

**Constraints to Scaling Up Health Related MDGs:
Cost, impact and financial gap analysis
-An analysis by WHO and partners**

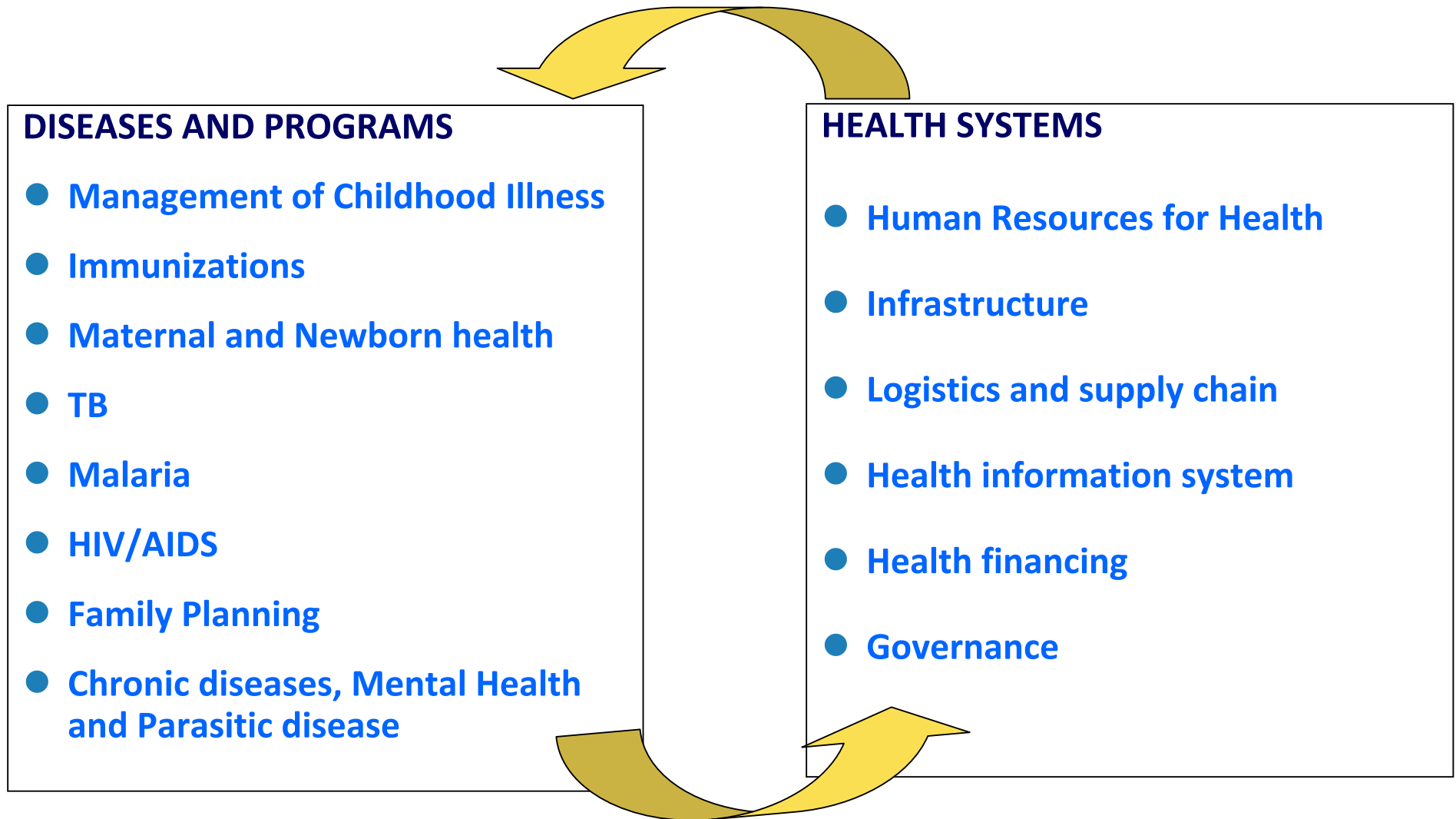
**Background to the Working Group 1 report
Taskforce on Innovative International Financing for Health Systems**

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**World Health
Organization**

Overall approach of WHO study



Process

WHO/HSF coordinated the work with technical inputs from:

- Health system scale-up
 - Essential Health Technologies
 - Essential Medicines and Pharmaceutical Policies
 - Health Policy, Development and Services
 - Human Resources for Health (for the health workforce)
 - Other health system inputs were obtained from the Optimize Project of the Immunization, Vaccines and Biological Department and the Health Action in Crisis cluster.
 - USAID Deliver Project
 - Health Metrics Network
- Disease-specific Scale-up
 - Child and Adolescent Health and Development
 - Making Pregnancy Safer
 - Immunization, Vaccines and Biologicals
 - Global Malaria Programme
 - Essential Medicines and Pharmaceutical Policies
 - Stop TB Partnership
 - UNFPA
 - UNAIDS
 - Futures Institute.
- Inputs from experts/individuals



49 low income countries

- Total population 1.4 billion
- GNI per capita of US\$ 935 or less in 2007
- Average total health expenditure per capita in 2006: US\$ 22 (from \$ 5 to \$58)
 - 17% of THE from external resources (2 to 66%)
- Of these 49 low income countries, 33 are in sub-Saharan Africa and 29 are described as fragile states by OECD.
- Fourteen of these countries have high HIV prevalence

General Methodology-Cost

1. Determine the current status of the country; classify as needed
2. Determine the target for each country/class by 2015
3. Obtain inputs from literature/country experiences/experts to go from current to target status by 2015
4. Attach prices (2005 USD from WHO-CHOICE database)
5. Aggregate and recheck/triangulate calculations

To determine current status

- WHO databases on diseases-specific coverage rates of health interventions
- Existing human resources: WHO database
- Existing infrastructure: WHO CHOICE dataset
- Governance: Country Policy and Institutional Assessment (CPIA) domain 9 score (1-6) on building human resources (World Bank).
- Logistics: Logistics Performance Indicator (World Bank); adjusted
- Health Information system: HMN assessment framework
- Health financing: expert knowledge

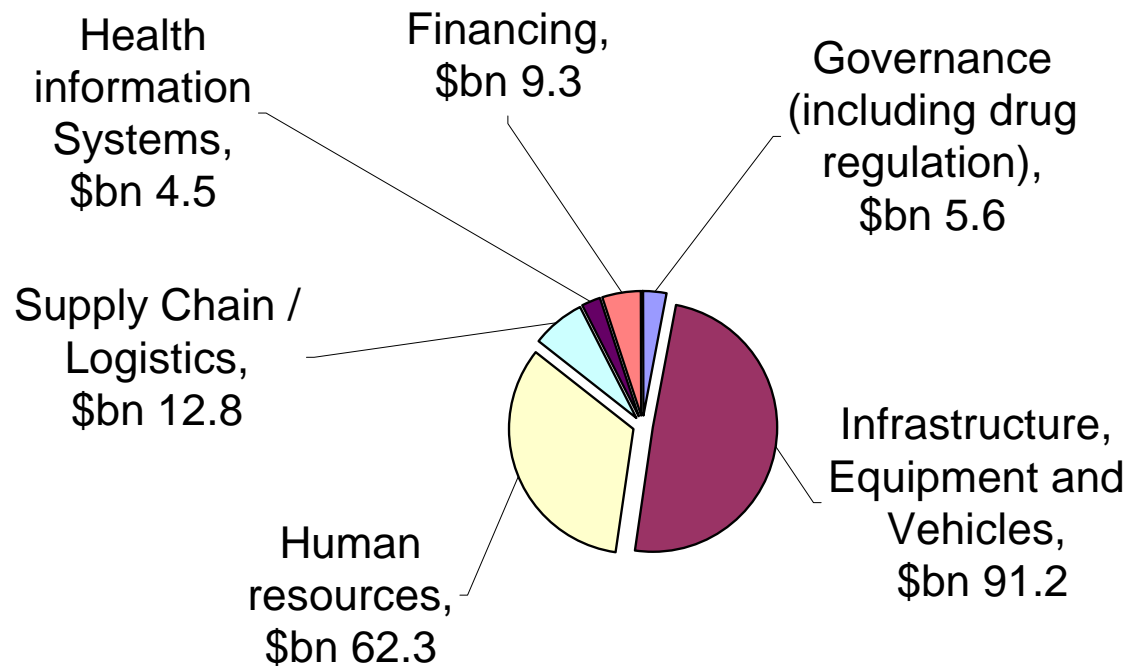
General Methodology- Impact

- Health outcomes follow MDG indicator framework
- Compliance with approaches supported by the recognized Epidemiology Reference Groups.
- Impact refers to *additional* lives saved by scaling up coverage beyond current coverage.
- Counterfactual is projected outcomes over time with current coverage.
- No integrated model available to allow for modelling the joint benefits of scaling up the entire package of health interventions together. The modelling was therefore done separately for different disease areas, using consistent approaches and taking into account synergies when possible.

● Results

In US\$ billions	2009	2010	2011	2012	2013	2014	2015	Total	%
Programme and disease									
Management of childhood illness*	0.14	0.16	0.24	0.35	0.45	0.53	0.66	2.53	1%
Immunization	0.66	0.67	1.04	0.91	1.10	0.91	0.97	6.27	2%
Maternal health	0.70	0.91	1.21	1.50	2.03	2.51	2.97	11.82	5%
Family planning	1.00	1.22	1.46	1.39	1.32	1.16	0.88	8.43	3%
Tuberculosis	0.61	0.67	0.67	0.69	0.70	0.71	0.73	4.78	2%
Malaria	1.04	1.05	0.94	1.17	0.95	0.96	1.14	7.25	3%
HIV / AIDS	0.56	1.12	1.65	2.17	2.69	3.23	3.73	15.13	6%
Essential drugs (NCD, MH, parasitic diseases)	0.53	0.63	0.83	1.10	1.36	1.84	3.17	9.48	4%
Subtotal	5.23	6.43	8.03	9.29	10.62	11.85	14.25	65.70	26%
Health system building block									
Governance (including drug regulation)	0.62	0.60	0.83	0.84	0.85	0.92	0.90	5.56	2%
Infrastructure, equipment and vehicles	8.34	12.84	17.33	18.45	13.09	11.42	9.75	91.23	36%
Human resources for health	3.28	5.31	7.24	9.30	10.61	12.33	14.20	62.28	25%
Supply chain / logistics	1.18	0.86	1.41	2.08	2.14	2.63	2.51	12.82	5%
Health information systems	0.37	0.94	0.44	0.70	0.69	0.69	0.69	4.52	2%
Health financing	0.32	0.49	0.73	1.13	1.55	2.26	2.85	9.34	4%
Subtotal	14.11	21.04	27.98	32.50	28.94	30.26	30.90	185.73	74%
Total (US\$ billions)	19.34	27.47	36.01	41.79	39.56	42.11	45.16	251.44	100%
Total per capita (US\$)	14.20	19.75	25.35	28.82	26.72	27.87	29.30	172.01	

Estimated HSS Costs Required to Achieve the Health MDGs by Building Block: 2009-2015



Benchmarking

Countries	% Burden of disease (DALYs, 2004)	Total health expenditure /capita (US\$, 2005)	Hospital beds /10,000 population (latest year available)	Nurses/midwives per 1,000 population (latest year available)
High income	8%	4012	49	8.8
High middle income	8%	412	42	3.9
Low middle income	30%	72	24	2.5
Low income	54%	22	13	1.1
Expected achievements in 49 countries with scale-up as modelled		54	22	2.3

Source: WHO data

Summary

- This is a desk exercise; countries need to do the work themselves: plan, prioritize and cost
- There is an huge need to scale-up health systems: 75% of total costs
- Results in health systems in low income countries in 2015 which barely meets what low middle income countries already had in 2005
- Most countries could achieve the health MDGs

Publications on Global Price Tags for programme areas and diseases

- **[Financial resources required for tuberculosis control to achieve global targets set for 2015.](#)** Floyd K, Pantoja A. Bulletin of the World Health Organization, 2008, 86:568-576.
- **Estimated global resources needed to attain international malaria control goals.** Kiszewski A, Johns B, Schapira A, Delacollette C, Crowell V, Tan-Torres T, Amenshewa B, Teklehaimanot A, Nafo-Traore F. Bulletin of the World Health Organization, 2007, 85:623-630.
- **A financial road map to scaling up essential child health interventions in 75 countries.** Stenberg K, Johns B, Scherpbier RW, Tan Torres Edejer T. Bulletin of the World Health Organization, 2007, 85:305-314.
- **Estimating the costs of achieving the WHO–UNICEF Global Immunization Vision and Strategy, 2006–2015.** Wolfson LJ, Gasse F, Lee-Martin S-P, Lydon P, Magan A, Tibouti A, Johns B, Hutubessy R, Salama P, Okwo-Bele J-M. Bulletin of the World Health Organization, 2008, 86:27-39.
- **Estimated global resources needed to attain universal coverage of maternal and newborn health services.** Johns B, Sigurbjörnsdóttir K, Fogstad H, Zupan J, Mathaid M, Tan-Torres Edejer T. Bulletin of the World Health Organization, 2007, 85:256-263.
- **Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use.** Asaria P, Chisholm D, Mathers C, Ezzati M, Beaglehole R. Lancet, 2007, 370:1944-1953.
- **Prevention of cardiovascular disease in high-risk individuals in low-income and middle-income countries: health effects and costs.** Lim SS, Gaziano TA, Gakidou E, Reddy KS, Farzadfar F, Lozano R, Rodgers A. Lancet, 2007, 370:1954-1962.
- **Cost of scaling up mental healthcare in low- and middle-income countries.** Chisholm D, Lund C, Saxena S. British Journal of Psychiatry, 2007, 191:528-35. **What countries need: Investments needed for 2010.** UNAIDS (2009).