Funds Needed for 'Free Medicines for All' in UAHC System

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Summary

During the 12th Five Year Plan, a ***centrally aided scheme to provide for 'free medicines for all' in Public Health Facilities*** can be launched. In this Scheme, all State Governments will be encouraged to constitute medical supplies corporations on the lines of Tamil Nadu Medical Supplies Corporation (TNMSC) to supply free, quality generic medicines mainly essential medicines to both indoor and outdoor patients who would seek care in Public Health Facilities (about 50% of the total number of patients, including the erstwhile 20% of unreached, very poor people). The total cost of the Scheme during the plan period would be Rs 28675 crores for running costs and an additional Rs 1293 crores as one-time capital costs. The Center's contribution at 50 % would be Rs 15631 crores.

A centrally aided scheme to provide for 'free medicines for all' can be launched also for those patients (about 50 % of all patients) ***who will seek care from private practitioners working within the framework of Universal Health Care System***. For these patients the government will pay for the quality generic medicines to be bought in bulk. During the plan period, the Scheme would cost be Rs 80,000 crores, out of which the Centre would contribute Rs. 40,000 crores.

This exercise is limited to allopathic medicines.

Background

In this note we have tried to answer the question - India how much money will be required to achieve the objective of providing good quality 'Free Medicines for All' as part of the goal of 'Health Care for All' ? To estimate this amount, we need appropriate community based morbidity data for different areas, standard drug treatment guidelines for all the morbidities and standard prices of medicines. In absence of especially the appropriate comprehensive morbidity data, we have estimated the amount required for 'Free Medicines for All' inn an indirect way.

. For making the estimate in case of patients going to the ***Public Health Facilities***, we have extrapolated from the Tamil Nadu experience. In case of patients accessing free treatment to be provided by ***private providers*** who would join the Universal Health Care System, good quality generic medicines can be supplied through commercial retail outlets; the cost for which have been estimated by extrapolating from the experience in Chittorgarh/Nagaur in Rajasthan.

Part I*

Adaptation of TNMSC model of 'Free Medicines for All' in Public Health Facilities (PHF)

In Tamil Nadu, since 1995 all patients visiting Public Health Facilities (which in Tamil Nadu, constitute 40% of the total number of patients as per NSSO 60th round figures) get all medicines free. This has been possible because of setting up of an autonomous corporation in the Public Sector, the Tamil Nadu Medical Services Corporation (TNMSC), which procures in bulk directly from manufacturers, ***quality generic medicines*** through a transparent bidding process. TNMSC then supplies these to the PHFs through a demand sensitive passbook system instead of the traditional 'supply driven' inflexible system of distribution. It supplies about 260 drugs to Public Health Facilities

* This part was submitted to the Secretary MoH as part of the exercise for preparation for the 12th FYP

as per its Essential Drug List and 192 'specialty' drugs for secondary and tertiary care as per need. The TNMSC procurement prices of quality generic medicines are very low; for many medicines they are one tenth and sometimes even one fiftieth of the retail prices (see also table in Annexure). Hence even at a budget of Rs. 29 per capita, plus medicines supplied by the Central Government (about Rs 20 per capita), Tamil Nadu is able to provide free medicines to all indoor and outdoor patients in all PHFs in TN (from all PHCs to all secondary and tertiary care hospitals under the State Government). The Government of Kerala has adapted the TNMSC model. The governments of Bihar and Rajasthan are in the process of doing so.

During the 12th FYP, significant advance towards the goal of 'Free Medicines for All' in Public Health Facilities (PHF) would be made. For this purpose, all State Government s would be encouraged to adopt and adapt (taking into account, specific features if any, of different states), the Tamil Nadu model to reach the goal of free medicines for all in the PHFs.

Out of 100 patients needing care, currently only 80 use public or private facilities; 20 are unreached. Amongst those who access health care, currently utilization of public health services is on an average around 20-25 %. Based on the Tamil Nadu experience, it is hoped that it will increase to 40% when free medicines and quality care will be provided in the PHHFs. Secondly the erstwhile 20% unreached very poor people would also now access services in PHFs. It is therefore estimated that by the end of the 12th Plan, in different states, on an average, 52% of all patients would receive care from the PHFs. The budgetary outlay required for quality generic medicines for these patients has been estimated in the table below by extrapolating from the experience of Tamil Nadu. Ideally of course these estimates need to be calculated from the disease burden.

Budgetary Outlay for 'Medicines for All' Scheme for Public Health Facilities

	Subject Head	Amount in Rs	Remarks
1.	TN's budget for medicines at 40 % utilization	210 crores	Rs 210 crores[1] for TN *population* of 7.2 crores as per 2011 census provisional figures. (In TN, out of *patients* seeking treatment, 40% go to PHFs, that is 40 % utilization)
2.	All India requirement at TNMSC procurement prices	3530 crores	Extrapolated to patients seeking treatment from 121 crores population of India: Rs 210 crores x (121/7.2)
3.	**All India requirement inclusive of** additional requirement for the very poor 20 % patients who are currently totally deprived	5735 crores	This translates to 62.5 % increase in patients attending PHFs: 1.625 x Rs 3530 crores . See footnote.
4.	**Total All-India Requirement for 5 year Plan Period for medicines for PHFs**	**28675 crores**	At Rs 5735 crores x 5
5.	**a) At 50 % central contribution of running costs**	**14338 crores**	**(50% of Rs 28675 crores)/5 = Rs 14338 crores/5 = Rs 2868 crores per year.**
6.	**b) Capital Costs**		
7.	IT enabled Supply Chain system @Rs 5 lakhs per district for all India	31.55 crores	631 districts @ Rs 5 lakhs
8.	Warehouses and related infrastructure like cold storage, storage racks @ Rs 2 crores per district for 631 districts	1262 crores	At 10-12000 sq. feet per warehouse; and 631 districts @ Rs 2 crores.
9.	**c) Total Capital Costs all-India**	**1293 crores**	
10.	**d) Center's Contribution at 50% of (a) plus 100 % of (c)**	**15631 crores**	**Rs 14338 crores plus Rs 1293 crores**

[1] Source: TNMSC, July 2011. This does not include Centre's contribution for National Programme etc.

** Out of per 100 patients, currently only 80 seek treatment; 20 are out of the reach of both private and public health services. Out of these 80 patients, 32 (40%) go to the PHFs; rest 48 go to private practitioners. Due to the 'Free Medicines for All' scheme, it is assumed that all over India, like in TN, now 40% of patients will take treatment at PHFs. Secondly, now the 20 patients who were hitherto unserved, will also take treatment from PHFs. Thus out of 100 patients, now 52 instead 32 patients will take treatment at PHFs. Thus under this assumption that all these 20 hitherto unserved patients will also take treatment in PHFs, number of patients reaching PHFs will increase by 62.5% (52/32 x100). See Annexure 2 for more details.*

The above estimate is to be seen in the light of the current Government expenses on medicines. Rough figures from the budget estimates of 2010-11 shows that Government (Centre and States put together) had spent about Rs. 6,000 crores with the Central Government alone spending around Rs. 2,500 crores. Hence the additional annual expense is only Rs 2,868 crores during the plan period for the Centre for this Scheme for 50% contribution for the recurring costs. It is expected that during the 12th FYP, the health care expense would increase quite substantially from current 1.1% of GDP to 2 to 2.5% of GDP. Hence It would be possible to get the above estimated funds for this scheme.

Summary of Costs for 'Free Medicines for All' in PHFs

The total cost during the 5-year Plan Period to the Center for 'Free medicines for all in PHFs' would be –
At 50 % contribution from the Center for recurring costs: Rs 14338 (Rs 2868 crores per year) plus Rs 1293 crores to be spent by the Centre for 100 % of the capital costs will be equal to a total of Rs 15631 crores for the 5-year Plan Period.

Note:

- We have ignored inflation because the outlay we have estimated has some cushion; full amount will not be utilized from the first year. Secondly bulk medicine prices have not increased during last 5 years and in fact in TNMSC procurement, they have decreased in many cases.
- We have taken only TNMSC prices in our estimation. A similar system is in operation in Kerala. The prices for Kerala system can be taken into account to make an All India estimate as some small states may not be able to bargain for prices as low as TNMSC prices.
- We have not taken into account the financial outlay required for AYUSH in these calculations.
- It is expected that in 5 years, if not earlier, the procurement system would be self-sustaining by charging (as is being done in Tamil Nadu) the Government health facilities a percentage of (~ 5 to 10%) on the drugs procured by the State level procurement agency.
- As UHC becomes fully operational, there will be more demand for medicines for treatment of hitherto hidden morbidities. Hence the requirement for medicines will go up. In the current exercise we have not taken this into accont as no appropriate data are available for this exptrapolation.

Important Features of Successful Public Procurement

It may be noted that in TNMSC, bulk procurement is directly from Schedule M certified manufacturers, of quality generic medicines through a transparent bidding process. A list of selected medicines including mainly the essential medicines is used for procurement. However, this is not the only reason for the success of the TNMSC model. Autonomy for the professionally run Public Sector procurement agency working in a transparent manner and a demand sensitive passbook-based supply system instead of the traditional 'supply driven' inflexible supply system are the two other essential elements of the success of the TNMSC model. Hence while adopting the system in other steps following steps would be considered essential -

1) Bulk procurement of generic medicines directly from the manufacturers will be done from a list of mainly essential medicines and some others, drawn up taking into account state-wise variations in morbidity. For this purpose the NLEM 2011 would be used a guide. Generic generics will be given preference as a matter of routine.

2) We have taken only TNMSC prices in our estimation, though a similar system is in operation in Kerala since 2007-08 because the TN system has been in place for the last 15 years and has been studied, evaluated in detail. Initially, some small states may not be able to bargain for prices as low as TNMSC prices. However there is enough cushion in the budget as all the budgeted amount will not be utilized fully from the first year in all states.
3) While working within the framework given by the State Government, the procurement agency would be autonomous and transparent. State Governments will be encouraged to pass enabling legislations like the Tamil Nadu Transparency in Tenders Act, 1998, and the Rajasthan Public Services Guarantee Bill, 2011.
4) A demand sensitive passbook-based supply system, online supply chain monitoring, strict quality control, black listing of defaulting suppliers, complete transparency and systems of public accountability would be ensured. Institutionalized prescription audits and standard treatment guidelines will be put in place to ensure rational use of medicines.

Part II

'Free, Quality Generic Medicines for All'
(for patients seeking care from private practitioners working in UAHC)

As already noted, in Tamil Nadu as per NSSO 60th round figures for 2005, 40 % of patients visit Public Health Facilities (PHFs). In 2011 in many other states of India, it is about 20%. During the 12th Plan period we aim at an ambitious yet realistic goal of 50 to 60% utilization of PHFs in different states. This is inclusive of the erstwhile of unreached people, the very poor people (20%).

For the rest of the 40% to 50% of the patients who would continue to go to the private doctors, by 2020, the government would pay for their medicines as part of its goal of providing "Universal Health Care" by 2020. For this purpose there will be regulation of private sector. Private practitioners opting to be part of the Publicly Funded Universal Health Care will have to follow the standard treatment protocol and use of low priced quality generic medicines. This would be achieved through a series of measures like mandatory use of generic medicines in the UHC system, Standard Treatment Guidelines, prescription audits, etc.

Overall out of pocket expenditure on medicines would be reduced to less than 50% of its current levels by rationalizing the manufacture and use of medicines for both PHFs and private facilities. It may be noted that the TNMSC, the distribution management cost is low (~ 5 %) whereas in the private sector it is bound to be high due to parcelisation of demand up to thousands of small retail shops all over India. Secondly, to match the demand for all the medicines required in India, not all companies can supply at TNMSC rates. Hence to reach the goal of (free) Medicines for All in the private sector also, the estimate for the private sector patients will scale up by a factor of say 3, that is government will reimburse drug prices for private sector care at these prices – which would be closer to that of the Chittorgarh/Nagaur government medicine cooperatives. (They would be still much below the current retail prices, see Table in Annexure I.)

For the 48% of patients going to the private sector (48% because 52% go to the public sector), the total medicine expenditure at Chittorgarh/Nagaur rates would be Rs 210 crores x (121 /7.2) x (48/32) x 3 = Rs 15,881 crores or say Rs 16,000 crores per year. Centre's 50% contribution to this Scheme would mean annual Rs. 8000 crores expense for the Centre. (States have very little flexibility in enhancing resources and will find it very difficult to pay for 70% of this totally new expenditure item of medicines for private patients. Hence we suggest Centre's contribution for this expenditure should be at least 50%.)

- The above cost-estimate has been summarized below.
- We have ignored inflation because the outlay we have estimated has some cushion; it will not be fully utilized from the first year. Secondly bulk medicine prices have not increased during last 5 years and in fact in TNMSC type procurement, they decrease.

- We have taken only TNMC prices in our estimation. A similar system is in operation in Kerala. The prices for Kerala system can be taken into account to make an All India estimate as some small states may not be able to bargain for prices as low as TNMC prices.

We have not taken into account the financial outlay required for AYUSH in these calculations.

Summary of Costs

For access to quality generic medicines for about 48% of patients who would utilize the services of the private providers insourced into the UAHC system under a publicly funded universal health care system, the cost to the Central Government will be Rs. 16.000 crores per year out of which the Centre should contributing 50%, i.e. Rs 8,000 per year.

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Annexure 1

Table: A Comparison of Chittorgarh, TNMSC Procurement Prices and Retail Market MRPs

Generic Name of Drug (1)	**Unit** (2)	**Chittorgarh Tender Rate (Rs.)** (3)	**MRP Printed on pack/strip (Rs.)** (4)	**TNMSC Prices 2010-11 (Rs)*** **(5)**
Albendazole Tab IP 400 mg	10 tablets	11.00	250.00	4.62
Alprazolam Tab IP 0.5 mg	10 tablets	1.40	14.00	0.45
Arteether 2 ml Inj	1 injection	9.39	99.00	9.71 for 80 mg per vial
Amylodipine Tab 5 mg	10 tablets	2.50	22.00	.42, 2.5 mg
Cetrizine 10 mg	10 tablets	1.20	35.00	0.50
Ceftazidime 1000 mg	1 injection	52.00	370.00	8.77 for 250 mg inj.
Atorvastatin Tab 20 mg	10 tablets	18.10	170.00	2.30 for 10 tabs, 10 mg
Diclofenac Tab IP 50 mg	10 tablets	2.20	25.00	0.63
Diazepam Tab IP 5 mg	10 tablets	1.90	29.40	0.47
Amikacin 500 mg	1 injection	6.95	70.00	6.78 per vial

Source: Prices in Columns (3) and (4) from then Collector Samit Sharma's presentation, July 2009, and websites cited, op.cit. Source for TNMSC prices:
http://www.tnmsc.com/tnmsc/new/html/pdf/drug.pdf and
http://www.tnmsc.com/tnmsc/new/html/pdf/spldrug.pdf
*For similar strengths and pack sizes unless indicated otherwise. Accessed, April 29, 2011.

Annexure 2

A Detailed Explanation of How the All-India Estimate of Rs 5735 crores was arrived at

Under Key Assumption that out of 100 patients needing tt, 20 patients (20%) who are very poor and deprived are not reached at all. And of the rest 80 patients (80%), 32 (40%) seek treatment (tt hereafter) in government /Public Health Facilities (PHFs); and 48 (60%) seek it in the private sector. The calculations remain same if we had assumed 20% of the population (say of TN or India) was unserved.

- Total population of TN = 7.2 cr. *And let the fraction of patients needing tt to total population be y.* Therefore Total No of Patients needing tt in TN = 7.2 y crores.
- Out of 7.2y crores, 20% are not reached in TN. That is 20% of 7.2y crores are not reached (or 0.2 x 7.2y crores). Therefore those who are able to access it is 80% of 7.2y crores (or 0.8 x 7.2y crores).
- Utilisation of the PHFs in TN is 40%. That is 40 % of (0.8 x 7.2y crores) = 32 % of 7.2y cr = 0.32 x 7.2y cr = 2.304y cr.
- Total Outlay of TN = Rs 210 cr
- Therefore per patient cost is = Rs 210 cr /2.304y cr = Rs. 91.145/y.
- Total population of India = 121 cr.
- And therefore assuming same y factor, there are 121y crore patients in India
- Out of this No of patients seeking tt from PHFs = 32% of 121y cr = 38.72y cr patients (as in 3 above).
- Cost of free supply for above = 38.72y cr x (Rs 91.145/y) = Rs 3530 cr approx. (A)
- 20% of patients in India = 20% of 121y cr = 24.2y cr patients.
- Cost of free supply of medicines for (11) above = 24.2y crores x (Rs 91.145/y) = Rs 2205.70 crores. (B)
- Total of (A) + (B) = Rs 3529.13 cr + Rs 2205.70 cr = Rs. 5734.83 cr say Rs 5735 cr. This amount will reach through PFIs, (32 +20) % x 121y cr or 52% x 121y cr patients.

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