Medicine and Society

Reforming Central Government Health Scheme into a 'Universal Health Coverage' model

RAKESH SARWAL

ABSTRACT

Background. Universal Health Coverage (UHC) is now recognized as a goal of all health systems, irrespective of income levels. In the absence of a one-size solution, each country has to develop strategies suited to its circumstances. How does the Central Government Health Scheme (CGHS) stand up to the goals and global experience of UHC, and what can be done to make it a model?

Methods. I relied on publicly available documents to identify key features of UHC, and relate it to the architecture of and practices in CGHS.

Results. Combining WHO's framework of health systems functions with log frame approach, I constructed a 'UHC status tool' of key elements and expected norms of UHC. CGHS has been performing strongly on financing function and for the range of services covered. It has performed rather poorly on all other elements of UHC. I build the argument for continued public provision of health, as opposed to insurance, on grounds of cost, public good nature of outpatient care and public health services. I suggest and strategize a sequence of reforms in CGHS anchored in health system strengthening, governance and financing, comprehensive primary care and client participation.

Conclusion. It is both possible and desirable to transform CGHS into a UHC model within the same fiscal space. Merger of finance pools of centrally administered health schemes is suggested as a step towards UHC in India.

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INTRODUCTION

Universal health coverage (UHC) defined[1] as 'ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship', is a goal of national healthcare systems globally.[2] India's Twelfth Five-Year plan[3] has proposed the strategy and first steps towards roll-out of UHC. UHC is eminently desirable not only from a human rights perspective, but also because it is expected to improve health and productivity of individuals and population, prevent people from being driven into poverty in paying for needed health services at the point of care and also to reduce social inequities. The goal may seem utopian, but is reachable as is evident from the progress achieved in low- and middle-income countries such as Rwanda,[4] Kyrgyz Republic[5,6] and Thailand[7–10] (at the time of launch of UHC in 2001).

Adviser Health, NITI Aayog, New Delhi 110001, India

UHC is not another scheme but a dynamic process of health systems strengthening and financing reforms which all countries need to progress towards. Beyond the broad objectives and core tenants[11] of equity, reliance on public funding, reduction in out-of-pocket spending and developing health system, there is no 'one size fits all', although country experiences reveal some common lessons.[12] Each country is expected to develop contextual strategies in moving towards UHC, depending on its disease profile, income levels, institutions and other factors and set their own goals.

Previous studies in India have underscored the need for, suggested strategies and goals of UHC,[13] and reviewed the progress in comparison to other countries.[14] Recently, Duran *et al*.[15] have analysed the experience of service delivery in India in the context of UHC framework and suggested adoption of a health systems approach and implementation accompanied by analysis. Since UHC will not be built afresh but by incremental changes[7] in already functioning systems, it is crucial that these be systematically analysed for their potentials and gaps before suggesting reforms. The present study adopts such an approach using centrally administered health schemes as a template.

There are four health schemes operated by the Central Government that assure a comprehensive package of services, including outpatient and inpatient care, tertiary care and prescription drugs, to its employees, pensioners and their families. These schemes, which cover 2.3 crore (23 million) families comprising 8.2 crore (82 million) persons (i.e. 6.5% of India's population), are Central Government Health Scheme (CGHS) for civilian employees and pensioners, Retired Employees Liberalized Health Scheme (RELHS) and Railway Health Service, Ex-Servicemen Contributory Health Scheme (ECHS) for retired armed forces personnel and Employees' State Insurance Scheme (ESI) for workers and their families in the organized sector with an annual income of ₹1.8 lakh (₹180 000) or less. Of the above four schemes, I shortlisted CGHS for a detailed study because it sets the trend for other schemes in terms of policy and procedures and has maximum fiscal space for reform. As it is directly managed by the Ministry of Health and Family Welfare (MoHFW), CGHS can benefit from knowledge and best practices in India and could in turn influence state governments to reform their health systems.

I address the question of how well does CGHS meet the criteria of and global experience on UHC; what are the areas of opportunity, and gaps; how can CGHS learn from global experience to make its services efficient, effective and equitous on the goal to UHC. In the process I suggest a generic template of a 'UHC status tool'. I conclude with challenges in the path and suggested strategy.

METHODS

I relied on published articles, web resources and government documents to obtain an understanding of the architecture and functioning of CGHS. Key informant interviews were done with

a few CGHS beneficiaries, medical officers and administrators. Literature on UHC was reviewed to identify its key elements, and successful practices in similarly placed countries. Systems and practices of CGHS were assessed against the goals of UHC to identify gaps and suggest policy and managerial reforms to achieve a model status. In view of a paucity of peer-reviewed literature on CGHS, and considerable interest on this subject in Parliament, questions raised by Members of Parliament in both houses were studied.

In the absence of official reports on costing of services, budget documents and reports of the Ministry of Finance were accessed. The budget of MoHFW for CGHS includes expenditure on treatment of pensioners in private facilities, both through cashless transactions and medical reimbursement (MR) of payments. MR of serving employees in CGHS areas, which is done by their respective departments, is estimated from the total MR expenditure of Central Government civilian employees weighed by the proportion of such employees covered by CGHS to their total number. Expenditure on treatment of CGHS cases in government hospitals was not separately available and hence the estimated cost per CGHS family reflects additional spending on beneficiaries over and above what is spent on all citizens of India. Since CGHS coverage of civilian pensioners for each state was not directly available, we obtained the total number of live civilian pensioners and those drawing a fixed monthly allowance (FMA) in lieu of outpatient CGHS services from the Central Pension Accounting Office. The coverage under CGHS was taken to be the balance number of pensioners, namely those not drawing FMA.

RESULTS

A comparison of the four central government schemes (Table I) reveals that ESIC, the oldest and largest of these schemes, operates a large number of in-house clinics and hospitals, has a progressive beneficiary subscription and gets the least contribution from the government (12.5%). The cost per beneficiary family across the four schemes varies over a range of ₹2184 (ESIC) to ₹19 593 (CGHS for pensioners), which is a multiple of 9.

Architecture and functioning of CGHS

Coverage. CGHS covers 25 cities across 18 states and 2 Union Territories, leaving out just 11 states and 5 Union Territories without a presence. The scheme is compulsory for Central Government civilian employees posted in covered cities, while it is optional for pensioners. Its services extend to some autonomous and semi-autonomous organizations, members of Parliament, state governors and accredited journalists. All the family members of beneficiaries are covered. The scheme currently covers 47% (668 895) of serving (excluding railways and civilian defence) employees and 47% (442 754) of central civilian pensioners (Table II).[16,17] A large proportion (59%, 830 000) of serving civilian employees are from the central police forces and they have a choice to avail medical services from CGHS or respective unit hospitals. Central Government employees serving outside CGHS cities are provided health cover under the Central Services (Medical Attendance) Rules, 1954 which allow outpatient consultation from contracted out authorized medical attendants (AMA), and inpatient care on referral to empanelled private hospitals. Services have to be paid for at predetermined rates, which are later reimbursable from respective departments. Thus, all serving Central Government employees are covered for their healthcare needs.

Even though pensioners residing in non-CGHS covered areas can join the scheme and get serviced by their nearest dispensary, not all pensioners are covered. A spatial distribution of pensioners revealed that only 55% residing in states with a presence of CGHS dispensary opt to enrol in CGHS; while 44% of pensioners in states without any CGHS facility enrol in the scheme. Of the total pensioners, those not enrolled in CGHS in covered states range from 82% in Jammu and Kashmir to 5.5% in the National Capital Region, Delhi. Low enrolment of pensioners residing in states with CGHS dispensaries could be due to distance from place of residence, or low perceived value of services offered.

Infrastructure. In the covered areas, CGHS operates its own outpatient dispensaries in modern medicine (254) and Ayush (78), yoga centres (3), polyclinics (19), laboratories (73) and dental units (19). Recently, 19 dispensaries of the postal department in 12 cities have been taken over by CGHS. Despite having just four hospitals of its own, CGHS has been able to extend a broad package of inpatient services by partnering with government and private hospitals (382), diagnostic centres (137) and specialty clinics such as eye care centres (179), dental clinics (72) and cancer hospitals (20). The norms for empanelment of private facilities require them to have a minimal level of infastructure; yet, facilities that are not quality certified are also eligible.

Staffing. Despite vacancies in posts of physicians (15%) and paramedics (25%), the population covered per doctor (2604) and

TABLE I. A comparison of government-sponsored health schemes with comprehensive cover (2012–13)

Item	Central Government Health Scheme (CGHS)		Ex-Servicemen Contributory Health Scheme (ECHS)	Retired Employees' Liberalized Health Scheme (RELHS) and Railway Health Service	Employees' State Insurance Corporation (ESIC)
	Retired	Serving			
Cost per subscriber family (₹)	19 593	15 516	10 814	10 283	2184
When introduced (year)	1954	1954	2003	1997	1952
Contributory members (in thousand)	443	669	1326	1766	18 582
Minimum subscription (₹ or % of salary)	6000	1.1%	15 000	One month wages	1.8%
Maximum subscription (% or % of salary)	60 000	0.6%	60 000	One month wages	1.8%
Nature of subscription	Regressive	Regressive	Regressive	Progressive	Progressive
Government contribution	92.2%	92.2%	95.0%	100.0%	12.5%
Clinics	351	351	426	586	2735
Empanelled hospitals	790	790	507	133	1000
Cashless	Yes	No	Yes	Yes	Yes
Own hospitals	2	2	Military hospitals	125	151
Civil hospitals empanelled	Nil	Nil	693	No	No
Smart card facility	No	No	Yes	Yes (pensioners only)	Yes

TABLE II. Medical benefits to central government employees and pensioners

Item	CGHS covered	CGHS not covered	Total
Serving			
Families covered (in thousands)	669	741	1410
Persons covered (in thousands)	2637	2922	5559
Medical cover under	CGHS	CS (MA) Rules	
Department incurring expenditure	CGHS services: MoHFW; MR: respective departments	Respective employees' departments	
Total expenditure per annum (in billion ₹)	10.38	2.34	12.72
Cost per family per annum (in ₹)	15 516	3153	9018
Pensioners			
Families covered (in thousands)	443	504	947
Persons covered (in thousands)	951	1083	2033
Medical cover under	CGHS	Fixed medical allowance	
Department incurring expenditure	MoHFW	Pensioners welfare	
Total expenditure per annum (in billion ₹)	8.67	1.81	10.49
Cost per family per annum (in ₹)	19 593	3600	11 079
All			
Families covered (in thousands)	1112	1245	2357
Persons covered (in thousands)	3588	4004	7592
Total expenditure per annum (in billion ₹)	19.05	4.15	23.20
Cost per family per annum (in ₹)	17 140	3334	9846

Notes:
1. Families and persons obtained from the *Annual Report of MoHFW* (2013–14); serving includes MPs and others (journalists, autonomous bodies); pensioners include ex-MPs, freedom fighters; family size in CGHS areas assumed to exist in non-CGHS areas also.
2. Number of total pensioners from CPAO (2014); total serving employees obtained from the 'Brochure on pay and allowances of central government civilian employees, 2012–13 (available on http://finmin.nic.in/pru/Publications.htm) excludes those in the ministries of Railways and Defence.
3. % average contribution of beneficiaries (@₹1340 per annum) to CGHS=8%
4. Expenditure on CGHS for serving employees is the sum of budgetary outlay of MoHFW and medical reimbursement of Central ministries weighted by the ratio of serving employees in CGHS area to the total (2012–13)

CGHS Central Government Health Scheme MoHFW Ministry of Health and Family Welfare CPAO Central Pay and Accounting Office MR medical reimbursement MP Member of Parliament CS (MA) Central Services (Medical Attendance) Rules

paramedic (1964) in CGHS is one-twelfth and one-fifth, respectively of the National Rural Health Mission. The ratio of physician to paramedic in CGHS (1:1.5) is low even by the prevalent ratios in the government health set ups in rural areas of India (1:2.9).

Benefits. The CGHS benefit package is very comprehensive, without any exclusions, co-payments, deductibles or annual limits of cover. Entitlement is the same irrespective of contribution, though eligibility to hospitality-linked inpatient facilities is pay-related. Services include outpatient consultations and medicines, diagnostic tests and inpatient services. The benefit package is portable across all CGHS dispensaries in India. The number of annual visits per beneficiary in 1994–95 was 3.5.[16] During 2013–14, the average daily attendance in outpatient clinics was 50 000.[17] Access to diagnostics or inpatient treatment at private empanelled hospitals requires a referral by the chief medical officer (CMO) in-charge or a government specialist, and involves prior payment which is subsequently reimbursable. Pensioners have, however, been provided cashless service at private, empanelled facilities.

Medicines. Faced with increasing complaints of non-availability of medicines, and in a departure from traditional bulk procurement, CGHS in 2003 permitted dispensaries to directly purchase medicines from the open market. Local purchase is done at retail prices, which are evidently much higher than bulk rates. On dispensing of medicines to patients with chronic diseases with a valid specialist prescription, there are long-standing complaints[18] of only one month's stock being issued despite instructions permitting this for six months; even government instructions have been vacillating between allowing one and three months stock leading to much confusion on the issue. Another contentious area is the range of medicines allowed. Till recently, all medicines were permitted, including foreign formulations that were not approved by the Drug Controller General for use in India. Recently (25 August 2014), CGHS restricted supply to 1447 generic and 622 branded medicines of the CGHS formulary. In the face of demands from beneficiaries, this decision was reversed on 1 October 2014 to allow the CMOs to order local purchase of any drug subject to some monetary ceilings. A technical committee was recently (27 August 2014) set up to update permitted list of medicines, implants, investigations and treatment procedures.

Use of information technology (IT). IT systems are in place to register patients, dispense drugs, and for inventory management of the pharmacy. Doctors personally enter prescription details online. After cases of large scale misappropriation of medicines came to light in 2012, SMS alerts are being issued to beneficiaries when medicines are issued against their cards. IT systems in place are oriented towards accounting for medicines, rather than comprehensive electronic health records.

Quality of care. Mid-term appraisal of the Tenth Five-Year Plan (2002–07)[19] had noted that 'Several reports have drawn attention to low satisfaction levels with CGHS, particularly on account of poor emergency services, non-availability of medicines, and inconvenient timings.' Studies have reported of poor quality of care in CGHS, reflected in regular complaints about long waiting periods, inadequate supply of medicines and equipment and unhygienic conditions.[16] Using four indicators of patient satisfaction, namely accessibility, environment, behaviour of doctors and other staff, Vellakkal[20] has reported lowest levels (0.48) among CGHS beneficiaries in comparison to ECHS polyclinics (0.52), private healthcare for ECHS beneficiaries (0.73) and for CGHS referred cases (0.75). Two cross-sectional studies on CGHS dispensaries in Kolkata found varying levels of patient's satisfaction, 60% in 2002–03[21] and 65% in 2008–09.[22]

Satisfaction levels were lower among the pensioner's dependants and those with lower incomes[22] suggesting differential treatment based on influence and power of the patient. The gaps identified were absence of CGHS hospitals with inpatient facilities, drug supply and long waiting time,[21] inadequate health personnel and infrastructure facilities such as toilet, drinking water, sitting arrangements, overcrowding and laboratory services.[22] Short service hours[22] and lack of infrastructure foreclose the possibility of providing round the clock emergency care.[21] The felt needs of patients included ambulance facility, immunization services, own inpatient hospital, specialist and services in Indian systems of medicine.[21] Other service issues include long waiting time, inadequate medicines, equipment and staff, and often unhygienic conditions.[23] An analysis of questions on CGHS raised in both houses of Parliament reveals considerable concern of members on the subject. Of the total questions raised during 1996–2004 relating to MoHFW, 9% of questions in the Rajya Sabha and 5% in the Lok Sabha concerned CGHS. Most of these questions relate to issues with the scheme's performance.

Responsiveness. Since government hospitals, where beneficiaries are invariably referred to, remain over-crowded and cannot provide exclusive and high quality care that subscribers expect from a contributory scheme, beneficiaries prefer referral to private facilities. There are no laid down norms on referral to private institutions, which remain a discretion of the CMO in-charge and the specialist, often exercised in favour of public hospitals. When beneficiaries do succeed in obtaining a referral to a private facility, serving employees have to pay for the service and later claim reimbursement. Even though functioning of the scheme is subject to scrutiny of dispensary level beneficiaries advisory committees, the Committee of Secretaries headed by the Cabinet Secretary and even a Parliamentary committee,[24] subscribers' have little voice in matters of policy, planning or management of the scheme. Client's choice and participation in service delivery, the cornerstone of making services responsive and efficient,[25] are missing.

Beneficiary contribution and financial risk protection. Beneficiaries' contribution ranges from ₹600 to ₹6000 per annum depending on their scale of pay, which is not progressive enough to match the pay differential of 1:20. Subscribers contributed 8% of the cost of the scheme in the year 2012–13. A fixed contribution with the remaining being borne by the government leads, over time, to a declining share of users in the total expenditure under the scheme. Users, thus, have little stake in containing the cost of schemes. Studies have reported that CGHS beneficiaries themselves consider their current contribution to be low and are willing to pay up to 64% higher for better services.[20] An analysis of reimbursement claims during the period 1999–2004 by the National Commission on Macroeconomics and Health revealed a rise in total claims, and an increasing share of private sector hospitals.[26] Despite such an organized system of care, an average patient paid about ₹1507 for the first treatment episode in 1994.[23] A study in 2010 reported that 42% of CGHS beneficiaries incur out-of-pocket expenses comprising 30% of their total annual health expenditure.[20]

Financing. The average cost of servicing an employee's family in CGHS was ₹15 516 in 2012–13, which is about five times that in non-CGHS area. The cost for pensioners' families at ₹19 593 is 26% more than that for serving employees (Table II), even though the average family size in case of the former is two, compared to four for the latter. The cost per pensioner beneficiary is 2.4 times a serving one. The MoHFW spent 6% its budget on CGHS. The total cost of operating CGHS to the Central Government has been rising, more so in the case of pensioners (Fig. 1).

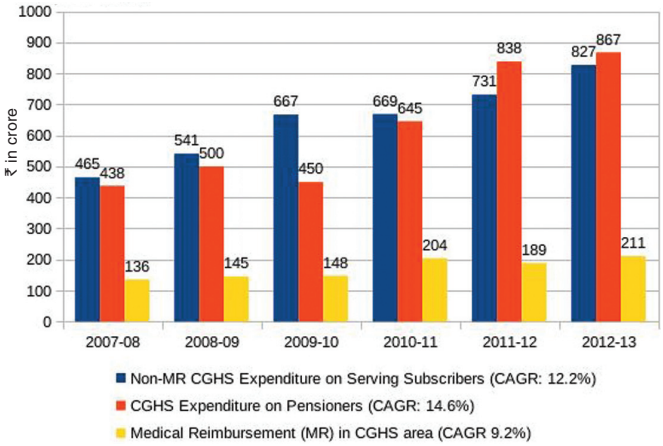

FIG 1. Trends in expenditure on components of CGHS (2007–12)

Provider payment mechanism. CGHS facilities are fully funded by budgetary support from the MoHFW. Private facilities are paid on the basis of fixed, 'package rates', which are finalized through open competitive bidding, for each encounter of service. Empanelled hospitals, in turn, are reimbursed by the MoHFW. The engagement of private providers was started in 2002 to respond to increasing demands of beneficiaries for specialist care. CGHS has pioneered the concept of 'package rates' for services which is an improvement over itemized, fee-for-service employed by most private insurers.[27] These package rates have been fixed after due internal diligence on likely costs, followed by competitive bidding. Such a double level of scrutiny and power of bulk purchase has ensured that rates for services in private facilities remain much below market rates. For instance, outpatient consultation in a quality accredited hospital in Delhi is priced at ₹58, while the market rate would be five times higher. While guidelines stipulate 45 days time for clearing of claims of private facilities, there are complaints of delays. A Bill Clearing Agency, UTI–TSL, has been engaged to assist in processing of claims of empanelled facilities. This agency is authorized to make presumptive payments at package rates, subject to a final settlement by the MoHFW. To enable UTI–TSL to make payments to a hospital, a rolling advance has been placed with it.

Governance and management structure. CGHS is headed by a civil servant of the MoHFW, designated as Director General (DG), and assisted by a secretariat which has some medical doctors. Below the DG down to the dispensary level is a multi-layered hierarchy of zonal/regional directors drawn from the Central Health Service, who have little expertise or training in management.[28] In the past 6 years, no target relating to CGHS has ever been set by the MoHFW in its 'Result framework document', which lists key annual departmental priorities. The system is centralized, with little administrative or financial autonomy even at dispensary levels.

Evaluation or research on the functioning of the scheme has been rare; data on financing, costs, pattern of drug purchase in terms of non-generics and local purchase, etc. are not openly available. Annual reports used to be a regular feature till 2006 but have since been discontinued.

UHC status tool

Placing Kutzin's framework of health system functions, goals and

TABLE III. Mapping of CGHS on expected norms of UHC elements[11,12] (UHC status tool)

UHC element	Desirable activities/objectives	Status in CGHS
I. Goal/outcome		
1. *Service delivery as per need*		
• Universal coverage	• Priority services to the worse off[30]	• Elderly attended on special days of the week • 53% of serving, 53% of pensioners not covered
• Access	• Institution-based and outreach services • Family and patient-centred care • Health promotion, disease prevention, primary and secondary care,[4] diagnostic tests, pharmaceuticals • Access to limited tertiary, domiciliary and rehabilitatory care • Access to emergency care and transport services	• Largely institutional services • Focus on disease and medicines • All levels of care, diagnostics and medicines provided but with procedural issues • Domiciliary and rehabilitatory care limited • Limited, during dispensary hours
• Effectiveness	• Monitoring[31] and evaluation of processes and outcomes generated from HIS using log frame approach	• Prescription behaviours, health status and outcomes not monitored
• Efficiency	• Improve efficiency of resource use to save up to 20%–40%[6]	• Cost of care not routinely monitored
• Quality (acceptable, appropriate, safe and effective care)	• Quality standards of facilities and services (including standard treatment guidelines)	• Dispensaries not registered under Clinical Establishment Act; non-NABH private hospitals also accredited
2. *Responsiveness*	• Building consumer's trust • Bill or patient's rights; generating awareness on entitlements • Transparency on quality, availability and pricing of services • Client's participation in programme management, oversight and accountability;[7] grievance redressal • Responsiveness:[32] Respect of persons (dignity, autonomy, confidentiality) and client orientation (prompt attention, quality of basic amenities, choice of care-provider and access to social support networks during care)	• Charter of services missing • Passive • Missing for services in dispensaries • Client engagement feeble; grievances committee exist at dispensary level • Responsiveness not monitored, but perceived to be low
3. *Financial risk protection*	• Affordable: Fairness of financial contribution • Break/weaken the link between entitlement and contribution • Reduced reliance on direct, out-of-pocket payments;[11] preferably cashless service at point of care	• Outpatient services free; inpatient services need to be paid upfront and then claim reimbursement; considerable out-of-pocket payments.
II. Health system component[33]		
1. *Managerial*		
• Human resources	• Sufficient, trained and well-motivated; family medicine expertise preferred	• Staffed by graduate medical officers with little expertise in family medicine
• Health information systems (HIS)	• Geographical information system-based mapping of residents, smart-card based transaction, Interoperable electronic health records, outcome monitoring, universal civil registration, information technology-based inventory management, accounts and audit	• Only information technology-based inventory management in practice
• Medicines, diagnostics	• Systems for procurement, distribution, dispensing of essential drugs, blood, diagnostics, diet • Avoid inappropriate or overuse of medicines and technologies	• Some drugs and diagnostics centrally procured; frequent local purchase and referral for diagnostics.
2. *Policy-related*		
• Leadership, governance and stewardship	• Hospital autonomy and accountability;[5] continuum of care, life-course approach, health system strengthening • Effective regulation • Health in all policies: Attention to public health, environmental and social determinants of health • Research for UHC • Sustainability	• Centralized management; beyond attending patients, system lacks performance goals.
3. *Financing*		
• Resource generation	• Public, tax-based/mandatory social health insurance contributions, income-based progressive pre-payments, sin taxes, reinsurance of CBHI[34] schemes	• Largely publicly funded; contributions regressive
• Pooling (resources and risk)	• Centralization of pooling[5]	• Fragmented service delivery for different schemes

(continued)

TABLE III. *(continued)*

UHC element	Desirable activities/objectives	Status in CGHS
• Purchase of services	• Input-based versus output-based payment mechanisms[5,35] • Efficient provider payment systems[13] • Shift from historical, bureaucratic resource allocation to data-driven, pay for performance and strategic purchasing[11]	• Input-based payment to dispensaries and government hospitals • No pay for performance
• Determine benefit package	• Health technology assessment[36] to assess cost-effectiveness and essentiality of services and procedures, medicines, vaccines and diagnostics for inclusion; peoples' needs and public opinion	• Benefit package selection discretionary

Notes:
1. Overall goal of UHC is to achieve health gains.[11]
2. Equity is desirable in all elements of UHC, particularly in access, responsiveness, financing and outcomes and is to be separately measured.
3. The above framework is necessary to bring clarity on what UHC means, and builds on earlier work done by Murray[32] and building blocks of health system identified by WHO[37] and their interrelationships.[16]
4. Indicators for each of the above elements exist to measure performance of health systems towards the UHC goal, most of which are not separately measured for CGHS covered population

CGHS Central Government Health Scheme UHC universal health coverage NABH National Accreditation Board for Hospitals and Healthcare Providers
CBHI Central Bureau of Health Intelligence

health financing policy objectives[29] on the log frame, we construct a table (Table III) listing key elements of UHC with desirable activities/objectives for each from cross-country experiences. We then map the status of CGHS on each of these elements to assess its level of progress on the path towards UHC. It is seen that CGHS performs strongly on financing function as the scheme is largely publicly funded, and for the extensive range of services covered. It performs rather poorly on all other elements. The tool also suggests the required direction of reform in CGHS.

DISCUSSION

Strengths and gaps of CGHS

CGHS services face a contrasting scenario where those outside its cover want to be included, while those covered 'lament the poor quality of service available and seek an alternative to it',[38] ostensibly private insurance that would allow access to corporate hospitals. Does CGHS offer value for money?

CGHS beneficiaries have much to be satisfied about the scheme. Enrolment in service areas is compulsory and contribution means-based thereby enabling risk pooling. The coverage is comprehensive, without any financial ceiling. It offers referral to private facilities of choice, and access to a wide range of prescription medicines. The scheme follows a broad definition of family, including dependent parents and minor children of widowed, separated or divorced daughters. Cashless facility to pensioners is another noteworthy feature of the scheme. Yet, beneficiary satisfaction is low.

CGHS should be judged on the objectives set before it. At its inception, CGHS was expected to 'provide comprehensive medical care to the Central Government employees (both in service and retired) and their families to replace the cumbersome and expensive system of reimbursement'. The goal was to directly provide, as opposed to ensure provision through contracting, a complete range of services. Though its original mandate for services in Delhi has been expanded placing a strain on services, the outsourcing of most of procedures is contrary to its original mandate.

The Central Government's average contribution to CGHS works out to ₹4895 per capita (net of beneficiaries' contribution of ₹1340 in 2012–13) is 4.3 times the average government spending on health of ₹1140 in India.[39] Assignment of a sizeable amount (6% in 2012–13) of country's health budget for its own employees comprising a fraction (0.6%) of the total population and belonging to the better-off sections of the society has been criticized.[26] The expenditure on CGHS is much higher than the globally estimated cost of US $60 (₹3720) per capita for a comprehensive package.[40] The reason for higher cost of service in CGHS compared to similarly placed government schemes probably lies in a greater reliance on private facilities for diagnostics and treatment, and local purchase of medicines since all other expenses are fixed. Global experience shows that excessive and unbalanced reliance on private providers makes the system a highly inflationary one,[8] a position validated by trend in rapid growth in CGHS expenditure.

How comprehensive are the services? It is well known that health systems focused on strong primary healthcare deliver better population health outcomes at lower cost.[41] The recent experience of the Kyrgyz Republic shows that strengthening of primary care networks through enhanced financing and training of health workers in family medicine is accompanied with a shift from secondary to primary level and decline in hospital referrals.[6] Yet, CGHS dispensaries do not provide comprehensive primary care services, even for national programmes such as AIDS, mental health, cancer, deafness, tuberculosis, leprosy, blindness or tobacco control. Health education, screening and other preventive and promotive services are not offered as a routine. Preoccupation of medical officers with data entry of prescriptions has consistently come out as a key barrier to spending time with the patient for clinical care. Paucity of paramedics who could otherwise perform some of the preliminary scrutiny tasks is another drain on doctors' time. A study in 1976–77[42] found that CGHS doctors spend two minutes per patient on an average, a situation that appears to have changed little. The study had then suggested that medical officers should be given certain beneficiary population and made responsible for them. In-service training of doctors to hone their skills for managing routine conditions is rare. On clinical care, an analysis of the 1780 procedures for which private hospitals and diagnostic centres have been contracted reveals that it includes many items of primary care such as dressing and suturing of wounds, which medical teams can perform in-house with some training and infrastructure. The list also includes cosmetic and many unnecessary procedures (as mammoplasty). Cost and value do not seem to guide inclusion of procedures in the coverage list. Absence of electronic medical records (EMR) and networking with referral hospitals leads to delays, duplication and waste. Provider-induced demand from private hospitals, and even laboratories, is strong. Demand side moral hazard exists as 83% of

hospitalized patients are reported to be self-referred and most patients prefer to bypass the dispensaries and directly avail of specialist services.[16]

What are the systemic reasons for attenuation of a well-funded, medical institution into a channel for dispensing of medicines and referral to private facilities? The reasons appear to be three-fold. One, lack of a clear vision, mission or goal in terms of health and well-being beyond preventing and addressing beneficiaries' concerns; two, availability of budgetary support as per need and absence of quality or cost-consciousness; three, absence of client empowerment which otherwise could have driven reforms. In the absence of a proactive policy, or accountability for outcomes, the default culture of a regulatory, centralized set-up pervades the organization. Hence, there are no incentives for performance, or systems to dynamically check provider and beneficiary behaviour, frivolous spending or fraud. Pre-authorizations, the principal handle with insurance agencies to contain costs, do not exist and instead the CMO in-charge and government specialists perform the gatekeeper function. Low institutional capacity beyond what has been traditionally practised limits support for reforms.

Insurance: A replacement of supplement to CGHS?

The perceived high cost of extending CGHS and even Central Services (Medical Attendance) Rules[38] services, and problems in managing reimbursement claims in uncovered areas have promoted the seeking of alternative models for service delivery. The Sixth Pay Commission observed that 'there is increasing pressure on CGHS which sometimes results in less than satisfactory services being provided to its beneficiaries and the need of the hour may, therefore, be to retain CGHS in its existing form while simultaneously providing optional in-patient department facilities through health insurance'.[38] There is a proposal[43] to launch an insurance-based health scheme for Central Government pensioners and fresh recruits, with a choice for others to opt for it in preference to CGHS. The proposed scheme would cover inpatient care only, with an annual ceiling of ₹500 000 per family.

A pure insurance-based healthcare model looks attractive in so far as it offers a choice of private providers, predictability of treatment, cashless transaction and freedom from procedural complexities of CGHS. The delivery of institution-based, quantifiable and verifiable services for procedures of secondary and tertiary care is aptly amenable to contracting and verification.[25]

On the flip side, most insurance models do not cover outpatient care, which along with medicines is not only a major contributor to out-of-pocket expenditure but also necessary for comprehensive and cost-effective care. Moral hazard (both demand and supply), provider-induced demand and pushing up the level and cost of care are known shortfalls of the pure insurance-based healthcare model. The provision of inpatient care by a separate agency will lead to fragmentation of care, which is known to inflate costs. There is a heavy price to be paid for adding a layer of insurance agency, overheads for which average 28% for the country, and need to be examined for its value addition. Another argument for insurance of bearing of risk is in doubt given that government is the principal contributor of premiums. Lastly, health teams which are employed by the public sector and are not profit-driven in their clinical care decisions are more likely to offer cost-effective and long-term health building advice to clients.

A crucial responsibility of a healthcare system is to attend to population and individual health risks, a role which is often included under 'public health'. This is cost-effective and high impact. Preventive services and public health are public goods, which governments are obliged to provide.[44,45] Public provision thus appears to be the preferred option for outpatient care and public health functions. Choice of care, however, should be of the client and health systems must provide for this choice.[25]

How can CGHS reform into a UHC model

The mid-term appraisal of the Tenth Five-Year Plan (2002–07)[19] stated: 'It is the time to restructure, reform and rejuvenate this (CGHS) contributory health scheme.' Increasing demands and expectations of CGHS present an opportunity. While individual elements of and best practices for achieving UHC are listed in the UHC status tool (Table III) for a broad direction, I discuss the key strategic choices for reform.

Universal provision. In line with the focus on equity in UHC, coverage of pensioners should be a priority. This may require different strategies in states with and without CGHS presence. Part of the solution in the former states may lie in building a trust in the system by following the tenets of UHC as discussed. Ideally and over a long term, CGHS dispensaries should be expanded to all cities with a sizeable presence of employees and pensioners. Till then, CGHS can contract out networks of providers for a comprehensive care package (outpatient, diagnostics, inpatient and medicines) on a per family per annum (capitation) basis. While more than one provider would have to be enrolled in a city/region to give choice, their numbers need not be too large so as to make the bid unviable. The government's district health set-up along with its network of public facilities should also be allowed, even encouraged, to bid. The contract with the healthcare providers should be so framed that incentives are built in for providing preventive interventions (such as weight control, dietary advice), encouraging healthy behaviours (such as smoking cessation, exercise) and achieving better health outcomes. Learnings on provider payments from countries such as Kyrgyz which have undertaken successful[46] reforms can be referred to. Robust and real-time IT systems are a prerequisite to monitor use, health status, cost, satisfaction and outcomes.

Service delivery. To provide comprehensive primary care and patient-centered family care, health teams in CGHS dispensaries would have to be supplemented, trained, motivated and incentivized. Collaboration with teaching institutions for on-the-job learning would prevent service disruptions. Its medical officers should be equipped to practice family medicine, and thereby address healthcare needs of all ages, leaving only the more complicated cases for specialist referral. Transfer of data entry jobs to allied health professionals, and arranging home delivery of medicines for chronic cases can free precious time of doctors for attending to clinical care. Timely and bulk procurement of generic medicines and devices should be ensured to avoid costly and sometimes irrational local purchase and improve quality of care. Laboratories would need strengthening, and the option for a common laboratory (on the lines of Hindlab in Delhi) for a group of dispensaries could be considered to attain economies of scale. The IT systems in CGHS should be upgraded into full-fledged EMR, preferably geographic information systems-based, to enable portability and interoperability with referral centres, evidence-based care and prompt response. Each beneficiary family should be mapped to a health team, which could partner together to promote health, prevent disease and improve outcomes. CGHS dispensaries ought to be responsible for public health functions in the locality, such as disease surveillance, assessing health status of population, sanitation, testing for water and food quality in the area, and insect control measures which have a profound impact

on the health of the residents. Regular accreditation of CGHS dispensaries by an external agency is necessary to measure and ensure quality of care.

Responsiveness. Simple measures such as web- and phone-enabled appointments, electronic token display boards for waiting patients, inviting suggestions for improvement of services can make a difference in convenience and patient satisfaction. Choice to the client is desirable, and should be provided for higher levels of care. Participation of beneficiaries in planning and management should also be institutionalized.

Financial protection. Out-of-pocket spending can be minimized if there is clarity on what is covered, and cashless service is provided for the same. This would necessitate a system of pre-approvals based on package rates, for which IT and back-up systems need to be put in place. A back-end agency conducting due scrutiny of case histories and authorizing non-emergency procedures in private facilities is a prerequisite to efficient contracting for delivery of cashless service; it will also lead to timely claim settlement, and compliance to standard treatment protocols. Timely payment to private facilities can bring down costs in the subsequent contracts. Once service quality improves, beneficiaries' contribution can be enhanced, made progressive and linked to total cost of operating the scheme.

Governance and provider payment reforms. Currently, both the roles of purchaser (of paying providers) and provider of health services (through CGHS) are vested in the government. Such an arrangement impedes efficiency by reducing options for purchase of services and creating a conflict of interest. Purchaser–provider split has been tested as an instrument of new public management to introduce competition in the public sector and has yielded efficiency gains in countries such as Thailand,[9,10] Sweden and Malaysia. Such a split led to the transfer of financing and purchase functions of the Health Ministry of Thailand to an independent agency; which allocates funds in line with activity (demand-side financing) backed by contractual relationship with the providers making them more responsive and accountable to their clients.[9] On the lines of National Health Trust of UK, the case for hiving off purchasing function of the government to a separate agency is compelling. This would be in line with the recommendations of the Second Administrative Reforms Commission on separation of policy-making function of government from execution, delegating powers to executing agencies which should be autonomous and professionally managed.[47] The management of the suggested agency will be better able to concentrate on efficient contracting of services, monitoring of services delivered for their quality, usage, client satisfaction and health outcomes. For day-to-day management tasks such as enrolment of beneficiaries, pre-approvals of procedures and reimbursement of claims from empanelled facilities, a third party administrator (TPA) can be engaged. The Rajiv Aarogyashri Trust of Andhra Pradesh is an example of a government agency performing insurance-like functions at lower costs. Global experience in accountable care also calls for aligning provider payments with health and well-being of client population, outcomes rather than activities.[48]

Autonomy to CGHS. It is known that decentralization of management capacity and of responsibility is an important prerequisite for obtaining micro-efficiency.[46] Managerial reforms can lead to superior performance from the existing system, a savings of up to 40% in costs[49] and increased client satisfaction. The mid-term appraisal of the Tenth Five-Year Plan (2001–07)[19] had recommended that CGHS be conferred greater operational autonomy and converted into an appropriate organizational form such as a registered society. A corporate entity at arms length from the MoHFW with operational flexibility, clear mandate and measurable deliverables appears to be an essential prerequisite for the proposed transformation. The aim should be to create a cost-conscious, outcome-driven, client-centred and professional organization.

From a model to full-scale UHC. One clear learning from country experiences of UHC is that fragmentation of risk pools and delivery systems by ability to pay is inefficient,[11,50] a barrier to risk-sharing and thus contrary to the spirit of UHC. A 10-fold difference between budget subsidy for the health programme for government employees and that for low-income households buttressed the case for a move towards UHC in Thailand.[7] The Thai National Health Security Act of 2002 created a single pool of resources for UHC.[9] The National Commission on Macro-economics and Health had in 2005 recommended[26] vertically integrating the network of dispensaries and hospitals of ESIS, CGHS and public sector undertakings and converting them into Trusts and autonomous units. Hence, schemes for government employees should be first merged among themselves and ultimately with the National Health Mission to cover the entire population. The UHC status tool can be similarly used to diagnose and plan for transformation of other government-sponsored schemes into UHC. The suggestions for reforming CGHS presented here are a beginning for universalizing access of all Indians to a CGHS-like service. A small beginning in this direction has already been made by opening the doors of some CGHS dispensaries to senior citizens for outpatient care.[51]

Challenges in reforming CGHS

Just as moving towards UHC is a political process,[50] a system-wide reform in an established scheme requires careful generation of evidence, planning, stakeholders' engagement and phased implementation. A patient explanation of the need for and elements of reform proposed is likely to convince key stakeholders, namely the leadership of the MoHFW, subscribers and participating hospitals of its inevitability and the immense opportunities that success offers. The Thai experience in policy development for UHC also underscored the role of media in shaping societal consensus.[7] The expected savings in cost through efficiency gains are likely to be enough to match the additional costs for a gradual expansion and provision of new range of primary and public health services. The new government in Delhi has a historic mandate and very high expectations of it. It has the goodwill required to meet the challenge of reforming CGHS, as the first step in taking India's health system towards the goal of universal health assurance. The suggested reforms could be piloted in dispensaries of one zone of CGHS and experience gained used to guide larger, systemic reforms.

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