

Health systems and the right to health: an assessment of 194 countries



Gunilla Backman, Paul Hunt, Rajat Khosla, Camila Jaramillo-Strouss, Belachew Mekuria Fikre, Caroline Rumble, David Pevalin, David Acurio Páez, Mónica Armijos Pineda, Ariel Frisancho, Duniska Tarco, Mitra Motlagh, Dana Farcasanu, Cristian Vladescu

60 years ago, the Universal Declaration of Human Rights laid the foundations for the right to the highest attainable standard of health. This right is central to the creation of equitable health systems. We identify some of the right-to-health features of health systems, such as a comprehensive national health plan, and propose 72 indicators that reflect some of these features. We collect globally processed data on these indicators for 194 countries and national data for Ecuador, Mozambique, Peru, Romania, and Sweden. Globally processed data were not available for 18 indicators for any country, suggesting that organisations that obtain such data give insufficient attention to the right-to-health features of health systems. Where they are available, the indicators show where health systems need to be improved to better realise the right to health. We provide recommendations for governments, international bodies, civil-society organisations, and other institutions and suggest that these indicators and data, although not perfect, provide a basis for the monitoring of health systems and the progressive realisation of the right to health. Right-to-health features are not just good management, justice, or humanitarianism, they are obligations under human-rights law.

Introduction

December, 2008, marks the 60th anniversary of the Universal Declaration of Human Rights.¹ The declaration provides the foundation for the international code of human rights.² This code gives an internationally agreed set of standards to guide and assess the conduct of governments across a wide range of sectors and has a direct, close bearing on medicine, public health, and the strengthening of health systems.³

The international code of human rights consists of legally binding international components. Among the most important of these components for health systems are the International Covenant on Economic, Social, and Cultural Rights (ICESCR)^{4,5} and the Convention on the Rights of the Child (CRC).⁶ Both these human-rights treaties are legally binding for those countries that have ratified them. Most states have ratified the ICESCR, and all but two (Somalia and the USA) have ratified the CRC. The right of everyone to enjoy the highest attainable standard of physical and mental health—sometimes known as the right to the highest attainable standard of health or the right to health—is an integral part of both of these international treaties. All countries have ratified one or more binding treaty that includes the right to health, such as the International Convention on the Elimination of All Forms of Racial Discrimination.⁷ Also, many countries include this right in their national constitutions.⁸ The Constitution of WHO,⁹ the Declaration of Alma-Ata,¹⁰ the Ottawa Charter for Health Promotion,¹¹ the Bangkok Charter for Health Promotion in a Globalized World,¹² and other important documents agreed by the health community also recognise this fundamental human right.

In recent years, national and international policy makers, courts, non-governmental organisations, and other stakeholders have adopted and applied features of the right to the highest attainable standard of health. Uganda's review of its health policy expressly uses a right-to-health analysis¹³ as does WHO in, for example, its publication on

human rights, health, and poverty reduction.¹⁴ Courts, too, are explicitly relying on the right to health in their decisions, most recently in a landmark judgment of the Colombian Constitutional Court.^{15–19} On the basis of a detailed understanding of the right to health, this court effectively ordered a phased restructuring of the country's health system by way of a participatory and transparent process based on current epidemiological information.²⁰ Civil-society guides to the right to health are increasing in number, and many civil-society organisations use these in their work.^{21–24} Both the UN General Assembly and Human Rights Council have discussed numerous reports on the right to health, covering a wide range of issues, such as neglected diseases,²⁵ sexual and reproductive health,²⁵ maternal mortality,²⁶ mental disability,²⁷ the Millennium Development Goals (MDGs),²⁸ medicines,²⁶ and water and sanitation.²⁹

Recognition that a strong health system is an essential element of a healthy and equitable society is growing. However, according to a recent WHO publication, health systems in many countries are failing and collapsing.³⁰ Too many health systems are inequitable, regressive, and unsafe.³⁰ WHO also confirms that sustainable development, including achievement of the MDGs, depends on effective health systems.³⁰

As with a fair court system, an effective health system is a core social institution and, for this reason, crucially, both systems are protected by human rights.^{31,32} Although many human rights are important to a well-functioning court system, the key one is the right to a fair trial.³³ Through human-rights treaties, national laws and policies, judicial decisions, and so on, the right to a fair trial has helped to identify the key features of a fair court system, such as an independent judiciary and trials without undue delay. The right to a fair trial has not only identified unfair judicial processes but also led to welcome reforms in many countries.

By analogy, the right to the highest attainable standard of health can help to establish health systems that are

Lancet 2008; 372: 2047–85

Published Online

December 10, 2008

DOI:10.1016/S0140-

6736(08)61781-X

See [Editorial](#) page 2001

See [Comment](#) pages 2005, 2007, 2008, and 2010

See [Perspectives](#) page 2015

Nordic School of Public Health, Gothenburg, Sweden

(G Backman MSc); Human

Rights Centre (P Hunt Mjur,

R Khosla LLM,

B Mekuria Fikre LLM,

C Rumble MBChB) and School of

Health and Human Sciences

(David Pevalin PhD) University

of Essex, Colchester, UK;

Office of the Mayor of Bogota,

Colombia

(C Jaramillo-Strouss LLM);

Foundation for Alternative

Social Development, Cuenca,

Ecuador

(David Acurio Paez MPH,

M Armijos Pineda MA); Health

Team National Coordinator,

CARE Peru, Lima, Peru

(Ariel Frisancho MHPFF);

National Health Council

Secretariat, Ministry of Health,

Lima, Peru (D Tarco MD);

WHO-Western Pacific Regional

Office, Manila, Philippines

(M Motlagh LLM); Centre of

Health Policies and Services,

Bucharest, Romania

(D Farcasanu MPH); Department

of Public Health, Victor Babes

University of Medicine and

Pharmacy, Timisoara, Romania

(C Vladescu PhD)

Correspondence to:

Gunilla Backman, Nordic School

of Public Health, Gothenburg

SE-402 42, Sweden

gunillabackman@yahoo.com



Eric Miller/World Bank

reasonably equitable. However, to make this happen, the right-to-health features of health systems need to be identified. This process will take time, just as our understanding of the right to a fair trial has developed over many years. Once identified, the right-to-health features will not provide a neat blueprint or formula for a health system. There will be many grey areas, just as there are in relation to the right to a fair trial and court systems.³⁴ The right to a fair trial does not provide detailed prescriptions, rather it insists upon key principles, such as fairness, independence and impartiality, and several important features that a court system must have if it is to be fair. The right to health has a similar role.

Of all the important human rights that bear upon health systems, the right to the highest attainable standard of health is the cornerstone of both an effective health system and the growing movement for health and human rights.³⁵

In this Report, we aim to assess the degree to which the health systems of 194 countries include some of the features that arise from the right to health. We introduce the right to health and identify some of the right-to-health features of health systems. These features are not just a matter of good management, justice, or humanitarianism—they are a matter of human-rights law. We set out our methods and their limitations and identify 72 indicators of right-to-health features of health systems. We present some of the findings and results arising from the data on the indicators, and discuss these data and make recommendations for a range of stakeholders.

What is the right to health?

The right to the highest attainable standard of health encompasses medical care, access to safe drinking water, adequate sanitation, education, health-related information, and other underlying determinants of health;³⁶ it includes freedoms, such as the right to be free from discrimination and involuntary medical treatment, and entitlements, such as the right to essential primary health care.³⁶ Like other human rights, the right to health has particular concern for disadvantaged people and populations, including those living in poverty. The right to health requires an effective, responsive, integrated health system of good quality that is accessible to all.³⁷

International human-rights law recognises that the right to the highest attainable standard of health cannot be realised overnight; it is expressly subject to both progressive realisation and resource availability.⁴ Put simply, progressive realisation means that a country has to improve its human-rights performance steadily; if there is no progress, the government of that country has to provide a rational and objective explanation. Because of their greater resource availability, more is expected of high-income than of low-income countries. However, the right to health also imposes some obligations of immediate effect, such as non-discrimination,⁴ and the requirement that a state at least prepares a national plan for health care and

protection.³⁶ Furthermore, the right to health requires that there are indicators and benchmarks to monitor progressive realisation³⁶ and that individuals and communities have opportunities for active and informed participation in health decision making that affects them.³⁶ Under international human rights law, developed countries have some responsibilities towards the realisation of the right to health in developing countries.³⁶ Because the right to health gives rise to legal entitlements and obligations, effective mechanisms of monitoring and accountability are needed.³⁶

Although the right to health adds power to campaigning and advocacy, it is not just a slogan, it has a concise and constructive contribution to make to health policy and practice. Health workers can use the right to devise equitable policies and programmes that strengthen health systems and place important health issues higher up national and international agendas.^{37,38}

Medicine, public health, and human rights have much common ground. To one degree or another, each field stresses the importance of the underlying determinants of health and good-quality medical care, looks beyond the health sector, struggles against discrimination and disadvantage, demands respect for cultural diversity, and attaches importance to public information and education.

The right to health cannot be realised without the interventions and insights of health workers; and the classic, long-established objectives of public health and medicine can benefit from the newer, dynamic discipline of human rights. A few enlightened people understood these relations when the WHO Constitution was drafted in 1946⁹ and when the Declaration of Alma-Ata was adopted in 1978,¹⁰ affirming the right to the highest attainable standard of health.

However, until recently, the right to health was only dimly understood and attracted limited support from civil society or any other sector. The understanding and practice of health and human rights has improved since the Alma-Ata conference.^{35,39–43} One vital part of this process has been a deepening understanding of the right to health. But it was not until 2000 that an authoritative understanding of the right to health emerged when the UN Committee on Economic, Social, and Cultural Rights, working in close collaboration with WHO and many others, drafted and adopted general comment 14.³⁶

Although neither complete, perfect, nor binding, general comment 14 is compelling and groundbreaking. The comment shows a substantive understanding of the right to health that can be made operational and improved in the light of practical experience. The influence of Alma-Ata on general comment 14 is explicit and clear. Although much more work is needed to grasp all the implications of the right to the highest attainable standard of health, the general comment confirms that the right cannot be dismissed as a rhetorical device. General comment 14 provides a common right-to-health language for talking about health issues and sets out a way of

analysing the right to health, making it easier for policy makers and practitioners to use.²⁷ Panel 1 summarises general comment 14, including the requirement that health facilities and services be available, accessible, and culturally acceptable.

The right-to-health analysis can be used to identify and expose, for example, the lack of available mental-health facilities properly serviced by trained staff.⁴⁴ Health-related facilities and services, including mental-health facilities with properly trained staff, must be available in adequate number throughout a country. Of course, the need is subject to resource availability: more and better facilities are required of Canada than of Chad. Few nations, however, devote adequate funds to mental health.^{44,45} On a routine basis, mental-health facilities are neglected, workers untrained, and patients uncared for.⁴⁴ Poor mental health gives rise to other profound problems, not least discrimination and stigmatisation, important to the right to health.

The test of availability can also be applied to harm-reduction initiatives.⁴⁶ Provision of injecting drug users with comprehensive and integrated treatment, counselling, and clean needles and syringes is good for public health, reduces avoidable suffering, saves lives, and is cost-effective.⁴⁷ An appropriate harm-reduction initiative is also a right-to-health initiative. However, most countries do not provide harm-reduction services for people who use drugs, and those that do, such as Sweden, provide a limited and scattered service.⁴⁸ The right to health requires all countries to have an effective, national, comprehensive harm-reduction policy and plan, delivering essential services. A high-income country such as Sweden is expected to provide more than the essential services.

Health-related facilities and services can be available within a country but inaccessible to all those who need them. For example, access to essential medicines is an indispensable part of the right to health with several dimensions.⁴⁹ First, medicines must be accessible in remote rural areas as well as in urban centres, which has major implications for the design of medicine supply systems. Second, medicines must be affordable to all, including those living in poverty, which has obvious implications for funding and pricing arrangements. Third, given the fundamental human-rights principles of non-discrimination and equality, a national medicines policy must be designed to ensure access for disadvantaged individuals and communities, such as women and girls, people living with HIV/AIDS, elderly people, and people with disabilities. Because equal access is not always secured by equal treatment, a state must sometimes take measures in favour of disadvantaged people. As far as possible, data must be disaggregated to identify marginalised groups and monitor their progress towards equal access. Fourth, reliable information about medicines must be accessible to patients and health workers so they can take well-informed decisions and use medicines safely.

Panel 1: Some important points from general comment 14

Article 12 of the International Covenant on Economic, Social, and Cultural Rights very briefly sets out the right to the highest attainable standard of health. General comment 14 provides the UN Committee on Economic, Social, and Cultural Rights' interpretation of article 12. Although not legally binding, the comment is highly authoritative.

- Encompassing physical and mental health, the right to health places obligations on governments in relation to health care and the underlying determinants of health—these obligations include provision of clean water, adequate sanitation, nutritious food, adequate shelter, education, a safe environment, health-related information, and freedom from discrimination.
- Governments have, for example, obligations regarding maternal, child, and reproductive health; healthy natural and workplace environments; the prevention, treatment, and control of diseases; health facilities, services, and goods.
- Governments have an obligation to give particular attention to marginal individuals, communities, and populations, creating a need for as much disaggregation of data as possible.
- Within a country, health facilities, services, and goods must be available in sufficient quantity, accessible (including affordable) to everyone without discrimination, culturally acceptable (eg, respectful of medical ethics and sensitive to gender and culture), and of good quality.
- The right to health is subject to progressive realisation and resource availability.
- Nonetheless, governments must take deliberate, concrete, and targeted steps to ensure the progressive realisation of the right as expeditiously and effectively as possible.
- However, core obligations are subject to neither progressive realisation nor resource availability. Expressly taking into account the Declaration of Alma-Ata, they include obligations to ensure access to health facilities, goods, and services to everyone, including marginal groups, without discrimination; to ensure everyone is free from hunger; to ensure access to basic shelter, housing and sanitation, and an adequate supply of safe and potable water; to provide essential drugs, as defined under the WHO action programme on essential drugs; to ensure equitable distribution of all health facilities, goods, and services; and to adopt and implement a national public-health strategy and plan of action, by way of a participatory and transparent process.
- The right to health requires opportunities for as much participation as possible by individuals and communities in health-related decision making.
- Governments have an obligation to ensure that non-state stakeholders are respectful of the right to health (eg, do not discriminate).
- Developed states, and others in a position to assist, should provide international assistance and cooperation in health to developing countries (eg, economic and technical assistance to help developing countries fulfil their core obligations). All states "have an obligation to ensure that their actions as members of international organizations take due account of the right to health".
- Monitoring, accountability and redress are essential. Given progressive realisation, indicators and benchmarks are indispensable if governments are to be held to account.
- The right to health is closely related to, and dependent upon, numerous other human rights, such as the rights to life, education, and access to information.
- In narrowly defined circumstances and as a last resort, the enjoyment of some human rights may be interfered with to achieve a public health goal. For example, quarantine for a serious communicable disease, such as ebola fever, may, under certain circumstances, be necessary for the public good, and lawful under human rights, even though it limits an individual's freedom of movement.

Health-related facilities and services may be available and accessible but be insensitive to culture and gender. For example, improving the access to sexual and reproductive health care is not simply about scaling up

technical interventions or making them affordable. A Peruvian project that studied indigenous communities with very high maternal mortality found an acute reluctance within the population to use the health facilities offered by the state, partly because they did not take account of local cultural conceptions of health and sickness. In close consultation with the indigenous communities, culturally sensitive facilities and services were introduced, such as sturdy ropes in delivery rooms so that women could give birth squatting and gripping the rope, as they were accustomed to. These changes led an increase in deliveries in local health centres,⁵⁰ and the success of these local initiatives helped to generate a corresponding change in national health policy on deliveries in all primary health-care facilities.⁵¹

Right-to-health features of health systems

The Declaration of Alma-Ata identifies some vital components of an effective health system. The declaration is especially instructive because of its public-health, medicine, and human-rights aspects (panel 2), and it provides compelling guidance on the core obligations of the right to health.³⁶

Other attempts have been made to identify what constitutes a functioning health system.⁵² WHO identifies six essential building blocks that make up health systems: health services (medical and public health); health workforce; health information system; medical products, vaccines, and technologies; health financing; and leadership, governance, and stewardship.³⁰ Although debatable, these building blocks provide a useful way of looking at health systems and can be thought of as building blocks for the realisation of the right to health. However, a health system might have all these building blocks but still not serve human rights. For example, the system might

include both medical care and public health but not secure fair access, or there might be a health information system but key data might not be suitably disaggregated.

A major challenge for human rights is to apply or integrate the right to health across the six building blocks. The right-to-health analysis provided by general comment 14 has to be systematically and consistently applied to health services, health workforce, health information, medical products, financing, and stewardship—that is, all the elements that together constitute a functioning health system. Panel 3 identifies some of the issues that arise when the right-to-health analysis is applied to the second WHO building block—the health workforce. The right-to-health analysis of availability, accessibility, cultural acceptability, quality, participation, international assistance and cooperation, monitoring and accountability, and so on, can also be applied to health systems to identify some of the right-to-health features of health systems, encompassing what health systems do (for example, providing access to essential medicines and safe drinking water) and the way in which they function (for example, transparently, in a participatory process, and without discrimination). Health systems run the risk of being impersonal, top-down, and dominated by experts, but the right to health places the wellbeing of individuals, communities, and populations at the centre.⁵³ Irrespective of which of the many definitions of a health system is used,^{30,52,54} all the following features should be part of any health system.

Legal recognition—Countries should give recognition to the right to health in national law and by ratifying relevant human-rights treaties.³⁶ In some countries legal provisions on the right to the highest attainable standard of health are generating significant case law.⁵⁵ For example, Hogerzeil and colleagues⁵⁶ analysed 71 court cases from 12 countries and concluded that in 59 cases access to essential medicines was enforced through the courts as part of the right to health. Legal recognition is just one of the first steps on a long and difficult journey to realising the right to health. Without follow-up from social movements, health workers, progressive government ministers and public officials, activist courts, and international support, in addition to governmental respect for the rule of law, legal recognition is likely to be an empty promise.

Standards—Although important, legal recognition of the right to health is usually confined to a general formulation that does not set out in any detail what is required of those with responsibilities for health. For this reason, countries must not only recognise the right to health in national law, but also ensure that there are more detailed provisions clarifying what society can expect by way of health-related services and facilities. For example, provisions are needed for quality and quantity of drinking water, blood safety, essential medicines, the quality of medical care, and so on. Such clarifications may be provided by laws, regulations, protocols, guidelines, and codes of conduct. WHO has published important standards on various health issues.^{57–59}

Panel 2: The Declaration of Alma-Ata (1978)

Principal themes

- The importance of equity
- The need for community participation
- The need for a multisectoral approach to health problems
- The need for effective planning
- The importance of integrated referral systems
- An emphasis on health-promotional activities
- The crucial role of suitably trained human resources
- The importance of international cooperation

Essential health interventions

- Education concerning prevailing health problems
- Promotion of food supply and proper nutrition
- Adequate supply of safe water and basic sanitation
- Maternal and child health care, including family planning
- Immunisation against major infectious diseases
- Prevention and control of locally endemic diseases
- Appropriate treatment of common diseases and injuries
- Provision of essential drugs

Many others have also contributed; for example, the Sphere Project provides minimum standards for responses to disasters.⁶⁰ Clarification is important for providers, so they know what is expected of them and also for those for whom the service or facility is intended, so they know what they can legitimately expect.

Participation—Health systems must also include institutional arrangements for the active and informed participation in strategy development, policy making, implementation, and accountability by all relevant stakeholders, including disadvantaged individuals, communities, and populations.³⁶ Examples of such participation include conferences to develop national health plans in Brazil and Peru; a legislative requirement of Maori participation in New Zealand's District Health Boards; village health teams in Uganda; and the participatory transfer of an HIV/AIDS clinic from Médecins Sans Frontières to the Guatemalan Ministry of Health.⁶¹ Participation improves health outcomes.⁶²

Transparency—Tempered by the confidentiality of personal data, this requirement applies to all those working in health-related sectors, including countries, international organisations, public-private partnerships, business enterprises, and civil-society organisations.³⁶ The Medicines Transparency Alliance, funded by the UK Government, is an alliance of governments, international agencies, pharmaceutical companies, and civil-society organisations, committed to increasing transparency of information on the quality, availability, and pricing of essential medicines in the public, private, and non-profit sectors.⁶³

Equity, equality, and non-discrimination—Health systems must be accessible to all, including those living in poverty, minority groups, indigenous people, women, children, people living in slums and rural areas, people with disabilities, and other disadvantaged individuals, communities, and populations.³⁶ Additionally, health systems must be responsive to the particular health needs of women, children, adolescents, elderly people, and so on.³⁶ Outreach programmes are needed to ensure that disadvantaged people have the same access as more privileged people. Several European governments, for example, have established Roma health mediator programmes.⁶⁴ As members of the Romani community themselves, the mediators aim to improve community health by mediating between patients and health workers during consultations and communicating with Romani communities on behalf of the public health system. Although the programmes have limitations, mediators have greatly assisted some Romani.⁶⁴

The right-to-health principles of equality and non-discrimination are akin to the health concept of equity. All three concepts have a social-justice component. In some respects, equality and non-discrimination, being reinforced by law, are more powerful than equity.⁶⁵ For example, if a government or other body does not take effective steps to tackle discrimination, it can be held to account and required to take remedial measures.^{66,67}

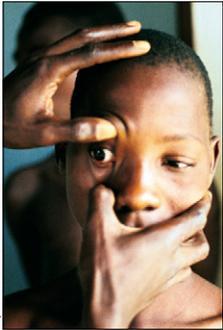
Panel 3: Some issues arising when the right to health is applied to health workforces

- General comment 14 requires a comprehensive national health plan (eg, paragraphs 43[6] and 55) encompassing human resources. So is there an up-to-date plan for human resources in preventive, curative, and rehabilitative health, encompassing physical and mental health?
- Is there a role for midlevel providers who can increase access to health care, such as assistant medical officers and surgical technicians, and public-health professionals?
- Are there outreach programmes for the recruitment of health workers from marginalised communities and populations, such as indigenous peoples, to reduce non-discrimination and improve respect for cultural difference?
- Are effective measures in place to achieve a gender balance among health workers in all fields to ensure equality, non-discrimination, and respect for cultural difference?
- Because health-related services must be available in sufficient quantity, subject to resource availability, are effective measures in place to ensure that the number of domestically trained health workers is commensurate with the health needs of the population?
- Is health information about the number of health workers by category (eg, nurses and public health professionals) collected, centralised, and made publicly available on a regular basis?
- Are human rights, including respect for cultural diversity, as well as the importance of treating patients and others with courtesy, a compulsory part of the training for all health workers?
- General comment 14 (paragraph 44[5]) requires appropriate training for health personnel, so are opportunities for further professional training in place for all health workers without discrimination?
- Are health workers receiving domestically competitive salaries as well as other reasonable terms and conditions of employment? A lack of reasonable terms and conditions of employment, one of the causes of the skills drain, is likely to undermine a health system
- Are incentives in place to encourage the appointment, and retention, of health workers in underserved areas to improve access, especially of marginal communities and populations?

Respect for cultural difference—From the right-to-health perspective, health systems must be respectful of cultural difference.^{36,38,68} Health workers must be sensitive to issues of culture, ethnicity, and sex, strategies must be in place to enable indigenous people to study medicine and public health, and so on.⁶⁹

Quality—All health-related services and facilities must be of good quality.³⁶ For example, water quality regulations and standards consistent with the WHO guidelines for the quality of drinking water should be in place.⁵⁷ The good quality requirement also extends to the way patients and others are treated: health workers must treat patients and others politely and with respect. Because medicines may be counterfeit, states must establish appropriate regulatory systems.⁴⁹ In Nigeria, for example, there is evidence that the National Agency for Food and Drug Administration and Control's dual strategy of strengthening the regulatory environment, while encouraging intolerance of counterfeit drugs through public enlightenment campaigns is improving medicine safety and quality.⁷⁰

Planning—Some important implications arise from the right to health being subject to progressive realisation and resource availability. The crucial importance of planning is recognised in the Declaration of Alma-Ata,¹⁰ general



Ray Winton/World Bank

comment 14,³⁶ and elsewhere.⁷¹ States must have comprehensive national health plans, encompassing both the public and private sectors, for the development of health systems; because the plans have to be evidence-based, a situational analysis with disaggregated data is needed before the plan is drafted. Health research and development should also inform the planning process.^{72,73}

According to general comment 14, the plan must include certain features, such as clear objectives (and how these are to be achieved), timeframes, effective coordination mechanisms, reporting procedures, a detailed budget, financing arrangements (national and international), assessment arrangements, indicators and benchmarks to measure achievement, and one or more accountability devices.³⁶ Indicators and benchmarks are already commonplace features of many health systems, but they rarely have all the elements that are important from a human-rights perspective, such as appropriate disaggregation.³⁶

The identification of indicators and benchmarks to measure the progressive realisation of the right to health is a national and international process that involves countries, international organisations, the UN Committee on Economic, Social, and Cultural Rights, and others. A wealth of data is available at the global level, some of which is highly relevant to the right to health. But are international bodies making other data important to the right-to-health perspective available? If not, countries may wrongly assume that these other data, and the issues to which they relate, are less important. Many countries look to UN bodies for technical assistance, ideas, and leadership. Whether or not UN bodies are making data that are highly relevant to the right to health available at a global level is an important issue.

A fair, transparent, participatory, and inclusive process for prioritising competing health needs is required—one that takes into account explicit criteria, such as the well-being of those living in poverty, and not just the claims of powerful groups with vested interests.⁷² The process of prioritisation should give particular attention to the core obligations identified in general comment 14 because they are required of all countries, whatever their stage of economic development.³⁶ The list of core obligations is illustrative rather than exhaustive (panel 1).⁷⁴ One of the core obligations is to adopt and implement a national public health strategy and plan of action, on the basis of epidemiological evidence, addressing the health concerns of the whole population.³⁶

Before the finalisation of the plan, key elements must undergo impact assessment to ensure that they are likely to be consistent with national and international legal obligations, including those relating to the right to the highest attainable standard of health.⁷⁵ In addition, the present realisation of the right to health must be maintained, although this might be waived in exceptional circumstances.³⁶

Progressive realisation does not mean that a government is free to choose whatever measures it wishes to take so

long as they reflect some degree of progress. General comment 14 requires that governments take deliberate, concrete, and targeted steps to ensure progressive realisation as quickly and effectively as possible.³⁶

Progressive realisation, maximum available resources, and core obligations need closer conceptual and operational attention. Some courts have rejected the idea of core obligations and required that government policies are reasonable.⁷⁶ Other courts have taken the same position as the UN Committee on Economic, Social, and Cultural Rights in general comment 14 and found that some health-related responsibilities are so fundamental that they are subject to neither progressive realisation nor resource availability.^{15,77} This position most closely matches the right to health: progressive realisation is an important concept with a crucial role, but only up to the boundaries of core obligations.

Referral systems—Health systems should have a mix of primary (community-based), secondary (district-based), and tertiary (specialised) facilities and services, providing a continuum of prevention and care.⁵² The system also needs an effective process by which health workers assess whether patients will benefit from additional services and patients are referred from one facility or department to another. Referrals are needed between alternative health systems (eg, traditional health practitioners) and mainstream health systems. The absence of an effective referral system is inconsistent with the right to health.

Coordination—Health systems and the right to health depend on effective coordination across a range of public and private stakeholders (including non-governmental organisations) at the national and international levels. Effective coordination between various sectors and departments, such as health, environment, water, sanitation, education, food, shelter, finance, and transport is important for health systems, which also require coordination within sectors and departments, such as ministries of health. The need for coordination extends to policy making and delivery of services.^{36,52} Uganda has recently added several interventions, such as de-worming of children, supplementation with vitamin A, and health promotion information, to its Child Health Days. Now known as Child Health Days Plus, these days depend on, and reinforce, improved coordination between and within sectors and national and international partners, including civil society.^{78,79}

International cooperation—Health systems have international dimensions, including the control of infectious diseases, the dissemination of health research, and regulatory initiatives, such as the International Health Regulations⁵⁸ and the WHO Framework Convention on Tobacco Control.⁸⁰ The international dimension of health systems is reflected in countries' human-rights responsibilities of international assistance and cooperation that can be traced through the Charter of the UN, the Universal Declaration of Human Rights, and some more-recent international human-rights declarations and binding treaties.^{81,82} At least, all countries have a

human-rights responsibility to cooperate on transboundary health issues and to do no harm to their neighbours.⁸³ High-income countries have an additional responsibility to provide appropriate international assistance and cooperation in health for low-income countries. High-income countries should especially help others fulfil their core obligations.³⁶ The Swedish International Development Cooperation Agency (SIDA), for example, supports several stakeholders with crucial roles in relation to the right to health in Uganda. The agency has given funds to various organisations: the Ugandan Government; WHO for its human-rights work in Uganda; the Uganda Human Rights Commission; and civil-society organisations, including Straight Talk, which aims to increase understanding of adolescence, sexuality, and reproductive health.⁸⁴ For their part, low-income countries have a responsibility to seek appropriate international assistance and cooperation to help them strengthen their health systems.⁸⁵

General comment 14 confirms that the human-rights responsibility of international assistance and cooperation in health extends to countries' actions as members of international organisations.³⁶ Scandinavian countries, for example, have proposed a trust fund for justice and human rights in the World Bank.^{85–87}

Legal obligation—Crucially, the right to the highest attainable standard of health gives rise to legally binding obligations. The health system must have, for example, a comprehensive national health plan; outreach programmes for the disadvantaged; a minimum package of health-related services and facilities; effective referral systems; arrangements to ensure the participation of those affected by decision making in health; respect for cultural difference; and so on. One of the distinctive contributions of the right to the highest attainable standard of health is that it reinforces good health practices with legal obligation and accountability. States are legally obliged to take all appropriate steps to implement the right-to-health features of health systems. Of course, some governments implement these features without reference to the right to health. But many governments do not ensure that these features are in place, and, in these cases, the right to health has an especially important role.

Monitoring and accountability—Individuals and communities should have the opportunity to understand how those with responsibilities have discharged their duties and provide those with responsibilities the opportunity to explain what they have done and why.⁸⁸ Where mistakes have been made, accountability requires redress. Accountability is not a matter of blame and punishment but a fair and reasonable process to identify what works, so it can be repeated, and what does not, so it can be revised.⁸⁸

Something as complex and important as health systems needs effective, transparent, accessible, and independent accountability mechanisms—health commissioners, national human-rights institutions, democratically elected local health councils, public hearings, patients' committees, impact assessments,

and judicial proceedings. The media and civil-society organisations also have crucial roles.⁸⁸

Accountability in many health systems is extremely weak. In some countries, the same body provides and regulates health services, as well as holding those responsible to account. Accountability can also be little more than a device to check that health funds were spent as they should have been. Human-rights accountability is concerned with ensuring that health systems are improving, and the right to the highest attainable standard of health is being progressively realised, for all, including disadvantaged individuals, communities, and populations.

In some countries, although playing an important part, the private health sector is largely unregulated. The requirement of human-rights accountability extends to both the public and private health-related sectors⁸⁹ and to international bodies working on health-related issues.

Accountability mechanisms are urgently needed for all bodies—public, private, national, and international—working on health-related issues. The design of appropriate and independent accountability mechanisms needs creativity and leadership, such as recently shown by the Uganda Human Rights Commission with the launch of its new Right to Health Unit in Kampala.⁹⁰

Scope and objectives

We begin to assess the degree to which the health systems of 194 countries include features arising from the right to the highest attainable standard of health.

From the start, this project did not aim to give a weighting to indicators nor to rank countries in an index, although we are aware that ranking can appeal to politicians and sometimes might enhance monitoring and accountability, leading to improved health and respect for human rights.^{91,92} Ranking in league tables is also problematic with technical difficulties and problems of interpretation.⁹³ However, indicators and benchmarks are needed to measure the present condition of a country's health system and to monitor its progress over time. We hope that this project will be repeated periodically so that the progress of individual countries, in relation to health systems and the right to health, can be monitored.

Although much more work has to be done to help governments identify the minimum package of health-related services and facilities needed by the right to the highest attainable standard of health, that vital task is not our aim here. In this Report, we do not attempt to provide a list of essential services and facilities needed for a well-functioning health system. Rather, we attempt to identify several additional, and commonly neglected, features arising from the right to health and informed by good practices that are required of all health systems.

Methodology

Development and selection of indicators

Our aim was to assess how much the health systems of all countries include some of the features that arise from



Dominic Simeoni/World Bank

the right to health. To meet this aim, we identified the following objectives: to promote awareness of the complementary relation between a health system and the right to health; to select a manageable set of indicators to assess the degree to which a health system includes some of the right-to-health features; to assess if sufficient information is available about these features both nationally and internationally; to increase monitoring and accountability in relation to health systems and the right to the highest attainable standard of health; to deepen the understanding of the important role of health data and indicators in relation to the progressive realisation of the right to health; to consider the limitations of data for health and human rights in relation to the progressive realisation of the right to health; to provide a basis to monitor, over time, health systems and the progressive realisation of the right to the highest attainable standard of health.

We developed indicators to reflect right-to-health features of health systems. The features arise from general comment 14,³⁶ including core obligations, and reflect many of the themes of the Declaration of Alma-Ata,⁹⁴ and elements of the WHO building blocks of a health system.⁷⁵ We also referred to article 24 of the Convention of the Right of the Child,⁶ general comments 3 and 4 of the Committee on the Rights of the Child,^{95,96} and general recommendation 24 of the Committee on the Elimination of the Discrimination Against Women.⁹⁷ We also relied on the framework of structure, process, and outcome indicators on the right to the highest attainable standard of health,⁹⁸ and the requirement that health facilities and services should be available, accessible, culturally acceptable, and of good quality.³⁶

To ensure that a similar project had not already been done, we reviewed existing projects (both published and in draft form) relying heavily on indicators, such as the Human Development Reports,⁹⁹ the World Health Report 2000 on health systems,⁵² the WHO and Office of the High Commissioner of Human Rights (OHCHR) indicators joint project of 2008,¹⁰⁰ the UN Millennium Development Goals,¹⁰¹ the poverty-reduction indicators from OHCHR,¹⁰² the WHO essential-medicine indicators,¹⁰³ and indicators of UNICEF,¹⁰⁴ UNAIDS,¹⁰⁵ and the World Bank.^{106,107}

The development and selection of indicators was a lengthy process with numerous stages. We selected indicators according to the following criteria: scientific robustness, usefulness, representativeness, understandability, and importance.⁹¹ Data availability was not a determining factor. We also selected indicators that would be accessible to a broad group of professions, including policy makers in both health and human rights.

In an ongoing process over 18 months, we consulted different individuals who helped in the selection of indicators, including academics (eg, from political science, law, health, and sociology), UN bodies, national and local non-governmental organisations and associations, health practitioners, lawyers, economists, and anthropologists. Individuals were consulted from Africa, Latin America, Europe, North America, and Asia-Pacific, with balance between sexes. We also consulted people from indigenous communities. We used purpose sampling to address specific questions and right-to-health features. We also asked delegates at two health and human-rights conferences (Italy and Zimbabwe) for their views, and consulted Maori and non-Maori people in New Zealand. However, our

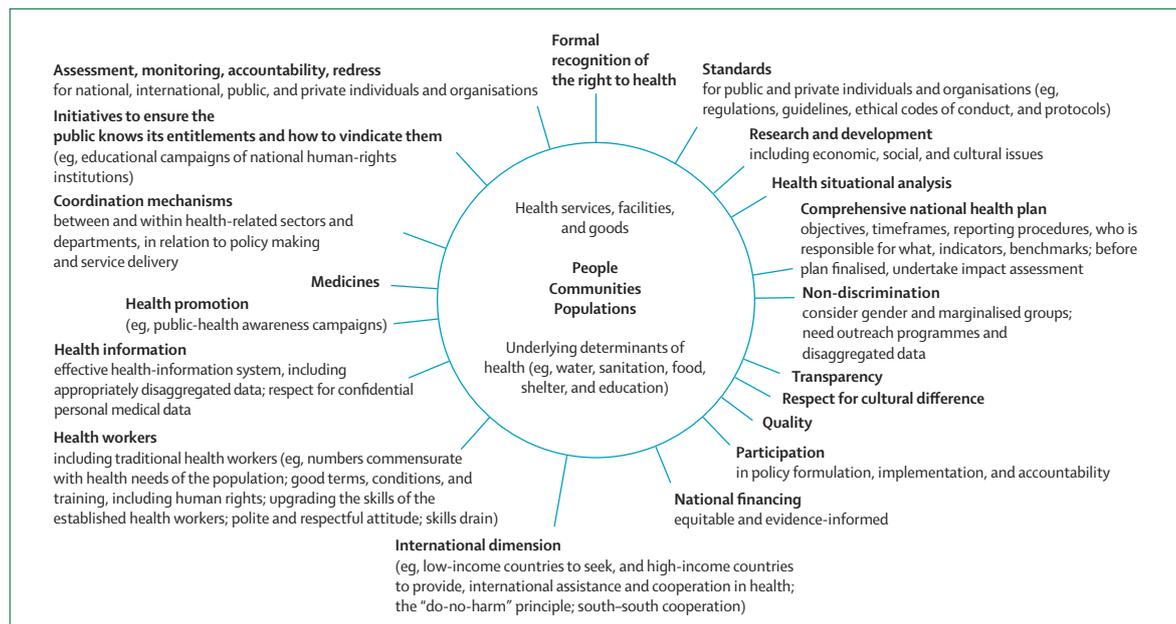


Figure 1: Right-to-health features of a health system underpinned by legal obligations based on general comment 14: preliminary working model

consultation process could have been better and we suggest that, when our selection of indicators is revisited, more consultations should take place.

We used five steps in the process of indicator selection. First, we reviewed the right-to-health features of health systems and WHO building blocks and, after numerous consultations, we created a preliminary working model as a way to assist development and selection of indicators (figure 1). We focused on the wellbeing of individuals, communities, and populations. We also recognised the importance of health-related services, facilities, and goods, including underlying determinants of health, water, sanitation, food, shelter, and education. Additionally, we identified a selection of features that were of particular importance to health systems. We revised and refined this preliminary model because we were aware that it had shortcomings—eg, the model did not clearly convey that several of the features, such as non-discrimination, are recurrent.

Second, we looked closely at health-related services and the underlying determinants of health (middle section of figure 1) in the context of the right-to-health requirements—ie, that these should be available, accessible, culturally acceptable, and of good quality. However, of these four requirements, we focused on the first (availability) and second (accessibility). From the right-to-health perspective, access is crucial because of its relation with non-discrimination, equality, and equity. Health care (eg, antenatal, mental-health, cancer care, and access to medicines), underlying health determinants (eg, drinking water), and government spending on health care were also taken into account (webtable 1).

Third, we considered the features shown in the perimeter of figure 1. Formulation of indicators for standards proved difficult. Formal recognition of the right to health is important but it is usually confined to a few vague sentences. A more detailed elaboration is needed by way of legislation, protocols, guidelines, codes of conduct, and others. We therefore considered formulating indicators that questioned whether countries had adopted international standards on blood safety and water quality, but we were unable to identify indicators conforming to our criteria.

We recognise that planning is only a means to an end. Nonetheless, general comment 14 underlines the importance of planning. An appropriate plan, prepared with a suitable process, is a vital vehicle for realising the right to health. Thus, we devoted great attention to the identification of appropriate indicators in relation to devising a comprehensive national health plan (webtable 2).

We struggled to identify indicators of participation that conformed to our criteria. Especially challenging were indicators capturing whether a country has appropriate institutional mechanisms for participation. Participation should not be confined to the development of the national health plan; it should also extend to the national health-workforce strategy, national medicine policy,

implementation measures, accountability, and so on. Furthermore, participation should not be confined to marginalised groups. However, the right to health has a special focus on disadvantaged people. But, if marginalised groups are participating, we can be confident that non-marginalised groups are too. In the end, we addressed participation in the context of national health planning.

Indicators for research and development in health were also challenging. We wanted to identify indicators that showed whether adequate and appropriate research and development are being undertaken in a country, but we failed to identify an indicator that conformed to our criteria, and so this issue is not present in our final selection.

Fourth, we aimed to merge the two sets of draft indicators already identified (webtables 1 and 2) and revise them where appropriate. Also, we wanted to add some new indicators. For example, we were looking for an indicator that reflected the right-to-health requirement that health-related services, facilities, and goods should be culturally acceptable. General comment 14 emphasises that special attention should be paid to indigenous people and so, prompted by the indicators joint project of WHO and the OHCHR,^{100,108} we added a new draft indicator—ie, the proportion of people covered under indigenous or alternative systems of health care (webtable 3). However, placing indigenous and alternative health systems in the same indicator was confusing; therefore, this indicator was not included in our final list. Other indicators approach aspects of cultural acceptability, such as the indicator about participation of marginalised groups. Also, the definition of a comprehensive national health plan extends to the whole population, including indigenous people, and incorporates public and private sectors, including traditional and indigenous health practices and medicines.

Fifth, we made a final selection of 72 indicators (panel 4), divided into 15 groups. Some of the groups overlap; for example, the participation indicator overlaps with the planning indicators. Of course, many different health workers are crucially important, but some indicators use doctors and nurses as proxies. After consultations, we created a new group—additional safeguards—for indicators that did not fit neatly into any other group. By placing indicators on monitoring, assessment, accountability, and redress at the end of the list, we are not saying that such issues only arise at the end of a process. On the contrary, these issues must be seen as recurrent elements in a continuous process.

As prioritised by general comment 14, several indicators focus on maternal and child health. Women and children are among those groups that are often marginalised. In the past 2–3 years, maternal mortality has increasingly been recognised as a human-rights issue.^{109–111}

We prepared explanatory notes for each indicator, along the lines of the meta-sheets used in the recent indicators joint project of WHO and the OHCHR.¹⁰⁰ Explanatory



Dominic Sansoni/World Bank

See Online for webtables 1–3



Masaru Goto/World Bank

See Online for webappendix 1

notes for every indicator include: definitions, rationale, method of computation, data source, periodicity, comments, and limitations (webappendix 1). Each data source was assessed for its quality and any potential bias was noted.

To reduce the number of indicators, disaggregation of all appropriate indicators on all relevant grounds was not required, although we acknowledge that such data should be available. Several of the selected indicators, however, address discrimination, including the indicator on civil registration requiring disaggregation on five priority grounds: sex, ethnic origin, rural or urban residence, socioeconomic group, and age. We identified these priority grounds of disaggregation through a process of consultation between lawyers and health workers, including representatives from the British Medical Association, WHO, and academic institutions. Ideally, all appropriate data should be disaggregated, at least, by these five priority grounds. The civil registration system should be one of the most comprehensive data-collection systems in a country, and therefore this indicator was chosen as the proxy measure.

We did not identify indicators of all right-to-health features conforming to our selection criteria (eg, indicators related to coordination and research and development). Although several indicators exist addressing different dimensions of access, such as indicators 24 (access to clean water), 27 (antenatal care), and 46 (catastrophic health expenditure), we accept that issues of access demand more attention.

See Online for webtables 4 and 5

External review

After selection of draft indicators, we sent them and explanatory notes to 40 experts, who had not previously been part of this project, for their comments and review. 22 experts responded, including lawyers, human-rights professionals, clinicians, public-health practitioners, academics, and policy makers. We recognise the advantages of random sampling, but constraints of time and resources prevented this approach. However, expert comments were very constructive in deciding and devising the final version of our list of indicators.

Data collection

To fulfil the project's objectives, we needed to consider data availability at the global level and, in relation to five countries, at the national level as well.^{52,112} For a few indicators, only the global perspective was necessary (eg, the number of international and regional treaties recognising the right to health ratified by a country). If information was not present about a particular indicator, it was marked as not available in the tables 1 and 2. If an indicator was not applicable to a particular country, it was marked as such. The time period for data collection was from August, 2007, to August, 2008, with the intention of obtaining data for the same indicators at about the same time.

We initially selected six countries for national data collection because one of us, PH (then the UN special rapporteur on the right to the highest attainable standard of health) had recently been to them on mission and prepared formal UN reports on each before this project began. Only five could commit to data collection in the allotted time: Sweden, Mozambique, Romania, Peru, and Ecuador. Although not globally representative, these high-income, middle-income, and low-income countries provided a range of different political background, history, geographical location, and cultural contexts. Countries such as China, Bangladesh, USA, and India would have been interesting to study, but they fell outside our selection criteria. In each of the five countries selected, we chose data collectors who, at the relevant time, were independent from the government (although they might have collaborated closely with the government) and had a good knowledge of the country, of health and human rights, and preferably of the right to health.

For every indicator, the information obtained was the response to the indicator, the source of the data, and the date of last update and of access (if from an internet source). Relevant comments to explain the answer were documented, in addition to exact legal provisions for indicators related to the law and exact quotes for indicators related to plans or policies. In addition to table 1 on global data (194 countries) and table 2 on national data (five countries), webtables 4 and 5 include extended tables with sources, comments, and other information. The International Committee of Medical Journal Editors Uniform Requirements was used as the basis for the referencing system.¹¹³ For internet sources, the date of access and of last update was of particular importance to document. The working currency for all monetary data was US dollars at the exchange rate at the time of data collection.

We clearly defined terms used for indicators that were strictly adhered to during data collection; although this rigidity might have led to reduced data availability. All relevant definitions can be found in the explanatory notes online (webappendix 1).

Data were accepted in any of the official UN languages: Arabic, Chinese, English, French, Russian, and Spanish, with translations into English done by the team where necessary. National data were received in English, Spanish, or Swedish, and translated where necessary.

Primary data were not collected; therefore, formal ethical approval was not necessary for this research project. Only secondary data were used on both global and national levels. All the information was in the public domain, defined to be any document that is in print and should be easily accessible, such as in a library or on the web.

To ease collection of global data, we created the so-called one-click rule, which defines that the limits of the search for data should only be no more than one mouse click away from the global source. For example, if, while navigating through the WHO website, a link to a national

Panel 4: Indicators of right to health**Recognition of the right to the highest attainable standard of health**

- 1 Number of international and regional human-rights treaties recognising the right to health ratified by the state
- 2 Does the state's constitution, bill of rights, or other statute recognise the right to health?

Non-discrimination

- 3 Number of treaty-based grounds of discrimination that the state protects out of: sex; ethnic origin, race, or colour; age; disability; language; religion; national origin; socioeconomic status, social status, social origin, or birth; civil status; political status, or political or other opinion; and property
- 4 Number of non-treaty-based grounds of discrimination that the state protects out of: health status (eg, HIV/AIDS); people living in rural areas; and sexual orientation
- 5 General provisions against discrimination

Health information

- 6 Does the state law protect the right to seek, receive, and disseminate information?
- 7 Does the state law require registration of births and deaths?
- 8 Does the state have a civil registration system?
- 9 Does the state disaggregate data in the civil registration system on grounds of: sex, ethnic origin, rural or urban residence, socioeconomic status, or age?
- 10 What proportion of births is registered?
- 11 Does the state regularly collect data, throughout the territory, for the number of maternal deaths?
- 12 Does the state centralise these data for the number of cases of maternal deaths?
- 13 Does the state make publicly available these data for the number of cases of maternal deaths?
- 14 Does the state regularly collect data, throughout the territory, for the number of neonatal deaths?
- 15 Does the state centralise these data for the number of cases of neonatal deaths?
- 16 Does the state make publicly available these data for the number of cases of neonatal deaths?

National health plan

- 17 Does the state have a comprehensive national health plan encompassing public and private sectors?
- 18 Has the state undertaken a comprehensive national situational analysis?
- 19 Before adopting its national health plan, did the state undertake a health impact assessment?
- 20 Before adopting its national health plan, did the state undertake any impact assessment explicitly including the right to health?
- 21 Does the state's national health plan explicitly recognise the right to health?
- 22 Does the state's national health plan include explicit commitment to universal access to health services?

Participation

- 23 Is there a legal requirement for participation with marginalised groups in the development of the national health plan?

Underlying determinants of health

- 24 What percentage of the rural and urban population has access to clean water?
- 25 What are the CO₂ emissions per capita?
- 26 Prevalence rate of violence against women

Access to health services

- 27 Proportion of women with a livebirth in the last 5 years who, during their last pregnancy, were seen at least three times by a health-care professional, had their blood pressure checked, had a blood sample taken, and were informed of signs of complications

Medicines

- 28 Is access to essential medicines or technologies, as part of the fulfilment of the right to health, recognised in the constitution or national legislation?
- 29 Is there a published national medicines policy?
- 30 Is there a published national list of essential medicines?
- 31 What is the public per capita expenditure on medicines?
- 32 What is the average availability of selected essential medicines in public-health facilities?
- 33 What is the average availability of selected essential medicines in private-health facilities?
- 34 Percentage of 1-year-old children immunised against measles
- 35 Percentage of 1-year-old children immunised against diphtheria, tetanus, and pertussis

(Continues on next page)

(Continued from previous page)

Health promotion

- 36 Does state law require comprehensive sexual and reproductive-health education during the compulsory school years for boys and girls?
- 37 Proportion of 15–24-year-old boys and girls with comprehensive HIV and AIDS knowledge

Health workers

- 38 Does the state have a national health-workforce strategy?
- 39 Does the state law include provision for adequate remuneration for doctors?
- 40 Does the state law include provision for adequate remuneration for nurses?
- 41 Do the state's workforce policies or programmes include a plan for national self-sufficiency for doctors?
- 42 Do the state's workforce policies or programmes include a plan for national self-sufficiency for nurses?
- 43 Do the state's workforce policies or programmes provide incentives to promote stationing in rural areas of doctors?
- 44 Do the state's workforce policies or programmes provide incentives to promote stationing in rural areas of nurses?

National financing

- 45 Is the per capita government expenditure on health greater than the minimum required for a basic effective public-health system?
- 46 What is the proportion of households with catastrophic health expenditures?
- 47 Total government spending on health as percentage of gross domestic product (GDP)
- 48 Total government spending on military expenditure as percentage of GDP
- 49 Total government spending on debt service as percentage of GDP
- 50 Proportion of national health budget allocated to mental health

International assistance and cooperation

- 51 Does the state's international development policy explicitly include specific provisions to promote and protect the right to health?
- 52 Does the state's international development policy explicitly include specific provisions to support the strengthening of health systems?
- 53 Proportion of net official development assistance directed to health sectors

Additional safeguards

- 54 Does the state law require protection of confidentiality of personal health data?
- 55 Does the state law require informed consent to treatment and other health interventions?
- 56 Does the constitution protect freedom of expression?
- 57 Does the constitution protect freedom of association?
- 58 Does the state have a patients' rights charter?
- 59 Is the patients' rights charter available in all official languages?

Awareness raising about the right to the highest attainable standard of health

- 60 Does the state have a national human-rights institution with a programme of budgeted activities to raise awareness of the right to health among the public?
- 61 Does the state have a national human-rights institution with a programme of budgeted activities to raise awareness of the right to health among doctors?
- 62 Does the state have a national human-rights institution with a programme of budgeted activities to raise awareness of the right to health among nurses?
- 63 Are human rights a compulsory part of the national curriculum for the training of doctors?
- 64 Are human rights a compulsory part of the national curriculum for the training of nurses?

Monitoring, assessment, accountability, and redress

- 65 Infant mortality rate
- 66 Mortality rate of children younger than 5 years
- 67 Maternal mortality ratio
- 68 Life expectancy
- 69 Does the state have a national human-rights institution with a mandate that includes the right to health?
- 70 Number of judicial decisions, nationally, that considered the right to health during 2000–05
- 71 Does the state have a national human-rights institution with a mandate to monitor international assistance and cooperation?
- 72 In the past report submitted by the state to the UN in relation to the International Covenant on Economic, Social, and Cultural Rights, was there a detailed account of the international assistance and cooperation in health that the state is providing?

website was found, then the link would be opened. If the required information was accessible on that webpage, then it would be judged as globally processed data and therefore acceptable. If, however, there was need to follow more than one link, open tabs, or for any navigation other than scrolling up and down, the information was not judged as globally available. This rule only applied to links to webpages outside the global source, with no limitations imposed on navigation within the global source. We decided that this rule was needed to provide a practical limit to what could otherwise become an eternal internet search, but still allowing adequate and useful data collection.

We generated a list of global websites (webappendix 2). If any data were unavailable in any of these websites, we did a more detailed search. We identified suitable search terms where necessary; these are documented in the explanatory notes that accompany each indicator (webappendix 1).

Sometimes, the presence of a right-to-health feature was not apparent at the global level, which could be interpreted as the data were not existing. However, in these situations we reported that the information was not available, which meant that it might exist and be documented elsewhere. For example, if there was no mention of a national health-workforce strategy in the information available at the global level, then the data were listed as unavailable for that country. However, if the information stated that there was no health-workforce strategy, then that was recorded with a 'no'.

Methods for data collection nationally were slightly different and defined as accessible information in the public domain. These data were needed to be publicly available and therefore included information available on the internet, published reports, or information publicly available on request. We requested documentation of the source. Data that were only available to selected groups or information acquired through interviews were not allowed. National teams of data collectors could decide how best to search for the information as long as it fulfilled the methodological requirements. National teams searched relevant websites and published documents unrestricted by the one-click rule. However, they were restricted to national sources and could not access global databases, such as UN sources. We relied on the same explanatory notes (webappendix 1) to ensure that definitions and criteria were consistent with the global data and the same referencing guidelines were applied. We are aware of some limitations of the methods.

For some indicators, a year was included from which data were collected (identified in webappendix 1). The project started in 2007 and data were often not yet available for 2007, or even 2006, and therefore data from 2005 were often the most up-to-date (further information is available in webtables 4 and 5 and explanatory notes in the webappendix 1). Furthermore, the indicator relating to judicial decisions was restricted

to cases within a 5-year period (2000–05) because we thought that this was a manageable recent timeframe.

Several indicators we selected are commonly used (eg, indicator 68 on life expectancy), and information is available in published material about their usefulness, validity, and limitations.

Because of the many differing lists of states worldwide, we opted to use a list of 194 countries generated from the WHO member-state list of 2000³² and those countries listed by the UN Development Programme,¹¹² acknowledging that other lists may differ. Several indicators were only applicable to donor states, and the list of states to be considered for these indicators was compiled from Organisation for Economic Co-operation and Development (OECD) members¹¹⁴ and the International Development Association of the World Bank list of donors from March, 2008¹¹⁵ (webpanel). However, the indicator may be related to an event that happened before a state was a donor, such as the past report in relation to the International Covenant on Economic, Social, and Cultural Rights.

Key findings

We discuss some of the key findings and results arising from the data collected for the 72 indicators, giving special attention to three of our objectives. Do countries' health systems have the relevant right-to-health features? Are the relevant data available at the global level? Do the data provide a basis to monitor, over time, health systems and the progressive realisation of the right to the highest attainable standard of health.

We did not try to find directional relations between variables, such as treaty ratification and health outcomes. Several indicators in our list illustrate that, no matter how sophisticated they are, indicators never provide a complete picture and they need to be supplemented with qualitative information. Table 1 summarises the global data from 194 countries and table 2 the national data from five countries. All data are available in webtables 4 and 5.

Recognition of the right to health

Recognition of the right to the highest attainable standard of physical and mental health is a right-to-health feature of a health system. Although recognition can have various forms, we focused on international (indicator 1) and national (indicator 2) recognition (panel 4). Figure 2 shows the number of countries that have ratified three international human-rights treaties that include the right to health. The step after ratification of treaties is the recognition of the right to health in the national constitution or other statute, but more than two-thirds of countries do not have this recognition. Only 56 countries that have ratified the International Covenant on Economic, Social, and Cultural Rights include the right to health in their constitution or other statute. International recognition of the right to health (indicator 1) is substantially more widespread than national recognition (indicator 2), probably because international accountability is weaker than national accountability.



See Online for webappendix 2

See Online for webpanel



Trevor Samson/World Bank

Although legal recognition of the right to the highest attainable standard of health can mean commitment towards the realisation of the right to health, this does not capture the actual process or success of implementation. Other indicators attempt to do this and are discussed later. Legal recognition is important because it can increase accountability of stakeholders with responsibilities to, and within, a health system.

Although eight indicators explicitly mention the right to health, different countries use different terminology for this human right. Some countries use terminology that does not match our wording, and negative results were recorded in these cases (webappendix 1). Online documents were sometimes translations of original documents, introducing another possible reason for different terminology.

Non-discrimination

We aimed to record aspects of non-discrimination, equality, and equity—key right-to-health features of health systems. Indicator 3, for example, lists 11 treaty-based grounds of discrimination, and indicator 4 lists three non-treaty-based grounds of discrimination (panel 4). The treaty-based ground of discrimination most commonly protected by law was ethnic origin (122 countries), whereas the least-protected was age (13 countries; figure 3). However, 95 countries protect only five or less treaty-based grounds of discrimination, and none protects all 11.

We addressed non-discrimination asking whether data in the civil registration system were disaggregated on the five priority grounds of sex, ethnic origin, rural or urban status, socioeconomic group, and age (indicator 9). None of the five countries studied nationally disaggregate these data by ethnic origin, and therefore they cannot show any inequity between ethnic groups. Disaggregation of data on the basis of ethnic origin is a controversial issue and, although such information can be used in a positive way, it can also be used in a negative way (eg, to reinforce stigmatisation). Therefore, article 8 of the EU Data Directive prohibits the “processing of personal data revealing racial or ethnic origin”, but with important exemptions related to data processed by health professionals.¹¹⁶

For non-treaty-based grounds of discrimination, protection was even less widespread than for treaty-based grounds (figure 3). For example, according to our approach, only three countries (Fiji, South Africa, and Ecuador) protected against discrimination on the ground of sexual orientation.

People with mental illnesses are frequently neglected and discriminated against, and this might lead to inadequate financial provision for mental health.⁴⁴ Therefore, we took into account the proportion of the national health budget allocated to mental health (indicator 50). Of 98 countries for which data were available, almost half allocated 2% or less of their national budget to mental health. Sweden and Ecuador did not allocate a specific budget for mental health. The team

gathering data in Sweden remarked that this is “partly a consequence of the objective to not stigmatise the group” (webtable 4). We do not agree that a specific budget allocation for mental health could stigmatise those with mental-health problems or that it is inconsistent with the integration of mental-health care across health systems. By contrast, the absence of a specific budget allocation might maintain the marginalisation and neglect experienced by many people with mental disabilities.

Later, we consider the indicator on access to clean water (indicator 24). Disaggregated on the basis of urban or rural residence, this indicator confirms the disadvantage of rural dwellers in most countries.

Health information

Because of its crucial importance in relation to both the right to health and the WHO building blocks, health information is prominent in our profile of indicators (indicators 6–16). We focused on maternal and neonatal deaths, and the civil registration system. We questioned whether countries obtained data for the number of maternal deaths throughout their territory. On the basis of global data and our approach, 69 countries obtained, centralised, and made publicly available these data; whereas 88 countries did not. Data for the remaining 37 countries were unavailable at the global level, including those for Ecuador and Peru. Compared with data for maternal deaths, data for neonatal deaths were available at a global level for even fewer countries. Nationally, data were gathered, centralised, and made publicly available by Ecuador, Romania, and Sweden (panel 5); however, Mozambique did not do this for maternal deaths (they only include those deaths occurring in institutions) and Peru did not for neonatal deaths. Overall, on the basis of our approach, 88 countries do not seem to have in place an adequate health information system for maternal deaths, suggesting that their health systems are seriously deficient in terms of both the right to health and relevant WHO building blocks. Also, despite their importance, global data for maternal and neonatal deaths are inadequate.

As with equity, human rights have a particular concern for marginalised individuals, groups, and populations. Several indicators in the profile take into account disadvantaged groups, such as indicators on discrimination (indicators 3–5), participation with marginalised groups (indicator 23), and whether or not the patients’ rights charter is available in all official languages (indicator 59). Disadvantage cannot be monitored without data that are disaggregated on key grounds.¹¹⁷ We questioned whether a country disaggregates data from the civil registration system on the priority grounds of sex, ethnic origin, rural or urban residence, socioeconomic group, and age (indicator 9). On the basis of our approach, no global data were available for any country. However, research in the five selected countries showed that national data were available.

All five countries disaggregated on two of the five grounds (sex and age); only one country (Romania) disaggregated on four of the five grounds, and none disaggregated on the ground of ethnic origin, which makes the design of appropriate interventions that address ethnic disadvantage very difficult for policy makers. Lack of disaggregated data also makes it difficult to hold countries accountable for accessibility of their health systems. From the right-to-health perspective, this shortcoming is important.

Overall, our data confirmed that disaggregated information, which is crucial for right to health, even when available nationally, is not always made available globally.

National health plan

According to general comment 14, the adoption of a national public-health strategy and plan of action is a core obligation.³⁶

An essential precondition for the development of a comprehensive national-health plan is a national health situational analysis (indicator 18). Global data showed that 57 countries had done health situational analyses, although all were done as a part of the WHO country cooperation strategy development process.¹⁸ However, global data were not available for the other 137 countries. Data were more readily available nationally than they were globally. For example, although global data are not available for Romania, national data confirmed that they have not done a health situational analysis. Indicator 18 does not capture whether the analysis was used to develop the national health plan or the quality of the analysis, as shown in panel 6 for Mozambique. Nonetheless, the existence of a health situational analysis is an important precondition for a national health plan and a step in the right direction. Our research confirmed that, despite the importance of health situational analyses, global data collection neglects this right-to-health feature.

Assessments of health and human-rights effects are also needed, together with a comprehensive national health plan. There is a growing trend to undertake health impact assessments before a health initiative is finalised, adopted, and implemented.⁷⁵ We asked whether countries undertook either a health impact assessment (indicator 19) or any impact assessment that included the right to health (indicator 20) before adopting their national health plan. Of course, indicators have limitations; for example, even with an impact assessment, any negative findings might be ignored and the plan implemented without revision. No global data were available with our approach for any country regarding either indicator. Nationally, none of the five countries did a health impact assessment before adopting their national health plans. We confirmed that, despite the importance of such assessments, global data collection ignores this important right-to-health feature of a health system.

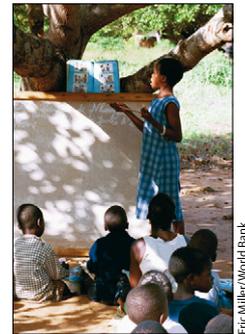
We asked whether a country has a comprehensive national health plan encompassing public and private

sectors (indicator 17). Our explanatory notes (web-appendix 1) identified the essential criteria of a plan, such as clear objectives, timeframes, indicators, benchmarks, and reporting procedures. For 181 countries, we were unable to gather global data with our approach, and 13 countries do not have a comprehensive national health plan—ie, their health systems lack this important right-to-health feature. However, the indicators for national health plans highlighted limitations of the internet as a resource. Dates of last updates are commonly unavailable, and therefore information might be out of date. Although we made every effort to gather data as completely and accurately as possible, with such an extensive database there might be inaccuracies. Nonetheless, despite the importance of a comprehensive national health plan, global data collection seems to neglect this important right-to-health feature of a health system.

More-detailed national data were available for the comprehensive national health-plan indicators, showing that Mozambique, Romania, and Sweden have comprehensive national health plans, whereas global data were not available. At the time of data collection, Peru was preparing a national health plan but it did not include all the features of a comprehensive health plan (panel 7).

We asked whether the national health plan includes an explicit commitment to universal access to health services, defined as access to primary, secondary, and tertiary physical and mental care (indicator 22). We regarded a commitment to basic or essential care as inadequate. A low-income country might not be in a position to deliver universal access to health services, but a comprehensive national health plan should include a commitment to reach this aim.³⁶ Such a commitment is the minimum expected from all countries, whatever their stage of economic development. A developing country's commitment to universal access gives an important message to health workers, the public, and donors. When a country cannot provide universal access, it must have fair, transparent, rational, evidence-informed processes (eg, protocols and guidelines) in place to ensure that reasonable decisions are made when determining who has access to health-related facilities and services, and on which terms.

On the basis of global data and our approach, national health plans of 15 countries (Antigua and Barbuda, Bahrain, Botswana, Chile, North Korea, Dominican Republic, Honduras, Libya, Mauritius, Mozambique, Peru, Seychelles, Timor-Leste, Uruguay, and Yemen) include an explicit commitment to universal access to health services, whereas plans of 14 countries (Afghanistan, Argentina, Bangladesh, Bolivia, Costa Rica, Croatia, Egypt, El Salvador, Lesotho, Malawi, Nepal, Papua New Guinea, Romania, and Tanzania) do not. However, global data are not available for 165 countries. Again, our research suggests that global data collection neglects information that is important for the right to health.



Eric Miller/World Bank

	Recognition		Non-discrimination			Health information										National health plan				Underlying determinants					Access	Medicines		
	1*	2	3	4	5	6	7	8	10†	11	12	13	14	15	16	17	18	21	22	24† rural	24† urban	25†	26† rural	26† urban	27†	28	29	30
Afghanistan	4/5	N	..	..	..	N	..	..	6	N	N	N	N	N	N	..	Y	N	N	27.4	56.6	0.0288	..	..	..	N	Y	Y
Albania	5/6	Y	7	..	1	Y	..	Y	98	N	N	N	N	N	N	..	..	..	..	92.5	99.3	1.172	..	..	..	N	..	..
Algeria	7/8	Y	4	..	..	N	..	Y	99	N	N	N	N	N	N	..	..	..	..	82.7	89.6	5.994	..	..	..	N	..	..
Andorra	5/6	Y	6	..	1	N	..	Y	..	..	..	..	..	..	..	..	..	..	100	100	..	..	..	..	N	..	..
Angola	5/8	N	5	1	..	Y	..	..	29	N	N	N	N	N	N	..	Y	..	..	39.9	63.8	0.5051	..	..	..	N	..	..
Antigua and Barbuda	4/7	N	5	1	..	Y	..	Y	..	..	..	..	..	..	..	..	..	N	Y	89	95	5.0556	..	..	..	N	..	..
Argentina	7/7	Y	..	..	1	Y	..	Y	91	Y	Y	Y	Y	Y	Y	..	..	..	N	78.8	98.3	3.6951	..	..	..	N	Y	Y
Armenia	6/6	N	10	..	1	Y	..	Y	96	N	N	N	N	N	N	..	..	..	..	75	99	1.2052	..	..	..	N	Y	Y
Australia	5/5	N	..	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	16.272	..	..	..	N	Y	Y
Austria	6/6	N	5	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	8.4628	..	..	..	N	Y	Y
Azerbaijan	6/6	Y	7	..	1	Y	..	Y	97	N	N	N	N	N	N	N	..	..	..	53	85.3	3.7762	..	..	..	N	N	Y
The Bahamas	3/7	..	..	..	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	86	98	6.2916	..	..	..	N	N	Y
Bahrain	5/5	N	5	..	..	N	..	Y	..	N	N	N	Y	Y	Y	..	Y	..	Y	..	100	23.8656	..	..	..	N	N	Y
Bangladesh	5/5	N	..	..	..	N	..	Y	10	N	N	N	N	N	N	..	Y	..	N	71.1	81.3	0.2469	62	53	8.5	N	..	..
Barbados	6/7	..	4	1	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	Y	..	..	100	100	4.3607	..	..	..	N	Y	Y
Belarus	4/6	Y	..	..	1	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	6.5892	..	..	..	N	Y	Y
Belgium	6/6	Y	..	..	..	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	..	100	9.722	..	..	..	N	Y	N
Belize	3/7	N	5	1	..	Y	..	Y	93	Y	Y	Y	N	N	N	N	..	..	..	82	100	2.9395	..	..	..	N	..	..
Benin	8/8	N	5	..	..	N	..	..	70	N	N	N	N	N	N	..	..	..	..	54.3	76.1	0.2902	..	..	..	N	Y	Y
Bhutan	2/5	N	..	..	..	N	..	..	..	N	N	N	N	N	N	..	Y	..	..	60	86	0.6649	..	..	..	N	Y	Y
Bolivia	7/7	Y	..	..	1	Y	Y	Y	82	N	N	N	N	N	N	..	..	..	N	55.8	95.3	0.774	..	..	..	N	Y	Y
Bosnia and Herzegovina	4/6	N	7	..	1	Y	..	Y	100	Y	Y	Y	..	..	..	..	..	..	..	94.9	99.8	3.9936	..	..	15	N	..	..
Botswana	5/8	N	4	1	..	N	..	..	58	N	N	N	N	N	N	..	Y	..	Y	90.5	99.7	2.3693	..	..	..	N	..	..
Brazil	7/7	Y	4	..	1	N	..	Y	89	N	N	N	N	N	N	..	..	..	..	..	97	1.8001	37	29	54.4	N	..	..
Brunei	3/5	N	..	..	..	N	..	Y	..	N	N	N	Y	Y	Y	..	..	..	..	..	..	24.0912	..	..	..	N	N	Y
Bulgaria	6/6	N	7	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	5.4598	..	..	..	N	Y	Y
Burkina Faso	8/8	Y	7	..	1	N	..	..	64	N	N	N	N	N	N	..	..	..	..	63.1	91	0.0812	..	..	4.1	N	..	Y
Burma	2/5	N	..	..	..	N	..	Y	65	N	N	N	N	N	N	..	Y	..	..	74	75.2	0.2052	..	..	13.7	N	..	..
Burundi	7/8	Y	..	..	1	N	..	..	60	N	N	N	N	N	N	..	..	..	..	77.9	91.4	0.0291	..	..	..	N	..	..
Cambodia	5/5	N	7	..	..	N	..	Y	66	N	N	N	N	N	N	..	Y	..	..	33.3	62.4	0.039	..	..	..	N	Y	Y
Cameroon	6/8	Y	7	..	1	N	..	..	70	N	N	N	N	N	N	..	..	..	..	45.2	86.3	0.2205	..	..	..	N	Y	Y
Canada	5/7	N	6	..	1	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	99	100	20.0095	..	..	..	N	N	N
Cape Verde	8/8	Y	7	..	1	N	..	Y	..	N	N	N	N	N	N	..	..	..	..	89.4	64.1	0.5553	..	..	..	N	Y	Y
CAR	7/8	N	5	..	1	N	..	..	..	N	N	N	N	N	N	..	..	..	..	55.7	88.1	0.0614	..	..	..	N	..	Y
Chad	6/8	N	6	..	..	N	..	..	9	N	N	N	N	N	N	..	..	..	..	40.9	81.4	0.0127	..	..	6.2	N	..	Y
Chile	6/7	N	..	..	1	N	..	Y	96	Y	Y	Y	Y	Y	Y	..	..	N	Y	66	99	3.8712	..	..	..	N	Y	Y
China	5/5	N	..	..	..	N	..	..	..	N	N	N	N	N	N	..	Y	..	..	85.5	99.5	3.8393	..	..	49.4	N	N	Y
Colombia	7/7	Y	7	..	..	Y	Y	Y	90	N	N	N	N	N	N	..	..	..	..	63.8	99.1	1.2102	..	..	..	N	..	Y
Comoros	7/8	N	..	..	..	N	..	..	83	N	N	N	N	N	N	..	..	..	..	74.2	93.5	0.1132	..	..	44.1	N	..	Y
Congo (Brazzaville)	7/8	N	6	1	..	N	..	N	81	N	N	N	N	N	N	..	..	..	..	37.4	95.6	1.0034	..	..	25.5	N	Y	Y
Cook Islands	2/5	N	5	0	1	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	87.5	98.5	2.0445	..	..	..	N	N	Y
Costa Rica	7/7	N	..	..	1	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	N	92	100	1.506	..	..	..	N	N	Y
Cote d'Ivoire	7/8	N	..	..	..	N	..	..	55	N	N	N	N	N	N	..	..	..	..	87.8	95.2	0.2825	..	..	12.7	N	N	Y
Croatia	6/6	Y	8	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	N	..	..	5.1765	..	..	70.3	N	..	..
Cuba	4/7	Y	4	..	1	N	..	Y	100	Y	Y	Y	Y	Y	Y	..	..	..	..	77.7	94.9	2.2956	..	..	..	N	N	Y
Cyprus	6/6	N	7	..	1	N	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	100	100	8.1634	..	..	..	N	Y	Y

																												Health workers			National financing					IAC					Additional safeguards					Monitoring, assessment, accountability, and redress				
31§	32¶	33¶	34†	35†	37m†	37f†	38	43	44	45	46†	47†	48†	49†	50†	53†	54	55	56	57	58	59	65||	66||	67**	68	70	72																						
..	57	45	..	..	Y	..	..	N	..	5.2	1.5	..	..	NA	..	..	Y	Y	..	..	165	257	1800	42	..	NA												
..	61	52	..	..	..	..	..	Y	..	6.5	1.3	1	6	NA	..	..	Y	Y	..	..	15	17	92	71	..	NA													
..	91	92	..	..	..	..	..	Y	..	3.5	2.9	5.8	NA	NA	..	..	Y	Y	..	..	33	38	180	71	..	NA													
..	Y	..	6.3	..	..	4	NA	..	..	Y	Y	..	..	3	4	..	82	..	NA																
..	53	34	42.7	35.2	Y	..	..	N	..	1.8	4.1	6.8	NA	NA	..	..	Y	Y	..	..	154	260	1400	41	..	NA																
..	Y	..	4.8	..	..	3	NA	..	..	N	Y	..	..	10	11	..	73	..	NA																
..	Y	5.77	10.2	1	5.8	NA	..	Y	Y	N	N	..	..	14	17	77	75	..	N																				
157	72	71	..	..	..	..	..	N	..	5.4	2.9	2.8	5	NA	N	..	Y	Y	..	..	21	24	76	69	..	NA															
331-02	Y	..	8.8	1.8	..	10	4.2	N	Y	N	..	..	..	5	6	4	82	..	N																			
171-98	Y	..	10.2	0.9	..	NA	7.97	Y	..	N	Y	..	..	4	4	4	80	..	N																				
..	88	94	..	..	N	NA	NA	N	7.15	3.9	2.3	1.9	2	NA	..	..	N	Y	..	..	73	89	82	64	..	NA																
30-55	Y	..	6.7	0.6	..	11	NA	..	..	N	Y	..	..	13	14	16	74	..	NA																		
57-36	94	90	..	..	..	..	..	Y	..	3.8	3.6	..	..	NA	..	..	Y	Y	..	..	9	10	32	75	..	NA											
..	81	88	..	..	..	..	..	N	1.21	2.8	1	1.3	1	NA	..	..	N	Y	..	..	52	69	570	63	..	NA													
..	N	NA	NA	Y	..	6.8	0.8	3.1	12	..	..	..	N	Y	..	..	11	12	16	75	..	NA																	
36-12	Y	..	6.6	1.5	2.3	NA	NA	..	..	Y	Y	..	..	6	8	18	69	..	NA																		
500-02	Y	0.09	9.6	1.1	..	6	2.21	Y	Y	N	Y	..	..	4	5	8	79	..	Y																				
..	83	83	..	..	..	..	..	Y	..	4.9	1.4	20.7	1	NA	..	..	N	Y	..	..	14	16	52	69	..	NA													
..	72	79	10.6	8.1	..	..	..	N	..	5.4	1.1	1.6	..	NA	..	..	Y	Y	..	..	88	148	840	55	..	NA															
3.7	96	99	..	..	..	..	..	N	..	4	..	0.8	0	NA	..	..	..	..	..	..	63	70	440	64	..	NA											
4.19	64	72	18	..	..	..	..	Y	..	6.9	1.6	5.7	0	NA	N	..	Y	Y	..	..	50	61	290	66	..	NA																
..	64	88	..	..	..	..	..	Y	..	8.8	1.8	2.7	NA	..	..	..	Y	Y	..	..	13	15	3	75	..	N												
..	90	97	33	40	..	..	..	Y	..	8.3	2.9	0.5	1	NA	..	..	N	Y	..	..	90	124	380	52	..	NA															
..	87	81	..	..	..	..	..	Y	10.27	7.9	1.4	7.9	3	..	Y	N	Y	Y	..	..	19	20	110	72	..	N															
75.4	Y	..	2	3.9	..	NA	NA	..	..	..	..	..	..	8	9	13	77	..	NA																
37.55	Y	2.00	7.7	2.4	21.7	3	NA	Y	..	Y	Y	..	..	10	12	11	73	..	NA																				
..	56	57	23	15	..	..	..	N	..	6.7	1.1	0.9	NA	NA	..	..	Y	Y	..	..	122	204	700	47	..	NA															
..	83	83	..	..	Y	..	..	N	..	2.2	1.3	..	1	NA	..	..	..	..	..	..	74	104	380	60	..	NA												
..	75	74	3.6	3.6	..	..	..	N	..	3.4	6.2	4.9	NA	NA	..	..	Y	Y	..	..	109	181	1100	49	..	NA															
2.6	77	78	..	..	..	..	..	N	5.02	6.4	1.1	0.5	NA	NA	..	..	Y	Y	..	..	65	82	540	62	..	NA													
1.25	71	75	34.3	27.2	..	..	..	N	..	5.2	1.3	4.7	0	NA	..	..	Y	Y	..	..	87	149	1000	51	..	NA															
279.34	Y	0.09	9.7	1.1	..	..	6.43	N	Y	Y	Y	..	..	5	6	7	81	1	Y																		
8.45	75	85	..	..	..	..	..	Y	..	5.6	0.7	3.4	..	NA	..	..	Y	Y	..	..	25	34	210	70	..	NA													
..	52	48	..	..	..	..	..	N	..	4	1.1	0.4	NA	NA	..	..	Y	Y	..	..	114	174	980	48	..	NA													
..	31.3	13.6	23	20	21	8	..	..	..	N	..	3.7	0.9	1.1	..	NA	..	..	Y	Y	..	..	124	209	1500	46	..	NA															
157.91	Y	..	5.4	3.7	6.7	2	NA	N	N	Y	Y	..	..	8	9	16	78	..	NA																				
15.17	19.2	10	84	73	..	..	..	..	..	N	..	4.7	1.9	1.2	2	..	N	N	N	Y	..	..	20	24	45	73	..	N															
..	82	81	..	..	..	..	..	Y	6.26	7.3	4	8.3	0	..	N	..	Y	Y	..	..	17	21	130	74	..	N															
..	73	70	..	..	Y	..	..	N	..	3	..	1	NA	NA	..	..	N	Y	..	..	51	68	400	65	..	NA														
..	66	68	..	..	..	..	..	N	..	1.9	1.4	2.3	NA	NA	..	..	Y	Y	..	..	79	126	740	54	..	NA													
40.32	Y	..	4.6	..	..	NA	NA	..	..	Y	Y	..	..	16	19	..	73	..	NA																
15	92	87	..	..	N	NA	NA	Y	0.12	7.1	0	3	8	NA	N	..	Y	Y	..	..	11	12	30	78	..	NA																		
1.19	69	70	..	..	..	..	..	N	..	3.9	1.5	2.8	0	NA	..	..	Y	Y	..	..	90	127	810	53	..	NA													
..	Y	0.2	7.4	1.9	12.8	..	..	..	..	Y	Y	..	..	5	6	7	76	..	N																
11.54	Y	..	..	Y	..	7.6	..	..	5	NA	..	..	Y	Y	..	..	5	7	45	78	..	NA														
..	Y	..	6	1.4	..	7	..	N	..	Y	Y	..	..	3	4	10	80	..	N																				

(Continues on next page)

	Recognition		Non-discrimination			Health information										National health plan				Underlying determinants					Access		Medicines		
	1*	2	3	4	5	6	7	8	10†	11	12	13	14	15	16	17	18	21	22	24† rural	24† urban	25‡	26† rural	26† urban	27†	28	29	30	
(Continued from previous page)																													
Czech Republic	6/6	Y	8	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	11-4759	..	..	61-6	N	Y	Y
DRC	6/8	N	6	1	..	N	..	..	34	N	N	N	N	N	N	..	..	..	..	28-5	83-8	0-037	..	..	75-7	N	Y	Y
Denmark	6/6	N	2	..	..	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	..	9-8013	..	..	..	N	N	N	
Djibouti	5/8	..	..	..	..	N	..	N	89	N	N	N	N	N	N	..	Y	..	..	51-5	70-5	0-4639	..	..	..	N	N	Y
Dominica	5/7	..	..	..	..	N	..	Y	..	..	..	..	Y	Y	Y	..	..	..	..	90	100	1-5636	..	..	..	N	..	..
Dominican Republic	6/7	N	..	..	..	Y	..	Y	78	N	N	N	N	N	N	..	..	..	Y	72-9	91-4	2-1063	..	..	73-7	N	Y	Y
Ecuador	7/7	Y	8	2	1	Y	Y	Y	..	N	N	N	N	N	N	..	..	..	..	89-7	96-4	2-2658	..	..	40-5	N	Y	Y
Egypt	7/8	N	3	..	1	N	..	Y	..	N	N	N	N	N	N	N	Y	N	N	96	100	2-2116	..	..	..	N	Y	Y
El Salvador	7/7	N	4	..	1	N	..	Y	..	N	N	N	N	N	N	..	..	..	N	67-1	96	0-9378	..	..	..	N	N	Y
Equatorial Guinea	6/8	N	3	..	..	N	..	..	32	N	N	N	N	N	N	..	..	..	..	42-4	45-3	11-4748	..	..	..	N	..	..
Eritrea	6/8	N	7	..	1	N	..	..	..	N	N	N	N	N	N	N	Y	..	..	53-7	71-7	0-1735	..	..	..	N	Y	Y
Estonia	6/6	Y	7	..	1	Y	..	..	..	Y	Y	Y	Y	Y	Y	N	..	..	..	98	99	14-0496	..	..	55-9	N	Y	N
Ethiopia	7/8	N	8	..	1	N	..	..	7	N	N	N	N	N	N	..	..	..	..	39-7	96-4	0-1037	71	..	7-4	N	Y	Y
FSM	2/5	Y	..	..	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	86-1	98-8	..	..	..	..	N	..	..
Fiji	3/5	N	9	2	1	N	..	Y	..	N	N	N	N	N	N	..	..	..	..	..	..	1-301	..	..	..	N	Y	Y
Finland	6/6	..	7	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	12-5782	..	..	..	N	Y	N
France	6/6	N	3	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	6-1608	..	..	..	N	N	Y
Gabon	7/8	N	2	..	..	N	..	..	89	N	N	N	N	N	N	..	..	..	..	46-9	94-9	1-0796	..	..	..	N	Y	Y
The Gambia	7/8	..	7	..	1	N	..	..	55	N	N	N	N	N	N	..	Y	..	..	77-1	94-6	0-1821	..	..	..	N	N	Y
Georgia	5/6	Y	8	1	..	Y	..	Y	93	N	N	N	N	N	N	..	..	..	..	95-5	99-8	0-866	..	..	64-6	N	..	..
Germany	6/6	N	7	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	9-7881	..	..	..	N	..	..
Ghana	7/8	..	6	1	1	N	..	..	51	N	N	N	N	N	N	..	..	..	..	..	..	0-326	..	..	41-8	N	Y	Y
Greece	6/6	N	1	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	66-5	88-4	8-7275	..	..	..	N	..	..
Grenada	4/7	N	5	1	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	..	..	2-0693	..	..	..	N	N	Y
Guatemala	7/7	Y	2	..	1	Y	..	Y	..	N	N	N	N	N	N	..	..	..	..	93	97	0-9857	..	..	..	N	Y	N
Guinea	7/8	Y	..	..	..	N	..	..	43	N	N	N	N	N	N	..	..	..	..	98-9	89-8	0-1515	..	..	..	..	Y	Y
Guinea Bissau	4/8	Y	4	..	..	N	..	..	39	N	N	N	N	N	N	..	..	..	..	33-8	79-1	0-1752	..	..	..	N	N	Y
Guyana	5/7	N	10	1	..	N	..	N	97	N	N	N	N	N	N	..	Y	..	..	49-1	79-2	1-9547	..	..	..	N	N	Y
Haiti	4/7	Y	..	..	..	N	..	..	81	N	N	N	N	N	N	..	..	..	..	83-2	83-4	0-1919	..	..	..	N	..	..
Honduras	6/7	Y	2	..	..	Y	..	Y	94	Y	Y	Y	N	N	N	..	..	..	Y	54-3	54-6	1-1362	..	..	..	N	Y	Y
Hungary	6/6	Y	7	..	1	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	80-4	93-6	5-6543	..	..	71-6	N	Y	N
Iceland	6/6	N	7	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	99-9	100	7-6103	..	..	..	N	..	..
India	5/5	N	4	1	1	Y	..	N	41	N	N	N	N	N	N	..	Y	..	..	..	..	1-2023	..	..	11-8	N	Y	Y
Indonesia	5/5	N	..	..	1	N	..	..	55	N	N	N	N	N	N	..	..	..	..	85	98	1-6945	..	..	..	N	Y	Y
Iran	3/5	N	2	..	..	N	..	Y	..	Y	Y	Y	N	N	N	..	Y	..	..	72-1	88-1	6-3139	..	..	..	N	Y	N
Iraq	4/5	Y	5	..	..	N	..	Y	95	N	N	N	N	N	N	..	Y	..	..	86	99	2-9739	..	..	..	N	N	Y
Ireland	6/6	N	..	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	51-2	97-5	10-4119	..	..	..	N	Y	N
Israel	5/5	N	..	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	10-8377	..	..	..	N	..	..
Italy	6/6	Y	6	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	7-6908	..	..	..	N	Y	Y
Jamaica	6/7	N	4	1	..	Y	..	Y	89	N	N	N	N	N	N	..	..	..	..	..	..	3-974	..	..	..	N	N	Y
Japan	5/5	N	5	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	87-4	95-9	9-8434	..	15	..	N	Y	N
Jordan	5/5	N	..	..	..	N	..	Y	..	N	N	N	N	N	N	..	Y	..	..	100	100	3-0658	..	..	..	N	Y	Y
Kazakhstan	4/5	Y	8	1	1	N	..	Y	99	N	N	N	N	N	N	..	..	..	..	94-4	98-8	13-2574	..	..	64-9	N	..	..
Kenya	7/8	N	..	..	..	N	..	Y	48	N	N	N	N	N	N	..	Y	..	..	96	100	0-3054	..	..	30	N	Y	Y

							Health workers			National financing				IAC		Additional safeguards					Monitoring, assessment, accountability, and redress							
31§	32¶	33¶	34†	35†	37m†	37ft†	38	43	44	45	46†	47†	48†	49†	50†	53†	54	55	56	57	58	59	65||	66||	67**	68††	70	72
165	Y	0.00	7.1	2	4.8	3	..	Y	..	Y	Y	..	..	3	4	4	77	..	N
..	48	31	..	..	..	..	..	N	..	4.2	2.1	3	NA	NA	..	..	Y	Y	..	..	129	205	1100	47	..	NA
459-38	Y	0.07	9.1	1.3	..	NA	11-12	Y	Y	Y	Y	Y	Y	3	4	3	79	..	N
2.08	72	72	..	..	N	NA	NA	Y	0.32	6.9	4.2	2.6	NA	NA	..	..	..	..	..	..	86	130	650	56	..	NA
..	Y	..	6.5	..	6	3	NA	..	..	..	Y	..	..	13	15	..	74	..	NA
..	68	65	..	..	..	..	..	Y	..	5.4	0.6	3	1	NA	..	N	Y	Y	..	..	25	29	150	70	..	NA
3.03	85	85	..	..	..	..	..	Y	..	5.3	2.6	11.4	NA	NA	N	..	Y	Y	..	..	21	24	210	73	..	NA
6.74	97	94	..	..	Y	..	..	N	2.8	6.1	2.9	2.8	9	..	..	..	Y	Y	..	..	29	35	130	68	..	N
6.93	53.8	69.2	80	89	..	..	..	..	..	Y	..	7	0.6	3.8	NA	NA	N	..	Y	Y	..	..	22	25	170	71	..	NA
..	51	33	..	..	..	..	..	Y	..	1.7	..	0.1	..	NA	..	..	Y	Y	..	..	124	206	680	46	..	NA
2.9	95	97	..	37	Y	..	..	N	..	3.7	24.1	2.1	NA	NA	..	..	Y	Y	..	..	48	74	450	63	..	NA
110.08	Y	0.31	5	1.6	12.1	NA	NA	N	N	Y	Y	..	..	5	6	25	73	..	NA
3.8	52.9	88	54	66	..	..	..	..	..	N	..	4.9	2.6	0.8	..	NA	..	..	N	Y	..	..	77	123	720	56	..	NA
..	Y	..	13.5	..	..	7	NA	..	..	Y	Y	..	..	33	41	..	69	..	NA
..	..	75	92	92	..	..	..	..	..	Y	..	4.1	1.3	0.6	2	NA	..	Y	Y	Y	..	..	16	18	210	69	..	NA
371.4	Y	0.44	7.5	1.4	..	..	5.55	Y	..	Y	Y	..	..	3	3	7	79	..	N
505.46	Y	0.01	11.2	2.5	..	8	3.74	Y	Y	Y	N	Y	Y	4	5	8	81	..	N
..	55	38	..	..	..	..	..	Y	..	4.1	1.3	1.4	0	NA	..	..	Y	Y	..	..	60	91	520	58	..	NA
0.72	89	87	..	..	..	..	..	N	..	5.2	0.6	6.3	NA	NA	..	..	Y	Y	..	..	84	114	690	59	..	NA
..	73	80	..	..	..	..	..	N	..	8.6	3.3	2.9	..	NA	N	Y	Y	Y	..	..	28	32	66	70	..	NA
403	Y	0.03	10.7	1.4	..	..	2.93	Y	N	..	..	..	..	4	5	4	80	..	N
0.35	17.9	44.6	85	84	40.3	35.8	..	..	..	N	1.3	6.2	0.6	2.7	1	NA	..	..	Y	Y	..	..	76	120	560	57	..	NA
..	Y	2.17	10.1	3.8	..	NA	1.34	Y	..	N	Y	..	..	4	4	3	80	..	N
13.54	Y	..	7.2	..	2.6	10	NA	..	..	N	Y	..	..	17	20	..	68	..	NA
..	75	77	..	..	..	..	..	Y	..	5.2	0.3	1.5	1	NA	N	..	Y	Y	..	..	31	41	290	68	..	NA
0.12	50	51	..	..	..	..	..	N	..	5.6	2	4.9	NA	NA	..	..	..	Y	..	..	98	161	910	53	..	NA
0.27	70	38	..	..	..	..	..	N	..	5.2	3.9	10.8	2	NA	..	..	N	Y	..	..	119	200	1100	48	..	NA
3.78	92	89	..	..	N	NA	NA	Y	0.6	5.4	0.8	4.2	..	NA	..	..	Y	Y	..	..	46	62	470	64	..	NA
..	54	43	..	..	..	..	..	N	..	6.2	..	1.4	..	NA	..	..	Y	Y	..	..	60	80	670	61	..	NA
5.05	85	93	..	..	..	..	..	Y	..	7.5	0.6	4.6	2	NA	..	..	Y	Y	..	..	23	27	280	70	..	NA
..	Y	0.2	7.8	1.4	21.5	8	..	Y	Y	Y	Y	Y	Y	6	7	6	73	..	N
409	Y	0.3	9.5	0	..	NA	..	Y	N	Y	Y	..	..	2	3	4	81	..	N
..	20.5	75.4	59	55	..	..	..	..	..	N	..	5	2.8	3	2	NA	N	..	Y	Y	..	..	57	76	450	63	..	NA
5.24	46.7	..	72	58	..	..	..	..	..	N	1.26	2.1	1.2	6.3	1	NA	..	..	Y	Y	..	..	26	34	420	68	..	NA
21.61	96	88	..	..	..	..	..	Y	..	7.8	4.6	1.3	3	NA	..	..	Y	..	..	..	30	35	140	71	..	NA
17.25	60	60	..	..	..	..	..	Y	..	4.1	3.8	..	..	NA	..	..	..	Y	..	..	37	47	300	56	..	NA
351	Y	..	8.2	0.6	..	7	15.3	Y	..	Y	Y	Y	..	4	4	1	80	..	N
..	Y	0.35	7.8	7.9	..	6	..	N	N	N	N	Y	..	4	5	4	81	..	N
275	56	95	..	..	..	..	..	Y	..	8.9	1.9	..	..	17.48	Y	..	Y	Y	..	..	3	4	3	81	..	N
..	Y	1.86	4.7	0.6	10.1	5	NA	..	..	N	Y	..	..	26	32	170	72	..	NA
..	Y	..	8.2	1	..	5	1.13	N	N	Y	Y	..	..	3	4	6	83	..	Y
22.17	27.8	80	95	98	..	..	..	..	..	Y	..	10.5	4.8	4.8	NA	NA	N	..	..	..	..	..	21	25	62	71	..	NA
..	0	70	72	51	..	..	..	..	..	Y	..	3.9	1	23.1	7	NA	..	..	Y	Y	..	..	26	29	140	64	..	NA
0.81	37.7	72.4	73	72	79.5	58.3	..	..	..	N	..	4.5	1.7	1.3	0	NA	..	..	N	Y	..	..	79	121	560	53	..	NA

(Continues on next page)

	Recogni- tion		Non- discrimin- ation			Health information											National health plan				Underlying determinants					Acc- ess		Medicines		
	1*	2	3	4	5	6	7	8	10†	11	12	13	14	15	16	17	18	21	22	24† rural	24† urban	25‡	26† rural	26† urban	27†	28	29	30		
(Continued from previous page)																														
Kiribati	2/5	N	5	1	1	N	..	N	..	..	..	..	N	N	N	..	..	..	..	51.9	96.4	0.3244	..	..	..	N	N	Y
Kuwait	4/5	N	5	..	1	N	..	Y	..	Y	Y	Y	..	..	..	..	Y	..	..	..	..	..	..	..	N	..	..	
Kyrgyzstan	4/5	Y	6	..	1	Y	..	Y	94	N	N	N	N	N	N	..	..	..	..	..	..	..	..	..	N	Y	Y	
Laos	5/5	N	4	..	..	N	..	..	59	N	N	N	N	N	N	..	..	..	..	47.8	82.6	0.2296	..	..	6.4	N	Y	Y
Latvia	5/6	Y	..	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	..	..	..	..	..	..	..	..	..	52.9	N	Y	Y	
Lebanon	5/5	N	..	..	..	N	..	Y	..	N	N	N	N	N	N	N	Y	..	..	100	100	4.1019	..	..	..	N	..	..
Lesotho	7/8	N	8	..	1	N	..	N	26	N	N	N	N	N	N	N	Y	..	N	78.3	96.3	..	..	..	N	..	..	
Liberia	6/8	N	5	1	1	N	..	..	..	N	N	N	N	N	N	..	Y	..	..	49.4	74.5	0.1401	..	..	..	N	Y	Y
Libya	8/8	Y	..	..	..	N	..	Y	..	N	N	N	N	N	N	N	Y	..	Y	68.4	72.1	10.331	..	..	..	N	..	..
Liechtenstein	4/6	N	1	..	..	Y	..	Y	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	N	..	..	
Lithuania	6/6	N	6	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	..	..	..	N	Y	N	
Luxembourg	6/6	N	..	..	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	24.9271	..	..	..	N	Y	Y
Macedonia	6/6	Y	7	..	..	Y	..	Y	94	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	..	..	..	N	Y	Y	
Madagascar	7/8	Y	6	..	..	N	..	..	75	N	N	N	N	N	N	..	..	..	..	34.3	78.3	0.1506	..	..	..	N	Y	Y
Malawi	8/8	N	9	..	1	N	..	Y	..	N	N	N	N	N	N	..	Y	..	N	77	99	0.081	..	..	18.2	N	N	Y
Malaysia	3/5	N	..	..	..	N	..	Y	..	N	N	N	..	..	..	..	Y	..	..	96	100	7.0494	..	..	48.8	N	Y	Y
Maldives	5/5	N	..	..	..	N	..	Y	73	N	N	N	N	N	N	..	..	..	..	79.9	98.8	2.4981	..	..	..	N	Y	Y
Mali	8/8	Y	6	..	..	N	..	N	47	N	N	N	N	N	N	..	..	..	..	54.4	83.6	0.0501	..	..	5	N	Y	Y
Malta	6/6	N	5	1	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	N	..	..	..	..	100	6.1299	..	..	..	N	Y	Y
Marshall Islands	2/5	Y	7	..	1	N	..	..	..	..	..	..	N	N	N	..	..	..	..	95.9	84.1	..	..	..	N	N	N	
Mauritania	7/8	N	4	..	..	N	..	..	55	N	N	N	N	N	N	..	..	..	..	..	..	0.8866	..	..	12.5	N	Y	Y
Mauritius	7/8	N	..	..	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	Y	..	Y	42.3	54.2	2.598	..	..	57.6	N	N	Y
Mexico	7/7	Y	3	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	4.2387	..	..	55.8	Y	Y	Y
Moldova	6/6	N	8	..	..	Y	..	Y	98	Y	Y	Y	Y	Y	Y	..	..	..	..	92.1	94.4	1.9578	..	..	..	N	Y	Y
Monaco	5/6	N	..	..	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	..	100	..	..	..	..	N	..	..
Mongolia	4/5	Y	9	..	..	N	..	Y	98	Y	Y	Y	N	N	N	N	Y	..	..	34.7	90.9	3.3455	..	..	..	N	Y	Y
Montenegro	5/6	Y	1	..	1	Y	..	..	98	Y	Y	Y	..	..	..	..	..	..	..	..	..	..	..	..	..	N	..	..
Morocco	5/8	N	..	..	..	N	..	Y	85	N	N	N	N	N	N	..	Y	Y	..	56.9	97.3	1.3654	..	..	19.7	N	N	Y
Mozambique	7/8	N	6	2	..	N	..	..	..	N	N	N	N	N	N	..	Y	..	Y	24.4	73.3	0.1079	..	..	..	N	Y	Y
Namibia	8/8	N	4	..	1	N	..	..	71	N	N	N	N	N	N	..	Y	..	..	88.6	99.8	1.2394	..	36	39.9	N	Y	Y
Nauru	1/5	N	5	1	..	N	..	..	..	..	..	..	N	N	N	..	..	..	..	..	..	14.1681	..	..	..	N	N	Y
Nepal	5/5	N	5	..	..	N	..	..	35	N	N	N	N	N	N	..	Y	..	N	79	93	0.1146	..	..	12.9	N	..	..
Netherlands	6/6	N	4	..	1	Y	..	..	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	8.7349	..	..	..	N	Y	Y
New Zealand	5/5	N	5	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	7.7946	..	..	..	N	N	N
Nicaragua	6/7	Y	7	..	1	N	Y	Y	81	Y	Y	Y	N	N	N	..	..	..	..	56.7	88	0.743	..	..	..	N	Y	Y
Niger	7/8	Y	4	..	..	N	..	..	32	N	N	N	N	N	N	..	..	..	..	36	80.8	0.0947	..	..	..	N	Y	Y
Nigeria	8/8	N	6	1	..	N	..	..	33	N	N	N	N	N	N	..	..	..	..	31.3	64.9	0.8263	..	..	..	N	Y	Y
Niue	1/5	N	..	..	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	100	100	2.1941	..	..	..	N	N	Y
North Korea	4/5	N	..	..	..	N	..	..	..	N	N	N	N	N	N	..	Y	Y	Y	100	100	3.3645	..	..	..	N	Y	Y
Norway	6/6	..	..	..	..	Y	..	..	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	19.0086	..	..	..	N	Y	Y
Oman	4/5	N	6	..	..	N	..	Y	..	N	N	N	N	N	N	..	Y	..	..	100	100	12.4662	..	..	..	N	Y	Y
Pakistan	4/5	N	..	..	..	Y	..	..	..	N	N	N	N	N	N	..	Y	..	..	84	95.6	0.809	..	..	8.5	N	..	..
Palau	1/5	N	6	1	1	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	94.5	78	11.9017	..	..	..	N	N	Y
Panama	7/7	N	6	..	1	Y	..	Y	..	N	N	N	Y	Y	Y	..	..	..	..	86	88	1.7827	..	..	..	Y	..	Y
PNG	3/5	N	5	1	..	N	..	Y	..	N	N	N	N	N	N	..	Y	..	N	100	100	0.4126	..	..	..	N	Y	Y
Paraguay	7/7	Y	..	..	1	N	Y	Y	..	Y	Y	Y	N	N	N	..	..	..	..	67.7	94.3	0.7215	..	..	42.3	N	Y	Y

																											Health workers			National financing					IAC			Additional safeguards					Monitoring, assessment, accountability, and redress				
31§	32¶	33¶	34†	35†	37m†	37ft	38	43	44	45	46†	47†	48†	49†	50†	53†	54	55	56	57	58	59	65||	66||	67**	68 ††	70	72																			
16-3	Y	..	12-7	..	..	2	NA	..	..	N	Y	..	..	47	64	..	65	..	NA													
..	12	0	96	98	..	..	..	..	..	Y	..	2-2	4-7	..	..	..	..	..	Y	Y	..	..	9	11	4	78	..	N							
0-23	..	80	..	..	..	..	N	NA	NA	N	0-62	6	3-1	5-2	8	NA	..	..	Y	Y	..	..	36	41	150	66	..	NA											
..	62	28	..	..	..	..	..	N	..	3-6	2-1	6	NA	NA	..	..	N	Y	..	..	59	75	660	60	..	NA										
..	Y	..	..	Y	2-75	6-4	1-7	19-6	6	..	Y	..	Y	Y	..	..	8	9	10	71	..	NA															
..	0	83-8	88	90	..	..	N	NA	NA	Y	5-17	8-7	4-5	16-1	NA	NA	..	..	Y	Y	..	..	27	31	150	70	..	NA													
..	85	83	..	..	N	NA	NA	N	..	5-5	2-3	3-7	7	NA	..	..	N	Y	..	..	102	132	960	42	..	NA													
0-27	41	27	..	..	..	..	..	N	..	6-4	1-2	0-2	NA	NA	N	..	Y	Y	..	..	157	235	1200	44	..	NA												
..	92	96	..	..	..	..	..	Y	..	3-2	1-8	..	NA	NA	N	..	N	N	..	..	17	18	97	72	..	NA												
..	NA	..	..	Y	Y	..	..	..	..	..	..	..	NA															
82-29	Y	1-34	5-9	1-2	10-1	7	NA	N	Y*	Y	Y	Y	Y	7	9	11	71	..	NA																			
449	Y	..	7-7	0-8	..	13	1-42	Y	Y	N	Y	..	..	3	4	12	80	..	N																	
..	92	98	..	..	..	..	..	Y	..	7-8	2-2	4-1	..	..	..	..	Y	Y	..	..	15	17	10	73	..	N								
0-08	59	61	15-7	19-4	..	..	..	N	..	3-2	1-1	1-5	1	NA	..	..	Y	Y	..	..	72	115	510	59	..	NA												
..	85	86	36	23-5	Y	..	..	N	..	12-2	1-6	4-6	2	NA	..	..	Y	Y	..	..	76	120	1100	50	..	NA													
13-4	25	43-8	..	..	..	..	..	..	..	Y	..	4-2	2-4	7-2	2	NA	N	..	Y	Y	Y	Y	10	12	62	72	..	NA												
..	92	91	..	..	Y	..	..	Y	..	12-4	..	4-4	NA	NA	Y	..	N	Y	..	..	26	30	120	72	..	NA													
0-5	81	70	49	40	15	9	..	..	..	N	..	5-8	2-3	1-7	0	NA	..	..	N	Y	..	..	119	217	970	46	..	NA												
..	Y	..	8-4	0-7	..	10	NA	N	..	N	Y	..	..	5	6	8	79	..	NA																	
18-43	Y	..	15-4	..	..	0	NA	..	..	Y	Y	..	..	50	56	..	63	..	NA													
0-85	84	84	..	..	..	..	..	N	..	2-7	3-6	3-6	1	NA	..	..	Y	Y	..	..	78	125	820	58	..	NA										
7-99	57	89	..	..	Y	..	..	Y	1-28	4-3	0-2	4-5	0	NA	..	..	..	..	..	..	12	15	15	73	..	NA									
11	59	34	..	..	..	..	..	Y	1-54	6-4	0-4	5-7	1	..	N	Y	Y	Y	..	..	29	35	60	74	..	N												
..	91	92	..	..	..	..	..	N	..	7-5	0-4	8-6	..	NA	..	..	Y	Y	..	..	16	19	22	68	..	NA										
..	Y	..	4-6	..	..	..	NA	..	..	N	Y	..	..	3	4	..	82	..	NA												
4-95	100	80	86	89	3	5	..	..	..	N	..	4-3	1-6	2-4	5	NA	Y	..	Y	Y	..	..	35	42	46	66	..	NA														
..	8-2	..	..	..	..	..	..	Y	Y	..	..	9	10	..	74	..	NA											
1-92	0	52-5	90	95	..	12	N	NA	NA	N	0-17	5-3	3-9	5-3	..	NA	..	..	Y	Y	..	..	34	37	240	72	..	NA															
2-81	77	72	33	20	Y	..	..	N	..	4-3	0-9	1-4	..	NA	..	..	Y	Y	..	..	96	138	520	50	..	NA													
10-41	80	79	..	..	Y	..	..	Y	0-11	5-3	3-1	..	NA	NA	..	..	Y	Y	..	..	45	61	210	61	..	NA											
45-31	Y	..	10-3	..	..	NA	NA	..	..	N	Y	..	..	25	30	..	61	..	NA													
..	85	89	..	..	..	..	..	N	..	5-8	1-9	1-6	0	NA	..	..	Y	Y	..	..	46	59	830	62	..	NA										
..	Y	..	9-2	1-5	..	7	14-44	N	..	Y	Y	Y	Y	4	5	6	80	..	N																			
103-2	Y	..	8-9	1-1	..	11	3-45	N	..	Y	Y	..	..	5	6	9	80	..	N																	
5-09	86	83	..	..	..	..	..	N	2-05	8-3	0-7	3-5	1	NA	..	..	Y	Y	..	..	29	36	170	71	..	NA										
0-2	47	39	..	..	..	..	..	N	..	3-8	1	1-1	..	NA	..	..	Y	Y	..	..	148	253	1800	42	..	NA										
..	26-2	36-4	62	54	21	18	..	..	..	N	..	3-9	0-6	9	..	NA	N	..	Y	Y	..	..	99	191	1100	48	1	NA														
63-9	Y	..	14-5	..	..	NA	NA	..	..	..	..	..	..	34	42	..	70	..	NA											
..	92	96	..	..	..	..	..	N	..	3-5	..	..	NA	NA	..	..	N	Y	..	..	42	55	370	66	..	NA								
472-53	Y	0-28	9	1-6	..	0	4-65	N	N	Y	N	..	..	3	4	7	80	..	N																	
..	98	98	..	..	..	..	..	Y	..	2-5	11-8	4-1	..	..	..	..	Y	Y	..	..	10	11	64	74	..	NA								
..	3-3	31-3	63	65	..	..	N	NA	NA	N	..	2-1	3-4	2-2	0	NA	..	..	..	..	..	..	78	97	320	63	..	NA											
49-44	Y	..	9-6	..	..	2	NA	..	..	Y	Y	..	..	10	11	..	69	..	NA													
..	Y	2-35	7-3	0	13-5	NA	NA	..	..	Y	Y	..	..	18	23	130	76	..	NA															
3-22	76	47	..	..	..	N	N	N	..	4-2	0-6	7-9	1	NA	..	..	N	Y	..	..	54	73	470	62	..	NA												
5-39	67	61	..	..	Y	..	..	N	3-51	7-3	0-8	6-7	0	NA	N	..	Y	Y	..	..	19	22	150	75	..	NA													

(Continues on next page)

	Recognition		Non-discrimination			Health information										National health plan				Underlying determinants					Access	Medicines			
	1*	2	3	4	5	6	7	8	10†	11	12	13	14	15	16	17	18	21	22	24† rural	24† urban	25†	26† rural	26† urban	27†	28	29	30	
(Continued from previous page)																													
Peru	7/7	Y	..	..	..	Y	..	Y	93	N	N	N	N	N	N	..	..	..	Y	40.2	91	1.1682	69	51	..	N	Y	Y
Philippines	5/5	Y	..	..	..	Y	..	Y	83	..	..	..	N	N	N	..	Y	..	..	82	87	0.9716	..	..	23	Y	Y	N
Poland	6/6	Y	..	..	1	Y	..	..	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	100	8.0331	..	..	..	N	Y	Y
Portugal	6/6	Y	7	1	..	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	..	..	5.6253	..	..	..	N	Y	..
Qatar	3/5	N	4	..	1	N	..	Y	..	Y	Y	Y	N	N	N	N	Y	..	..	100	100	69.221	..	..	..	N	N	Y
South Korea	5/5	N	3	..	..	Y	..	Y	..	Y	Y	Y	N	N	N	..	..	..	..	71.4	97	9.7652	..	..	..	N	Y	N
Romania	6/6	Y	8	..	..	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	N	16	91	4.1621	..	..	..	N	Y	N
Russia	4/5	Y	8	1	1	N	Y	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	95.2	99.7	10.5393	..	..	56.4	N	..	..
Rwanda	7/8	Y	6	..	..	N	..	..	82	N	N	N	N	N	N	..	..	..	..	67.6	90.9	0.0632	..	..	..	N	N	Y
Saint Kitts and Nevis	3/7	N	..	..	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	99	99	2.5697	..	..	..	N	..	..
Saint Lucia	3/7	N	..	..	..	N	..	Y	..	..	..	..	Y	Y	Y	..	..	..	..	98	98	2.2997	..	..	..	N	..	..
Saint Vincent and the Grenadines	4/7	N	..	..	..	Y	..	Y	..	..	..	..	Y	Y	Y	..	..	..	..	93	..	1.6708	..	..	..	N	..	..
Samoa	2/5	N	7	1	1	N	..	Y	..	..	..	..	N	N	N	..	Y	..	..	87.7	91.6	0.8236	..	..	..	N	N	Y
San Marino	5/6	..	..	..	..	N	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
São Tomé and Príncipe	3/8	Y	..	..	..	N	..	Y	69	..	..	..	N	N	N	..	..	..	..	..	..	0.6106	..	..	..	N	N	Y
Saudi Arabia	4/5	N	..	..	..	N	..	..	..	N	N	N	N	N	N	..	Y	..	..	64.3	100	13.3811	..	..	..	N	N	..
Senegal	8/8	N	3	1	1	N	..	..	55	N	N	N	N	N	N	..	..	..	..	65.3	93.2	0.4353	..	..	8.5	N	Y	Y
Serbia	5/6	Y	10	1	1	Y	..	..	99	Y	Y	Y	..	..	..	..	..	..	..	..	..	..	..	..	..	N	N	Y
Seychelles	8/8	Y	..	..	1	N	..	Y	..	..	..	..	N	N	N	..	Y	..	Y	..	..	6.4395	..	..	..	N	N	Y
Sierra Leone	7/8	N	4	1	..	N	..	..	48	N	N	N	N	N	N	..	Y	..	..	45.6	74.8	0.1843	..	..	..	N	Y	Y
Singapore	2/5	..	3	1	..	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	12.2252	..	..	..	N	N	Y
Slovakia	6/6	N	8	..	1	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	99	100	6.7367	..	..	63.4	N	Y	Y
Slovenia	6/6	Y	7	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	..	..	8.1175	..	..	..	N	Y	Y
Solomon Islands	4/5	N	5	1	..	N	..	..	..	..	..	..	N	N	N	..	..	..	..	65	94	0.3819	..	..	..	N	Y	Y
Somalia	3/8	N	6	..	..	N	..	..	3	..	..	..	N	N	N	..	..	..	..	..	..	..	..	..	..	N	..	..
South Africa	7/8	Y	10	2	1	Y	..	N	..	Y	Y	Y	N	N	N	..	..	..	..	87	100	9.1927	..	..	35	N	Y	Y
Spain	6/6	Y	5	..	1	Y	..	..	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	99.9	7.7227	..	..	56.9	N	Y	Y
Sri Lanka	5/5	N	7	1	..	N	..	Y	..	N	N	N	N	N	N	..	Y	..	..	74.6	96.2	0.6058	..	..	58.4	N	Y	Y
Sudan	5/8	N	4	..	1	N	..	..	64	..	..	..	N	N	N	..	Y	..	..	63.4	79.4	0.287	..	..	..	N	Y	Y
Suriname	7/7	Y	..	..	..	N	..	Y	95	Y	Y	Y	Y	Y	Y	..	..	..	..	72.5	98.1	5.0805	..	..	..	N	Y	Y
Swaziland	6/8	..	7	..	1	N	..	..	53	..	..	..	N	N	N	..	Y	..	..	66.2	86.8	0.8589	..	..	39	N	Y	Y
Sweden	6/6	N	2	..	..	Y	..	Y	..	Y	Y	Y	..	..	..	..	..	..	..	100	100	5.894	..	..	..	N	Y	Y
Switzerland	4/6	N	9	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	5.4731	..	..	..	N	Y	Y
Syria	5/5	N	..	..	..	N	..	Y	95	..	..	..	N	N	N	..	Y	..	..	83	97.5	3.7207	..	..	..	Y	Y	Y
Tajikistan	4/5	Y	7	..	1	Y	..	N	..	..	..	..	N	N	N	..	..	..	..	47	93	0.7738	..	..	..	N	Y	Y
Tanzania	7/8	N	..	..	..	N	..	..	8	N	N	N	N	N	N	..	..	..	N	42.5	78.9	0.116	56	41	..	N	N	Y
Thailand	5/5	N	9	1	1	Y	..	Y	99	N	N	N	N	N	N	..	Y	..	..	97.9	98.5	4.2849	47	41	..	N	..	..
Timor-Leste	4/5	Y	8	1	..	N	..	..	53	..	..	..	N	N	N	..	Y	..	Y	62	80.3	0.1737	..	..	..	N	Y	..
Togo	7/8	Y	..	..	..	N	..	..	78	N	N	N	N	N	N	..	..	..	..	34.2	76.4	0.3805	..	..	..	N	Y	Y
Tonga	3/5	N	..	..	1	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	100	100	1.1852	..	..	..	N	..	Y
Trinidad and Tobago	5/7	N	4	..	..	Y	..	Y	96	Y	Y	Y	Y	Y	Y	N	Y	..	..	89	93	24.6802	..	..	..	N	Y	N
Tunisia	6/8	N	..	..	..	N	..	Y	..	..	..	..	N	N	N	..	Y	..	..	78.5	95.7	2.2895	..	..	36.7	N	N	Y

																												Health workers			National financing					IAC		Additional safeguards					Monitoring, assessment, accountability, and redress				
31§	32¶	33¶	34†	35†	37m†	37ft†	38	43	44	45	46†	47†	48†	49†	50†	53†	54	55	56	57	58	59	65||	66||	67**	68††	70	72																			
1-81	61-5	60-9	87	85	..	..	..	..	..	Y	3-21	4-3	1-5	7	2	NA	N	Y	Y	Y	..	..	21	25	240	73	1	NA												
8-47	15-4	26-5	80	79	..	..	..	..	..	N	0-78	3-2	0-9	10	0	NA	N	..	..	..	..	..	24	32	230	68	..	NA									
76-15	Y	..	6-2	2-1	11-2	NA	..	Y	..	Y	Y	..	..	6	7	8	75	..	N																	
224	99	98	..	..	..	..	..	Y	2-71	10-2	2	..	2	8-91	N	Y	Y	Y	..	..	3	4	11	79	..	N												
..	90	91	..	..	N	NA	NA	Y	..	4-1	..	..	1	NA	..	N	Y	Y	..	..	9	11	12	77	..	NA													
187-3	Y	1-73	5-9	2-6	..	3	..	N	..	N	Y	..	..	5	5	14	79	..	..																	
59-35	N	N	Y	0-09	5-5	2	7	3	NA	N	..	Y	Y	..	..	14	16	24	73	..	NA																	
..	Y	..	5-2	3-7	5-5	NA	..	N	..	Y	Y	..	..	10	13	28	66	..	N																	
..	86	87	..	..	Y	..	..	N	..	7-2	1-9	1-1	1	NA	..	..	Y	Y	..	..	97	160	1300	52	..	NA											
..	Y	..	5-5	..	10-6	..	NA	..	..	..	..	..	..	17	19	..	71	..	NA													
..	Y	..	..	Y	..	5-9	..	4	4	NA	..	..	..	..	..	..	12	14	..	75	..	NA											
..	Y	..	6	..	5-5	5	NA	..	..	..	..	..	..	17	20	..	70	..	NA													
8-55	Y	..	..	Y	..	4-9	..	5-5	NA	NA	..	..	Y	Y	..	..	23	28	..	68	..	NA													
..	Y	..	7-3	..	..	NA	NA	N	..	..	..	..	..	3	3	..	82	..	NA												
..	88	83	..	..	..	..	..	Y	..	9-8	..	13-8	..	NA	..	..	..	..	..	..	63	96	..	61	..	NA								
..	97	93	..	..	Y	..	..	Y	..	3-4	8	..	..	..	..	..	N	N	..	..	21	26	18	70	..	NA								
..	74	78	..	..	..	..	..	N	0-55	5-4	1-4	2-3	9	NA	..	..	Y	Y	..	..	60	116	980	59	..	NA										
26-67	87	96	..	..	..	..	..	Y	..	8	..	..	..	..	..	..	Y	Y	..	..	7	8	..	73	..	NA						
37-74	Y	..	6-8	2-1	7-9	3	NA	..	..	Y	..	..	..	12	13	..	72	..	NA														
0-81	76	63	..	..	N	NA	NA	N	..	3-7	2	2-1	NA	NA	..	..	N	Y	..	..	159	269	2100	40	..	NA													
38-34	Y	..	3-5	4-7	..	6	..	N	..	Y	Y	..	..	3	3	14	80	..	NA																	
237-13	Y	0-00	7	1-7	12-6	5	..	Y	..	Y	Y	..	..	7	8	6	74	..	N																	
..	Y	0-06	8-5	1-5	..	NA	..	N	..	Y	Y	..	..	3	4	6	78	..	N																	
2-48	N	..	4-3	..	4-7	1	NA	..	..	N	Y	..	..	55	72	220	67	..	NA															
..	38	36	12-5	7-9	..	..	..	N	..	..	..	1-2	NA	NA	..	..	Y	Y	..	..	90	145	1400	55	..	NA									
139-76	82	76	..	..	..	..	..	Y	0-03	8-7	1-6	2	..	..	..	Y	Y	Y	Y	N	56	69	400	51	1	NA											
355	Y	0-48	8-2	1	..	NA	3-67	N	Y	Y	Y	..	..	4	4	4	81	..	N																	
2-5	67	91	..	..	..	..	..	N	1-25	4-1	2-6	1-9	2	NA	N	..	Y	Y	..	..	11	13	58	72	..	NA												
1-3	51-4	77-2	51	44	..	..	..	..	..	N	..	3-8	4-4	1-4	..	NA	..	..	Y	Y	..	..	62	89	450	60	..	NA										
6-76	60	79	..	..	Y	..	..	Y	..	5-3	..	..	4	NA	..	..	Y	Y	..	..	29	39	72	68	..	NA									
..	96	97	..	..	..	..	..	Y	..	6-3	..	1-6	0	NA	..	..	N	..	..	..	112	164	390	42	..	NA									
462-44	Y	0-18	9-2	1-5	..	11	5-62	Y	..	Y	Y	..	..	3	4	3	81	..	N																	
402	Y	0-57	11-4	1	..	NA	6-1	Y	N	Y	Y	..	..	4	5	5	82	..	N																	
..	..	98-2	80	83	..	..	..	..	..	N	..	4-2	5-3	0-8	..	NA	..	..	Y	N	..	..	12	13	130	72	..	NA										
0-35	75	85	89	86	..	..	..	..	..	N	..	5	2-2	3-4	..	NA	..	..	Y	Y	..	..	56	68	170	64	..	NA										
0-8	23-4	47-9	80	86	49	44	..	..	..	N	..	5-1	1-1	1-1	7	NA	..	..	..	..	..	..	74	118	950	50	..	NA										
..	96	98	..	..	..	..	..	Y	0-8	3-5	1-1	11	3	NA	N	Y	Y	Y	..	..	7	8	110	72	..	NA												
..	55	57	..	..	Y	..	..	N	..	13-7	..	..	..	NA	..	..	Y	Y	..	..	47	55	380	66	..	NA								
..	58	64	..	..	..	..	..	N	..	5-3	1-6	0-8	0	NA	..	..	..	..	..	..	69	107	510	57	..	NA								
6-01	84	96	..	..	..	..	..	Y	..	5	1-1	1-9	1	NA	..	..	Y	N	..	..	20	24	..	71	..	NA										
29-3	58	81	..	..	..	NA	NA	Y	..	4-5	..	2-6	..	NA	..	..	Y	Y	..	..	33	38	45	69	..	NA												
44-05	64-3	95-1	71	96	..	..	..	..	..	Y	..	5-5	1-6	7-2	NA	NA	..	..	Y	Y	..	..	19	23	100	72	..	NA										

(Continues on next page)

	Recogni- tion		Non- discrimin- ation			Health information											National health plan				Underlying determinants					Acc- ess		Medicines		
	1*	2	3	4	5	6	7	8	10†	11	12	13	14	15	16	17	18	21	22	24† rural	24† urban	25‡	26† rural	26† urban	27†	28	29	30		
(Continued from previous page)																														
Turkey	6/6	N	5	..	1	Y	..	..	..	N	N	N	N	N	N	..	..	..	..	93.8	98.3	3.1395	..	..	..	N	..	..
Turkmenistan	4/5	Y	7	1	..	N	..	Y	96	..	..	..	N	N	N	..	..	..	..	53.6	93.1	8.7549	..	..	..	N	..	..
Tuvalu	2/5	N	4	1	..	N	..	Y	..	..	..	..	N	N	N	..	..	..	..	91.6	93.9	..	..	..	N	..	..	
Uganda	7/8	N	6	..	1	Y	..	..	4	N	N	N	N	N	N	..	Y	..	..	57	84	0.0651	..	..	..	N	Y	Y
Ukraine	5/6	N	8	1	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	89.3	99.1	6.9802	..	..	58.7	N	..	..
UAE	4/5	N	..	..	..	N	..	..	..	..	..	..	N	N	N	..	Y	..	..	100	99.6	37.7966	..	..	33.1	N	N	N
UK	6/6	N	8	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	9.7934	..	..	..	N	Y	Y
USA	1/7	N	..	..	1	Y	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	..	100	100	20.3792	..	..	..	N	..	..
Uruguay	7/7	N	..	..	1	N	..	Y	..	Y	Y	Y	Y	Y	Y	..	..	..	Y	100	100	1.6479	..	..	76.7	N	N	Y
Uzbekistan	4/5	N	6	..	..	Y	..	Y	100	Y	Y	Y	N	N	N	N	..	..	..	79.9	97.4	5.2619	..	..	..	N	Y	Y
Vanuatu	3/5	N	6	1	..	N	..	..	..	..	..	..	N	N	N	..	..	..	..	94	63	0.4192	..	..	..	N	N	Y
Venezuela	5/7	Y	4	..	1	N	..	Y	92	Y	Y	Y	Y	Y	Y	..	..	..	..	70.5	84.6	6.5735	..	..	..	N	..	..
Vietnam	5/5	Y	1	..	1	N	..	..	87	..	..	..	N	N	N	..	Y	..	..	87.3	96.2	1.1768	..	..	9.5	N	Y	Y
Yemen	5/5	N	5	..	..	N	..	..	..	..	..	..	N	N	N	..	Y	..	Y	65.5	71	1.0311	..	..	..	N	N	Y
Zambia	7/8	N	6	1	..	N	..	Y	10	N	N	N	N	N	N	..	Y	..	..	44.5	90.4	0.203	..	..	28.9	N	Y	Y
Zimbabwe	6/8	N	7	1	..	Y	..	..	42	..	..	..	N	N	N	..	Y	..	..	69.2	96.8	0.8106	..	..	40.6	N	Y	Y

Data are numbers or Y=yes or N=no, unless otherwise stated. NA=not applicable. ..=not available. IAC=international assistance and cooperation. Indicators 9, 19, 20, 23, 36, 39–42, 51, 52, 60–64, 69, and 71 are Emirates. *Number of treaties actually ratified/number of treaties the state is eligible to ratify. †Proportion (%). ‡CO₂ emissions per capita. §US\$ value per capita. ¶Median availability (%). ||Probability per 1000

Table 1: Globally processed data for indicators of health systems and right to health

	Non- discrimin- ation			Health information												National health plan					Partici- pation	Underlying determinants				Acc- ess		Medicines		Health promotion		
	3	4	5	6	7	8	9	10*	11	12	13	14	15	16	17	18	19	20	21	22	23	24* rural	24* urban	25†	26*	27*	34*	35*	36	37 m*	37 f*	
Ecuador	8	2	1	Y	Y	Y	3	..	Y	Y	Y	Y	Y	Y	..	Y	N	N	Y	Y	N	39.3	78.3	..	..	..	100	102	Y	..	..
Mozambique	7	0	0	Y	Y	Y	2	..	N	N	N	Y	Y	Y	Y	Y	N	N	Y	Y	N	48.5	40	..	54.2	..	..	..	N	..	..
Peru	7	1	1	Y	Y	Y	3	86.6	Y	Y	Y	N	N	N	N	Y	N	N	N	N	N	62	84	3.87	..	..	90.6	80.2	Y	..	..
Romania	11	0	1	Y	Y	Y	4	99.9	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	34	92	..	17.8	76	97	97	N	3	6	
Sweden	6	0	0	Y	Y	Y	2	100	Y	Y	Y	Y	Y	Y	Y	N	Y	..	N	Y	N	100	100	6.25	..	..	96	99	Y	..	..

Data are numbers or Y=yes or N=no, unless otherwise stated. NA=not applicable. ..=not available. IAC=international assistance and cooperation. Data not collected for indicators 1, 2, 28–33, and 72 at the national

Table 2: National data for indicators of health systems and right to health

We also asked whether the country’s national health plan explicitly recognises the right to the highest attainable standard of health (indicator 21). Explicit human-rights language can be useful for policy makers and empower disadvantaged individuals, communities, and populations. On the basis of global data and our approach, two national health plans secured a yes, four secured a no, and data were not available for the remaining 188 countries. From the right-to-health perspective, global data collection is seriously deficient.

Participation and its preconditions

Despite the importance of participation to both health systems and the right to health, no global data, with our

approach, were available for any country for indicator 23. At the national level, of the five countries, none legally required participation of marginalised groups in the development of their national health plan. This finding suggests that participation is not receiving the attention it demands; although some countries have made provision for the participation of citizens, without specifying marginalised groups. WHO building blocks of a health system give insufficient attention to the role of participation.³⁰

Active and informed participation depends on several factors. Preconditions for meaningful participation include having access to information (eg, access to the health budget), being free to speak openly without intimidation

																											Health workers			National financing					IAC			Additional safeguards					Monitoring, assessment, accountability, and redress				
31§	32¶	33¶	34†	35†	37m†	37ft†	38	43	44	45	46†	47†	48†	49†	50†	53†	54	55	56	57	58	59	65||	66||	67**	68	70	72																			
..	79	64	..	..	..	..	..	Y	..	5.7	2.8	11.6	NA	..	N	..	Y	Y	Y	Y	24	26	44	73	..	N														
..	76	82	..	..	..	..	..	Y	..	4.8	2.9	3.8	NA	NA	..	..	Y	Y	..	..	45	51	130	63	..	NA										
..	Y	..	8.8	..	..	NA	NA	..	..	Y	Y	..	..	31	38	..	65	..	NA													
4.16	20	80	53	55	..	..	..	N	N	N	..	7	2.4	2	1	NA	N	..	Y	Y	..	..	78	134	550	50	..	NA														
..	Y	3.87	7	2.8	7.1	NA	NA	Y	..	Y	Y	..	..	20	24	18	67	..	NA																	
7.76	61.1	73.9	83	85	..	..	..	..	..	Y	..	2.6	1.9	..	..	..	..	..	..	..	..	..	8	8	37	78	..	NA					
..	Y	0.04	8.2	2.7	..	10	2.37	Y	..	..	..	Y	Y	5	6	8	79	..	N																
191	91	94	..	..	..	..	..	Y	0.55	15.2	4	..	6	7.26	N	Y	N	N	Y	Y	7	8	11	78	..	NA														
..	Y	..	8.1	1.4	13.3	8	NA	Y	..	Y	Y	..	..	13	15	20	75	..	NA																	
9.59	..	82.5	97	96	7	8	..	N	..	N	..	5	0.5	5.6	5	NA	..	..	N	Y	..	..	38	44	24	68	..	NA															
0.04	Y	..	4.3	..	0.7	NA	NA	..	..	Y	Y	..	..	30	36	..	69	..	NA															
..	57	59	..	..	..	..	..	Y	..	4.7	1.3	4	NA	NA	N	..	N	Y	..	..	18	21	57	74	2	NA												
..	83	72	50	42	..	..	..	N	10.45	6	..	1.8	..	NA	..	..	N	Y	..	..	15	17	150	72	..	NA												
0.34	5	90	43	40	..	..	..	..	..	N	1.66	5.1	5.1	1.4	..	NA	..	..	Y	Y	..	..	75	100	430	61	..	NA										
2.14	84	80	46.1	40.5	Y	..	..	N	2.29	5.6	1.8	3.3	NA	NA	..	..	Y	Y	..	..	102	182	830	43	..	NA													
..	79	81	56.3	54.1	..	..	..	N	..	8.1	2.3	6.7	NA	NA	..	..	Y	Y	..	..	55	85	880	43	..	NA												

not shown because no data were available for any country. CAR=Central African Republic. DRC=Democratic Republic of the Congo. FSM=Federated States of Micronesia. PNG=Papua New Guinea. UAE=United Arab livebirths. **Ratio per 100 000 livebirths. ††Life expectancy (years).

																											Health workers					National financing					IAC			Additional safeguards					Awareness raising			Monitoring, evaluation, accountability, and redress				
38	39	40	41	42	43	44	45	46*	47*	48*	49*	50*	51	52	53*	54	55	56	57	58	59	60	61	62	63	64	65‡	66‡	67§	68¶	69	70	71																			
N	Y	Y	N	N	N	N	..	..	5.1	..	..	0.13	NA	NA	NA	Y	Y	Y	Y	Y	Y	N	N	N	N	N	15.3	24.8	85	74.2	Y	..	N															
Y	Y	Y	Y	Y	Y	Y	..	..	..	0.8	0.9	..	NA	NA	NA	N	N	Y	Y	Y	Y	..	..	..	N	N	124	178	408	47.4	NA	..	NA													
Y	Y	Y	N	N	..	..	Y	..	4.5	2	..	..	NA	NA	NA	Y	Y	Y	Y	N	..	Y	..	N	N	N	18	25	185	71.2	Y	2	N															
N	N	N	Y	Y	Y	Y	..	..	6.1	2.5	7	3.9	N	Y	NA	Y	Y	Y	Y	Y	Y	N	N	N	N	N	13.9	3.4	24	71.9	Y	..	N																	
N	Y	Y	Y	Y	N	N	Y	..	8.4	1.4	1	..	Y	Y	..	Y	Y	Y	Y	Y	N	..	..	..	Y	Y	3.1	5	4.7	82.4/77.9	NA	..	NA																

level. *Proportion (%). †CO₂ emissions per capita. ‡Probability per 1000 livebirths. §Ratio per 100 000 livebirths. ¶Life expectancy (years).

(eg, publicly criticise a local health council), being free to organise with no restriction (eg, establish an independent medical association or patients' group), and meeting without impediment (eg, hold a public meeting). These are also necessary safeguards for meaningful implementation of other right-to-health features, such as health promotion. Some of these preconditions are present in our selection of indicators. For example, the law in 121 countries does not protect the right to information (indicator 6); the law in 41 countries does not protect freedom of expression (indicator 56); and in nine countries the law does not protect the right of association (indicator 57). In these countries, preconditions for meaningful participation or effective health promotion do not exist.

However, reality is worse than these data suggest. Although the law might protect information, expression, association, and assembly, in some countries a wide gap exists between law and implementation. This does not mean that the law is without value. Rather, it recognises that the law is a tool, and therefore its usefulness depends on circumstances, including the creativity of those who use it. We addressed this more-practical, non-legal dimension of preconditions, with special attention to access to information. Global data showed that 88 countries do not gather, centralise, and make publicly available the number of maternal deaths (indicators 11–13). Without such vital health information, meaningful participation can be an empty promise.

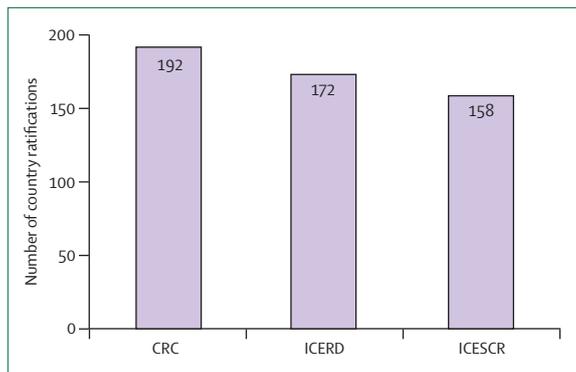


Figure 2: Number of countries that have ratified treaties that include the right to health
 CRC=Convention on the Rights of the Child. ICERD=International Convention on the Elimination of Racial Discrimination. ICESCR=International Covenant on Economic, Social, and Cultural Rights.

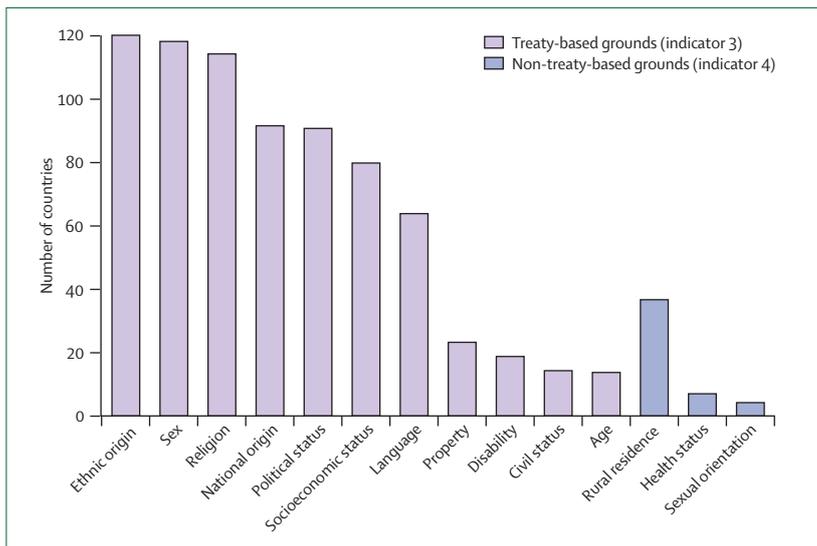


Figure 3: Number of countries protecting grounds of discrimination

Underlying determinants of health

We included indicators on the underlying determinants of health (eg, access to clean water, CO₂ emissions per person, and violence against women [indicators 24–26]). The relation between diarrhoea (and other health conditions) and access to clean water is well known.¹¹⁹ Thus, we asked what percentage of the population has access to clean water—defined as at least 20 L per person per day from a source within 1 km of the user’s dwelling (indicator 24).^{119,120} This indicator raised important definitional issues that were briefly considered in the explanatory notes (webappendix 1).

Only 54 countries had more than 90% of their rural population with access to clean water and only 115 countries had more than 90% of their urban population with access to clean water (panel 8). Rural dwellers are disadvantaged in most countries for clean water access (figure 4). We used the joint monitoring programme as the source for

these data because it shows where the original data come from, as opposed to some other sources that do not or only use estimates. We identified the method and year of data collection in the extended data tables (webtables 4 and 5) to emphasise that data were obtained from various sources, including national surveys and the joint monitoring programme estimates, and that some data were from 1990.¹²¹ Comparison of data between countries is therefore difficult, which is why we did not rank countries. Romania has less than 20% of its rural population with access to water, and the difference in access to water between rural and urban populations is striking (16% vs 91%).¹²¹ Data available at the national level were more recent and showed that, by 2005, the gap had narrowed a little but was still extreme (34% vs 92%).¹²²

We aimed to provide a basis to monitor, over time, the progressive realisation of the right to the highest attainable standard of health. The indicator for access to clean water is especially useful for monitoring a country’s progressive realisation. Romania’s data for access to clean water in rural and urban areas should be revisited in a few years. If there is an acceptable measure of improvement, the government will be able to argue that, in accordance with its international human-rights obligations, it is progressively realising this aspect of the right to health. But if access to clean water remains the same or becomes worse, the government will have the burden of proving that all has been done to try to improve access to clean water. If the government cannot show that all that is possible has been done, it will be in breach of its international human-rights obligations. This example illustrates the importance of independent, transparent, and accessible accountability mechanisms that can decide whether any improvement that might have occurred is acceptable in the circumstances. If the government has fallen short of its responsibilities, accountability mechanisms should consider appropriate redress, which ranges from guarantees of non-repetition to compensation.⁸⁸

Definitional issues restricted data availability for violence against women (indicator 26), the indicator of which has suitable data only for eight countries (Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Tanzania, and Thailand from the WHO multicountry study on women’s health and domestic violence against women).¹²³ Although a lot of data exist for this subject, definitions vary for violence, domestic violence, violence against women, and even women (as defined by age), making it challenging to find comparable data.

Access to health services

We addressed different dimensions of access, such as those of antenatal care (indicator 27), access to clean water (indicator 24), and catastrophic health expenditure (indicator 46), but more work is needed to identify appropriate indicators that measure access. We asked what is the proportion of women with a livebirth in the last 5 years who, for their last pregnancy, were seen at least three times

by a health-care professional, had their blood pressure checked, had a blood sample taken, and were informed of signs of complications (indicator 27). This indicator uses antenatal care as a proxy for primary care and coverage to represent access. We obtained data for this composite indicator from the world health survey with information available for 51 countries, 19 of which are categorised as low-income and 22 as middle-income countries.^{124,125}

The world health survey includes women aged 18 years and older, and therefore data exclude those under 18 years who also need antenatal care and might be a group with reduced access to services. Those women whose pregnancy did not result in a livebirth are not included and they may be less likely to have received adequate antenatal care. Furthermore, women could be reluctant to acknowledge a livebirth when the child only survived a few minutes, and could falsely refer to this as a stillbirth. These are a few examples of limitations associated with this indicator showing an overestimation of the percentage of women who received care. Even with these overestimations, less than 50% of women had comprehensive antenatal care in 33 of 51 countries (figure 5).

Similar to the indicator on access to clean water, the antenatal-care indicator can be used to measure the progressive realisation of an important aspect of the right to health. For example, according to global data and our approach, only 12% of women in India have comprehensive care. India's data should be revisited in the future to assess whether the government is progressively realising this important aspect of the right to health.

Health workers

One of the WHO building blocks of a health system, health workers have a key role in the implementation of the right to the highest attainable standard of health (panel 9). Because of their importance, 11 indicators address issues directly related to them (indicators 38–44 and 61–64). On the basis of global data and our approach, we found that 21 countries have a national health-workforce strategy and 12 do not, whereas for 161 countries data were not available. Using doctors and nurses as proxies, we looked at remuneration, national self-sufficiency, incentives to promote stationing in rural areas, awareness raising, and human-rights training. Of the 11 indicators that relate to health workforce, eight do not have global data available (including four in the awareness-raising group).

International assistance and cooperation

Human-rights responsibility has several components, including the duty of high-income countries to provide, and low-income countries to seek, international assistance and cooperation. We set five indicators for human-rights responsibility in health (indicators 51–53, 71, and 72). All five indicators focus on the responsibility of donors rather than on the responsibility of recipient countries.

We asked whether donors' international development policies explicitly include specific provisions to promote and protect the right to health in recipient countries (indicator 51), and whether these policies explicitly include provisions to support the strengthening of health systems (indicator 52). No global data based on our approach were available for any donor in relation to either indicator. Nationally, however, some data were available. National data in Sweden confirmed that the country's international development policies explicitly include specific provisions on the right to health, whereas national data in Romania led to the opposite conclusion. Also, national data in Sweden and Romania confirmed that both countries' international development policies explicitly include provisions to support the strengthening of health systems.

We also asked about the percentage of net official development assistance directed to health sectors (indicator 53): Italy (17%), Ireland (15%), Netherlands (14%), and Denmark (11%) seemed to be far ahead, whereas Japan, Greece, and Luxembourg (all 1%) seemed to be a long way behind (panel 10).

However, in recent years some donors have moved away from the provision of funds for specific sectors towards general budget support. Because of the Paris Declaration

Panel 5: Civil registration in Sweden

The law on national civil registration in Sweden provides registration of births to registered parents. When a child is born in Sweden to non-registered parents, such as undocumented immigrants, the child will not be registered. Information about number of births to non-registered parents is unreliable. The picture is complicated by the fear of many non-registered people of Swedish authorities.

Panel 6: National health situational analysis in Mozambique

Before the development of its national health sector strategic plan, Mozambique undertook a comprehensive national health situational analysis. This analysis identified health problems of disaggregated population groups, such as children, and the feminisation of HIV. It also showed the effect of gender in the fight against HIV, and the need to improve human resources for health at all levels. It identified possible interventions, such as high vaccination coverage, to control diseases in children younger than 5 years and the improvement of campaigns on behaviour change. The analysis emphasised the need to reinforce support systems and focused attention on the importance of monitoring and assessing health programmes and services. However, close examination also showed issues with the quality of the information gathered and data analysis.

Panel 7: Participation in Peru's health councils

Representatives of Peru's ForoSalud (a nationwide civil-society network) obtained support from the minister of health and the national health council for their proposal to change the composition of national, regional, and provincial health councils. The existing composition included nine representatives of health providers and only one of health-service users. The new proposal promotes a more bottom-up approach to participation, including discussion of new health policies, with a plan to repeat the participatory process in 2 years and 6 months. The aim is to promote accountability of government officers for both the achievements and shortcomings of health policy.

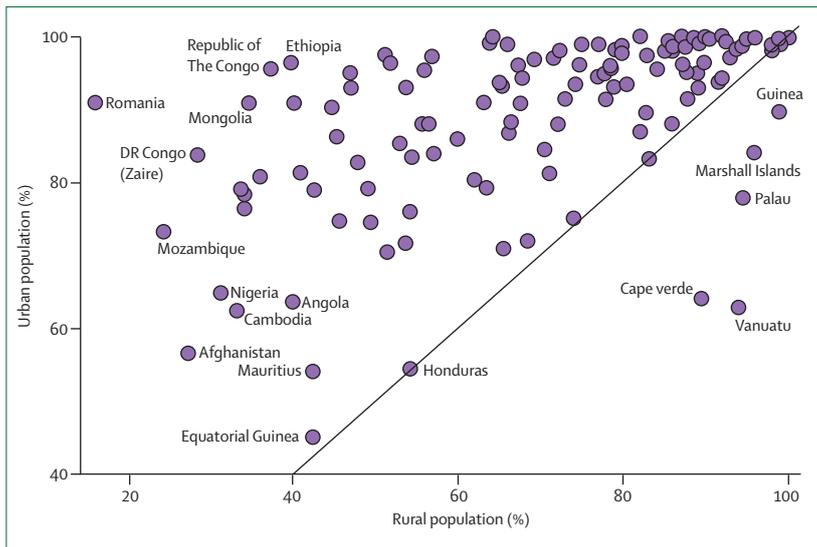


Figure 4: Percentage of urban and rural populations with access to clean water
N=157 countries.

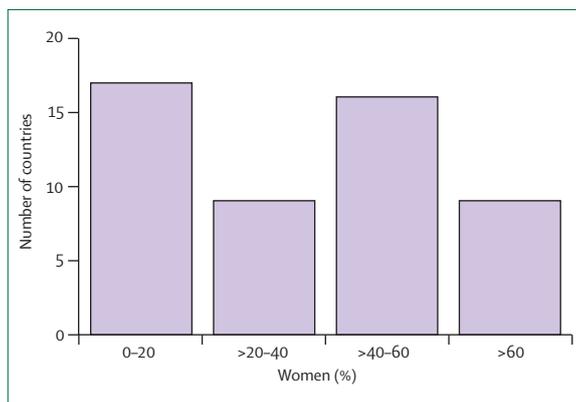


Figure 5: Percentage of women by number of countries who had comprehensive antenatal examinations during their last pregnancy
N=51 countries.

Panel 8: Access to clean water in Mozambique

In Mozambique, poor access to clean water is responsible for serious illnesses and leads to frequent outbreaks of cholera. Access to clean water has improved in rural communities through close coordination with the ministry of public works and with support from various donors. Recent data confirmed this improvement and showed a higher rate of access to clean water in rural (48.5%) than in urban (40%) areas. However, urbanisation has taken place across Mozambique in recent years, leading to a large influx of people into cities and, therefore, in provision of the necessary infrastructure to ensure access to water in urban areas.

on Aid Effectiveness, this trend is likely to accelerate.⁸² For this reason, a brief narrative should accompany this indicator to explain each country’s approach to overseas development assistance and health, for example, to signal if the donor is moving away from sectoral support towards general budget support. Donors’ support should be in line with the growing international recognition that, if the health-related Millennium Development Goals are to be achieved, health systems must be strengthened.

Our research suggests that, for indicators 51 and 52, the relevant global data, based on our approach, are globally unavailable. We also noted that the relevant national data were available for Sweden and Romania. Data gathered for indicator 53 provided a basis to monitor, over time, donors’ progressive realisation of their human-rights responsibility of international assistance and cooperation in health.

Monitoring, assessment, accountability, and redress

Eight indicators were grouped together under monitoring and accountability (indicators 65–72); however, several others might properly be regarded as monitoring and accountability indicators, such as those on impact assessments (indicators 19 and 20).⁸⁸

Monitoring and accountability depend on the availability of reliable and relevant data. Without indicators, benchmarks, and data, it is not possible to monitor the progressive realisation of the right to health. Several traditional health outcome measures have a key role. A worsening health outcome, such as maternal mortality, does not necessarily mean that a country is failing its right-to-health responsibilities. However, it obliges a country to explain to an appropriate accountability body why the situation is deteriorating.

We took into account three mortality measures: infant mortality (indicator 65), mortality of children younger than 5 years (indicator 66), and maternal mortality ratio (indicator 67), together with life expectancy (indicator 68). Of these, the one with the least global data available was maternal mortality ratio. Data exist for 169 countries with a range from 1 (Ireland) to 2100 (Sierra Leone) per 100 000 livebirths (mean 331).¹²⁶ This range is astounding because most deaths are preventable and a high ratio shows that the health system is failing.

As with other indicators already discussed, such as antenatal care and access to water, indicators 65–69 can be used as a basis to monitor, over time, aspects of the progressive realisation of the right to health.

111 countries have national human-rights institutions, many of which make a substantial contribution to the promotion and protection of human rights. Although independent, these institutions are non-judicial and designed to be more accessible, flexible, and informal than courts.¹²⁷ One of their functions is to monitor and hold governments accountable. We asked whether a country has a national human-rights institution with a mandate that includes the right to the highest attainable standard of health (indicator 69). Is the institution empowered to monitor public and private health and hold accountable those with right-to-health responsibilities? No global data for this indicator were available with our approach for any country. Data were available, however, nationally. Of the five countries, three (Ecuador, Peru, and Romania) have national human-rights institutions, and the mandate of each extends to the right to health. With leadership and resources, these

institutions could contribute greatly to constructive accountability for the right to health (panel 11).³¹

We also asked whether national human-rights institutions have a mandate to monitor donors' human-rights responsibility of international assistance and cooperation (indicator 71). However, no global data based on our approach were available for any donor for this indicator. National data showed that, although three of the five countries have national human-rights institutions, none of these institutions has a mandate to monitor international assistance and cooperation in health.

Countries that have ratified international human-rights treaties have an obligation to report on their activities related to that treaty usually within 2 years.⁵ A committee of independent human-rights experts publicly considers the report and may ask country's representatives challenging questions about the government's record, publishing its concerns and recommendations. A few years later the process is repeated and the experts' committee asks the country to explain what has been done in relation to the earlier recommendations. Under the International Covenant on Economic, Social, and Cultural Rights, donor countries should report on their human-rights responsibilities of international assistance and cooperation in health. Therefore, we took into account country's reporting on international assistance and cooperation in health to the UN Committee on Economic, Social, and Cultural Rights (indicator 72). We showed that only three donor countries (Belgium, Canada, and Japan) reported adequately on this crucial issue.

Low-income countries have the perception that high-income countries escape accountability when failing to fulfil their international pledges and commitments that are important to developing countries.²⁸ Data seem to confirm that this perception is right. Our national data suggest that the mandates of national human-right institutions do not extend to holding donors to account for their human-rights responsibility of international assistance and cooperation. Also, most donor countries are not being held accountable by a key UN human-rights treaty body for their responsibility of international assistance and cooperation in health. We conclude that donor countries are subject to only feeble independent, institutional scrutiny for their international responsibilities.

In 63 countries, the constitution, bill of rights, or other statute recognise the right to health. Legal recognition serves many purposes. In several countries, for example, it made the authorities accountable before the courts, leading to tangible improvements in health services.^{55,56} We, therefore, enquired about the number of judicial decisions that took into account the right to health in 2000–05 (indicator 70). However, it is possible that the decision may not promote and protect this fundamental human right. Nonetheless, even in this case, at least the country is held accountable for the right to health, having to explain itself before an independent accountability body.

Global data disclosed, on the basis of our approach, only five countries (Canada, Nigeria, Peru, South Africa, and Venezuela) with judicial decisions conforming to this indicator. The combined number of judicial decisions is less than ten. This is striking because in recent years numerous national courts have decided right-to-health cases, and yet our data show that they are not globally available in accordance with our approach.^{55,56}

Here, we looked at some of the right-to-health features and their data, and conclude that health systems in numerous countries do not have the features required by the right to health. Also, there are insufficient data currently available, especially at the global level, to assess these indicators in relation to many countries. Figure 6

Panel 9: Health workers in Romania

Romania has one of the lowest densities of health personnel in Europe in relation to doctors, nurses, dentists, and pharmacists. Furthermore, there is an imbalance between regions of the country. In rural areas, there are 98 communities (villages) without any doctor, and the situation is comparable for nurses and other health workers. In a third of Romania, more than 30% of medical specialties are not available. The accession of Romania to the EU aggravated the situation with 10% of doctors seeking work outside Romania, according to a recent survey of the Romanian College of Physicians. This situation increases already existing inequities between rural and urban populations. Payment types currently compensate rural better than urban clinicians for the same type of services. However, the existing additional benefit payment programme has not met its goal of providing a sufficient health workforce in the underserved areas. These data suggest that a comprehensive approach is needed to tackle more than the financial dimension of the issue. The ministry of health has proposed additional incentives to try to increase and stabilise the number of health workers in rural areas.

Panel 10: Official development assistance for G8 member countries (global level data)

Italy	—17.48%
USA	—7.26%
Canada	—6.43%
France	—3.74%
Germany	—2.93%
UK	—2.37%
Japan	—1.13%
Russia Federation	—Not available

Panel 11: Monitoring and accountability in Peru

Over the past year, Cooperative for Assistance and Relief Everywhere (CARE)-Peru and Physicians for Human Rights have supported the development of citizen and civil-society accountability mechanisms at both district and local levels. An example is in the Piura and Puno regions, where Quechua and Aymara women community leaders have been linked to regional offices of the human-rights ombudsman to monitor women's health rights, particularly their right to good quality, appropriate maternal health services. Rural women's leaders have also been empowered by a joint agreement between ForoSalud and the human-rights ombudsman office in Puno. Partnerships have been mutually enriched, with women leaders feeling better positioned to demand information and changes in health services.

shows the unavailability of global data in relation to a selection of 25 indicators for which it is clear that, in many cases, international bodies are not collecting the appropriate right-to-health data. An overarching conclusion is that those at the international and national levels with responsibilities for health systems seem to be giving inadequate attention to the right-to-health analysis and some of the features required by the right to highest attainable standard of health.

Opportunities and challenges

On a country-by-country basis, table 1 summarises the degree to which health systems of countries include some features that arise from the right to health in relation to 72 indicators. Table 2 summarises national

data for the same indicators in relation to five countries. When considering the performance of an individual country, the country's stage of economic development (what human-rights treaties refer to as the countries resource availability) is important.

Some of our findings are positive: for example, we record high rates of vaccination with measles-containing vaccine (MCV) and diphtheria, tetanus, pertussis (DTP3) vaccine (indicators 34 and 35). General comment 14 places a high priority on immunisation programmes.³⁶ Although such programmes can occur as vertical interventions, whenever possible they should strengthen health systems. Weak health systems impede high immunisation coverage¹²⁸ and the GAVI Alliance and Fund Boards recently increased funding for health system strength-

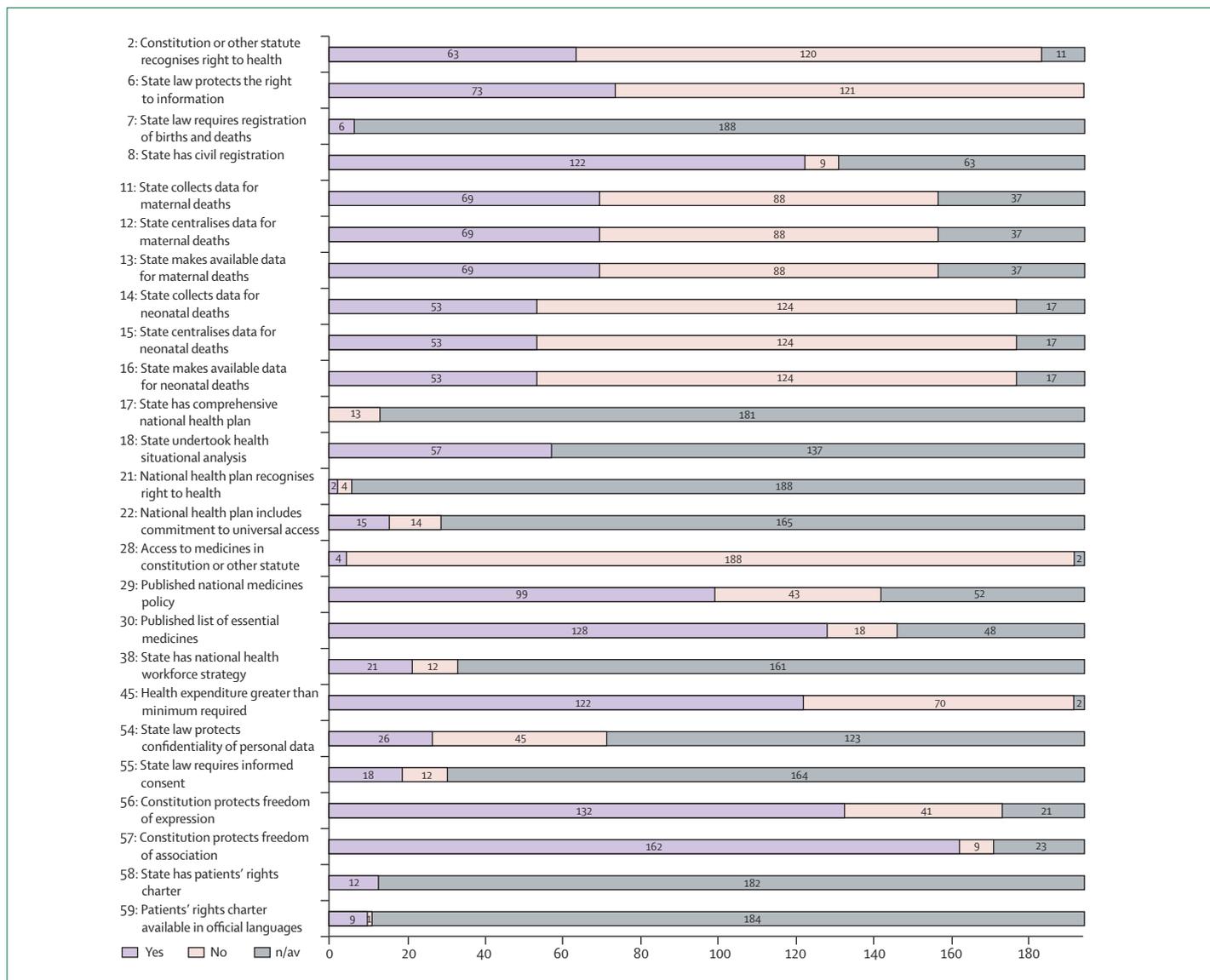


Figure 6: Availability of global data for a selection of 25 indicators
n/av=not available.

ening to US\$800 million.¹²⁸ We recorded good practices for the implementation of right-to-health features of health systems, such as Mozambique's effective coordination between different stakeholders to improve access to safe water in rural communities (panel 8). Also, Sweden has recently introduced the legal requirement for inclusion of human rights in the training curriculum of health workers, reflective of indicators 63 and 64.¹²⁹

Countries that have not put in place some of the key features of a health system—eg, a comprehensive national health plan (indicator 17), a published national list of essential medicines (indicator 30), a national health workforce strategy (indicator 38), or government expenditure on health per person above the minimum required for a basic effective public health system (indicator 45)—are in breach of their right-to-health responsibilities whatever their stage of economic development.

We provide a basis on which to monitor health systems and the progressive realisation of the right to health. A suitably improved version of this project repeated in a few years' time will give an indication of whether countries have progressively realised the right to health. Take, for example, a high-income country in which prevalence of violence against women has increased (indicator 26); access to health services (indicator 27) has worsened; immunisation of 1-year-old children against measles (indicator 34) has decreased; total government spending on health as a percentage of GDP (indicator 47) has lessened; and life expectancy has fallen. In such a case, progressive realisation of the right to health has not been achieved. Unless the government has a rational, objective explanation for the worsening situation (eg, a natural disaster), this country would be in breach of its right-to-health responsibilities.

We have emphasised the limitations of indicators generally and some of our indicators specifically. Moreover, as we have seen, there are some inconsistencies between global data (table 1) and national data (table 2). So the data must be used with caution.

In this Report, we concentrate on recognition of the right to health; non-discrimination; health information; national health plan; participation; underlying determinants of health; access to health services; health workers; international assistance and cooperation; and monitoring, assessment, accountability, and redress. We do not discuss some important right-to-health features and their data, such as finance and medicines, because space restrictions compelled us to be selective.

Limitations to indicator selection and data collection do not contradict the profile of indicators or the findings, but should be considered when analysing the results. We hope that the profile of indicators will prompt discussion and that subsequent revisions will make indicators more robust.

This project relies on secondary data published by others, and any limitations of the primary data affect our dataset. Because of resource constraints, triangulation of

data collection was not included in the methods, except when checking for an unexpected result. The number of indicators is large, but we did not want to compromise too much. When the project is repeated, we suggest an assessment of concordance of the data. Although one of the objectives of this project was to assist with monitoring progressive realisation of the right to health, some of the indicators, such as maternal mortality ratio, are not sensitive to change over short periods. Additionally, so-called yes or no indicators do not lend themselves to measurement of gradual change over time, although many are complemented by a commentary (webtables 4 and 5) to explain the result that could indicate improvement with time.

For this project, restrictions on collection of worldwide data were needed. However, the one-click rule introduced elements of inconsistency in the data collection. Some regions tended to have more information available within the limits of the one-click confines than others—for example, lists of WHO member states each link to some documents about that country. For some regions, detailed information was available on global websites, whereas, for others, global websites were structured in such a way that the one-click rule allowed only an index page for the region, not the actual information, to be reached. Also, there was a risk of further discrepancy in data available for developed countries and those available for developing countries. This discrepancy might arise because international organisations assist developing more than developed countries in data collection or analysis, and these data are subsequently more readily available worldwide.

Our research shows that insufficient data are available, especially at the global level, in relation to right-to-health features. From the perspective of health systems and the right to health, UN bodies and other international stakeholders are not collecting appropriate data. International and national institutions with responsibilities for health systems seem to be giving inadequate attention to the right-to-health analysis and some of the features needed for the right to the highest attainable standard of health. Here we focus on other areas of concern and make recommendations. We do not attempt to discuss all our concerns and recommendations but focus on those arising from some key areas. Taking into account both the right-to-health analysis outlined in this report and the data collected, we make additional recommendations in panel 12.

Recognition of the right to health

Recognition of the right to health in international treaties, national constitutions, and other statutes gives rise to a legal obligation for countries to ensure that their health systems have certain features, as discussed, and also that the performance and quality of health systems do not regress or stagnate but improve over



Curt Camermark/World Bank

Panel 12: Recommendations

We recommend WHO and the Office of the High Commissioner for Human Rights

- adopt a stewardship role in the collection and collation of data for right-to-health features of a health system
- lead the process to establish universal definitions for commonly used terms and standardised units of measurement regarding the right-to-health features of a health system
- maintain and regularly update a global data repository on the right-to-health features of a health system
- lead the process to establish, where appropriate, international benchmarks to assess country performance regarding the right-to-health features of health systems
- ensure that the Global Health Workforce Alliance gathers data relevant to the right to health, such as for human rights training for health workers

We recommend other UN specialised agencies and bodies

- coordinate with WHO, national governments, civil-society organisations, and other international, regional, and national stakeholders to ensure coherence in global monitoring with respect to the right-to-health features of a health system
- provide technical assistance to national governments to facilitate data collection on the right-to-health features of a health system
- record descriptive and numerical data
- cooperate with WHO, national governments, civil-society organisations, and other relevant stakeholders to establish universal definitions for common terms and standardised units of measurement of right-to-health features of health systems
- ensure that the activities of the UN specialised agency or other body are aligned with the comprehensive national health plan

We recommend national governments

- explicitly recognise the right to health, and right-to-health features, such as access to essential medicines, in the national constitution or statute
- ensure explicit recognition of the right to health in the comprehensive national health plan
- ensure sufficient expenditure on medicines to provide, as a minimum, equitable access to essential medicines
- collect data on marginalised groups to inform the planning and development of the health system
- do health and human-rights impact assessments before finalising the comprehensive national health plan
- in partnership with WHO, UN specialised agencies, civil society, and others, collect and regularly update information on right-to-health features of health systems
- disaggregate data on at least the five priority prohibited grounds of discrimination—sex, age, ethnicity, socioeconomic status, and rural or urban residence
- regularly submit information updates about the right-to-health features of health systems to the global data repository maintained by WHO/OHCHR
- cooperate with the WHO, UN bodies, and others in establishing national and international benchmarks to monitor the right-to-health features of health systems
- ensure registration of births and deaths within a civil registration system
- establish national human-rights institutions with a mandate that includes the right-to-health and budgeted programme of activities for raising awareness about the right to health
- ensure the mandate of the national human-rights institution includes monitoring and accountability with respect to international assistance and cooperation in health
- include compulsory human-rights and right-to-health training for health workers, judges, and lawyers
- submit timely, full reports to the UN Committee on Economic, Social, and Cultural Rights and other relevant UN treaty bodies

(Continues on next page)

time. However, most countries (121 of the 184 for which data are available) do not recognise the right to health in their national constitutions or other statute, although every country has ratified at least one international treaty that recognises the right to health. Recognition of the right to health has not only generated judicial decisions that have improved the delivery of health-related services,⁵⁵ it has also led to non-judicial mechanisms of accountability, such as the Right to Health Unit established by the Uganda Human Rights Commission,⁹⁰ and led to enhanced health policy and practice. For example, the Department of Health in the United Kingdom recently commissioned an assessment of the effectiveness of implementing a human-rights based approach in health and social care.¹³⁰ Focusing on five pilot projects, the assessment concluded that such an approach had a noticeable effect on the treatment and care of health-service users, and that it is one way of achieving good practice. Thus, we recommend that countries ratify treaties that encompass the right to health, explicitly recognise this human right in their national constitutions or other statute, and integrate the right to health into their national health plans.³⁶

Health information

Health information is the life-blood of effective, accessible health systems and the right to health. Information enables individuals and communities to promote their own health and allows governments to formulate evidence-based health plans. Monitoring, accountability, and participation depend upon access to information. Without reliable disaggregated data, whether health systems are delivering access to services and facilities without discrimination is impossible to know. However, our research suggested that health information systems in many countries are seriously deficient in several ways.

Health information systems include a range of data sources, such as censuses, household surveys, vital registration systems, and other health-facility data sources.¹³¹ Ideally, systems should not duplicate but complement each other, providing accurate information making best use of limited resources.¹³² Data for maternal and neonatal deaths, for example, should be included within the vital registration system, but the data then need to be specifically extracted, a position supported by the WHO Maternal Mortality Report in 2005.¹²⁶ Of 194 countries, 122 have a civil registration system; however, many of these are incomplete, with fewer than 90% of events registered. Accurate recording of cause of death according to international standards is important,¹³³ and the statistics generated should then form a part of the situational analysis that contributes to health-system planning. We recommend that all countries should legally require registration of births, deaths, and cause of death according to international standards (using the international classification of disease).¹³⁴

The USAID-supported Demographic Health Surveys, the Multiple Indicator Cluster Survey programme developed by UNICEF, and other surveys provide much information. Data provided by these surveys were used as sources for many indicators in this profile, and for some indicators, such as those considering access to water and vaccination coverage (see extended data in webtables 4 and 5) the survey type and year were recorded along with the score. Although surveys fill an important role, they are not the best long-term solution to collection of routine data if not done regularly and they should be included in a civil registration system that is permanent, continuous, compulsory, and universal.¹³² At the very least, a system is needed to record reliable information on birth and death registration in all regions. Such a system would have implications for several human rights. Without birth registration, many entitlements may be denied throughout life, such as access to health care, education, international travel, and the right to own property. However, data for the percentage of births registered in rural and urban areas are only available for 78 countries. Furthermore, only 69 countries regularly collect, centralise, and make publicly available data throughout the territory for numbers of maternal deaths. We recommend, at a minimum, continuous registration of births and deaths in all areas within a vital registration system.

Descriptive information is needed to understand the issues behind quantitative data; however, we often found a shortage of this information. In this project, all indicators have been reduced to a number or to yes or no answers, but the accompanying data and commentaries (webtables 4 and 5 and webappendix 1) are crucial to understanding our findings. Some issues are difficult to accurately capture with purely quantitative data, and we encourage greater emphasis on a complementary brief narrative in some cases.¹³⁵

As part of their human-rights responsibility of international assistance and cooperation in health, donors (webpanel) should accelerate their coordinated efforts to provide training and technical assistance for sustainable data collection and processing and to make data available worldwide. Additionally, donors should facilitate the establishment of national health information systems, including a comprehensive civil registration system in all countries, with clear mechanisms for relaying this information to a globally accessible data repository. WHO and the UN Office of the High Commissioner for Human Rights should have a leadership role in establishing and maintaining a global system for collection and collation of up-to-date information from different countries and UN bodies on right-to-health features of health systems.

Disaggregation

Policy makers and health practitioners need accurate information about marginalised groups as many are at risk of worse health,¹³⁶ because, in many cases, of

(Continued from previous page)

We recommend national and international civil society

- participates in health system planning and monitoring
- advocates that right to health is properly incorporated in health system planning
- advocates the inclusion of marginalised groups in health decision making
- advocates that the mandates of national human-rights institutions include the right-to-health and budgeted programme of activities for raising awareness of right-to-health
- disseminate information about key judicial decisions about the right to health
- ensure that the activities of the civil society organisation are in alignment with the comprehensive national health plans

We recommend research institutions

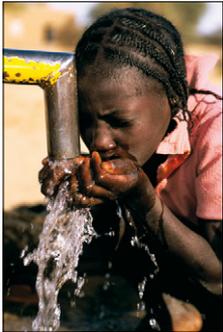
- provide assistance to national governments to do health and human-rights impact assessments
- do or commission research on the right-to-health features of health systems;
- actively promote knowledge sharing among academics on the right-to-health and right-to-health features of health systems
- collaborate with national governments, WHO, UN bodies, civil-society organisations, and others to promote a greater understanding of the right to health and right-to-health features of a health system

We recommend donors

- recognise the importance of strengthening health systems in international assistance strategies
- allocate greater funding for health in low-income and middle-income countries
- ensure donor accountability for international assistance and cooperation in health in both donor and recipient countries
- align international assistance and cooperation strategies with the comprehensive national health plans of recipient countries

problems in accessing health-related services. From the human-rights perspective, the goal is to disaggregate data in relation to as many of the internationally prohibited grounds of discrimination as possible (indicators 3 and 4), although some data cannot be disaggregated. The collection of disaggregated data remains an enormous challenge for many countries and, because of limited capacity, reliable disaggregated data are often unavailable. The contextual natures of vulnerability and discrimination further hamper collection of relevant data: a group might be especially vulnerable in one context but not in another. We had difficulty identifying indicators that captured vulnerability and marginalisation, probably because of their contextual nature. We recommend five priority grounds—sex, age, ethnic origin, rural or urban residence, and socioeconomic group—for disaggregation as a minimum.⁹⁸ These ground are similar to those identified by the Health Metrics Network.⁹⁹

Some health issues demand disaggregation on particular grounds; for example, in the context of sexual and reproductive health, disaggregation on the basis of sex and age are crucial. Of the 21 countries with information about the proportion of men and women with comprehensive knowledge of HIV/AIDS, men fared better than did women in 16, suggesting that different



Cur Camermark/World Bank

strategies for education of women are required. The Guidelines on Construction of Core Indicators in relation to monitoring the Declaration of Commitment on HIV/AIDS note that an important lesson from the UNAIDS Global Progress Report of 2003 was that without disaggregated data monitoring of access, equity, and change over time is difficult.¹³⁷ The guidelines acknowledge that this disaggregation requires effort, but point out that such data are commonly collected at the subnational level but subsequently lost when passed to the national level. Another recommendation therefore is that coordinated efforts are made to collate and present reliable data at the national and global levels broken down on the basis of the five priority grounds.

Coordination of data

Because the right to health involves policies and practices that lie beyond the health sector, effective coordination is needed between different sectors (including health, transport, environment, and education) and different health services. General comment 14 recognised coordination as a right-to-health feature of health systems.³⁶ Data collection is one example of where coordination is needed—as happens with global maternal mortality data. UNICEF, WHO, UNFPA, and the World Bank periodically assess maternal-mortality data.¹³⁸ As a result of joint assessment the data on maternal mortality are the same at WHO and UNICEF. However, life expectancy data differ between the two sources; for example, WHO reports a life expectancy of 61 years in Namibia, UNICEF reports 52 years. The cause of this large discrepancy is unclear. We recommend coordination and collaboration between countries, regional stakeholders, UN bodies, and others to establish a global repository for health data with up-to-date and consistent reporting.

For some indicators more information is available worldwide for low-income than for high-income countries, such as the data on DTP3 and MCV vaccination.¹³⁹ However, high-income countries have the resources to collect and process the relevant data, which should be logged in a global repository.

Standardisation

When developing the indicators and collecting data, one major difficulty was the lack of universal definitions for many commonly used and important terms, such as clear definitions for rural and urban. Disaggregation of data on these grounds was therefore difficult; in practice, individual data collectors decide whether a location is rural or urban.¹⁴⁰ Similarly, violence against women does not have a standard definition.¹⁴¹ Specific criteria and definitions should be created, although they might not capture every nuance of the relevant issue, to allow consistency of data collection and comparison over time.

Standard definitions are needed to create national and international benchmarks against which to measure a country's progress. General comment 14 anticipates that

countries and the UN Committee on Economic, Social, and Cultural Rights will agree key indicators and then identify appropriate benchmarks or targets to be achieved by the country over the next few years in relation to the selected indicators.³⁶ Agreed indicators and country-specific benchmarks are needed to measure progressive realisation and hold governments to account. Sometimes benchmarks are agreed internationally for all countries, or a group of countries—for example, all donors should devote 0.7% of their gross national income to overseas development assistance, and all African leaders have pledged to allocate 15% of their annual budgets to health.¹⁴² Whether benchmarks are set nationally or internationally, standard definitions are important. For example, CO₂ emissions are recorded in various ways, which makes benchmarking difficult.¹⁴³ Although indicators and benchmarks are vital if we wish to measure progressive realisation and hold countries to account, their usefulness depends on widely agreed definitions.

Standard formatting for data collection would be especially helpful in low-income and middle-income countries that have to collect similar information in different formats to fulfil the demands of different donors and international bodies.

We warmly welcome the Health Metrics Network, a global partnership of UN bodies, donors and others aiming to improve health information at country, regional, and global levels.³⁹ The network hopes that by 2011 its detailed framework and standards for country health information systems will be the universally accepted standard for all developing countries and global agencies. The network comments on the inappropriate use of data collection methods (eg, surveys used to record adult mortality) and advocates the disaggregation of health-status data. We recommend that the network encourages the collection of data outlined in this report, which is needed to measure the right-to-health features of a health system.

Access to information is part of the right to health. However, in addition, information is protected by national and international codes of civil and political rights.¹⁴⁴ Many of these codes provide stronger accountability mechanisms than are available to the right to health. We recommend that human-rights workers in the domain of civil and political rights use their expertise to improve access to health information, following the example of the London-based civil society organisation Article 19.

Comprehensive national health plans

Within the confines of our methods, no data currently are available at the global level to show that any country has a comprehensive national health plan, whereas 13 countries have data available on the WHO website indicating that they do not have a comprehensive national health plan. We recommend adoption of a universal definition of a comprehensive national health plan. Countries should develop comprehensive national health plans consistent with defined criteria, including budget allocation for all

proposed activities. Information about all such plans should be available both nationally and internationally. Monitoring and assessment of these plans both nationally and at the global level are also needed to ensure compliance with agreed criteria. Any gaps identified should be systematically addressed; for example, if a national health plan does not encompass the private sector then this shortcoming needs to be identified and remedial action taken.

Appropriate national and international human-rights bodies should monitor whether or not a country has a comprehensive national health plan conforming to the agreed criteria. For example, a national human-rights institution should check whether or not the government has an appropriate national plan. Most national human-rights institutions report annually to the legislature and the status of a national plan could be publicly reported this way. Also, appropriate international committees of human-rights experts, such as the UN Committee on Economic, Social, and Cultural Rights, should routinely ask countries appearing before the committee about their comprehensive national health plans. The UN Human Rights Council has recently established a new procedure that all countries must follow. Known as the universal periodic review, a comprehensive national health plan is so important that the council should routinely ask all countries about the status of their plan.¹⁴⁵

Monitoring, assessment, accountability, and redress

We recommend that much closer attention be devoted to establishing accessible, transparent, and effective mechanisms for monitoring and accountability of health systems and the right to health. Analysis of the data collected in this project reveals weak mechanisms at international and national levels. Without indicators and reliable data, neither the condition of health systems nor the progressive realisation of the right to health is possible. Accountability, however, is much more than monitoring. Organisations and individuals with right-to-health responsibilities must be held to account in relation to the fulfilment of their duties, with a view to identifying successes and difficulties—what Freedman³¹ calls constructive accountability. In this way, accountability strengthens health systems.

As explored by Potts,⁸⁸ there are many different mechanisms of monitoring and accountability for the right to health—social, political, administrative, quasijudicial, and judicial—each with a crucial role. Our indicator 69 tried to address quasijudicial accountability by asking if countries have national human-rights institutions with mandates that include the right to health. However, there was no globally available data for this indicator revealing either a shortfall in the data available or in the mandates themselves. We recommend that national human-rights institutions include the right to health in their mandates and budgets for programmes.¹⁴⁶ In close collaboration with the health sector, these institutions could provide

human-rights training for health workers, raise public awareness of right-to-health entitlements and processes, work with public officials to integrate the right to health into policies, help to prepare right-to-health protocols and guidelines for health workers, monitor right-to-health features (eg, comprehensive national health plans and international assistance and cooperation in health), and undertake independent public inquiries into particular right-to-health issues, hold those responsible to account, and make recommendations. Australia's Human Rights and Equal Opportunity Commission has made health inquiries on several occasions, for example, in its Social Justice Report 2005 that applies human rights to indigenous health policy.¹⁴⁷ With the recent change of government in Canberra, this important report is now shaping health policy and practice. National human-rights institutions should forge strategic partnerships with the media, health workers, patients' groups, judges, lawyers, academics, and others.

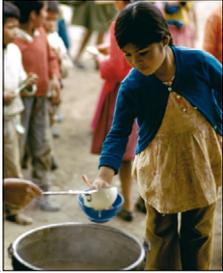
Mechanisms of social accountability include public hearings and social audits. The People's Health Movement in India has set up the People's Rural Health Watch to conduct independent health monitoring in seven states in northern India. This initiative supplements the community monitoring that is part of the National Rural Health Mission launched by the government in 2005.⁸⁸ In some situations, Médecins Sans Frontières, after listening to patients to understand why a situation is occurring, will draw attention to the issues, problems, and responsibilities.¹⁴⁸

One example of administrative accountability is addressed in the indicators for impact assessment (a process through which the potential effects of a policy, programme, or plan on the health of the population is assessed). However, data for the national level show that none of the five countries had made a health impact assessment or any impact assessment including the right to health before the implementation of their national health plan. We recommend that countries make such assessments before adopting their national health plan; there should at least be an impact assessment in relation to key elements of a plan. Such assessments can be crucial to progressive realisation of the right to health.⁷⁵

Effective monitoring and accountability depends on numerous factors, including the recognition of the right to health as a legally enforceable right. Where the rule of law is respected, it helps to be able to say to the relevant minister, local health council, or hospital director that a particular health initiative is not only ethically appropriate and good practice but is also required under binding national and international human-rights law. Accountability is not judicial accountability. As discussed, judicial accountability is one narrow, limited form; moreover, it is accountability of last resort. Judges and lawyers must be willing to learn about, and apply in a balanced manner, such right-to-health concepts as progressive realisation, resource availability, core obligations, and disadvantage; they must be willing to listen to health experts and those



Masaru Goto/World Bank



Jamie Martin/World Bank

using health-related services. Information about key judicial decisions for realisation of the right to health should be widely accessible. Also, countries must report regularly on regional and international treaties that they have ratified.

Redress is another important component of accountability.⁸⁸ It comes in many forms, such as full and public disclosure of the truth, apology, acknowledgment of responsibility, a change in policy, law reform, rehabilitation (eg, the provision of health-related services), and compensation.

Finally, careful attention must be given to the human-rights accountability of international bodies, as well as the private sector. The Human Rights Guidelines of Pharmaceutical Companies in relation to Access to Medicines can deepen the accountability of the pharmaceutical sector.¹⁴⁹

Additional research

This project highlights the need for more research on the right to health. For example, what are the core obligations signalled in paragraph 43 of general comment 14? Research is needed on the application of the right to health to the six WHO building blocks of a health system and within both public and private sectors. More attention should be devoted to right-to-health features of health systems: for example, what are appropriate mechanisms of monitoring and accountability? More research is needed on the most appropriate indicators for assessing the degree to which health systems include these right-to-health features. We had particular difficulty identifying appropriate indicators in relation to access (including access for marginal groups), respect for cultural difference, quality, participation, referral systems, standards (ie, provisions that elaborate in more detail upon the general right-to-health formulations found in treaties, constitutions, and statutes), coordination (ie, the need for effective coordination across a range of public and private stakeholders, at the national and international levels, both within and between health-related sectors), and monitoring and accountability. We recommend that particular thought be given to identifying appropriate indicators for these issues. Echoing Gruskin and colleagues,³⁹ we also recognise the need to build evidence of the effects of the application of the right to health on health systems.

Conclusion

Over 18 months of research, our interdisciplinary project has depended upon the insights of experts in both health and human rights. UN bodies, non-governmental organisations, policy makers, academics, and others have made indispensable contributions. We strongly recommend that all those sharing the common ground between health and human rights deepen their dialogue, cooperation, and collaboration. Our findings have implications for professions and institutions at all levels and

in both public and private sectors. For example, health ministries and national human-rights institutions need to meet and talk, and UN organisations must routinely discuss health and human-rights issues. For example, WHO, UNFPA, and the World Bank must engage with the UN Human Rights Council, Office of the High Commissioner for Human Rights, and human-rights-treaty bodies. All these organisations—and many others—have the common aim of strengthening health systems.

Countries have a legal obligation to progressively realise the right to the highest attainable standard of health and therefore to improve their health systems progressively. Indicators and benchmarks are needed to measure present conditions of health systems and to monitor them over time. Indicators selected in this profile and methods of data collection have limitations, but the findings have generated several recommendations. We are drawn to the conclusion that those with responsibilities for health systems are giving inadequate attention to the right-to-health analysis. Our main, overarching recommendation is that all those with health-related responsibilities explicitly consider the right-to-health analysis and integrate this human right into their policies and practices, with a view to strengthening health systems. We hope that this project will be repeated periodically so that the progress of individual countries will be monitored. No doubt improvements will be introduced to the methodology and profile of indicators before the exercise is repeated in a few years' time.

This project rests on the conviction that an equitable health system is a core social institution, no less than a fair court system or democratic political system. Because of its importance, a health system is reinforced and protected by the right to the highest attainable standard of health and other human rights. Health systems should have certain right-to-health features identified in this report. These features are legally binding requirements, not optional extras. Governments must be held to account to ensure that health systems have, in practice, the features required by international human-rights law.

Contributors

As project director, GB contributed to the drafting of all sections and explanatory notes and collected global data. PH contributed to the drafting of all sections. GB and PH prepared figure 1. RK contributed to the drafting of the introductory, key findings, and opportunities and challenges sections and explanatory notes and collected global data. CJ-S and BMF contributed to the drafting of the methodology section and the explanatory notes and collected global data. CR contributed to the drafting of the methodology, key findings, the opportunities and challenges sections and explanatory notes and collected global data. DP contributed by advising on statistical analysis and developing several and reviewing all of the figures in the key findings section. DA and MAP collected national data on Ecuador. AF and DT collected national data on Peru and drafted some panels. MM collected national data on Mozambique and drafted some panels. CV and DF collected national data on Romania and drafted some panels. DAP, CJ-S, AF, and DT, write in a personal capacity and the views expressed are not those of their affiliations.

Conflict of interest statement

We declare that we have no conflict of interest.

Acknowledgments

We are extremely grateful to the following individuals who have provided us with assistance: Idris A Bawa, Alexandra Cameron, Edelisa D Carandang, Judith Bueno de Mesquita, Aditi Das, Louise Finer, Malebakeng Forere, Jane Godsland, Sofia Gruskin, Hans Hogerzeil, Dragana Korljan, Richard Laing, Rhona MacDonald, Gillian MacNaughton, Maxwell Madzikanga, Paulo Marchi, Sophie Mathewson, Martin McKee, Ellen Nolte, Uju A Okereke, Lisa Oldring, Ching-Ling Pang, Genevieve Paul, Justina Pinkeviciute, Helen Potts, Anna Protano-Briggs, Mike Rowson, Julian Sheather, Christine Tapp, Daniel Tarantola, Michael Wilks. This report was researched with support from the Ford Foundation and Joseph Rowntree Charitable Trust. However, the content of the report is the sole responsibility of the authors and cannot be taken to reflect the views of either the foundation or trust.

References

- UN. Universal Declaration of Human Rights. G. A. Res. 217A (III), UN GAOR, Res. 71, UN Doc. A/810. New York: United Nations, 1948.
- Brownlie I. Basic documents of international law. Oxford: Oxford University Press, 2006.
- Marks S. Health and human rights: Basic international documents, 2nd edn. Cambridge: François-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health, 2006.
- UN. International Covenant on Economic, Social and Cultural Rights (ICESCR). New York: United Nations, 1966.
- Sepúlveda M. The nature of the obligations under the International Covenant on Economic, Social and Cultural Rights. Utrecht: Intersentia, 2003.
- UN. Convention on the Rights of the Child (CRC). New York: United Nations, 1989.
- UN. International Convention on the Elimination of all Forms of Racial Discrimination. New York, United Nations 1966.
- Kinney E, Clark B. Provisions for health and health care in the constitutions of the countries of the world. *Cornell Int Law J* 2004; 37: 285–355.
- WHO. Constitution of the World Health Organisation. http://www.who.int/gb/bd/PDF/bd46/ebd46_p2.pdf (accessed Sept 21, 2008).
- WHO. Declaration of Alma-Ata, international conference on primary health care, Alma-Ata, USSR, 6–12 September, 1978 http://www.searo.who.int/LinkFiles/Health_Systems_declaration_almaata.pdf (accessed Sept 21, 2008).
- WHO. Ottawa charter for health promotion, first international conference on health promotion Ottawa, 1986. http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf (accessed Sept 21, 2008).
- WHO. The Bangkok charter for health promotion in a globalized world, 2005 http://www.who.int/healthpromotion/conferences/6gchp/hpr_050829_%20BCHP.pdf (accessed Sept 21, 2008).
- Ministry of Health, Government of Uganda. Review of the HSSPII in relation to human rights and gender as part of third-term review for the health sector, second draft June 2008. Kampala: Ministry of Health, 2008.
- WHO. Human rights, health and poverty reduction strategies. Geneva: World Health Organization, 2005.
- Constitutional Court, Tutela decision T-760/2008, Judge: Manuel Jose Cepeda, Second Reviewing Chamber, 31 July 2008. <http://www.corteconstitucional.gov.co/> (accessed Sept 21, 2008).
- Gauri V, Brinks DM, eds. Courting social justice: judicial enforcement of social and economic rights in the developing world. Cambridge: Cambridge University Press, 2008.
- Ghai Y, Cottrell J, eds. Economic, social and cultural rights in practice: the role of judges in implementing economic, social and cultural rights. London: Interights, 2004.
- Inter-American Commission on Human Rights. Access to justice as a guarantee of economic, social and cultural rights: a review of the standards adopted by the Inter-American Commission on Human Rights. Washington: Inter-American Commission on Human Rights, 2007.
- Baderin MA, McCorquodale R, ed. Economic, social and cultural rights in action. Oxford: Oxford University Press, 2006.
- Ely Yamin A, Parra Vera O. The role of courts in defining health policy: the case of the Colombian constitutional court. Harvard Law School Human Rights Program Working Paper, October 2008. http://www.law.harvard.edu/programs/hrp/documents/Yamin_Parra_working_paper.pdf (accessed Sept 21, 2008).
- Asher J. The right to health: a resource manual for NGOs. London: Commonwealth Medical Trust, 2004.
- Asher J, Hamm D, Sheather J. The right to health: a toolkit for health professionals. London: British Medical Association/ Commonwealth Medical Trust, 2007.
- Physicians for Human Rights. The right to health and health workforce planning: a guide for government officials, non-governmental organisations, health workers and development partners. Cambridge: Physicians for Human Rights, 2008.
- People's Health Movement. The assessment of the right to health and health care at the country level. http://www.phmovement.org/files/RTH_assmt_tool.pdf.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the Commission on Human Rights, UN Doc E/CN.4/2004/49. Geneva: United Nations, 2004.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the United Nations General Assembly UN Doc A/61/338. New York: United Nations, 2006.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the Commission on Human Rights, UN Doc. E/CN.4/2005/51. Geneva: United Nations, 2005.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the United Nations General Assembly UN Doc A/59/422. New York: United Nations, 2004.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the United Nations General Assembly UN Doc A/62/214. New York: United Nations, 2007.
- WHO. Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. Geneva: World Health Organization, 2007.
- Freedman L. Achieving the MDGs: health systems as core social institutions. *Development* 2005; 48: 19–24.
- Weissbrodt D. The right to a fair trial under the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights. The Hague: Martinus Nijhoff, 2001.
- International Covenant on Civil and Political Rights (ICCPR). New York, United Nations, 1966.
- Zimmerman and Steiner v Switzerland, European Court of Human Rights. A.66 (1983) 6 EHRR 17.
- Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the Human Rights Council, UN Doc. A/HRC/4/28. Geneva: United Nations, 2007.
- Committee on Economic, Social and Cultural Rights. The right to the highest attainable standard of health: 11/08/2000. E/C.12/2000/4, CESCR General Comment 14. Twenty-second session Geneva, 25 April–12 May 2000 Agenda item 3. [http://www.unhcr.ch/tbs/doc.nsf/\(symbol\)/E.C.12.2000.4.En](http://www.unhcr.ch/tbs/doc.nsf/(symbol)/E.C.12.2000.4.En) (accessed Sept 21, 2008).
- Hunt P, Backman G. Health systems and the right to the highest attainable standard of health. *Health Hum Rights*; 2008; 10: 81–92.
- Hunt P. The human right to the highest attainable standard of health: new opportunities and challenges. *Trans R Soc Trop Med Hyg* 2006; 100: 603–607.
- Gruskin S, Mills E, Tarantola D. History, principles, and practice of health and human rights. *Lancet* 2007; 370: 449–55.
- Mann J, Gruskin S, Grodin M, Annas G, eds. Health and human rights: a reader. New York: Routledge, 1999.
- Gruskin S, Grodin M, Annas G, Marks S, eds. Perspectives on health and human rights. New York: Routledge, 2005.
- Yamin A. Journeys towards the splendid city. *Hum Rights Q* 2004; 28: 519–38.
- Hunt P. The health and human rights movement: progress and obstacles. *J Law Med* 2008; 15: 714–24.
- Hunt P, Mesquita J. Mental disabilities and the human right to the highest attainable standard of health. *Hum Rights Q* 2006; 28: 332–56.
- WHO. WHO Report 2001: Mental health: new understanding, new hope. Geneva: World Health Organization, 2001.

- 46 Horton R. What does a national health service mean in the 21st century? *Lancet* 2008; **371**: 2213–18.
- 47 International Harm Reduction Association. Global harm reduction report. London: International Harm Reduction Association, 2008.
- 48 Hunt P. Report of the Special Rapporteur on the right to the highest attainable standard of health to the Human Rights Council, UN Doc A/HRC/4/28/Add.2. Geneva: United Nations, 2007.
- 49 Hunt P, Khosla R. The human right to medicines. *SUR* 2008; **5**: 99–116.
- 50 Amnesty International. Peru: poor and excluded women—denial of right to maternal and child health. London: Amnesty International, 2006.
- 51 Ministerio de Salud. Norma técnica para la atención del parto vertical con adecuación intercultural. Lima, Peru: Ministerio de Salud, 2005.
- 52 WHO. World Health Report 2000, health systems: improving performance. Geneva: World Health Organization, 2000.
- 53 WHO. People at the centre of health care: harmonising mind and body, peoples and systems. Geneva: World Health Organization, 2007.
- 54 Tarimo E. Towards a healthy district. Organizing and managing district health systems based on primary health care. Geneva: World Health Organization, 1991.
- 55 Singh AJ, Govender M, Mills E. Do human rights matter to health? *Lancet* 2007; **370**: 521–27.
- 56 Hogerzeil HV, Samson M, Vidal Casanovas J, Rahmani L. Access to essential medicines as part of the fulfilment of the right to health—is it enforceable through the courts? *Lancet* 2006; **368**: 305–11.
- 57 WHO. Who guidelines for drinking water quality. http://www.who.int/water_sanitation_health/dwq/guidelines/en/index.html (accessed Sept 21, 2008).
- 58 WHO. International health regulations (2005), 2nd edn. Geneva: WHO, 2008.
- 59 WHO. Framework and standards for country health information systems. 2nd edn. Geneva: WHO, 2008.
- 60 Sphere Project. Humanitarian charter and minimum standards in disaster response. Geneva: Sphere Project, 2004.
- 61 Potts H. Participation and the right to the highest attainable standard of health. Essex: Human Rights Centre, University of Essex, forthcoming.
- 62 Manandhar DS, Osrin D, Shrestha BP, et al. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. *Lancet* 2004; **364**: 970–979.
- 63 Medicines Transparency Alliance. Website. <http://www.medicinestransparency.org> (accessed Nov 4, 2008).
- 64 Open Society Institute. Mediating Romani health: policy and programme opportunities. New York: Open Society Institute, 2005.
- 65 Braveman P, Gruskin S. Defining equito in health. *J Epidemiol Community Health* 2003; **57**: 254–58.
- 66 Hoffmann v South African Airways, Constitutional Court of South Africa, Case CCT 17/00 2000, decision of 29 September 2000. <http://www.saflii.org/za/cases/ZACC/2000/17.html> (accessed Sept 21, 2008).
- 67 Eldridge v British Columbia, [1997] 3 S.C.R. 624. <http://csc.lexum.umontreal.ca/en/1997/1997rcs3-624/1997rcs3-624.html> (accessed Sept 21, 2008).
- 68 UNFPA. Culture matters—working with communities and faith-based organisations: case studies from country programs. New York: UNFPA, 2004.
- 69 Hunt P. Report of the Special Rapporteur on the right to the highest attainable standard of health to the Commission on Human Rights, UN Doc E/CN.4/2005/51/Add.3. Geneva: United Nations, 2005.
- 70 Akunyili D. The fight against counterfeit drugs in Nigeria. In: Transparency International—global corruption report 2006: corruption and health. Berlin: Transparency International, 2006: 96–100.
- 71 Green A. An introduction to health planning for developing health systems. Oxford: OUP, 2007.
- 72 Hunt P, Stewart R, Mesquita J, Oldring L. Neglected diseases: a human rights analysis. Geneva: Special Programme for Research and Training in Tropical Diseases (TDR), 2007.
- 73 Allotey P, Reidpath D, Ghalib H, Pagnoni F, Skelly I. Efficacious, effective, and embedded interventions: implementation research in infectious disease control. *BMC Public Health* 2008; **8**: 343.
- 74 Chapman A, Russell S, eds. Core obligations: building a framework for economic, social and cultural rights. Antwerp: Intersentia, 2002.
- 75 Hunt P, MacNaughton G. Impact assessments, poverty and human rights: a case study using the right to the highest attainable standard of health. http://www2.essex.ac.uk/human_rights_centre/rth/projects.shtml (accessed Aug 15, 2008).
- 76 Minister of Health v Treatment Action Campaign, Constitutional Court of South Africa, Case CCT 8/02, decision of 5 July 2002. <http://www.saflii.org/za/cases/ZACC/2002/16.html> (accessed Sept 21, 2008).
- 77 Paschim Banga Khet Mazdoor Samity v State of West Bengal, 1996 SCJ 25: 29. <http://www.commonlii.org/cgi-bin/disp.pl/in/cases/INSC/1996/659.html?query=paschim> (accessed Sept 21, 2008).
- 78 WHO. Report of the global partners' meeting on neglected tropical diseases: a turning point. Geneva: World Health Organization, 2007.
- 79 UNAIDS. Enhancing results by applying the Paris Declaration at sector level: progress update and lessons learnt from aid effectiveness in AIDS responses. Geneva: UNAIDS, 2008.
- 80 WHO. Framework Convention on Tobacco Control, adopted by the 56th World Health Assembly, 31 May 2003. <http://www.who.int/fctc/en/> (accessed Sept 21, 2008).
- 81 Skogly S. Beyond national borders: States' human rights obligations in international cooperation. London: Intersentia, 2006.
- 82 High Level Forum on Aid Effectiveness. Paris declaration on aid effectiveness. http://www.oecd.org/document/18/0,3343,en_2649_3236398_35401554_1_1_1_1,00.html (accessed Sept 21, 2008).
- 83 International Council on Human Rights Policy. Duties sans frontières: human rights and global social justice. Versoix: International Council on Human Rights Policy, 2003.
- 84 Straight Talk Foundation. <http://www.straight-talk.or.ug/> (accessed Oct 14, 2008).
- 85 Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the Human Rights Council, UN Doc A/HRC/7/11/Add.2. Geneva: United Nations, 2008.
- 86 Darrow M. Between light and shadow: the World Bank, the International Monetary Fund and international human rights law. Portland: Hart, 2003.
- 87 Van Genugten W, Hunt P, Matthews S, eds. World Bank, IMF and human rights. Nijmegen: Wolf, 2003.
- 88 Potts H. Accountability and the right to the highest attainable standard of health. Colchester: Human Rights Centre, University of Essex, 2008.
- 89 Clapham A. Human rights obligations of non-state actors. Oxford: Oxford University Press, 2006.
- 90 New Vision. Health rights unit launched. Kampala: New Vision, Oct 1, 2008.
- 91 Nolte E, McKee M, Wait S. Describing and evaluating health systems. In Bowling A, Ebrahim S, eds. Handbook of health research methods. New York: Open University Press, 2006: 12–43.
- 92 Neuman E. Do international human rights treaties improve respect for human rights? *J Conflict Resolut* 2005; **49**: 6.
- 93 Nolte E, McKee M. Measuring the health of nations: analysis of mortality amenable to health care. *BMJ* 2003; **327**: 1129–32.
- 94 International conference on primary health care. Declaration of Alma-Ata. Alma-Ata, USSR: World Health Organization, 1978.
- 95 Committee on the Rights of the Child. HIV/AIDS and the rights of the child. March 17, 2003. CRC/GC/2003/3, General Comment 3.
- 96 Committee on the Rights of the Child. Adolescent health and development in the context of the Convention on the Rights of the Child. July 1, 2003. CRC/GC/2003/4, General Comment 4.
- 97 Committee on the Elimination of Discrimination against Women. Women and health. A/54/38/Rev.1, chapter 1, General Recommendation 24.
- 98 Hunt P. Report of the Special Rapporteur on the right to the highest attainable standard of health to the Commissioner on Human Rights, UN Doc E/CN.4/2006/48. Geneva: United Nations, 2006.
- 99 UNDP. Human development reports. <http://hdr.undp.org/en/statistics/> (accessed Aug 15, 2008).
- 100 UN. Report on indicators for promoting and monitoring the implementation of human rights. HRI/MC/2008/3. 6 June 2008. <http://www2.ohchr.org/english/bodies/icm-mc/documents.htm> (accessed Dec 1, 2008).

- 101 UN. United Nations Millennium Development Goals Indicators. <http://mdgs.un.org/unsd/mdg/Default.aspx> (accessed Aug 15, 2008).
- 102 UN Office of the High Commissioner for Human Rights. Geneva. Principles and guidelines for a human rights approach to poverty reduction strategies. Geneva: UN, 2007.
- 103 WHO. Medicines strategy 2004–2007. Geneva: World Health Organisation, 2004.
- 104 UNICEF. Monitoring and statistics: core indicators in depth. http://www.unicef.org/statistics/index_24296.html (accessed Aug 15, 2008).
- 105 UNAIDS. 2006 Report on the global epidemic. Geneva: UNAIDS, 2006.
- 106 The World Bank. World Development Indicators 2007. <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:21298138~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> (accessed Aug 15, 2008).
- 107 The World Bank. Governance Matters VI: aggregate and individual governance indicators 1996–2006. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/07/10/000016406_20070710125923/Rendered/PDF/wps4280.pdf (accessed Aug 15, 2008).
- 108 WHO. Indigenous peoples' health. WHO/SDE/HSD/99. Geneva: World Health Organization, 2006.
- 109 CRR. Broken promises, human rights, accountability, and maternal death in Nigeria. Centre for Reproductive Rights, 2008.
- 110 PHR. Deadly delays: maternal mortality in Peru—a rights-based approach to safe motherhood. Physicians for Human Rights, 2008.
- 111 Hunt P, Mesquita J. Reducing maternal mortality: the contribution of the right to the highest attainable standard of health. University of Essex, 2006.
- 112 UNDP. Beyond scarcity: power, poverty and the global water crisis. New York: Palgrave Macmillan, 2006.
- 113 United States National Library of Medicine National Institutes of Health. International Committee of Medical Journal Editors Uniform Requirements for Manuscripts Submitted to Biomedical Journals: sample references, 2005. http://www.nlm.nih.gov/bsd/uniform_requirements.html (accessed Sept 21, 2008).
- 114 OECD. Ratification of the Convention on the OECD. http://www.oecd.org/document/58/0,3343,en_2649_34483_1889402_1_1_1_1_00.html (accessed Sept 21, 2008).
- 115 The World Bank. Cumulative IDA Subscriptions and Contributions. <http://siteresources.worldbank.org/IDA/Resources/CUMIDA2008.pdf> (accessed May 20, 2008).
- 116 European Parliament and Council. Directive 95/46/EC of the European Parliament and of the Council. http://www.cdt.org/privacy/eudirective/EU_Directive_.html#HD_NM_10 (accessed Aug 08, 2008).
- 117 Hunt P, MacNaughton G. A human rights-based approach to health indicators. In: Baderin M, Mccorquodale R, eds. Economic, social and cultural rights in action. Oxford: Oxford University Press, 2007: 303–30.
- 118 WHO. Countries. <http://www.who.int/countries/en/> (accessed Sept 09, 2008).
- 119 WHO, UNICEF. Global water assessment and sanitation report 2000. http://www.wssinfo.org/pdf/GWSSA_2000_report.pdf (accessed May 23, 2008).
- 120 Howard G, Bartram J. Domestic water quantity, service level and health. http://www.who.int/water_sanitation_health/diseases/en/WSH0302.pdf (accessed Dec 20, 2007).
- 121 WHO, UNICEF. Joint monitoring programme for water supply and sanitation, 2008. <http://www.wssinfo.org/en/welcome.html> (accessed Aug 8, 2008).
- 122 National Institute of Statistics. Annual report of National Institute of Statistics, chapter Housing and Public Utilities, 2006. <http://www.insse.ro/cms/files/pdf/ro/cap5.pdf> (accessed July 23, 2008).
- 123 WHO. WHO Multi-country study on women's health and domestic violence against women. Geneva: World Health Organization, 2005.
- 124 WHO. World Health survey results. <http://www.who.int/healthinfo/survey/en/> (accessed July 23, 2008).
- 125 The World Bank. Data and statistics 2008 <http://go.worldbank.org/D7SN0B8YU0> (accessed Sept 21, 2008).
- 126 WHO, UNICEF, UNFPA, and the World Bank. Maternal mortality in 2005. Geneva: World Health Organization, 2007.
- 127 UN-OHCHR. Fact sheet no 19 national institutions for the promotion and protection of human rights. Geneva: United Nations, 1993.
- 128 GAVI. Health system strengthening. <http://www.gavi Alliance.org/vision/policies/hss/index.php> (accessed Sept 21, 2008).
- 129 Högscoleförordning. SFS 1993: 100 Amendment SFS 2007: 638. <http://www.notisum.se/index2.aspx?Template=/template/index.asp&iMenuID=314&iMiddleID=285&iParentMenuID=236&iLanguageID=1> (accessed Sept 21, 2008).
- 130 Department of Health. Human rights in healthcare evaluation. 31 July 2008. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_088979 (accessed Nov 30, 2008).
- 131 WHO. Country Health information systems. <http://www.who.int/healthinfo/systems/en/> (accessed Aug 8, 2008).
- 132 WHO. Department of Economic and Social Affairs' principles and recommendations for a vital statistics system revision. http://unstats.un.org/unsd/publication/SeriesM/SeriesM_19rev2E.pdf (accessed June 15, 2008).
- 133 WHO. Beyond the numbers: reviewing maternal deaths and complications to make pregnancy safer. Geneva: World Health Organization, 2004.
- 134 WHO. International statistical classification of diseases and related health problems 10th revision version for 2007. <http://www.who.int/classifications/apps/icd/icd10online/> (accessed Sept 21, 2008).
- 135 Robertson D, Bedell R, Lavery J, Upshur R. What kind of evidence do we need to justify humanitarian medical aid? *Lancet* **360**: 330–33.
- 136 WHO. Commission on social determinants of health—final report. Geneva: World Health Organization, 2008.
- 137 United Nations General Assembly Special Session on HIV/AIDS. Guidelines on construction of core indicators in relation to monitoring the declaration of commitment on HIV/AIDS. <http://www.measuredhs.com/hivdata/guides/ungassmeguidejuly2005.pdf> (accessed Aug 8, 2008).
- 138 WHO. World Health Report 2005: Make every mother and child count. Geneva: World Health Organization, 2005.
- 139 WHO, UNICEF. WHO vaccine-preventable diseases monitoring system. http://whqlibdoc.who.int/hq/2007/who_IVB_2007_eng.pdf (accessed May 20, 2008).
- 140 Demographic and Health Surveys. Model "A" questionnaire with commentary for high contraceptive prevalence countries, 2001. <http://www.measuredhs.com/pubs/pdf/DHSQ4/DHS-IV-Model-A.pdf.pdf> (accessed Sept 15, 2008).
- 141 WHO. Summary report: WHO multi-country study on women's health and domestic violence against women. Geneva: World Health Organization, 2005.
- 142 Abuja Declaration. AIDS is a state of emergency in the continent. Adopted 24–27 April 2001. http://www.un.org/ga/aids/pdf/abuja_declaration.pdf (accessed Sept 21, 2008).
- 143 UNDP. MDG Series metadata. <http://millenniumindicators.un.org/unsd/mdg/Metadata.aspx?IndicatorId=0&SeriesId=776> (accessed Sept 21, 2008).
- 144 International Covenant on Civil and Political Rights (ICCPR). New York, United Nations, 1966. United Nations G.A. Res. 2200A (XXI). UN GAOR, 21st Session, Supp. No. 16, at 52, UN Doc. A/6316, entered into force 23 March 1976. http://www.unhcr.ch/html/menu3/b/a_ccpr.htm (accessed Sept 21, 2008).
- 145 UN Human Rights Council Res 5/1, Institution-building of the United Nations Human Rights Council, 18 June 2007. <http://www2.ohchr.org/english/bodies/hrcouncil/> (accessed Sept 21, 2008).
- 146 OHCHR. Economic, social and cultural rights: handbook for national human rights institutions. Geneva: OHCHR, 2005.
- 147 Human Rights and Equal Opportunity Commission. Social justice report 2005. Canberra: Human Rights Equality Commission, 2005.
- 148 DuBois M. Civilian protection and humanitarian advocacy: strategies and (false?) dilemmas. *Humanitarian Exch* 2008; **39**: 12–15.
- 149 Hunt P. Report of the UN Special Rapporteur on the right to the highest attainable standard of health to the United Nations General Assembly UN Doc A/63/263, 2008. New York: United Nations, 2008.