

Towards a National Health Service

“If you dump all the drugs and formulations listed in *Materia Medica* into the ocean, mankind will be that much better off and fish will be that much worse off”

Achievements Through The Years - 1951-2000

| Indicator | 1951 | 1981 | 2000 |
|--|---------|------------|-----------------------|
| Demographic Changes | | | |
| Life Expectancy | 36.7 | 54 | 64.6(RGI) |
| Crude Birth Rate | 40.8 | 33.9(SRS) | 26.1(99 SRS) |
| Crude Death Rate | 25 | 12.5(SRS) | 8.7(99 SRS) |
| IMR | 146 | 110 | 70 (99 SRS) |
| Epidemiological Shifts | | | |
| Malaria (cases in million) | 75 | 2.7 | 2.2 |
| Leprosy cases per 10,000 population | 38.1 | 57.3 | 3.74 |
| Small Pox (no. of cases) | >44,887 | Eradicated | |
| Guinea worm (no. of cases) | | >39,792 | Eradicated |
| Polio | | 29709 | 265 |
| Infrastructure | | | |
| SC/PHC/CHC | 725 | 57,363 | 1,63,181 (99-RHS) |
| Dispensaries & Hospitals (all) | 9209 | 23,555 | 43,322 (95–96-CBHI) |
| Beds (Pvt & Public) | 117,198 | 569,495 | 8,70,161 (95-96-CBHI) |
| Doctors (Allopathy) | 61,800 | 2,68,700 | 5,03,900 (98-99-MCI) |
| Nursing Personnel | 18,054 | 1,43,887 | 7,37,000 (99-INC) |
| <i>Source: National Health Policy – 2002</i> | | | |

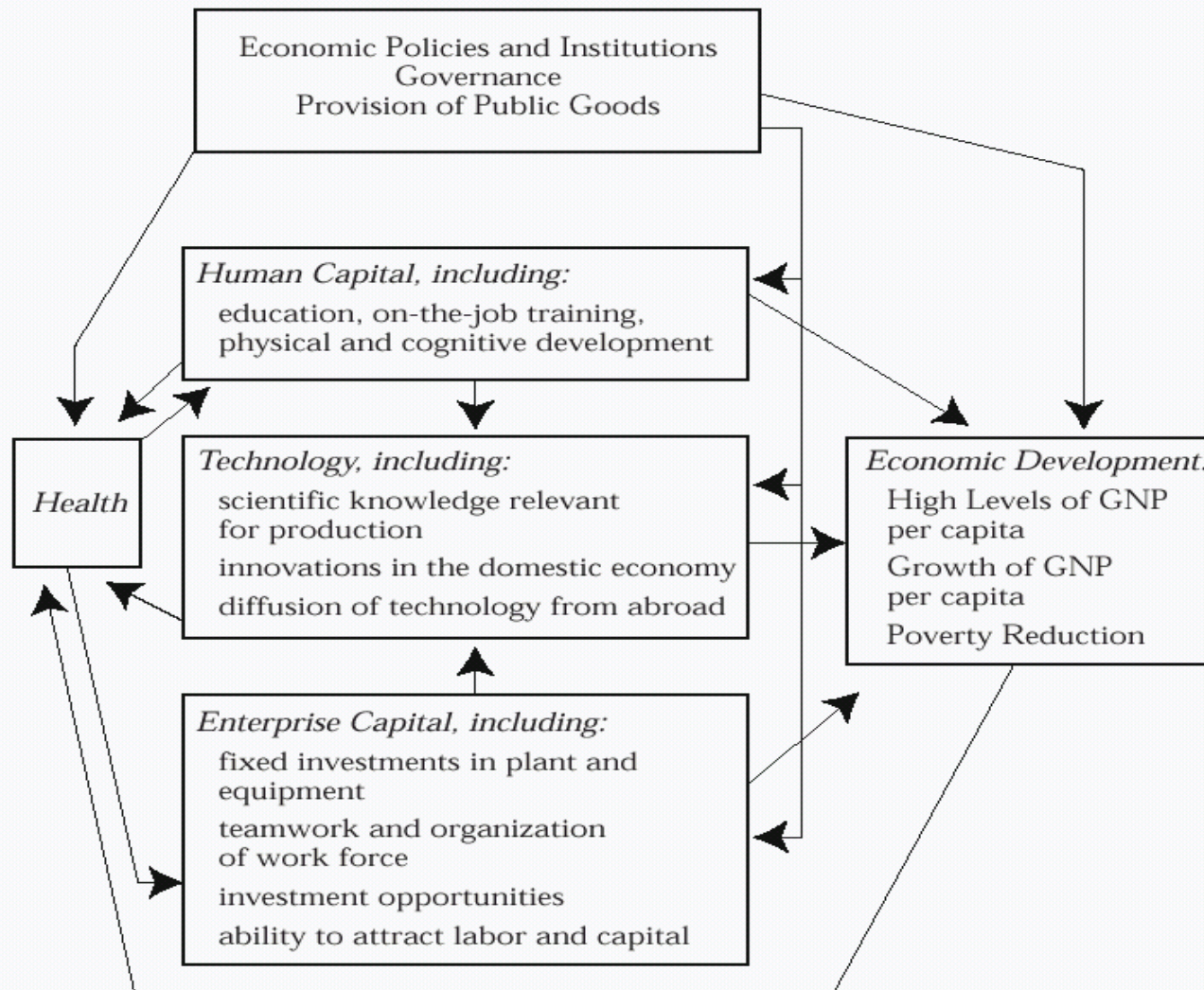
Difference Between Actual and Sustainable Number of Physicians

| GDP group | Country | Physicians per 10,000 population | | |
|---|-----------------------------|----------------------------------|-------------|--------------------|
| | | Actual | Sustainable | Excess or shortage |
| GDP less than US \$ 800 per capita | Brazil | 4.6 | 3.2 | +1.4 |
| | Egypt | 5.5 | 1.6 | +3.9 |
| | India | 2.1 | 0.6 | +1.5 |
| | Indonesia | 0.3 | 0.7 | -0.4 |
| | Iran | 3.1 | 3.1 | 0.0 |
| | Pakistan & Bangladesh | 3.9 | 1.2 | +2.7 |
| | Philippines | 3.5 | 1.3 | +2.2 |
| | Sri Lanka | 2.5 | 1.2 | +1.3 |
| GDP US \$ 800 to US \$ 2,000 per capita | Greece | 16.7 | 9.0 | +7.7 |
| | Ireland | 11.8 | 11.0 | +0.8 |
| | Romania | 13.1 | 9.0 | +4.1 |
| | Venezuela | 9.3 | 8.6 | +0.7 |
| GDP over US \$2,000 per capita | Australia | 13.9 | 26.5 | -12.7 |
| | Federal Republic of Germany | 17.7 | 29.0 | -11.3 |
| | Japan | 11.4 | 16.1 | -4.7 |
| | United Kingdom | 13.3 | 18.5 | -5.2 |
| | United States of America | 15.5 | 49.0 | -33.5 |

Source: WHO Technical Report – Migration of Physicians and Nurses (1979)

Macroeconomics and Health

Figure 1. HEALTH AS AN INPUT INTO ECONOMIC DEVELOPMENT



GDP Per-capita, Health Expenditure DALE Rankings

| Country | GDP per capita (in PPP terms - \$) | Health Expenditure per capita ranking (in \$ terms) | Health Level Ranking (DALE) |
|--|------------------------------------|---|-----------------------------|
| Low Income Countries | | | |
| Sri Lanka | 3530 | 138 | 76 |
| Indonesia | 3043 | 154 | 103 |
| Pakistan | 1928 | 142 | 124 |
| Egypt | 3635 | 115 | 115 |
| India | 2358 | 133 | 134 |
| Middle Income Countries | | | |
| Russian Federation | 8377 | 75 | 91 |
| South Africa | 9401 | 57 | 160 |
| Brazil | 7625 | 54 | 111 |
| OECD Countries | | | |
| United States | 34142 | 1 | 24 |
| France | 24223 | 4 | 3 |
| Germany | 25103 | 3 | 22 |
| Japan | 26755 | 13 | 1 |
| United Kingdom | 23509 | 26 | 14 |
| <i>Sources: The World Health Report – 2000 and UNDP Human Development Report – 2002 (UNDP)</i> | | | |

Allocation vs Prioritization

A better match

Morogoro disease burden, % of total

■ 1992-95 Years of life lost, %

■ 1996 Budget

Malaria

Childhood diseases*

Reproductive health

Immunisation

TB

Other

■ 1998 Budget

Malaria

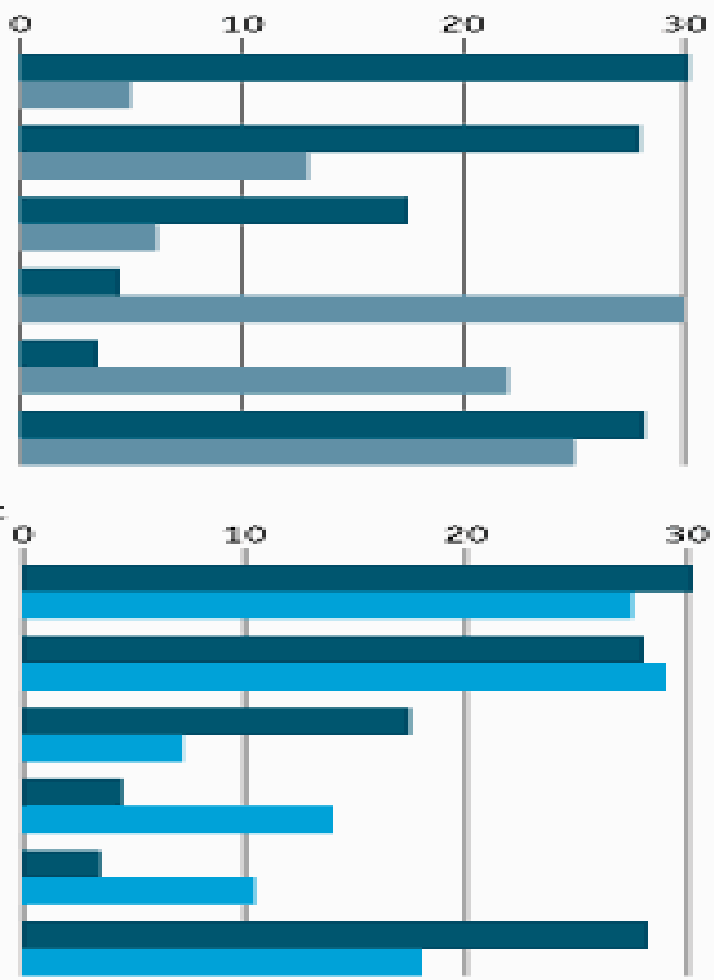
Childhood diseases*

Reproductive health

Immunisation

TB

Other



*Incl. pneumonia, diarrhoea, malnutrition, measles and malaria

Source: Tanzania Essential Health Interventions Project

Limits to Modern Medicine

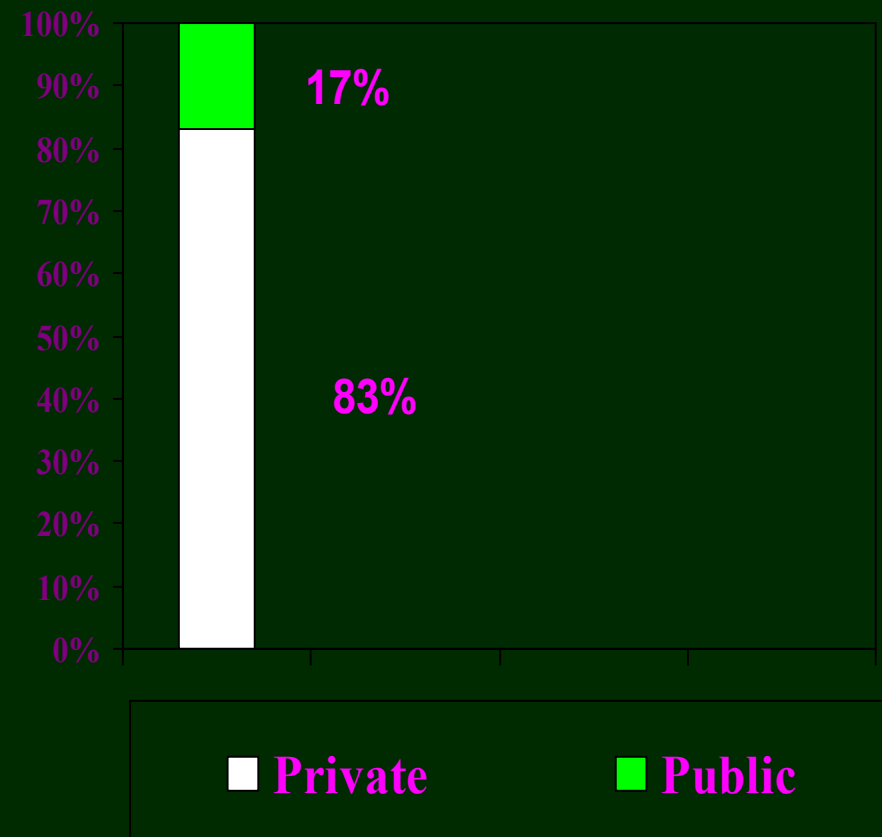
| | |
|---------------------------------|---|
| Spectacular Advances – Low Cost | Nutrition, Immunization, Antibiotics, Aseptic surgery, Maternal and child care, Healthy life styles |
| Grey Areas – High Cost | Degenerative diseases, Autoimmune diseases, Malignancies |
| Dark Areas | Idiopathic, Iatrogenic, Hospital Infections, Progressive, irreversible disorders |

Health Financing

| | 1990 | 1999 |
|--|--------------------------------|----------|
| Public health expenditure | 1.3% GDP | 0.9% GDP |
| Union budgetary allocation | 1.3% | 1.3% |
| States' budgetary allocation | 7% | 5.5% |
| Total per-capita public health expenditure | Rs 200 (15% Union, 85% States) | |

Public Health vs Total Health Expenditure

- Total Health Expenditure
5.2% GDP
- Comparable countries:
 - Cambodia
 - Burma
 - Afghanistan
 - Georgia



Public Health Expenditure among Various Countries

| Country | Public health expenditure as share of GDP | Private health expenditure as share of GDP |
|----------------|---|--|
| Norway | 6.5 | 1.1 |
| Sweden | 6.2 | 1.8 |
| Japan | 5.9 | 1.8 |
| United Kingdom | 5.9 | 1.4 |
| United States | 5.8 | 7.3 |
| Egypt | 1.8 | 2.3 |
| Sri Lanka | 1.8 | 1.9 |
| India | 0.9 | 4.3 |

Allocations in Public Health Expenditure

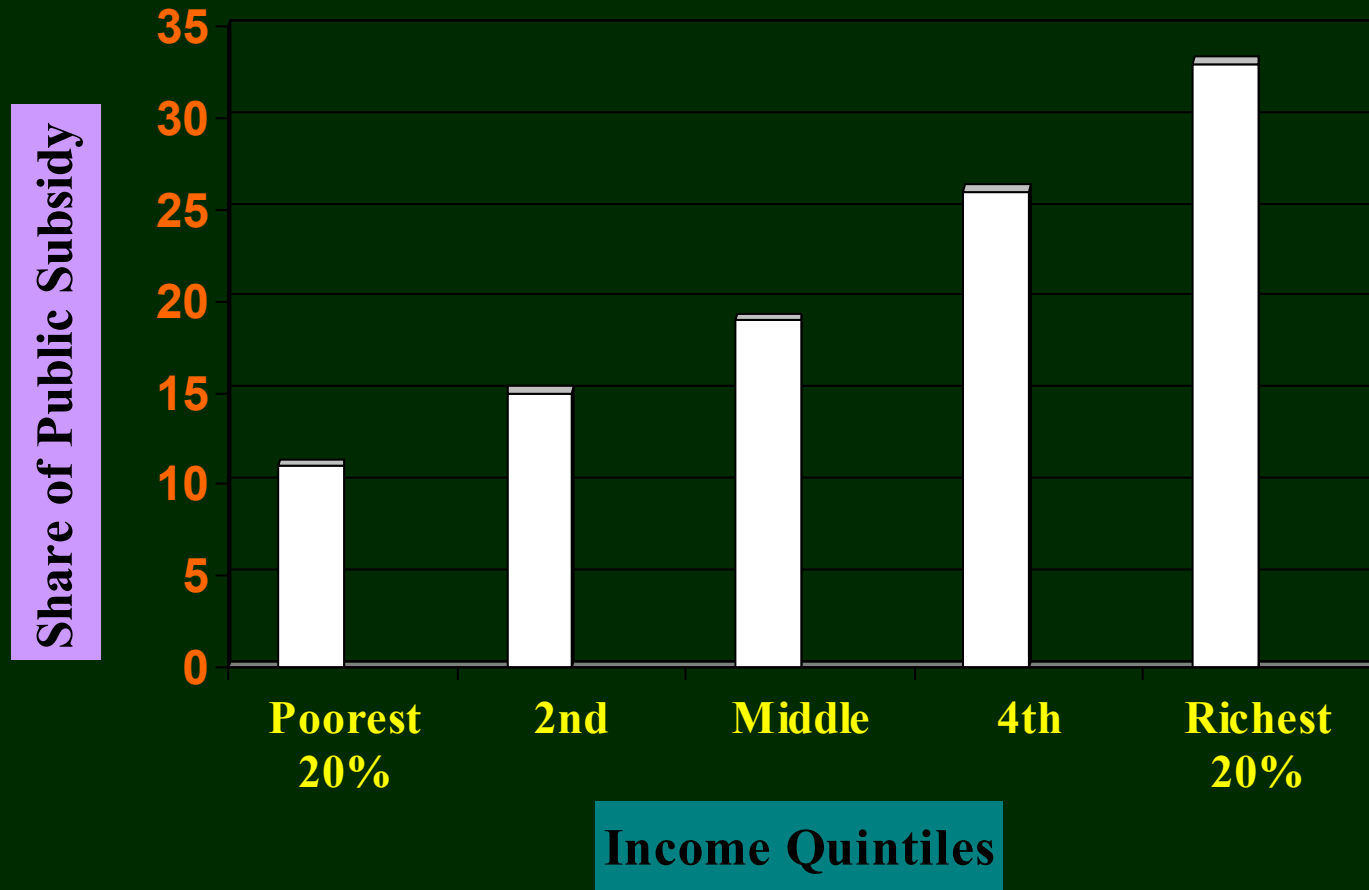
| | |
|--------------------------------|-----|
| Consumption Exp | 97% |
| Capital Exp | 3% |
| Salaries | 60% |
| Material & supplies | 35% |
| Curative Services | 60% |
| Public health & family welfare | 26% |
| Miscellaneous & Administration | 14% |

Health Financing & Inequity

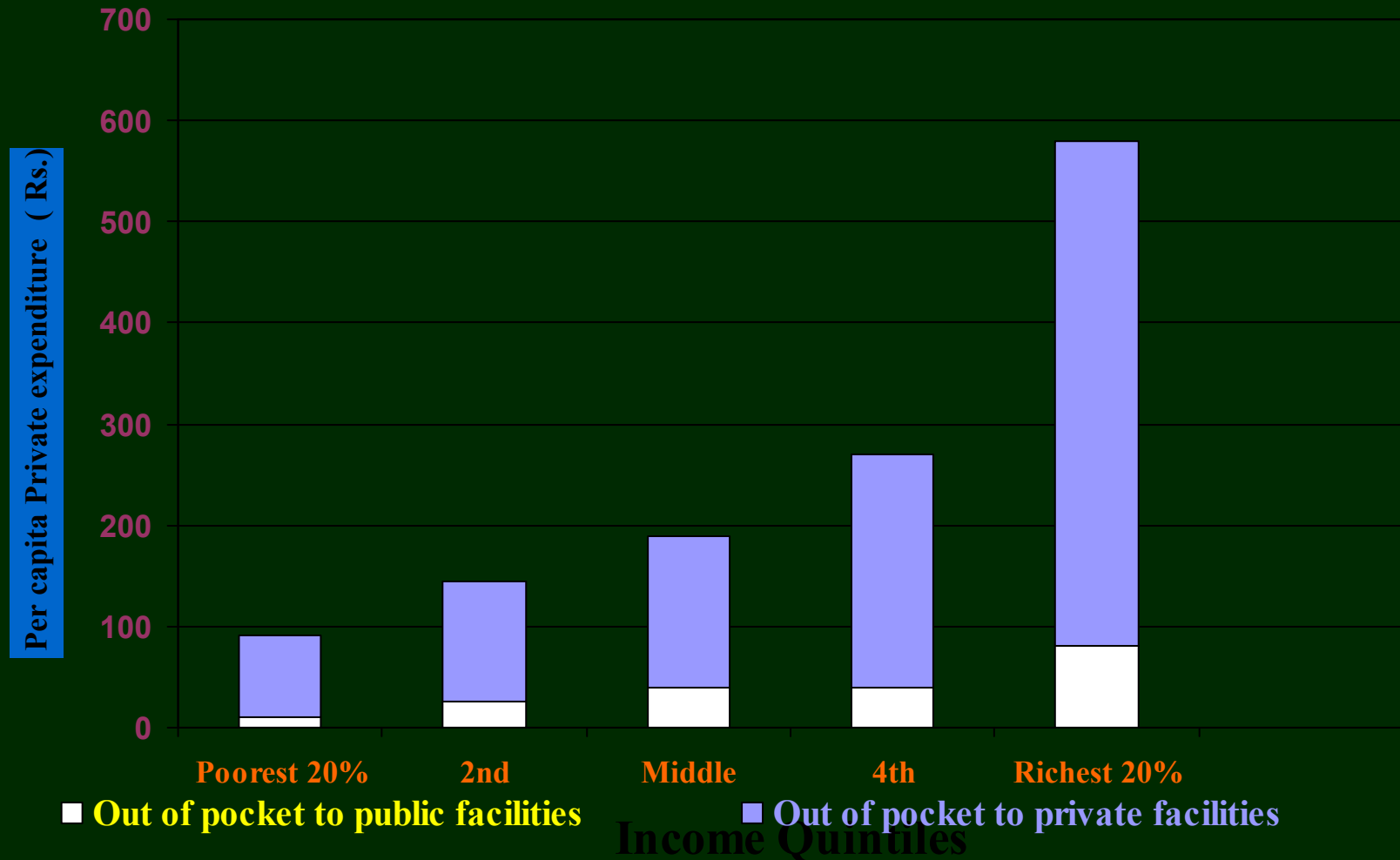
- Curative services favour the rich
- For every Re 1 spent on poorest 20% population,

Rs 3 spent on the richest quintile

Proportion of Public Expenditures on Curative Care, by Income Quintile, All India, 1995-96



Out-of-Pocket Payments for Health and Household Income, All India, 1995-96

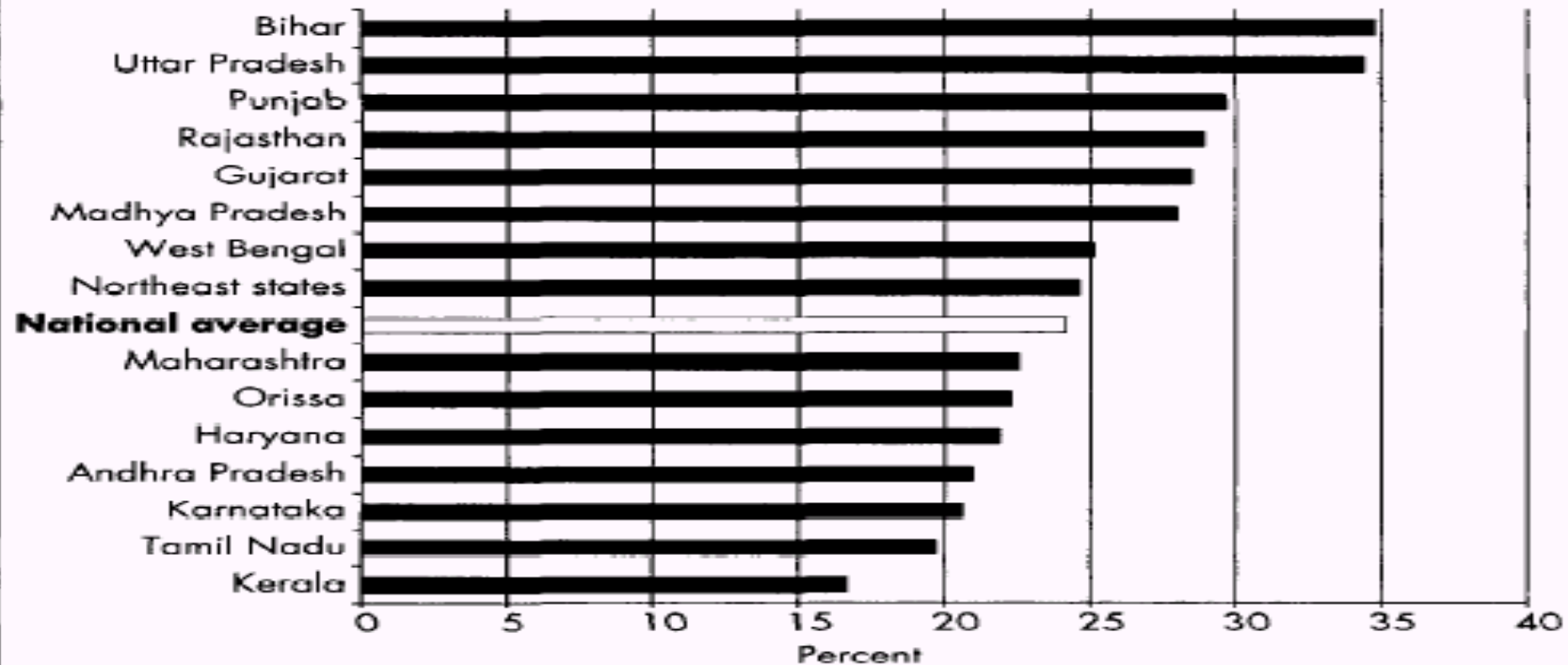


Hospitalization – Financial Stress

- Only 10% Indians have some form of health insurance, mostly inadequate
- Hospitalized Indians spend 58% of their total annual expenditure on health care
- Over 40% of hospitalized Indians borrow heavily or sell assets to cover expenses
- Over 25% of hospitalized Indians fall below poverty line because of hospital expenses

Percent of Hospitalized Indians falling into Poverty

Figure 0.2 Percent of Hospitalized Indians Falling into Poverty from Medical Costs, 1995-96



Note: Northeast states consist of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura.

Source: National Sample Survey Organisation (1998); authors' calculations.

Public – Private sector use for patient care – All India (percentage distribution)

| | Rural | | Urban | |
|-------------------------|-----------|-----------|-----------|-----------|
| | 1986 – 87 | 1995 – 96 | 1986 – 87 | 1995 – 96 |
| Outpatient care | | | | |
| Public Sector | 25.6 | 19.0 | 27.2 | 19.0 |
| Private Sector | 74.5 | 80.0 | 72.9 | 81.0 |
| Inpatient care | | | | |
| Share of public sector | 59.5 | 45.2 | 60.3 | 43.1 |
| Share of private sector | 40.3 | 54.7 | 39.7 | 56.9 |

Source: David.H.Peters, Abdo.S.Yazbeck, Rashmi R. Sharma, G.N.V. Ramana, Lant H. Pritchett, Adam Wagstaff, Better Health System For India's Poor: Findings Analysis and Options, The World Bank, 2002, Washington. p.5

Differentials in Health Status Among States

| Sector | Population BPL (%) | IMR/ Per 1000 Livr Births (1999 – SRS) | <5Mortality per 1000 (NFHS II) | Weight For Age - % of Children Under 3 years (,2SD) | MMR / Lakh (Annual Report 2000) | Leprosy cases per 10000 population | Malaria +ve Cases in year 2000 (in thousands) |
|---------------------------------|--------------------|--|--------------------------------|---|---------------------------------|------------------------------------|--|
| India | 26.1 | 70 | 94.9 | 47 | 408 | 3.7 | 2200 |
| Rural | 27.09 | 75 | 103.7 | 49.6 | - | - | - |
| Urban | 23.62 | 44 | 63.1 | 38.4 | - | - | - |
| Better Performing States | | | | | | | |
| Kerala | 12.72 | 14 | 18.8 | 27 | 87 | 0.9 | 5.1 |
| Maharashtra | 25.02 | 48 | 58.1 | 50 | 135 | 3.1 | 138 |
| Tamil Nadu | 21.12 | 52 | 63.3 | 37 | 79 | 4.1 | 56 |
| Low Performing States | | | | | | | |
| Orissa | 47.15 | 97 | 104.4 | 54 | 498 | 7.05 | 483 |
| Bihar | 42.60 | 63 | 105.1 | 54 | 707 | 11.83 | 132 |
| Rajasthan | 15.28 | 81 | 114.9 | 51 | 607 | 0.8 | 53 |
| UP | 31.15 | 84 | 122.5 | 52 | 707 | 4.3 | 99 |
| MP | 37.43 | 90 | 137.6 | 55 | 498 | 3.83 | 528 |

Source: National Health Policy, 2002

Major Indian States, by Stage of Health Transition and Institutional Capacity

| Stage of Transition, Degree of Capacity | States | India's Population (percent) |
|--|---|------------------------------|
| Middle to late transition, moderate to high capacity | Kerala, Tamil Nadu | 9.1 |
| Early to middle transition, low to moderate capacity | Maharashtra, Karnataka, Punjab, West Bengal, Andhra Pradesh, Gujarat, Haryana | 39.1 |
| Very early transition, very low to low capacity | Orissa, Rajasthan, Madhya Pradesh, Uttar Pradesh | 33.1 |
| Special cases: instability, high to very high mortality, civil conflict, poor governance | Assam, Bihar | 13.3 |

Note: Major Indian states are those with a population of at least 15 million. The estimates were made before bifurcation, so Bihar includes the recently created state of Jharkhand, Madhya Pradesh includes Chattisgarh, and Uttar Pradesh includes Uttaranchal

Source: David.H.Peters, Adbo.S.Yazbeck, Rashmi R. Sharma, G.N.V. Ramana, Lant H. Pritchett, Adam Wagstaff, Better Health System for India's Poor: Findings Analysis and Options, The World Bank, 2002, Washington. p.8

Strengths & Opportunities

- Large skilled health manpower
- Significant research capability
- Growing hospital infrastructure
- Mature pharmaceutical industry
- Democratic system and public discourse
- Increasing demand for health services
- Willingness to pay for health
- Breakthrough on population front (TN, AP etc)
- Effective military style campaigns (smallpox, pulse polio)
- Wide network of RMPs

Challenges of the Future

- Immunization coverage (TB: 68%, Measles: 50%, DPT: 70%, overall : 33%)
- Four major infectious diseases: Malaria, TB, HIV/AIDS, RHD
- Preventable blindness
- Population control – large northern states
- Public health expenditure share
- Sanitation (70% households without toilets)

Challenges of the Future

- Accountability in public health care
- High out-of-pocket health expenditure
- Alternative systems – integration
- Unqualified PMPs
- Mounting cost of hospital care
- Decline in family care – over-specialization
- Ideal vs Optimal care
- Health manpower training – inadequacies
- Regional inequalities

Critical Issues

- How to involve community in rural health care
- How to provide effective and affordable family care to urban populations
- How to promote public-private partnerships
- How to extend tertiary care to poor

Lessons of Past Experience

- More expenditure need not mean better health
- Risk-pooling necessary for private care : but not feasible without compulsion and large organized labour
- Consumer choice and producer competition vital to reduce costs and improve efficiency
- Public health and private health are complementary
- Future health care should address demographic transition

Lessons of Past Experience

- Community ownership, decentralization and accountability – key to better delivery
- Better health care delivery should be linked to massive employment generation
- Low-cost – high-impact solutions are possible
- We have great strengths and abilities which can be leveraged at low cost

Agenda for Action

- Raising an Army of Community Health Volunteers
- Strengthening the Primary Health Care Delivery System
- National Mission for Sanitation
- Taluk / Block Level Referral Hospitals for Curative Care
- Risk-Pooling and Hospital Care Financing
- Eight Task Forces

Raising an Army of Community Health Workers

- Women from the community
- One VHW per 1000 population (a million gainfully employed)
- Urban Health Worker (UHW) in areas inhabited by low income and poor populations.
- 3 months' training (Union) + health kit + refresher courses
- Accountable to village Panchayat
- Honorarium of Rs.1000 / month
 - User charges as prescribed by Panchayat
 - Incentives for performance

Raising an Army of Community Health Volunteers

Fund Requirements

- Training : Rs.200 crores per year for training of VHWs/UHWs spread over three years – borne by the Union
- Honorarium : Rs 1200 crore per annum towards honorarium (shared equally by Union and states)
- Health kits : Rs 100 crore per annum – health kit, a few generic drugs etc. (shared equally by Union and states)
- Refresher workshop: Rs. 50 crore per annum – 2 refresher workshops – 3 days each (shared equally by Union and states)

Strengthening of Primary Healthcare Delivery System

- Addressing shortage of doctors in 8 states
- Addressing shortage of other paramedical staff
- Direct Union Financing of Male MPWs
- Provisioning of 35 essential drugs in all PHCs
- Intensification of ongoing communicable disease control programmes
- Urban health posts
- New programmes for the control of non-communicable diseases
- Upgradation of PHCs in order to provide 24 hour delivery services

Strengthening the Primary Health Care Delivery System

| | | |
|--|---|----------------------|
| Male MPWs | : | Rs. 828 crores/year |
| Supply of listed drugs | : | Rs. 500 crores/year |
| Intensification of ongoing disease control programmes | : | Rs. 500 crores/year |
| Urban health posts | : | Rs. 200 crores/year |
| Control of non-communicable diseases | : | Rs. 260 crores/year |
| Upgradation of PHCs for 24-hour delivery | : | Rs 480 crores /year |
| Supply of auto-destruct syringes | : | Rs 60 crores / year |
| | | ----- |
| Total | : | Rs. 2828 crores/year |
| | | ----- |

National Mission for Sanitation

- Great Sanitation Movement
- Health, hygiene, dignity and aesthetics
- A toilet for every household
- 100 million toilets in 5 years
- 50 million units with private funds + 50 million with subsidies

National Mission for Sanitation

Fund Requirements

- 50 million toilets - Rs. 12000 crore – Union+States(one-time allocation)
- The Union's share will be Rs 8000 crore. Spread over 5 years at 10 million toilets a year, this will mean an allocation of Rs 1600 crore per year for the Union and Rs 800 crore per year for all states put together.
- Annual fund requirement for 5 years : Rs. 2400 crore.
- In addition, a national public health education programme and propagation of technology may cost Rs 100 crores per year. The Union may take up this campaign.
- Annual fund requirement for 5 years : Rs. 100 crore

Taluk / Block Level Referral Hospitals

Referral Hospitals

- One 30-50 bed referral hospital for every 100,000 population
 - Staff – One Civil Surgeon, 3 or 4 Civil Assistant Surgeons, a dentist, 7 or 8 staff nurses and 2 paramedical personnel
- To be controlled by the local government (district panchayat or town/city government).
- Recruitment, appointment, control and financial provision by local government, with full assistance from state and Union governments in the form of grants

Taluk / Block Level Referral Hospitals for Curative Care

Fund Requirements

- Capital cost of 7000 CHCs at Rs. 1 crore each =
Rs. 7000 crores
- Annual cost (spread over five years) = Rs. 1400
crores

Risk Pooling and Hospital Care Financing

- Traditional health insurance is not an answer for health care requirements of poor
- Most of the disease burden is a consequence of failure of primary care
- Public health system is in disarray
- National health insurance will further strengthen private providers at the cost of public exchequer

Health Insurance – Objectives

- Strengthen public health care
- Raise resources innovatively and make the programme sustainable.
- Ensure access and quality of service to those with no influence or voice
- Create incentives and risk-reward system to promote quality health service delivery
- Encourage competition among health care providers
- Ensure choice to patients among multiple service providers
- Encourage public-private partnerships

Risk-Pooling and Hospital Care Financing

- Financing by the Union, State and citizens (those above poverty), pooling Rs. 90-100 per capita
- Citizens' share to be collected by the local governments as cess/tax
- Pooling of the money at the District level with a new authority – District Health Board (DHB) under the overall umbrella of elected local governments
- Patients will have a choice to visit any public hospital
- There will be no separate budget for wages and maintenance, or new equipment
- The public hospital care costs will be reimbursed by DHB / money follows the patient
- Reimbursement will be based on standard costs and services

Risk-Pooling and Hospital Care Financing

- Where necessary DHB will involve private providers on the same basis
- A phased programme will be evolved for existing public hospitals to give time for transition
- A part of the fund (15%) will be separately administered for tertiary care / teaching hospitals at the State level
- Patients can go to tertiary hospitals only in emergencies or upon referral by secondary care hospitals
- All vertical programmes will be integrated and controlled at DHB level
- There will be an independent Ombudsman in each district
- There will be regular health accounting to trace expenditure flows, analyze costs and benefits, and demand and supply
- This will be the precursor of a National Health Service which serves all people at low cost

Risk-Pooling and Hospital Care Financing

Estimated population covered : Rs. 60 crore

Per capita cost of risk pooling (hospital costs) : Rs. 100 / year

Total cost * : Rs. 6000 cr. / year

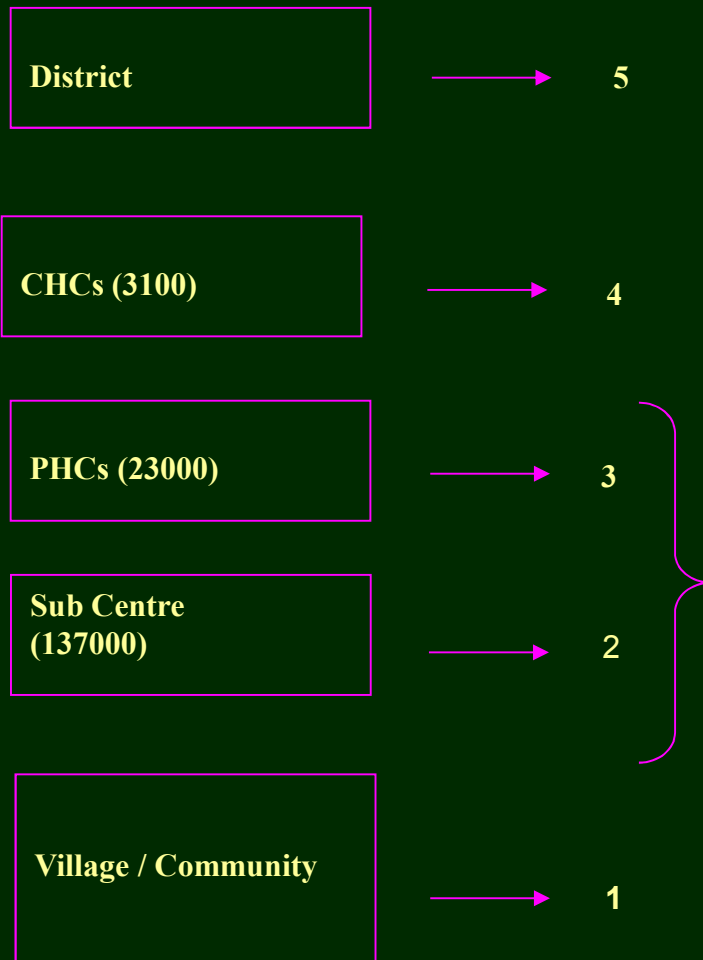
* This will be in addition to the current allocations.

Task Forces

- Reproductive and child health and birth control in high fertility states
- Convergence and integration of services
- Medical education and Medical Grants Commission
- Training of Voluntary Health Workers
- Regulation of medical care and medical ethics
- Regulation of medical profession
- Accreditation and integration of rural medical practitioners (RMPs) into health system
- Health financing mechanisms

Interventions Proposed

Current Structure



Interventions Proposed

**District Health Board
+ District Health Fund
+ Integrate all vertical programs**

**7000 New CHCs
+ Funding only for services delivered**

**Supply of drugs
+ Improvement of facilities
+ Strengthening programs**

Multipurpose Health Workers (Fill all vacancies) + Drug supply

**100 million household toilets
(50 million with government subsidy)
1 million VHWs / UHWs + Training + Kits**

Total Additional Funding Requirement for Health Care Interventions

The above five recommendations are in line with the commitments made under the NCMP in health sector. As stated earlier, they are in addition to the on-going programmes and the Tenth Plan commitments. The total additional costs (excluding capital costs for sanitation and referral hospitals) will be of the order of Rs. 14,000 crore per annum – about 0.35% of GDP

- The total estimated financial outlay of these proposals is as follows:
 - Community Health Workers (Recurrent cost) Rs. 1550 crores/year
 - Strengthening Primary Health care (Recurrent cost) Rs. 2828 crores/year
 - National Sanitation Mission (Capital cost) Rs. 2500 crores/year
 - First Referral Hospitals (Capital cost) Rs. 1400 crores/year
 - Risk-pooling and Hospital care financing
(Recurring cost) Rs. 6000 crores/year
-
- Total Rs.14278 crores/year
-

“Politics encircles us today like the coil of a snake
from which one cannot get out, no matter how
much one tries ”

- Mahatma Gandhi