action [70].

On the service supply side, reforms seem to have generally fallen short of both rhetoric and expectations; their limited impact stems in part from their limited effects on clinical practice [71]. Public hospitals have in particular emerged as extraordinarily complex environments to reform, subject to multiple relationships, more amenable to *governance* than to traditional management [72].

4.2. Management of the implementation process in India

As India moves towards implementation, two points are worth keeping in mind:

- First, no country (with the possible exception of China – and the political contexts are barely comparable) has ever taken on such a complex endeavor at such massive scale. The 12th 5-Year Plan rightly recognizes that the pursuit of UHC will last for at least 2–3 plan periods – that is, 10–15 years – requiring strategies to go beyond any script in any one plan. Therefore rather than over-prescribing detailed recipes taken from anywhere else, in our opinion attention needs to be paid by policy

makers to identifying priority issues, key implementation challenges and main barriers, customizing solutions across the four health system functions;
- Second, implementation needs to be accompanied by analysis, so that the solutions are found through policy analysis and research embedded into implementation. This calls for strengthening "evidence-to-policy" links and the intelligence dimension of stewardship as well as the necessary accountability. State-level experiences and good practices will need to be documented and circulated in each State, informing also decision-making in others.

In parallel with making policy choices in terms of processes, India needs to carefully design the institutional/organizational arrangements for implementation. The tools, management of partnerships, access to up-to-date health analyses for informed decision making, etc. need to be crafted. Clear system goals and the corresponding short-, medium- and long-term interventions need to be articulated and negotiated with the various stakeholders (public and private) at all territorial levels, across sectors.

Incentives need to be devised to increase transparency. Professional self-regulation and a high-level inspectorate could be promoted in our opinion, with key stakeholders' participation – at least at the level of policy design. Patient empowerment could be increased as necessary by acting on the Right to Information Act 2005 (modified in 2011) [73] – e.g. by individualized personal identification medical cards, facilitated formulation of complaints in case of abuse as adequate, etc.

Looking for the sustainability of reforms, the critical challenge is to gather momentum for correctly implementing the key multi-faceted reforming steps; there will surely be trade-offs between maximising the speed at which reforms are carried out and minimising the resources to be invested. Needless to explain, finally, the presence of high caliber people at the "commanding heights" of reform with a mandate to tailor an implementation process full of adjustments needs to be continued.

Overall, our conclusion is that there are reasons to be optimistic about UHC in India as there is: (i) political will to change; (ii) availability of resources; (iii) a coherent outline strategy; and (iv) updated knowledge and skills for learning by doing.

Major conclusions and recommendations

Compulsory funding sources (taxation) are needed to move towards Universal Health Coverage.

No readymade solution or approach exists to be "copied" or "imported". Accompanying the health financing changes, countries wanting to promote UHC need to address the functions proposed in the health system framework developed by the World Health Organization.

The framework can help diagnose shortcomings and facilitate the filling up of gaps between functions and goals, as poor outcomes usually reveal problems at various health system levels. For that reason, achieving the *final* health system goals require a multi-pronged approach towards generic *intermediate* objectives.

Shortcomings in service delivery need at least as much attention as financing problems. Proposals are needed to produce preventive, diagnostic, therapeutic, rehabilitative and caring personal – and population-based health services, plus inter-sectoral actions addressing the social determinants of health. Key issues are what services? delivered where (hospitals, PHC) and how (by the public or the private sector, what degree of vertical organization, what type of management?)

No health system can operate without assembling the necessary inputs. Sufficient clinicians (doctors, nurses, paramedics, etc.) and health system workers (managers, economists, lawyers, etc.) with the right knowledge, skills and attitudes plus efficient timeframes for education are needed. Reliable supply of pharmaceuticals, consumables, diagnostic, ICT and other technologies as well as health facilities (PHC centres, clinics, hospitals, etc.) is also crucial.

The stewardship function should ensure vision and direction through clear outcome-oriented policies and strategies involving stakeholders as well as regulation preventing the misuse of resources and ensuring transparency and accountability by all. Institutions like the Ministry of Health should have capacity to collect and share health intelligence, understood as higher level of data/information evaluation, monitoring and analysis.

Attention has to be paid to reform implementation, as different from its design: "how to implement reform?" needs to be found through policy analysis and research embedded into flexible implementation of the "what to do?" plans. Strengthening "evidence-to-policy" links and the intelligence dimension of stewardship/leadership during implementation is thus paramount.

References

[1] World Health Organization. The World Health Report 2010: health system financing; the path to Universal Health Coverage. Geneva: WHO; 2011.

[2] Kutzin J. Anything goes on the path to Universal Health Coverage? No. Bulletin of the World Health Organization 2012;90:867–8.

[3] Coelho V, Shankland A. Making the right to health a reality for Brazil's indigenous peoples: innovation, decentralization and equity. MEDICC Review 2011;13(July (3)):50–3.

[4] Kutzin J, Ibraimova A, Jakab M, O'Dougherty S. Bismarck meets Beveridge on the Silk Road: coordinating funding sources to create a universal health financing system in Kyrgyzstan. Bulletin of the World Health Organization 2009;87:549–54, http://dx.doi.org/10.2471/BLT.07.049544.

[5] Knaul F, Frenk J. Health insurance in Mexico: achieving Universal Coverage through structural reform. Health Affairs 2005;24:61467–76.

[6] Somkotra T. Measurement and explanation of horizontal (in)equity in health care utilization among Thais after universal coverage policy implementation. Asia-Pacific Journal of Public Health 2011;23(November (6)):980–95 [Epub 2010 May 10].

[7] Baeza C, Packard T. Beyond survival: protecting households from health shocks in Latin America. Washington, DC: World Bank; 2006.

[8] Knaul F, González-Pier E, Gómez-Dantés O, García-Junco D, Arreola-Ornelas H, Barraza-Lloréns M, et al. The quest for Universal Health Coverage: achieving social protection for all in Mexico. Lancet 2012, http://dx.doi.org/10.1016/S0140-6736(12)61068-X [published online 16.08.12].

[9] La Forgia G, Nagpal S. Government-sponsored health insurance in India: are you covered? Washington, DC: World Bank; 2012.

[10] National Rural Health Mission. Meeting people's health needs in rural areas, framework for implementation 2005–2012. Delhi: Ministry of Health and Family Welfare; 2012. http://jknrhm.com/Guideline/Frame_Work.pdf [retrieved September 2012].

[11] Palacios R, Das J, Sun C. A new approach to providing health insurance to the poor in India: the early experience of Rashtriya Swasthya Bima Yojna in India's health insurance scheme for the poor, evidence from the early experience of the RSBY. Delhi: Centre for Policy Research; 2011.

[12] Planning Commission of India. Health chapter 12th plan. Delhi; December 12, 2012.

[13] Nagpal S. Expanding health coverage for vulnerable groups in India. UNICO studies series no. 13. Washington, DC: The World Bank; 2013.

[14] NRHM.6th common review mission report. 2012.

[15] UNICEF and Center for Budget Governance and Accountability, December, National Rural Health Mission, Budgeting for Change Series 2011, Delhi, 7–19; 2011. http://www.cbgaindia.org/files/working_papers/NRHM.pdf

[16] Times of India, August 30, 2013, Court seeks NRHM expenditure report; 2013. http://timesofindia.indiatimes.com/city/patna/Court-seeks-NRHM-expenditure-report/articleshow/22150688.cms

[17] Das J, Leino J. Evaluating the RSBY: lessons from an experimental information campaign. Economic and Political Weekly 2011;xlvi(August (32)):85–93.

[18] Grover S, Palacios R. The first two years of RSBY in Delhi. In: Palacios R, Das J, Sun C, editors. India's health insurance scheme for the poor: evidence from the early experience of the Rashtriya Swasthya Bima Yojana. New Delhi, India: Centre for Policy Research; 2011. p. 153–88.

[19] Oxfam. Universal Health Coverage: why health insurance schemes are leaving the poor behind. In: Oxfam briefing paper 176. 2013. http://www.oxfam.org/sites/www.oxfam.org/files/bp176-universal-health-coverage-091013-en_.pdf

[20] Balooni K, Gangopadhyay K, Turakhia S, Karthik RG. Challenges in the sustainability of a targeted health care initiative in India. IIM Kozhikode Society and Management Review 2012;1(1):21–32.

[21] Sinha K. Unnecessary procedures on the rise in govt hospitals too: report'. In: The Times of India; 2012. http://articles.timesofindia.indiatimes.com/2012-10-15/india/34471569_1_health-insurance-rsby-health-care [online 15.10.12].

[22] HLEG. High level expert group on Universal Health Coverage, Report, Delhi; 2011. p. 9.

[23] World Health Organization. The World Health Report 2000: health systems; improving performance, Geneva; 2001.

[24] Duran A, Kutzin J, Martin JM, Travis P. Understanding health systems: scope, functions and objectives. In: McKee M, Figueras J, editors. Health systems: health, wealth, society and well-being. New York: Open University Press, McGraw Hill; 2011. p. 19–37.

[25] Government of India. State of the economy and prospects. In: Economic survey 2012–13; 2013. p. 13. http://indiabudget.nic.in/es2012-13/echap-01.pdf [chapter 1].

[26] HLEG. High level expert group on Universal Health Coverage, Report, Delhi; 2011. p. 99.

[27] HLEG. High level expert group on Universal Health Coverage, Report, Delhi; 2011. p. 110.

[28] Sen B. Securing the right to health for all in India. Lancet 2011:1, http://dx.doi.org/10.1016/S0140-6736(10)62182-4 [Published online 12.01.11].

[29] Hasnain Z, Manning N, Pierskalla JH. Performance-related pay in the public sector, a review of theory and evidence. In: Policy Research Working Paper 6043. 2012.

[30] World Bank. Result based financing for health; 2013. http://siteresources.worldbank.org/INTAFRICA/Resources/AHF-results-based-financing.pdf

[31] Snyder L, Neubauer RL, American College of Physicians Ethics, Professionalism and Human Rights Committee. Pay-for-performance principles that promote patient-centered care: an ethics manifesto (abstract). Annals of Internal Medicine 2007;147(December (11)):792–4. PMID: 18056664 [retrieved 31.03.08].

[32] Damberg CL, Raube K, Teleki SS, Dela Cruz E. Taking stock of pay-for-performance: a candid assessment from the front lines. Health Affairs (Millwood) 2009;28(March–April (2)):517–25, http://dx.doi.org/10.1377/hlthaff.28.2.517.

[33] OECD. Health data. Paris: OECD; 2011.

[34] World Health Organization. World health statistics. Geneva: WHO; 2011.

[35] HLEG. High level expert group on Universal Health Coverage, Report, Delhi; 2011. p. 120.

[36] Harvard Business School. Hospital pioneers new model; 2009. http://hbswk.hbs.edu/item/4585.html [accessed 01.06.11].

[37] The Economist. Squeezing the doctor – The future of medicine; June 2nd, 2012. p. 26.

[38] KPMG and ASSOCHAM. Emerging trends in healthcare: a journey from bench to bedside, 2011, 17 February, quoting Firstcall Research. Apollo Hospitals Enterprise Limited Company Research Report. Q2; 2011.

[39] McKinsey and Company. India Healthcare. New Delhi; December 2012.

[40] Duran A, Kutzin J. Financing of public health services and programs: time to look into the black box. In: Kutzin J, Cashin C, Jakab M, editors. Implementing health financing reform; lessons from countries in transition. WHO on behalf of the European Observatory on Health Systems and Policies; 2010. p. 247–69.

[41] Kutzin J, Cashin C, Jakab M, Fidler A, Menabde N. Implementing health financing reform in CE/EECCA countries: synthesis and lessons learned. In: Kutzin J, Cashin C, Jakab M, editors. Implementing health financing reform: lessons from countries in transition. Copenhagen, Denmark: World Health Organization, on behalf of the European Observatory on Health Systems and Policies; 2010.

[42] Liu X, O'Dougherty S. Purchasing priority public health services. In: HNP discussion paper, the World Bank's resource allocation and purchasing project. 2004.

[43] Atun R, Bennett S, Duran A. When do vertical (stand-alone) programs have a place in health systems? Policy Brief, Health Systems and Policy Analysis, European Observatory on Health Systems and Policies, Brussels; 2008. http://www.who.int/management/district/services/WhenDoVerticalProgrammesPlaceHealthSystems.pdf

[44] Duran A, Khot A. Strengthening the health system to better confront non-communicable diseases in india. Indian Journal of Community Medicine 2011;36(December (Supplement)):32–7.

[45] NCHRH. Government of India; 2011. http://164.100.47.5/newcommittee/press_release/bill/Committee%20on%20Health%20and%20Family%20Welfare/nationl%20com%20humn.pdf

[46] Rao M, Rao KD, Kumar AKS, Chatterjee M, Sundararaman T. Human resources for health in India; 2011, http://dx.doi.org/10.1016/S0140-6736(10) 61888-0 [published online 12.01.11].

[47] Government of India. Press information bureau; 2013. http://pib.nic.in/newsite/erelease.aspx?relid=96173

[48] Rens A. Collateral damage: the impact of ACTA and the enforcement agenda on the world's poorest people. In: PIJIP research paper no. 5. Washington, DC: American University, Washington College of Law; 2010.

[49] Government of India. Annual report to the people on health. New Delhi: Ministry of Health and Family Welfare; 2010. p. 21.

[50] Times of India. http://articles.timesofindia.indiatimes.com/2011-03-17/india/29138413_1_aiims-like-institutions-mbbs-seats-medical-colleges; March 17, 2011.

[51] Constitution of India. Part IV: directive principles of state policy. http://india.gov.in/govt/constitutions_of_india.php; 1949 [consulted 01.06.12].

[52] Sen G. Universal Health Coverage in India; a long and winding road. Economic and Political Weekly 2012;xlvi(February (8)):45–52.

[53] Transparency International. The 2011 corruption perceptions index. Berlin: Transparency International; 2012. http://cpi.transparency.org/cpi2011 [accessed 01.06.12].

[54] Sudarshan H, Prashanth NS. Good governance in health care: the Karnataka experience. Lancet 2011;6736(10):12–4, http://dx.doi.org/10.1016/S0140-6736(10)62041-7 [published online 12.01.11].

[55] Govt. of India. The clinical establishment (registration and regulation) act; 2010. http://clinicalestablishments.nic.in/

[56] Preston S. Causes and consequences of mortality declines in less developed countries in the twentieth century. In: Richard A, Easterlin, editors. Population and economic change in developing countries. Chicago: University of Chicago Press; 1980.

[57] Planning Commission of India. Health chapter 12th plan, Delhi; December 12, 2012.

[58] Ma S, Sood N. A Comparison of the health systems in China and India, RAND Center for Asia Pacific. In: Das Gupta M, Rani M, editors. India's public health system: how well does it function at the national level?" World Bank, policy research working paper no. 3447, November 1, 2004. 2008. p. 32. http://documents.worldbank.org/curated/en/2013/01/17207220/expanding-health-coverage-vulnerable-groups-india

[59] Jha P, Laxminarayan R. Choosing health: an entitlement for all Indians. CGHR, University of Toronto, Toronto and New Delhi; 2009. p. 38–40.

[60] Hill K, Lopez A, Shibuya K, Jha P. Interim measures for meeting needs for health sector data: births, deaths, and causes of death. Lancet 2007;370:1744–6.

[61] Times of India. http://timesofindia.indiatimes.com/india/Telemedicine-set-to-boost-health services/articleshow/12310829.cms; March 18, 2011.

[62] Reddy K, Patel V, Jha P, Paul V, Shiva-Kumar A, Dandona L. Towards achievement of universal health care in India by 2020: a call to action; 2011, http://dx.doi.org/10.1016/S0140-6736(10)61960-5 [published online 12.01.11].

[63] HLEG. High level expert group on Universal Health Coverage, report, Delhi; 2011.

[64] WHO India Country Office. Country cooperation strategy between the Government of India and the Office of the World Health Organization for India 2012–17. Delhi: WHO and GoI; 2012. http://www.who.int/countryfocus/cooperation_strategy/ccs_ind_en.pdf

[65] Roberts M, Hsiao W, Berman P, Reich M. Getting health reform right. New York: Oxford University Press; 2004.

[66] Docteur E, Oxley H. Health-system reform: lessons from experience. In: Towards high-performing health systems: policy studies. Paris: OECD; 2004 [chapter 1].

[67] Hurst J. Effective ways to realise policy reforms in health systems. In: OECD health working papers no. 51. OECD; 2010. http://dx.doi.org/10.1787/5kmh377l4n9x-en

[68] Walt G, Gilson L. Reforming the health sector in developing countries. Health Policy and Planning 1994;9(4):353–70.

[69] Saltman R, Figueras J, editors. European health care reform, analysis of current strategies. Copenhagen: WHO European Regional Office; 1996.

[70] Olson M. The logic of collective action; public goods and the theory of groups. Cambridge, MA: Harvard University Press; 1965.

[71] Oxman AD, Bjørndal A, Flottorp SA, Lewin S, Lindahl AK. Integrated health care for people with chronic condition. In: A policy brief. Oslo: Norwegian Knowledge Centre for the Health Services; 2008. p. 17.

[72] Saltman RB, Duran A, Dubois HFW, editors. Governing public hospitals; reform strategies and the movement towards institutional autonomy. Brussels: World Health Organization on behalf of the European Observatory on Health Systems and Policies; 2011. p. 13–35.

[73] Government of India. Right to information act (Act No. 22 of 2005) [As modified up to 1st February, 2011]. Ministry of Law and Justice; 2005. http://rti.gov.in/rti-act.pdf