

 All for universal health coverage

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As the USA engages in what promises to be a vibrant debate over how the world's most costly health-care system can efficiently and equitably provide access to quality health services to all American people, controversies about universal health coverage are brought into high relief, not only in the USA, but also worldwide. Since the mid-20th century, most nations have signed many accords, establishing that provision of health is a fundamental human right;^{1–4} health for all should be not only an aspirational target but also an essential framework for the United Nations system;^{5,6} international donor mechanisms should include support for essential health systems and health-workforce development;^{7,8} poor population health contributes to social and economic instability and undermines development efforts;⁹ and specific targets for country achievements in health should be set, and funded, through international instruments.

The world community is at a crucial juncture in implementation of all these understandings and agreements, each of which underscores the need for, and utterly depends upon, extending universal health coverage. The nearly US\$25 billion yearly enterprise¹⁰ that is global health features a long list of bold, targeted programmes, from child vaccination efforts to appropriate treatment of tens of millions of people now living with HIV/AIDS. Yet, the full bill for health spending in the world may already surpass \$6 trillion or 10% of the global gross domestic product (GDP), and the financing challenges in low-income and middle-income countries will increasingly be domestic, just as they are in high-income countries.¹¹ There is increasing appreciation of the links between disease and population health and nations' security, foreign policy, economic, and general social wellbeing.^{12–14} Amid the unfolding H1N1A influenza pandemic, political leaders everywhere are appreciating the strong link between health systems in low-income and middle-income countries, and the ability of the global scientific community to acquire real-time assessments of epidemic spread and clinical effect. And new threats to health arising from climate disruption suggest the need for vast infrastructures of adaptation to population-scale health disasters resulting from rising global carbon dioxide concentrations: catastrophic weather events, drought, heatstroke and dehydration, new infectious diseases emergence, food and malnutrition crises, and human migrations.¹⁵

On an immediate basis, the global campaign to provide antiretroviral drugs to people with HIV living in low-income countries, coupled with the worldwide increase in cancer, cardiovascular disease, diabetes, and other long-term management ailments, have prompted a shift in thinking about global health. For decades, global health referred mainly to prevention of infectious

diseases and epidemic control. Campaigns nowadays increasingly address lifelong interventions that need permanent systems of medical assessment and treatment in addition to population approaches to health promotion. In the 20th century global health world, vaccination was a dominant approach, often administered in one-off campaigns. The 21st century exigencies for global health dawned in Durban, South Africa, at the International AIDS Conference, amid demand for universal access to antiretroviral drugs, and the lifelong disease management required to sustain the life-sparing effects of the drugs.

As WHO Director-General Margaret Chan has correctly pointed out, "I think we can now let a long-standing and divisive debate die down. This is the debate that pits single-disease initiatives against the agenda for strengthening health systems." Chan continued in her address in June, 2009, "As I have stated since taking office, the two approaches are not mutually exclusive. They are not in conflict. They do not represent a set of either-or options. It is the opposite. They can and should be mutually reinforcing. We need both."¹⁶

Debate has emerged, pitting—we believe, incorrectly—health-systems support against targeted health campaigns. In truth, development of systems capable of delivering health, generally, or specifically targeted campaigns and health initiatives, all rely on the existence of health financing mechanisms that offer universal access to health. The specific nature of such financing schemes and service delivery models will vary, dependent on nations' economic and cultural norms. To assume that universal health coverage necessarily requires a single-payer government mechanism would be a mistake, and adherents to that position doom the people of the poorest nations to generations of medical deficiency. In classic terms, debates may be framed as the Bismarck model versus the Beveridge model, but this dichotomy is increasingly viewed as being as false as that which seeks to pit vertical schemes of health against horizontal.¹⁷ Whether a nation chooses a mixed economy model of coverage, single-payer mode, donor-issued voucher mechanism, or other innovative models of universal financing is not the issue; provision of universal health coverage is the issue facing the entire global health construct. Sadly, for most of the world's populations universal health coverage remains a mirage, blurred further out of focus by the present world financial crisis.

In the USA, for example, where spending on health topped \$2.4 trillion in 2008, or 17% of GDP,¹⁸ an estimated 47 million citizens have no health coverage whatsoever, and another 25–45 million are covered by insurance that is so inadequate that major medical events may cause family bankruptcy (panel). Studies in the USA show that at least half of all bankruptcies filed by American families

in 2005 were eventuated by medical events and catastrophic health expenditures,^{27,28} and about a quarter of all home foreclosures filed in 2007 (before the world financial crisis) were the result of the inability to meet mortgage payments because of such costs.²⁹ The USA is projected to spend \$4.1 trillion by 2016, and 25% of GDP in 2025 on health.^{30,31} Health spending is also growing at alarming rates in other countries of the Organisation for Economic Cooperation and Development.³² But the dilemmas of health-care financing for rich countries are less of a global concern than are the tragic failures witnessed in poor and emerging market nations.

For many people living in low-income countries, health services are obtained through out-of-pocket expenditures. Globally, such costs account for 19% of expenditure on health.³³ For low-income countries such as Bangladesh, Cambodia, Ghana, India, Pakistan, or Vietnam, it accounts for more than 50% of the total health expenditures.³⁴ High out-of-pocket expenditure restricts long-time economic survival³⁵ and leads to further poverty and impoverishments. In a review of household expenditure surveys from 89 countries, Carrin and colleagues³⁶ noted that due to the various charges associated with accessing health-care services, 44 million people face severe financial hardships and another 25 million are pushed into poverty every year. High out-of-pocket expenditures also prompt parents to withdraw children from schooling, using education fees to cover medical costs as necessary.⁹

Governments have missed opportunities to create rational health financing with prepaid risk pools, whether public or private, as exist in most high-income countries. And donors have shown little inclination to support such schemes. Although overall global health spending soared from \$5.6 billion in 1990, to \$21.8 billion in 2007, general health-sector development assistance has essentially remained level during that period, and both public and private donors have shown little interest in health-care financing or infrastructure.³⁷ In the meantime, health spending is growing at unprecedented rates in countries of low and middle income, even as some governments try to restrict their health budgets. As a rule, public spending has lagged well behind private expenditures, and the poorest people worldwide pay the highest percentages of their wealth for health,³⁸ often through inefficient and regressive out-of-pocket payments. This perverse economic trend—in which the poorest people have the most costly care, as a percentage of personal income and without the benefits of health insurance or social protection—is a major contributor to maternal mortality and to parental decisions denying education to girls.³⁹ Conversely, introduction of universal health-financing schemes has profoundly improved performance in other social sectors, such as education, and lowered bankruptcy filings and family budgetary crises.⁴⁰

This cycle of illness, impoverishment, and further illness is best interrupted with prepayment of health

Panel: Difficulties with estimation of number of people in USA without health coverage

Estimates of the numbers of American people without health coverage, or grossly underinsured by present plans, vary widely and are subject to fluctuation based on unemployment rates and political debate. No published estimates reflect the effect of the 2008–09 economic downturn and high US unemployment rates. Families USA, a liberal advocacy group, undertook a poll which found that 86.7 million American people were without health insurance at some time during 2007 or 2008—most, for more than 6 months.¹⁹ The US Census Bureau estimated that during 2007, before the financial downturn, 45.7 million American people were without coverage.^{20,21} An independent analysis reckons that there will be 52 million uninsured American people by the end of 2009.²² Estimates of the size of the underinsured population depend, partly, on the definition used in describing insufficient coverage. One study finds that between 2003 and 2007, there was a 60% increase in underinsurance, leaving 25 million Americans with excessive out-of-pocket payments, despite paying for insurance.²³ If underinsurance was defined as coverage that needed families to spend more than 10% of yearly household income on health (out-of-pocket costs) the total in 2003 was 48.8 million American people.²⁴ With a definition of underinsurance as a state in which the coverage fails to adequately cover the costs of doctor visits, treatments, and medicines, Consumer Reports estimates that 45.2 million American people are underinsured.²⁵ The share of bankruptcies attributable to medical problems (62.1%) rose by 50% between 2001 and 2007.²⁶

costs through universal health coverage. The 58th session of the World Health Assembly in May, 2005, endorsed a resolution urging its member countries to work towards sustainable health financing, defining universal health coverage as access for all to appropriate health services at an affordable cost. The World Health Assembly also urged countries to strive for achievement of universal health coverage by using, on the basis of their specific contexts, a mix of prepayment systems including tax-based financing and social health insurance.⁴¹

A report (figure) published by the Social Security Department of the International Labor Organization listed its member countries according to formal total coverage by different types of health insurance, including those provided by the State; by social, mutual, and private health insurance; and by employers. On the basis of their definition, nearly 50 countries have attained near universal coverage. Yet few have done so in Africa, Asia, and the Middle East. Of the 32 countries in Sub-Saharan Africa for which data were available, 12 did not have any coverage, 11 had fewer than 10% coverage, and nine had more than 10%. In the countries with more than 10% coverage, Gambia had 99.9%, Gabon 55%, Kenya 25%,

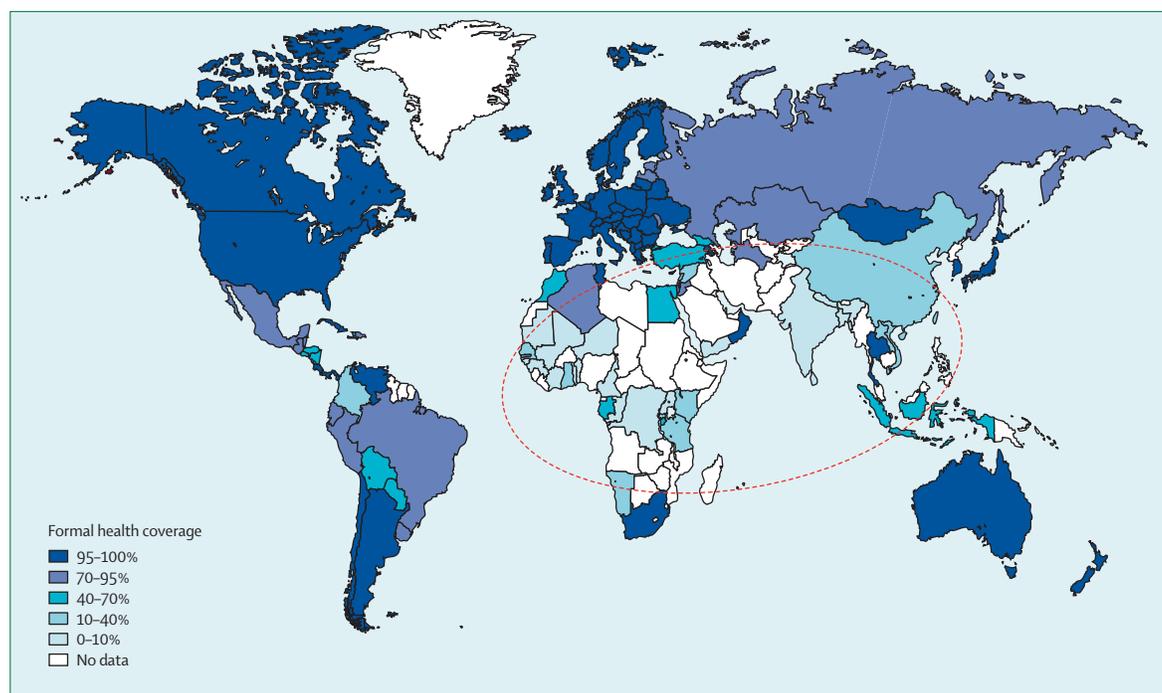


Figure: Extent of universal coverage worldwide

The encircled region has the poorest rate of health coverage in the world. International Labor Organization defined coverage as the population formally covered by social health protection (eg, under legislation, without reference being made to effective access to health services, quality of services, or other dimensions of coverage), explaining the depiction of the USA and South Africa. Source: data compiled by the International Labor Organization, 2008, from multiple sources; mapping by the Results for Development Institute (R4D).

Namibia 22.5%, and Rwanda 36.6% (although coverage for this country has recently improved through a national system of *Mutuelles*). Of the five south Asian countries listed, Bangladesh had 0.4%, India 5.7%, Nepal 0.1%, Pakistan 0%, and Sri Lanka 0.1%.³⁴

As the US example shows, vast wealth does not ensure health, and attaining universal coverage is a complicated affair. Moreover, direct links cannot be made between the amounts of monies spent by states (either per head, as a percentage of national GDP, or in absolute total sums) on health and outcomes achieved in the standards of population or individual health. Scrutiny of a dozen nations with highly divergent health systems (or lack thereof), and per head yearly spending ranging from US\$12 to \$4631 shows no discernable correlation between expenditures and health outcomes (table). In particular, the outcome similarities between Costa Rica, Cuba, and the USA, in view of their logarithmic spending differentials and disparate systems of delivery and financing, are striking. It is tempting to conclude that US outcomes, despite large expenditures, are similar to those in the two Latin American countries because the US has less than 75% population health coverage, versus universal coverage in Costa Rica and Cuba.

In low-income countries, the obstacles to universal health coverage begin with the obvious—money. The WHO Macroeconomic Commission⁴² suggested that a minimum per head allocation of US\$34 is sufficient, but

the average per head expenditure for low-income countries is \$25, and can be as low as \$4 (Ethiopia) and \$12 (Bangladesh).⁴³

For decades, discussion of universal health coverage has been mired in larger political debates. To accept either simplistic praise or criticisms of universal health coverage would be a mistake. Data show a complex picture—eg, achievement of universal health coverage is not linked to country GDP. Many countries with low GDPs, such as Costa Rica, Cuba, Gambia, and Gabon, have attained impressive prepaid coverage compared with those with higher GDPs, such as China, India, and the USA. At issue are political commitment and health-systems design and management, particularly of its financing.

Further, attainment of high rates of population coverage might not necessarily lead to low out-of-pocket expenditures or improved health status. Tunisia, for example, has attained universal coverage, but its out-of-pocket expenditure is 45%.³⁴ This example indicates that there are bottom-line requirements for coverage, suggesting that even a package as inexpensive as \$34 per head per year has to include a range of medical delivery and health options to substantially affect population health outcomes, and avoid impoverishing individuals through high out-of-pocket expenditures.

In Vietnam, for example, nearly all poor people are covered by some form of health insurance or protection,

but the quality of care they receive in government health centres, or the range of medical exigencies covered by their financing plans, is inadequate.⁴⁴ Thailand, however, has achieved universal coverage with reasonable quality of care ensured, and improved health outcomes (table).

Successful health-financing schemes are an indicator of a gamut of political ideologies and philosophies; there is no one ideal system, and most feature a mix of public and private components. However, that attaining affordable universal health coverage, coupled with highly-ranked health outcomes, is linked to a common political process is striking. Most nations that have laudable success have at the highest levels of political power addressed three key questions. First, what are the role and responsibility of the State for the health of its people? Second, what are the responsibilities of the individual for his/her health? Last, what third-party players are acceptable, with which roles and responsibilities in health coverage for the nation's population?

The answers to the three questions vary widely, on the basis of the culture, political tendencies, and economics of a specific nation. There is no correct set of answers, but failure to formally address these questions guarantees both poor health coverage and achievements, often coupled with great financial inefficiency. Conversely, many low-income countries have confronted the three questions, and settled on innovative answers that have provided highly promising outcomes.

Rwanda, where the economy is mostly informal, focused on the third question about the role of non-governmental, and non-individual, players in the health of its people. A mutual insurance scheme known as *Mutuelles* seeks to bring all citizens under health insurance through a combination of government financing, and individual payments of US\$2 per year. For people unable to afford their yearly \$2 copayment, a third party—the Global Fund to Fight AIDS, Tuberculosis and Malaria—makes up the difference, paying premiums for 1.5 million Rwandan people.⁴⁵ In Bangladesh, the non-governmental organisation BRAC ensures the health care for more a million very poor people under its Challenging the Frontiers of Poverty Reduction programme.⁴⁶ Many countries have accepted third-party responsibility in the form of employer coverage for its workforce, including those engaged in the informal economy. In India, for example, an estimated 370 million workers are engaged in the informal economy; about 30 million are covered by community-based social protection schemes.³⁴

In 2000, the Mexican Government formally addressed all the three questions in an effort to diminish the impoverishing effect of catastrophic illness that bankrupted 3–4 million Mexican people every year and to provide access to care for 53 million uninsured citizens. In a process that culminated in 2003 legislative approval, Mexico increased federal expenditures on health (from 4.8% of GDP to 6.5% in 2006) and created innovative schemes to leverage taxation, employer contributions,

	Combined male/ female life expectancy (years [rank]*)	Maternal mortality per 100 000 births (rank†)	Per head spending (US\$ [rank]‡)	Estimated population with health coverage (%)	Population not surviving to 40 years of age (% [rank]§)
Bangladesh	63.21 (128)	350 (35)	12 (116)	<10%	21.4% (47)
Cambodia	61.7 (175)	440 (29)	17 (111)	..	24.4% (43)
Costa Rica	77.4 (53)	29 (98)	257 (41)	>95%	4% (108)
Cuba	77.2 (55)	33 (96)	NA	>95%	4.4% (104)
Ireland	78 (48)	6 (126)	1569 (20)	>95%	..
Jordan	78.7 (39)	41 (90)	139 (62)	..	7.9% (81)
Mexico	75.8 (72)	55 (81)	236 (45)	70–95%	..
South Africa	48.9 (206)	..	230 (46)	>95%	24.4% (44)
Sweden	80.74 (10)	5 (132)	2145 (11)	>95%	..
Thailand	72.8 (111)	44 (86)	112 (68)	>90%	9% (75)
USA	78.14 (48)	8 (121)	4631 (1)	76%	..
Vietnam	71.33 (128)	95 (65)	17 (110)	10–40%	12.8% (58)

NA=not available. ..=no data. *Rank of 225 countries. †Rank of 136 countries. ‡Rank of 133 countries. §Rank of 111 countries. Sources: World Bank, WHO, and International Labor Organization, based on most recently available data; years variable by country and indicator.

Table: Relations between key health indicators, spending, and access to health coverage

and individual payments, moving the country towards universal health coverage. Between 2003 and 2007, the number of Mexican people covered increased by 20%, use of health services soared, and the numbers of households facing impoverishment as a result of medical costs plummeted. Mexico is on track to achieve its goal of universal health coverage by 2010.⁴⁷

The entire Latin American continent is on track to achieve universal health coverage within the next decade. The achievement of Latin America offers hope to Africa, the Middle East, and Asia—but success looms only because of years of hard work and innovation across the continent.

History suggests that ensuring universal coverage takes some time; in the UK, nearly five decades of hard work and political debate were needed. South Korea did it faster, but still needed about two decades to attain universal coverage. There is no timetable attached to the WHO 2005 resolution for universal health coverage,⁴⁸ although a clearer path could emerge in a 2010 World Health Report dedicated to the topic. Daunting as the challenge of universal health coverage for the world's citizenry might seem, the global community committed to several equally impossible tasks: universal access to antiretroviral drugs for people living with HIV; the Millennium Development Goals; and poliomyelitis and measles eradication.

It is prudent for the world community to accelerate efforts aimed at ensuring health coverage for all, linking the goal with all donor, non-governmental organisation, and country health aspirations and targets related to health, rights, and poverty. This effort will need working on many fronts, starting with the political will of governments and civil societies. Countries are obliged to follow core obligations under the Universal

Declaration of Human Rights, including ensuring access to health facilities, goods, and services to everyone.⁴⁹ According to Article 12 of the International Covenant on Economic, Social, and Cultural Rights,⁵⁰ adoption of a national public health strategy and plan of action is a core obligation. Backman and colleagues⁵¹ at the Nordic School of Public Health in Sweden surveyed national plans for explicit commitments to universal access to health. Of 29 countries surveyed, only 15 had such explicit statements in their national plans.

Mexico's *Seguro Popular* shows the importance of phasing in coverage innovations, beginning with the most vulnerable populations in society. Under the 2003 scheme, the most dramatic efforts targeted unemployed Mexican people and those working in the informal economy or farming.

The introduction of universal health coverage through insurance schemes that initially target special groups, such as women and children, very poor people, and those with catastrophic illnesses, is a strategic approach that is gaining traction. For example, a new global campaign linked to the Millennium Development Goals promotes "Free quality services for women and children at the point of use and other access barriers removed".⁵² United Nations Secretary-General Ban ki-Moon in his address to the Global Health Forum in New York, USA, this year lent unequivocal support to the universal health coverage aspiration, and to near-term targeting of poor and vulnerable populations.

A strong advocacy drive is needed both nationally and globally. Further, the call for universal coverage should resonate well beyond the traditional boundaries of global health, bridging development and health programmes, non-governmental organisations, UN agencies, and donor agencies. This call is a health aspiration, offering antipoverty and pro-rights agendas.

Contributors

AP-M originated the idea. AMRC did the initial literature searches and wrote the first draft of the report. All subsequent research, drafts, and the final report were written by LG, with input and review from AP-M and AMRC.

Conflicts of interest

We declare that we have no conflicts of interest.

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References

- General Assembly of the United Nations. The Universal Declaration of Human Rights. Palais de Chaillot, Paris; Dec 10, 1948. <http://www.un.org/en/documents/udhr/> (accessed July 23, 2009).
- General Assembly of the United Nations. The International Covenant on Economic, Social and Cultural Rights. New York, NY, USA; Dec 16, 1966. <http://www2.ohchr.org/english/law/cescr.htm> (accessed July 23, 2009).
- General Assembly of the United Nations. The Convention on the Elimination of All Forms of Discrimination against Women. New York, NY, USA; Dec 18, 1979. <http://www.un.org/womenwatch/daw/cedaw/cedaw.htm> (accessed July 23, 2009).
- General Assembly of the United Nations. The Convention on the Rights of the Child. New York, NY, USA; Nov 20, 1989. <http://www2.ohchr.org/english/law/pdf/crc.pdf> (accessed July 23, 2009).
- Declaration of Alma-Ata. International Conference on Primary Health Care. Alma-Ata, USSR; Sept 6–12, 1978. http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf (accessed July 23, 2009).
- Copenhagen Declaration on Social Development, 1995. World Summit for Social Development. http://www.un.org/esa/socdev/wssd/decl_partc.html (accessed July 23, 2009).
- Frenk J. Strengthening health systems to promote security. *Lancet* 2009; **373**: 2181–82.
- Reich MR, Takemi K. G8 and strengthening of health systems: follow-up to the Toyako summit. *Lancet* 2009; **373**: 508–15.
- World Bank. World development report 1993: investing in health. Washington DC: World Bank, 1993. http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&SitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000009265_3970716142319 (accessed July 19, 2009).
- Ravishankar N, Gubbins P, Cooley RJ, et al. Financing of global health: tracking development assistance for health from 1990 to 2007. *Lancet* 2009; **373**: 2113–24.
- World Development Indicators database. Washington DC: World Bank, 2009. <http://siteresources.worldbank.org/DATASTATISTICS/Resources/wdi09introch2.pdf> (accessed July 23, 2009).
- Garrett L. HIV and national security: where are the links? A Council on Foreign Relations Report. New York: Council on Foreign Relations, 2005.
- Ban J. Health as a global security challenge. *Seton Hall J Diplom Int Relat* 2003; **4**: 19–29.
- Patterson A. The African state and the AIDS crisis. Aldershot: Ashgate, 2004.
- Costello A, Abbas, M, Allen A, et al. Managing the health effects of climate change. *Lancet* 2009; **373**: 1693–733.
- Chan M. Why the world needs global health initiatives. Address at the high-level dialogue on maximizing positive synergies between health systems and global health initiatives. Venice, Italy; June 22, 2009. http://www.who.int/dg/speeches/2009/global_health_initiatives_20090622/en/index.html (accessed July 23, 2009).
- Kutzin J, Ibraimova A, Jakab M, O'Dougherty S. Bismarck meets Beveridge on the Silk Road: coordinating funding sources to create a universal financing system in Kyrgyzstan. *Bull World Health Organ* 2009; **87**: 549–54.
- Keehan S, Sisko A, Truffer C, et al. Health spending projections through 2017: the baby-boom generation is coming to Medicare. *Health Aff (Millwood)* 2008; **27**: w145–55.
- Families USA. Americans at risk one: in three uninsured. March, 2009. <http://www.familiesusa.org/resources/publications/reports/americans-at-risk-findings.html> (accessed July 18, 2009).
- Pifer-Bixler J. Study: 86.7 million Americans uninsured over last two years. CNN.com; March 9, 2009. <http://www.cnn.com/2009/HEALTH/03/04/uninsured.epidemic.obama/> (accessed July 20, 2009).
- DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2007. Washington DC: US Census Bureau, 2008.
- Gilmer TP, Kronick RG. Hard times and health insurance: how many Americans will be uninsured by 2010? *Health Aff (Millwood)* 2009; **28**: w573–77.
- Schoen C, Collins SR, Kriss JL, Doty MM. How many are underinsured? Trends among US adults, 2003 and 2007. The Commonwealth Fund, 2008.
- Banthin JS, Bernard DM. Changes in financial burdens for health care: national estimates for the population younger than 65 years, 1996 to 2003. *JAMA* 2006; **296**: 2712–19.
- Anon. Study finds 24% of Americans underinsured. ConsumerAffairs.com. Aug 6, 2007. http://www.consumeraffairs.com/news04/2007/08/cu_insurance.html (accessed July 20, 2009).
- Himmelstein DU, Thorne D, Warren W, Woolhandler S. Medical bankruptcy in the United States, 2007: results of a national study. *Am J Med* 2009; **122**: 741–46.
- Himmelstein D, Warren E, Thorne D, Woolhandler S. Illness and injury as contributors to bankruptcy. *Health Aff (Millwood)* 2005; **w5**–63.
- The Access Project. Home sick: how medical debt undermines housing security. Boston: Access Project, 2005.

- 29 Robertson CT, Egelhof R, Hoke M. Get sick, get out: the medical causes of home mortgage foreclosures. *Health Matrix Clevel* 2008; **18**: 65–104.
- 30 Poisal JA, Truffer C, Smith S, et al. Health spending projections through 2016: modest changes obscure part D's impact. *Health Aff (Millwood)* 2007; **26**: w242–53.
- 31 The long-term outlook for health care spending. Report to the United States Congress, Washington DC, November 2007. <http://www.cbo.gov/ftpdocs/87xx/doc8758/11-13-LT-Health.pdf> (accessed July 23, 2009).
- 32 Narayan PK. Do health expenditures catch-up? Evidence from OECD countries. *Health Econ* 2007; **16**: 993–1008.
- 33 WHO. National health accounts. Geneva: World Health Organization, 2007. http://www.who.int/whosis/whostat2007_6healthsystems_nha.pdf (accessed July 23, 2009).
- 34 International Labour Organization. Social health protection: an ILO strategy towards universal access to health care. Geneva: US Social Security Department, 2008.
- 35 Leive A, Xu K. Coping with out-of-pocket health payments: empirical evidence from 15 African countries. *Bull World Health Organ* 2008; **86**: 849–46.
- 36 Carrin G, Mathauer I, Evans DB. Universal coverage of health services: tailoring its implementation. *Bull World Health Organ* 2008; **86**: 817–908.
- 37 Institute for Health Metrics and Evaluation. Financing global health 2009: tracking development assistance for health. Seattle: University of Washington, Seattle, 2009.
- 38 Getzen TE. Health care is an individual necessity and a national luxury: applying multilevel decision models to the analysis of health care expenditures. *J Health Econ* 2000; **19**: 266–67.
- 39 Obaid TA. The global economic crisis and health: why investing in women is a smart choice. New York: UNFPA, 2009. <http://www.unfpa.org/public/cache/offonce/News/pid/3027> (accessed July 23, 2009).
- 40 Frenk J, Gomez-Dantes O, Knaul FM. The democratization of health in Mexico: financial innovations for universal coverage. *Bull World Health Organ* 2009; **87**: 542–48.
- 41 World Health Assembly Resolution 58.33. Geneva: World Health Organization, 2005. http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_33-en.pdf (accessed July 23, 2009).
- 42 WHO Commission on Macroeconomics and Health. Macroeconomics and health: investing in health for economic development. Geneva: World Health Organization, 2001. <http://www.paho.org/English/HDP/HDD/Sachs.pdf> (accessed July 23, 2009).
- 43 World Bank. World Development Indicators 2002. http://www.nationmaster.com/graph/hea_spe_per_per-health-spending-per-person (accessed July 21, 2009).
- 44 Lieberman S, Wagstaff A. Health financing and delivery in Vietnam: looking forward. Washington DC: The World Bank, 2009.
- 45 Anon. Sharing the burden of sickness: mutual health insurance in Rwanda. *Bull World Health Organ* 2008; **86**: 823–24.
- 46 BRAC-AKFC Learning Partnership. http://www.akfc.ca/en/knowledge_center/akfc_brac.shtml (accessed June 15, 2009).
- 47 Frenk J, Gómez-Dantés O, Knaul FM. The democratization of health in Mexico: financial innovations for universal coverage. *Bull World Health Organ* 2009; **87**: 542–48.
- 48 Yates R. Universal health care and the removal of user fees. *Lancet* 2009; **373**: 2078–81.
- 49 Universal Declaration on Human Rights (1948)—Article 25: <http://www.un.org/en/documents/udhr/> (accessed July 23, 2009).
- 50 International Covenant on Economic, Social and Cultural Rights (1976)—Article 12. http://www.unesco.org/education/information/nfsunesco/pdf/SOCIAL_E.PDF (accessed July 23, 2009).
- 51 Backman G, Hunt P, Khosla R, et al. Health systems and the right to health: an assessment of 194 countries. *Lancet* 2008; **372**: 2047–85.
- 52 The Global Campaign for Health Millennium Development Goals 2009, p33. http://www.ousaid.gov.au/publications/pdf/lead_by_example.pdf (accessed July 23, 2009).