

Moving Universal Health Coverage from Ambition to Practice:

Focus on Rwanda



Population:

12.3m

World Bank

Income Group:

Low income

Rwanda is the only low-income country in this study but does as well as middle-income ones across several areas related to Universal Health Coverage (UHC).¹

Its notable strengths are in the areas of policy building and reducing the financial burden of healthcare on its citizens:

- The country has comprehensive UHC arrangements with transparent benefits, both of which earn green lights.
- It is the only country to get full marks for value-based healthcare² care policies which include an outcomes-based care system and payments being linked to quality.
- The proportion of the population with cover (87% in 2016) earns only a yellow, but is high for Sub-Saharan Africa. On the other hand, the decline in the percentage covered in recent years, from 96% in 2012, is worrying.
- Although the country does not have a Health Technology Assessment body, major decisions frequently occur after well-designed pilot projects—a practice which turns what would otherwise be a red light to a yellow one.
- Rwanda has the lowest proportion of out-of-pocket spending in the study (6.4% of total health expenditure) giving it a solid green. Similarly, it has the smallest level of catastrophic expenditure (just 0.1% of the population had to spend more than a quarter of household income in 2016 compared to the OECD average of 1.25%). A higher than normal rate of impoverishing spending, however, means that the country gets a yellow for financial protection.

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¹ The WHO defines Universal Health Coverage as a situation where “all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.” https://www.who.int/health_financing/universal_coverage_definition/en/

² For definition, see discussion of value-based care in Executive Summary below.

- Although it has one of the highest age-adjusted mortality rates in the study (993 per 100,000), it still earns a green because this is markedly better than the average for low income countries (1,182 per 100,000).

Significant, in some cases fundamental, challenges remain, however. These include:

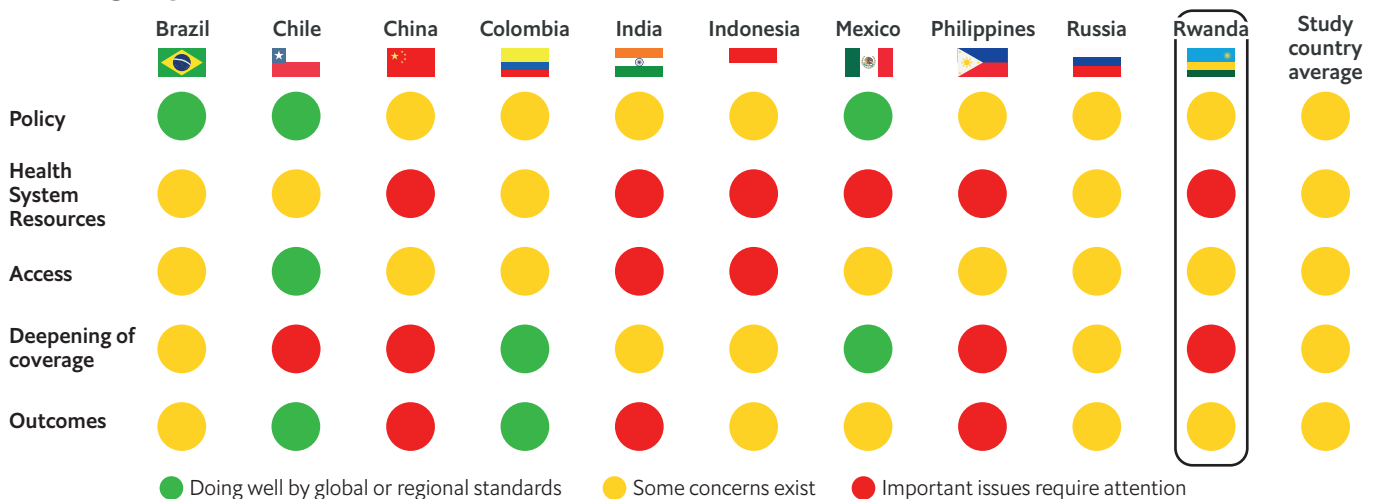
- Given Rwanda’s relatively low GDP per capita, it comes as no surprise that health system resources require ongoing strengthening. Despite progress in these areas, the country still lacks the medical workers, advanced equipment, surgical capacity, and primary care based non-communicable disease management facilities needed to achieve effective universality.
- Funding is an acknowledged issue, with 60% of health costs paid for with foreign assistance of some form. More worryingly, government and compulsory spending on healthcare as a proportion of GDP (3.6%)

actually declined between 2012 and 2016, by 16% in relative terms. Current financing arrangements, according to the government, are not sustainable and foreign assistance is expected to decline at some point.

- Despite widespread formal insurance coverage, the WHO’s Index of Average Coverage of Essential Health Services in 2017—which is derived from the geometric mean of the availability of 14 key tracer healthcare interventions—was only 57 out of a possible 100, a figure which has grown only slowly since 2015.
- Also, although an extensive network of community health workers provides at least basic contact with the health system throughout the country, marked disparities in the number of doctors per capita exist between rural and urban areas.

Rwanda’s progress is impressive, especially for a country with limited resources, but it needs to maintain further momentum to achieve UHC.

Traffic-light system: Results



Rwanda				
No	Indicator	Explanation and Scoring guidelines	Light	Analysis or Data (with date)
1.1	Existence of UHC Policy	This assesses whether countries have credible legislation, policy declarations or substantial programmes to pursue UHC. Green = this exists Yellow = commitment to substantial expansion of healthcare but not UHC Red = does not exist		Rwanda's mandatory Community Based Health Insurance is its UHC vehicle.
1.2	Transparency of Benefits	To move beyond aspiration, UHC programmes need to be clear on what they provide. Green = there is a clear statement of what is covered and no indication that informal rationing undermines this Yellow = clear statement exists but evidence of extensive informal rationing Red = no clear statement		Rwanda has a clear health service package and, although resources are a perennial concern, our research found that informal rationing was not an issue.
1.3	Financing sufficient for policy aspiration	A qualitative assessment of the extent to which health systems are struggling to meet current UHC commitments due to lack of funding. It does not look at the extent of commitments or whether government and compulsory funding meets the WHO recommended level of GDP (5%) to achieve UHC. Green = funding sufficient for current ambition Yellow = long-term funding issues exist Red = a major current funding gap		Even after five years of increasing its share of health spending, the Rwanda health system still relies on foreign sources for 60% of its funding. The government currently considers the extent of external financing of the sector unsustainable and expects it to decline.
1.4	Citizen/Patient role in UHC governance	Effective health system must engage with citizens and patients. Green = there is evidence of a meaningful citizen/patient role in health system/UHC governance Yellow = policy that favours such a role, but limited actual engagement at best Red = no sign of engagement		Rwanda still has village, cell and sector elected mobilisation committees for its Community-Based Health Insurance, but in practice the insurance system is run from the centre by the Rwandan Social Security Board and the Health System by the Ministry of Health.
1.5	Monitoring	Effective UHC policy implementation requires monitoring. Using WHO Global Health Observatory data, we look at whether countries monitor the progress of their national health policy/strategy/plan regularly. Green = yes Red = no		Yes (2017)
1.6	Whole of Government Policy (with Tobacco Control as a Proxy)	Population health requires more than medical services. It also needs policies from across government. This indicator looks at tobacco control as a proxy for whole of government health thinking. The Economist Intelligence Unit drew data from the 2019 WHO Report on the Global Tobacco Epidemic to create a score based on five tobacco control factors. The global average is around 2.4. Green = score of between 3 and 4 Yellow = score between 2.5 and 3.0 Red = equal to or lower than the global average of 2.4		1.3 out of 4 (2019)
	Overall Pillar Score			

Policy

Health System Resources	2.1	Government and Compulsory Spending	<p>This indicator measures government domestic revenue allocated to health purposes, social insurance contributions and compulsory prepayment as a percentage of gross domestic product. WHO's UHC minimum target: 5% of GDP.</p> <p>Green= 5.0% or higher Yellow= between 2.5% and 5.0% Red= less than 2.5%</p>	3.6% (2016)
	2.2	Long Term Government/Compulsory Spending Growth	<p>This indicator measures the relative growth in government health spending per GDP (as defined in 2.1) between 2012 and 2016. This reflects government commitment to addressing funding issues.</p> <p>Green= if the relative increase in this spending is greater than 10% Yellow= if between 0% and 10% Red= if a decline</p>	-15.8% (2012-2016)
	2.3	Out-of-Pocket Payments	<p>A high level of out-of-pocket payments as a proportion of total health expenditure indicates that those with low socio-economic status may be having difficulty accessing health care. The OECD average is 19.5%.</p> <p>Green=20% or lower Yellow= between 20% and 40% Red=over 40%</p>	6.4% (2016)
	2.4	Value-Based Care	<p>Effective UHC needs to be value-based given the limited resources available. Countries score one point each if the national health system or major health provider have implemented: (A) Outcomes-based care / patient-centred care; (B) Bundled / block payments; payment for performance / linked to quality; (C) Quality standardisation; (D) A national policy that supports organisation health delivery in patient-centred units.</p> <p>Green= countries with 3 to 4 points Yellow= with 2 points Red= those with 0 or 1 points</p>	4 out of 4 (2012)
	2.5	Payer and Risk Pool Fragmentation	<p>This indicator assesses whether payer and risk pool fragmentation is low, medium or high. The lower the better as this allows greater efficiency and more universal access. Scoring is based on Economist Intelligence Unit qualitative assessments.</p> <p>Green= relatively low fragmentation Yellow= medium fragmentation Red= high fragmentation</p>	Although most of the country is covered by Community-Based Health Insurance, there is separate risk pooling at the national, district, and—in practice—community levels.
	2.6	General Medical Workforce per 1,000 population	<p>This indicator is based on the overall health workforce—including doctors, nurses, midwives—per 1,000 population. WHO calculates that 4.45 doctors, nurses and midwives per 1,000 population represented the minimum density needed to deliver the Sustainable Development Goals in health, which include UHC.</p> <p>Green= above 4.75 per 1,000 population Yellow= between 4.25 and 4.75 Red= under 4.25</p>	1 (2015, 2017)
	2.7	Primary Care NCD Management	<p>This indicator measures the ability of Primary Care to provide basic non-communicable disease (NCD) prevention and management, which is both important in itself and a proxy for the quality of primary care which the health system can provide. Countries get one point each for: General availability of diabetes testing (by HbA1c) at the primary health care level; General availability of urine testing for albumin; General availability of total cholesterol measurement at the primary health care level; Availability of cardiovascular risk stratification in 50% or more primary health care facilities; and General availability of peak flow measurement spirometry at the primary health care level.</p> <p>Green= 5 of 5 Yellow= 4 Red= 3 or lower</p>	1 out of 5 (2017)
	2.8	Surgical Capacity	<p>This is a ratio of the estimated number of operations per 100,000 population conducted in a country and the estimated need for surgery per capita in that country's region.</p> <p>Green= ratio is higher than 1, so the health system has the capacity to perform all the needed surgery so long as it is allocated effectively, and the country scores green Yellow= ratio is less than 1 but above 0.7 Red= ratio is less than 0.7</p>	0.1 (2010, 2012)
	2.9	Advanced Equipment (using radiotherapy machines as a proxy)	<p>This indicator updates previous calculations using an approach developed by the International Atomic Energy Agency to compare radiotherapy capacity and need in countries.</p> <p>Green= if the treatment capacity is 100% or higher, then the health system has the capacity to perform all the needed radiotherapy so long as it is allocated effectively Yellow= treatment capacity below 100% but above 70% Red= treatment capacity is 70% or below</p>	17.2% (2019)
	Overall Pillar Score			

Access	3.1	Population Formally Covered	This indicator measures the proportion of the population that has formal access to healthcare. Ideally this should be 100%. Green = between 95% and 100% Yellow = 80% to 95% Red = below 80%		87% (2016)
	3.2	Coverage of Essential Services	Formal coverage and actual access are not always the same thing. This indicator uses the WHO Index of Average Coverage of Essential Health Services. Its scoring is the geometric mean of the average coverage of 14 tracer interventions in healthcare. These are proxies for essential services more generally in areas that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases, and service capacity and access. The OECD average score for the WHO Index is 80 (out of a possible 100). Green = score of 80 out of 100 or higher Yellow = between 70 and 80 Red = below 70		57 out of 100 (2017)
	3.3	Expansion of Essential Services Coverage	This measures the improvement in scoring in the WHO Index of Average Coverage of Essential Health Services between 2015 and 2017. It is difficult to compare percentage increases given that each country starts at a different place in 2015. We therefore use a 'distance to the frontier' methodology. The figures here give the reduction in the distance to the frontier between 2015 and 2017. The global average figure is 7.8%; the OECD one is 15%. Green =Results of 15% or better Yellow =7.8% to 15% Red =below 7.8%		10% (2016-2017)
	3.4	Disparity by Socio-Economic Status (with proportion of attended live births as proxy)	This indicator measures the difference in the percentage of women giving birth in the highest wealth quintile who were attended by a skilled clinician and the percentage of women with similar health system support in the lowest wealth quintile. Green = if the percentage point difference in the proportions with a clinician attending is 5% or less Yellow = between 5% and 10% Red = more than 10%		11.5% (2015)
	3.5	Urban-rural disparity (with ratio of doctors in urban areas to rural areas used as proxy)	The ratio of urban to rural doctors is used as a proxy for how health resources are spread between the countryside and the city. Green = if the ratio is 1.5 (the OECD average in 2017) or below Yellow = if between 1.5 and 3 Red = higher than 3		11.2 (2018)
	3.6	Concern for Marginalised Groups (with refugees as a proxy)	This indicator looks at whether legally-recognised refugees have access to the country's UHC system. Green = yes in law and also generally in practice Yellow = yes in law, but limited in practice Red = no		Yes, refugees have access.
		Overall Pillar Score			

Deepening	4.1	Speed of Essential Drug Adoption	<p>This measures the speed of national adoption of medications added to the WHO Essential Medicines list. We look at three representative drugs first added to the WHO Essential Medicines List in 2015 (bedaquiline, sofosbuvir, and trastuzumab) and three added in 2017 (sofosbuvir/velpatasvir combination, dolutegravir and budesonide/formoterol combination). For each we measure whether they are available at lower than market cost as a result of health system policy. The indicator gives one point each for drugs from the 2015 list and two points each for drugs from the 2017 list as a way of rewarding speed. The maximum score is 9.</p> <p>Green= 7 to 9 Yellow= 4 to 6 Red= 0 to 3</p>		2 out of 9
	4.2	Regularity of Coverage Review	<p>This indicator looks at how frequently the main UHC payer reviews the extent of coverage. For countries with a limited list of specific conditions covered, we look at how often those lists are reviewed or revised; for countries without such a list, we look at revisions to the essential drugs list.</p> <p>Green= annual reviews (whether in practice or by law) Yellow= reviews once every 1-5 years Red= reviews over 5 year period</p>		<p>Although the 2017 revision of the Rwandan Health Service Packages for Public Health Facilities occurred five years after the previous one, it promised revisions every two years thereafter. In 2019, a Service Packages for Upgraded Health Centers was published.</p>
	4.3	Health Technology Assessment	<p>A Health Technology Assessment (HTA) agency or process is essential to value-driven deepening of care. This indicator scores the existence of a national HTA agency that is integrated into decision-making.</p> <p>Green= HTA agency in place and plays a role in decision making Yellow= some progress toward setting up an HTA agency Red= there is no national HTA agency (or it's in an embryonic phase)</p>		<p>No mention of HTA agency on Ministry of Health web page (in particular its page on Rwanda FDA) or found via internet search. It does, however, make regular use of evidence-based pilot projects before making expansion decisions.</p>
	4.4	Citizen/Patient role in Benefit Decisions	<p>This measures whether citizens or patients have a meaningful role in decisions on expanding benefits.</p> <p>Green= evidence of such a role Yellow= policy favours such a role, but limited engagement Red= no sign of any role</p>		<p>Although there is a policy encouraging citizen participation in analysing local health needs and proposing solutions, the publications describing essential service packages make no reference to citizen/patient input.</p>
		Overall Pillar Score			

Outcomes	5.1	Age-Adjusted Mortality relative to average for same income group	Age-standardised rates allow direct comparison, despite demographic differences, on success against the overall disease burden. However, income levels and mortality rates also correlate for reasons unrelated to health systems. This indicator therefore calculates scores based on how mortality rates in individual countries compare with the rates in their World Bank income group. For calculations and assumptions, see the online Workbook. Green = the national average is better (lower) than the income group average by more than 5% Yellow = the national average is better than the income group average by 5% or less Red = the country's age-adjusted mortality rate is higher than the average figure for its income group		Country mortality (per 100,000) - 993 Comparator mortality* (per 100,000) - 1182 Percentage difference - 16.0% *Low-income country average
	5.2	Preventable Deaths (with cervical and prostate cancer used as proxies)	Compared to other cancers, those of the prostate and cervix are both relatively easy to detect early and highly survivable if caught at an early stage. This makes them good proxies for the effectiveness of health systems in avoiding preventable deaths. Accordingly, we have calculated the mortality:incidence (M:I) ratio—a rough measure of survival—for each of these cancers for each country. For both cancers, the national M:I figures were compared to the average M:I ratios for high-income and upper middle-income countries as benchmarks, and an aggregate score calculated. For details see online workbook. Green = at least one cancer has a better M:I ratio than the high-income country average and the other is at least better than the upper middle-income country average. Yellow = at least one M:I ratio better than upper middle-income country average Red = neither M:I ratio better than upper middle-income country average		Cervical Cancer Country M:I ratio - 70.6% OECD M:I ratio - 39.3% Upper middle-income M:I ratio - 46.6% Prostate Cancer Country M:I ratio - 61.2% OECD M:I ratio - 18.8% Upper middle-income M:I ratio - 36.7% (All figures 2018)
	5.3	Patient Risk Management (with hypertension related deaths used as a proxy)	This indicator uses deaths related to hypertension as a proxy for blood pressure control. We took the age-standardised death rate for fatalities attributable to this risk factor for each country, and adjusted it to reflect the different levels of risk as measured in the summary exposure value. We then used the average results for high-income and upper-middle income countries to devise benchmarks. Green = adjusted mortality rate under 85 deaths per 100,000 (slightly higher than the average for high-income countries) Yellow = rate between 85 and 150 Red = rate above 150 For detailed calculations, see online workbook.		See online workbook for data and calculations.
	5.4	Financial Protection	This measure combines results for catastrophic spending—using the latest available WHO data for out-of-pocket health spending representing 25% of household spending—and impoverishment—using the latest available WHO data for the percentage of the population whose ability to spend on other goods and services is driven below the poverty line (set at 2011 PPP\$1.90 per day) by out-of-pocket health spending. These are each assessed using OECD results as a benchmark. (For catastrophic spending, the figure is OECD figure is 1.25%, for impoverishment it is 0.016%). The scores for each are then averaged. For detailed calculations, see online workbook. Green = at least one measure of financial protection meets or betters the OECD average and the other is at least within twice that average Yellow = at least one measure of financial protection is within twice the OECD average Red = neither measure of financial protection is within twice the OECD average		Percentage of population seeing out-of-pocket health spending exceeding 25% of household's total consumption or income Country figure: 0.1% (2016) OECD average: 1.25% (Calculation based on national figures for latest years) Percentage of the population whose ability to spend on other goods and services is driven below the poverty line (set at 2011 PPP\$1.90 per day) by out-of-pocket health spending Country figure: 0.60% (2016) OECD average: 0.016% (Calculation based on national figures for latest years)
			Overall Pillar Score		

(NB: For sources and more detailed information, see Workbook)

Moving Universal Health Coverage from Ambition to Practice:

Executive Summary



Universal Health Coverage (UHC) is one of the health targets within the sustainable development goals (SDGs). It means that everyone who needs healthcare services receives ones of sufficient quality without having to experience financial hardship. Reaching this goal is a task both large and urgent: currently more than a half of the world's population lack access to at least some essential element of healthcare.¹

Nor is it easy. The move toward UHC requires far greater financial resources for healthcare than governments in middle- and low-income countries have previously committed. These funds typically come from increased general taxes or compulsory social insurance payments – both of which may be politically unpalatable. UHC also frequently requires that health care systems greatly improve their levels of organisational sophistication. Ideally, this should involve a shift away from traditional fee-for-service medicine to so-called value-based care. The latter involves getting the best outcomes on things which matter to the patient for the least cost.

Given the different moving parts involved, it is not surprising that no simple roadmap exists. Instead, UHC as a concept has a complex and diverse range of national roots, with the most prominent country examples dating back many decades. However, in the last 15 years, UHC has attracted growing international salience. Since 2005, for example, various World Health Assembly declarations and UN general assemblies have urged bold action.

In September 2019 the UN general assembly adopted a political declaration strongly recommitting to achieving UHC by 2030 with a “view to scaling up the global effort to build a healthier world for all”.²

This is therefore an appropriate time for the Economist Intelligence Unit to consider how far ten key countries at different levels of economic development have come in the implementation of UHC. The countries are: Brazil, Chile, China, Colombia, India, Indonesia, Mexico, Philippines, Russia and Rwanda.

Such a review requires a multifaceted approach because the idea itself has various

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¹ World Bank and World Health Organisation (WHO), *Primary Health Care on the Road to Universal Health Coverage: 2019 Monitoring Report*, 2019, https://www.who.int/healthinfo/universal_health_coverage/report/uhc_report_2019.pdf?ua=1; ILO, *Universal social protection for human dignity, social justice and sustainable development*, 2019, https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_673680.pdf

² UN General Assembly, seventy-fourth session, Agenda item 126, 2019 <https://undocs.org/en/A/RES/74/2>

inter-related elements. The World Health Organisation (WHO) defines UHC as a situation where “all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship”.

Each country’s results, and health challenges, inevitably have specific features. Nevertheless, several overarching themes appear often. These include:

In our study countries, UHC policies and formal coverage have become widespread.

Nine of our ten countries get a green traffic light for the existence of such policy. In the same number, at least 85% of the population have formal access to healthcare. The exception is India. Its healthcare reforms should greatly boost the number covered in the coming years but, even if all goes to plan, roughly 30% of the population will still be uninsured.

Financial and health system resources continue to lag behind. The current consensus estimate is that government and compulsory spending on health needs to be at least 5% of GDP for effective UHC. By 2016, only one of our ten study countries, Chile, reached this level, and that was after rounding up from 4.98%. More worryingly, four of the ten countries (Colombia, Mexico, Russia, and Rwanda) saw a decline in this measure between 2012 and 2016. Meanwhile, those states experiencing the greatest relative increases—Indonesia and the Philippines—began from very low bases, 0.9% and 1.2% respectively in 2012. As a result, even after rapid growth in government and compulsory spending as a proportion of GDP, neither of the two topped 1.5% overall.

UHC also requires a sufficient healthcare workforce—a minimum of 4.5 doctors,

nurses and midwives per 1,000 population, according to WHO estimates. Only four study countries—Brazil, Mexico, Philippines and Russia—exceed that number, with the Philippines doing so just barely. Meanwhile, in only three—Chile, Colombia and the Philippines—can primary care facilities typically carry out and assess five basic tests that are important for the clinical management of certain key non-communicable conditions: diabetes, cardiovascular disease, chronic obstructive pulmonary disease and asthma. Finally, looking beyond the general to more advanced provision, no country has enough radiotherapy machines for its cancer burden.

Investing in health system resources may be the most difficult part of UHC, but there is no substitute.

Access takes time to build in general, with patients from rural areas and lower socio-economic groups too often not being reached. The WHO’s Index of Average Coverage of Essential Health Services measures the ability of countries to provide citizens with 14 key tracer health interventions. On average, OECD countries score 80 out of a possible 100, which is the geometric mean of the proportion of the relevant need being met by use of each intervention. None of those in our study reached that level. On the other hand, Brazil, Chile, China, Colombia, Mexico and Russia all fall between 70 and 80 on this scale, suggesting reasonable access to the very basic provision covered in the WHO Index. Most of these countries have been working to improve health access for some time. Clearly, even essential care does not get rolled out overnight.

The bigger worry is that most study countries are still trying to find ways to reach those groups which are often underserved worldwide. Eight of these states received red lights because of their very high ratios of urban to rural doctors. Only Chile and Mexico

earned yellow here, with both falling short of the OECD average.

Socio-economic differences are another area of concern. Five countries received yellow or red lights here. Even this range of results likely reflects bigger disparities than it might at first appear. The metric we used was the difference in the number of births attended by skilled professionals for mothers in the highest and lowest economic quintiles of the population. Although an important measure, this is much easier to provide for those with lower income than, for example, comprehensive cancer care. That only five of our ten countries could do so raises concerns about socioeconomic disparities for more expensive or complicated interventions.

Decisions on deepening of what UHC provides often lack scientific or patient input. We looked at how different national systems select which health interventions to

cover or, where all are ostensibly included, which drugs to either subsidise or provide free. Only three countries—Brazil, Colombia and Mexico—have strong Health Technology Assessment bodies, although India, Indonesia, Philippines and Russia are currently developing in this area. Meanwhile, Mexico and Colombia are the only states to avoid red for how much patient input goes into deepening decisions.

Related to these issues is the very slow progress towards value-based care in the study countries. Just Rwanda and Colombia finish better than red here. Amid the strong policy commitment toward UHC, governments should be sure to build the patient-centred, evidence-based systems that are essential for value-based care. Otherwise, they will likely need to engage in yet more fundamental and difficult reforms sooner rather than later.

Methodology

This Economist Intelligence Unit study measures where 10 countries stand in five areas—which we call pillars—relevant to UHC. These were selected after an extensive literature review and consultation with an advisory board of experts in this field. The pillars are: policy, health system resources, access, deepening, and outcomes. Within each we look at a range of individual metrics, or “indicators”. For each of these, we assign one of three scores modelled on traffic lights: a green means that the country in question is doing well by global or regional standards; a yellow that some concerns exist; and a red that important issues require attention. The indicator scores are then aggregated into pillar scores. For more detailed information on scoring and results, please see the workbook and country reports also published as part of this project available at the EIU Perspectives website.

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