



Global Medicine

The World Bank Group: Innovative financing for health and opportunities for global surgery^{☆,☆☆}



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ABSTRACT

The World Bank Group is the largest global development organization working to end poverty and promote shared prosperity. Its 5 institutions play an essential role in the advancement of global health through innovative health financing, data collection and management, policy reform, and advocacy. Previously, the World Bank Group has supported global surgery through data collection and advocacy. As it grows, it must continue to focus on the importance of surgical care in promoting health and avoiding poverty in low- and middle-income countries. The house of surgery and its community should play an active role in advocating for the many ways in which the World Bank Group could facilitate the strengthening of surgical systems to improve access to surgical care worldwide.

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Introduction

This article marks the third in our series on the large organizations involved in global health funding and policy setting. In this issue, we discuss the World Bank Group (WBG), which has evolved

into one of the largest and most impactful global health financing organizations worldwide. With more than 10,000 employees in more than 120 countries,¹ the WBG works toward its core mission of ending extreme poverty and promoting shared prosperity for all.² Based in Washington, DC, the WBG comprises 5 institutions that together support global development through loans from the public and private sectors, grants, innovative financing, data collection, advocacy, and policy reform in low- and middle-income countries (LMICs). Since 1945, the bank has lent more than \$1 trillion to development projects worldwide, committing more than \$61 billion in grants, loans, equity investments, and financial guarantees in 2017 alone.³ A substantial portion of these efforts focus on health, and under the current president Dr. Jim Yong Kim, the WBG has been an advocate for global surgery. In this article, we discuss the origin and evolution of the WBG and explore opportunities to leverage its preeminent role in global health to address the surgical, obstetric, and anesthetic needs in low-resource settings.

History of the World Bank

The WBG traces its origins to the aftermath of World War II. After the widespread destruction of Europe, the International Bank for Reconstruction and Development (IBRD) was established after a proposal arose at the Bretton Woods Conference in July 1944

* Disclaimer: The findings, interpretations, and conclusions expressed in this article are entirely those of the authors and do not represent the views of the affiliated organizations.

☆☆ Acronyms/abbreviations: DCP, Disease Control Priorities, 3rd edition; FIF, Financial Intermediary Fund; FY, fiscal year; GFF, Global Financing Facility; HNP, health, nutrition, and population; IBRD, International Bank for Reconstruction and Development; ICSID, International Centre for Settlement of Investment Disputes; IDA, International Development Association; IFC, International Finance Corporation; IMF, International Monetary Fund; KPI, key performance indicator; LCOGS, Lancet Commission on Global Surgery; LMICs, low- and middle-income countries; MIGA, Multilateral Investment Guarantee Agency; NSOAP, National Surgical, Obstetric, and Anesthesia Plan; PEF, Pandemic Emergency Financing Facility; RMNCAH-N, Reproductive, Maternal, Neonatal, Child, and Adolescent Health and Nutrition; SDG, Sustainable Development Goals; UHC, universal health coverage; UN, United Nations; UNDP, United Nations Development Programme; UNESCO, United Nations Educational, Scientific, and Cultural Organization; UNICEF, United Nations International Children's Fund; WBG, World Bank Group; WDIs, world development indicators; WFP, World Food Programme; WHO, World Health Organization.

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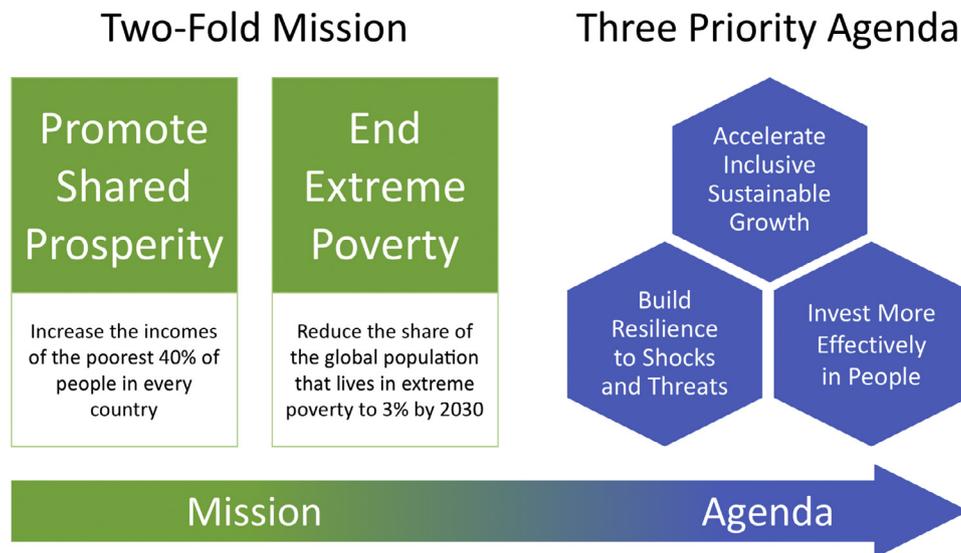


Fig. 1. World Bank Group's mission and priority agenda.²

to finance European reconstruction.⁴ In 1947, the IBRD made its first loan to France to fund the reconstruction of vital national industries.⁵ As Europe rebuilt, the bank's role slowly changed from funding reconstruction to funding development projects, and the bank shifted its focus to countries in Africa, Asia, and Latin America in the 1950s–1960s, where it focused primarily on infrastructure projects, such as dams and irrigation systems.⁴ Throughout the 1970s–1980s, the bank pivoted toward social development and poverty relief, and its workforce expanded from an economic, financial, and engineering corps to include policy experts, social scientists, and other international development experts.⁴ Nonetheless, during that period the WBG also faced criticism⁶ for some of its lending policies⁷ and their effect on the poor, as well as concerns surrounding sustainability. Since that time, the WBG has reframed its goals and realigned its lending priorities to reflect a focus on reduction in worldwide poverty.⁸

Today, the WBG is the largest funder of development projects worldwide and champions an ambitious twofold mission (Fig 1): first, to end extreme poverty by decreasing the share of the global population that lives in extreme poverty to 3% by 2030, and second, to promote shared prosperity by increasing the incomes of the poorest 40% of people in every country.² The WBG aims to achieve these goals through 3 priority agendas: “accelerating inclusive, sustainable economic growth, building resilience to shocks and threats, and investing more effectively in people.”⁹

Structure and governance of the WBG

The World Bank is 1 of 15 specialized United Nations (UN) agencies.¹⁰ Unlike traditional UN agencies, such as UN Children's Fund (UNICEF), the UN Development Programme (UNDP), and the World Food Program (WFP), specialized UN agencies are independent and autonomous agencies that work with the UN through negotiated agreements.¹¹ Whereas traditional agencies are financed entirely through voluntary contributions, specialized agencies are financed through a combination of assessed contributions (eg, country membership dues) and voluntary contributions from member states. Under this structure, specialized agencies, which also include the International Monetary Fund (IMF), the World Health Organization (WHO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO), are able to

operate independently of the UN while still working toward common UN goals.

In its fiscal year (FY) 2017, the World Bank Group made loans totaling \$61.8 billion,² which it raised from a range of sources and spent across 6 regions (Fig 2) and (Fig 3). Primarily, the capital of the WBG comes from 5 sources: capital raised on world financial markets, investment income, member country fees, contributions from wealthy member states, and repayments on the WBG loans it issues.¹² The WBG commits these funds to a mix of loans, grants, equity investments, and guarantees that support development in partner countries and private businesses across the world.² Through its lending, the WBG aims to help countries improve access to clean drinking water, schools and teachers, and health care, and to manage agriculture and natural resources, build transportation infrastructure and systems of communication, generate energy, and modernize.¹² Fig. 3.

Internally, the WBG functions like a cooperative of its 189 member countries.¹³ Each member country is represented at the WBG on the Board of Governors, which is composed of 1 Governor and 1 Alternate Governor (traditionally a Minister of Finance, central bank leader, or other high-ranking official) from each country.¹⁴ Although the decision-making power of the WBG rests formally with the Board of Governors, traditionally this board has delegated most of its functions to a group of 25 Executive Directors (known as the Board of Directors), who are either appointed or elected by groups of member states to serve as their representation.¹³

The Board of Directors works on site at the WBG in Washington, DC, and oversees its daily operations. Among its most important responsibilities is soliciting nominations for and selecting a President of the World Bank Group to chair its board and lead the day-to-day operations of the WBG over 5-year terms. Currently serving as President is Dr. Jim Yong Kim, a Korean-American physician who was first nominated by Barack Obama to be President of the WBG in 2012,¹⁵ and who is now serving his second term after being reappointed unanimously in 2016.¹⁶

World Bank Group activities focus primarily on assisting governments in developing countries to both strengthen public sector institutions and foster private sector growth. To fulfill this work, the WBG is more broadly comprised of 5 distinct institutions, with the CEO of each institution reporting to WBG President Kim.

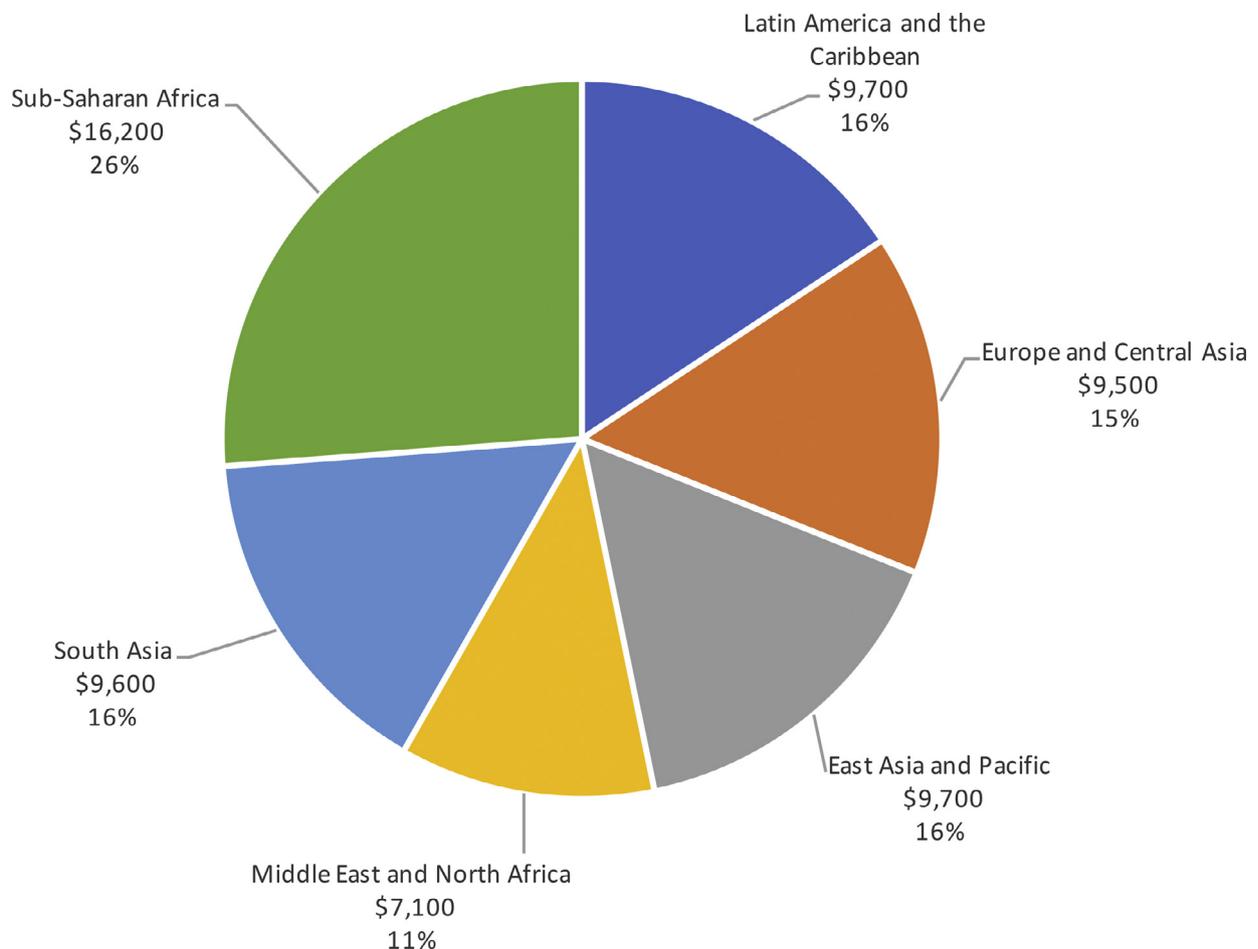


Fig. 2. World Bank Group global commitments by region in fiscal year 2017 (in millions, USD²; includes loans, grants, equity investments, and guarantees to partner countries and private businesses).

“Five institutions, one group”¹⁷

As an organization, the WBG is composed of 5 associated but different international institutions: the International Bank for Reconstruction and Development (IBRD) and the International Development Associations (IDA), which together make up the World Bank; the International Finance Corporation (IFC); the Multilateral Investment Guarantee Agency (MIGA); and the International Centre for Settlement of Investment Disputes (ICSID) (Fig 4).¹⁷

The World Bank is composed of 2 “sister” entities: the IBRD and the IDA. These 2 institutions manage the vast majority of the annual spending of the WBG, committing \$42.1 billion to development financing in 124 member countries (Fig 5), including \$2.4 billion toward health across 6 regions (Figs 6 and 7).³ Their roles however, are different.

The IBRD, which originated to help rebuild Europe after World War II, today provides competitive loans and technical support to governments in LMICs that it deems creditworthy.² In FY2017, the IBRD committed \$22.6 billion to development projects, with the largest borrowers being China (\$2.4 billion) and India (\$1.8 billion).²

As a complement to the IBRD, the IDA, which the WBG describes as its “fund for the poorest,”² provides zero-interest loans, or “credits,” and highly concessional grants to governments in the poorest countries in the world.² These loans and grants allow poorer governments that might not otherwise have access to traditional credit markets the opportunity to borrow for health and

social development projects. In FY2017, the IDA committed \$19.5 billion to development projects including \$16.2 billion in credits, \$3.2 billion in grants, and \$50 million in loan guarantees; the greatest borrowers were Nigeria (\$1.6 billion) and Viet Nam (\$1.5 billion).³

In addition to these 2 major lending arms, the 3 other sister institutions of the WBG provide additional financial and technical support toward the development goals of the WBG. First, the IFC focuses exclusively on private sector buildup in developing countries. In particular, the IFC hosts trust funds that finance advisory services and provides funding to small and medium-size private entrepreneurs in developing countries, for example, through a 15 million Euro investment in technology startups in sub-Saharan Africa in January 2018.¹⁸

Second, MIGA works to promote foreign direct investment in developing countries.¹⁹ It does this by acting to guarantee investors and lenders against political risk and other market threats that could negatively affect investments, ranging from government defaults and contract breaches to civil war. As an agency, MIGA facilitates traditional private investors who might otherwise seek less risky investment to invest in developing countries, and it focuses in particular on low-income settings.²⁰ For example, in 2018, MIGA put \$102.6 million toward guaranteeing German and Chinese investments in 12 solar power plants in Egypt, which could decrease carbon dioxide emission by 233,000 tons annually.²¹ Although MIGA was first established in 1988, currently as the World Bank turns toward traditional private markets and adopts tools of modern finance,²² which include strategies to “de-risk”

World Bank Group Total Commitments by Institution in FY2017 (in millions, USD)

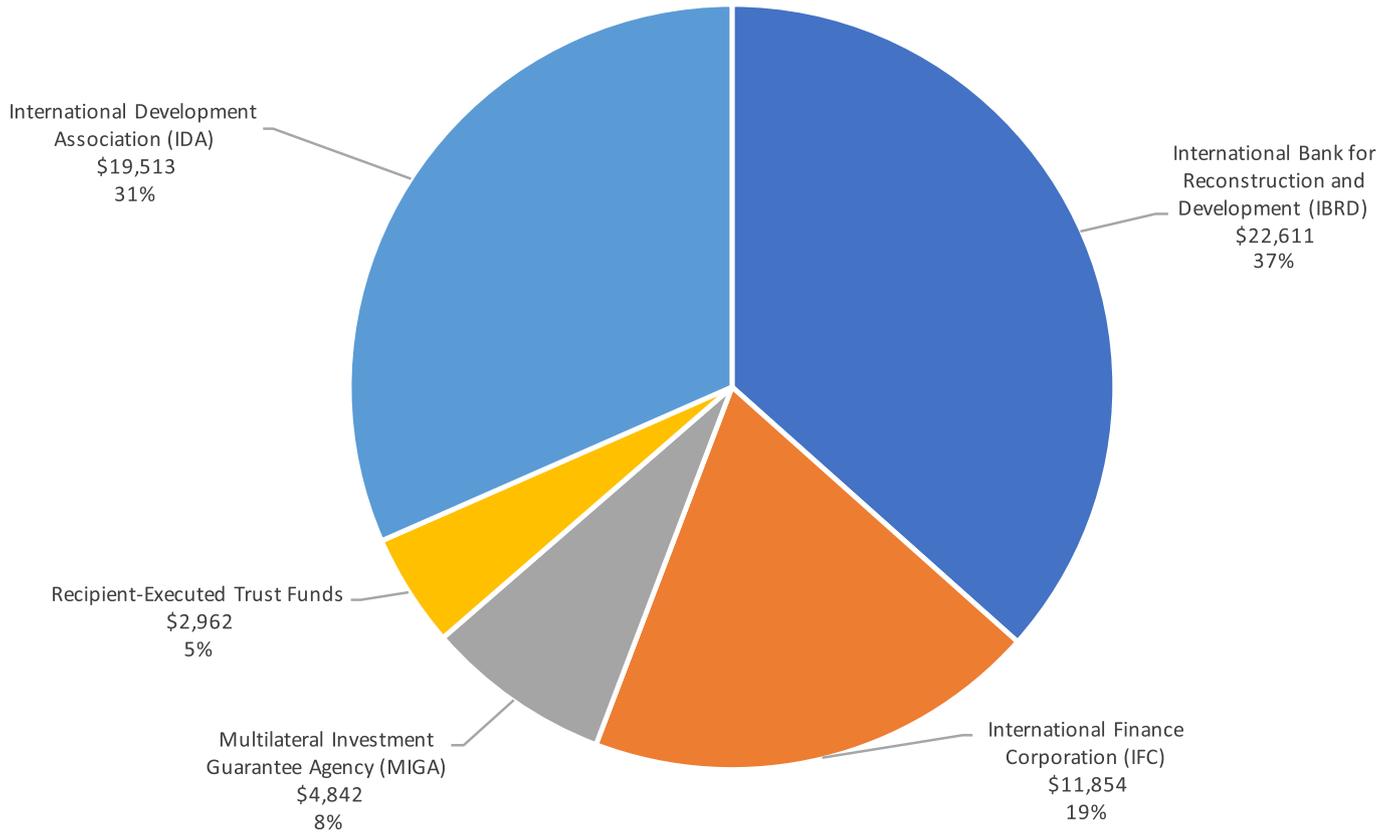


Fig. 3. World Bank Group global commitments by institution in fiscal year 2017 (in millions, USD²; includes loans, grants, equity investments, and guarantees to partner countries and private businesses).

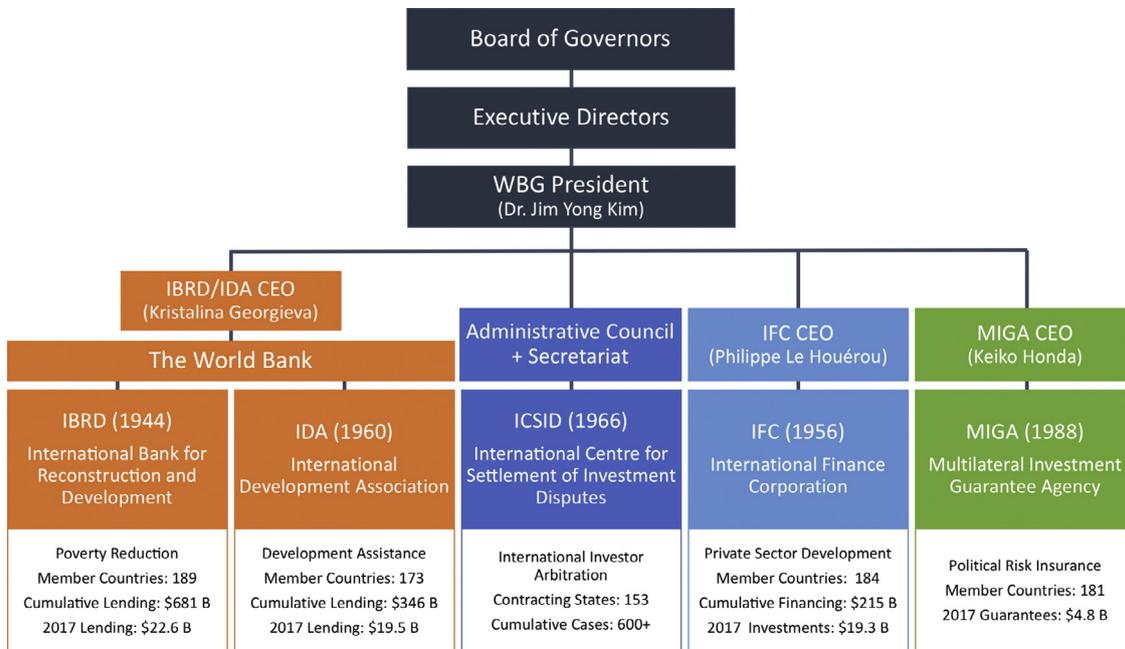


Fig. 4. World Bank Group organizational structure: “five institutions, one group.”^{3,19,60-69}

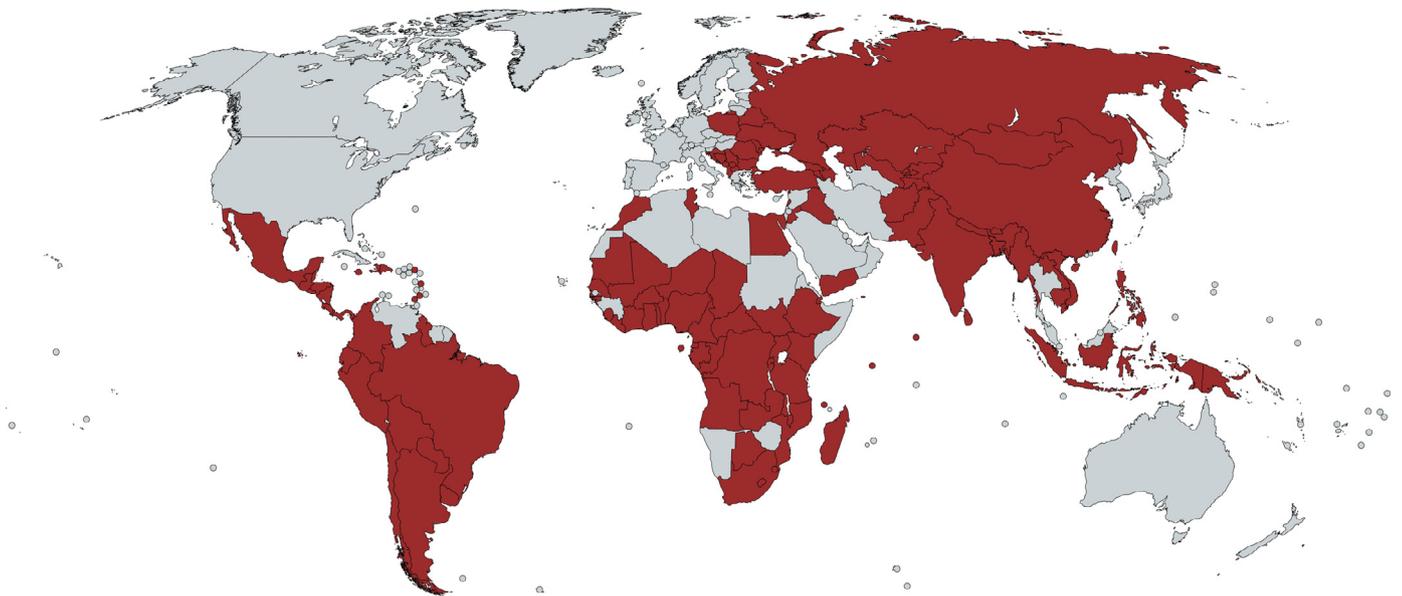


Fig. 5. Countries receiving International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA) lending (July 2017).^{2,70}

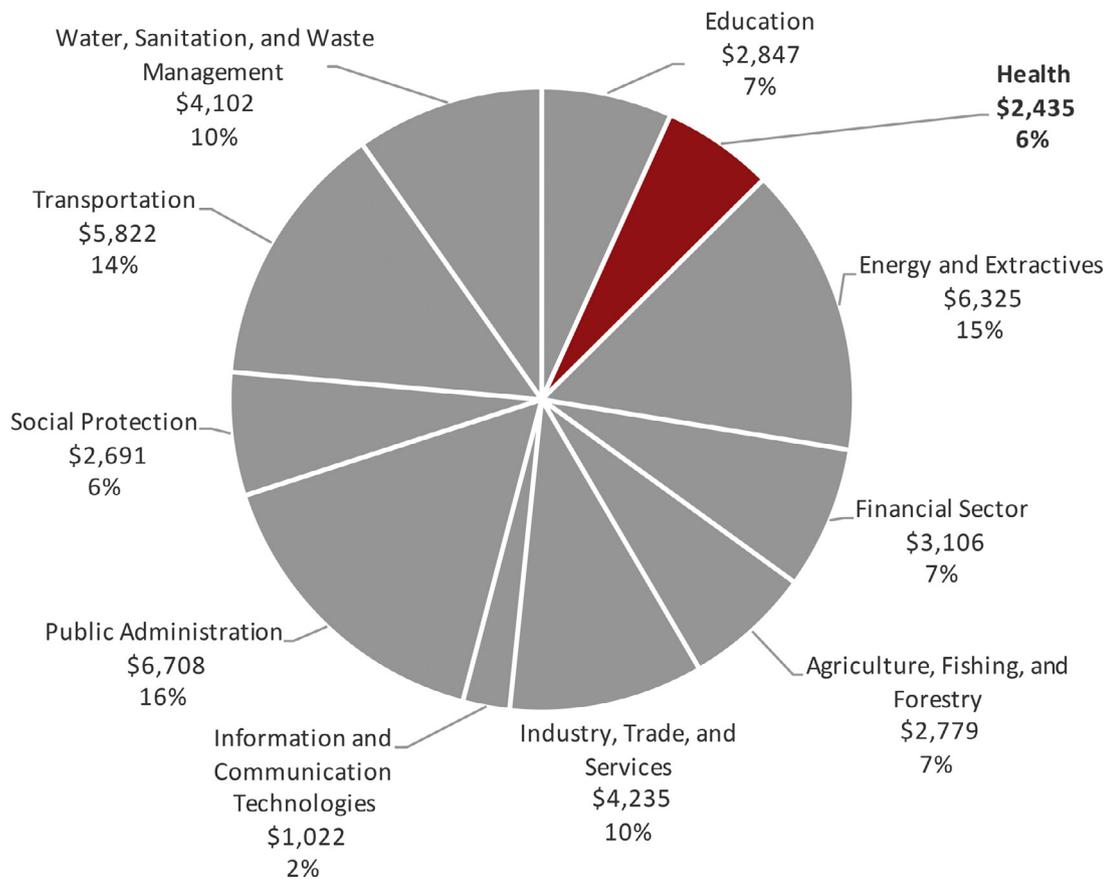


Fig. 6. Combined International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA) lending commitments by sector in fiscal year 2017 (in millions, USD).²

development loans, some have suggested that MIGA may finally be coming of age.²⁰

Third, ICSID assists with arbitration and dispute resolution among international entities.¹⁹ It is composed of 2 groups: an Administrative Council of representatives from each member state chaired by the WBG President, which serves as the governing body of the ICSID, and a Secretariat made up of approximately 70

professional staff who administer arbitration and conciliation of cases before the ICSID and tend to its daily operations. This administrative divide allows ICSID to function impartially in its operations and fulfill its role as the “independent global dispute resolution facility.”²³

Together, the 5 institutions of the WBG today constitute one of the world’s largest development institutions with more than

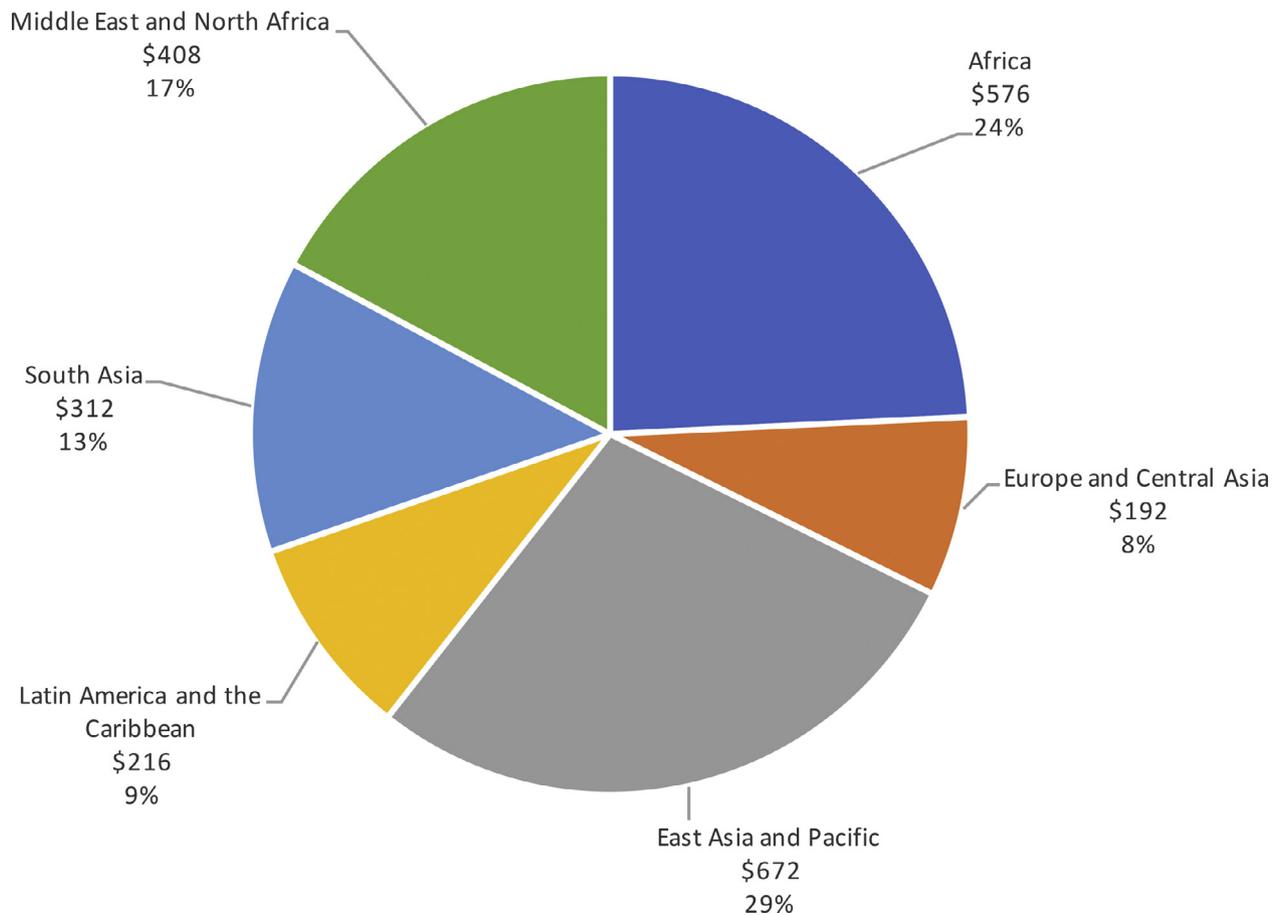


Fig. 7. Combined International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA) health-related lending by region in fiscal year 2017 (in millions, USD) (\$2.4 billion total).³

10,000 employees working in more than 120 countries.¹ The WBG works across several sectors, including education, trade, transportation, and agriculture, but health remains a substantial focus (see Fig 6). The WBG is the second largest funder of global health worldwide.²⁴ In the next section, we detail the work of the WBG in promoting health and well-being for all.

Global health promotion activities and investments

The WBG's financial focus on health is both substantial and crucial. Health spending accounted for 6% of all IBRD and IDA lending in FY2017, totaling more than \$2.4 billion, and makes up almost half of the WBG's financial intermediary funding.²⁵ This focus of spending of the WBG, however, has not always been the case. From 1985 to 1989, the WBG allocated only 1% of its lending to projects in health, nutrition, and population (HNP) projects, and only in recent years has the percentage of their funding increased to 12%.²⁴ Nonetheless, in addition to health financing, the WBG plays a very important role in promoting health through other important avenues. Broadly, its health activities fall into 4 categories: financing, data management, capacity building, and policy and advocacy.

Health financing

First and most importantly, the WBG provides financing for health-related activities through several dynamic financing mechanisms, most notably through WBG trust funds, financial intermediary funds, the new Global Financing Facility, and IDA development bonds.

The WBG trust funds

The WBG sources health funding through 4 distinct trust fund models: IDA and IDRB trust funds, IFC trust funds, and Financial Intermediary Funds (FIFs).²⁵ First are the IBRD and IDA trust funds, which provide grants and concessional loans typically below market price interest rates and above average grace periods, to low-income countries. These trust funds can be further divided based on the bank's management role into bank-executed and recipient-executed trust funds.²⁵

Bank-executed trust funds, which the bank fully and directly implements, typically support bank programs, such as analytical, advisory, and management services that the bank provides to country-level development projects. In contrast, recipient-executed trust funds, which the bank cedes control of to third parties to implement, such as ministries of health or other global health organizations, typically co-finance IBRD and IDA projects by funding external implementation organizations that the bank appraises and oversees.^{25,26}

In addition to the IBRD and IDA trust funds, a small portion of the bank trust funds are managed by the IFC.²⁶ These IFC trust funds support private sector development by financing advisory services throughout the government and private sectors,²⁵ such as the Microfinance Enhancement Facility, which promotes investments in small enterprises that combine sustainability and development.²⁷

Finally, the bank serves as trustee for 22 FIFs.²⁸ FIFs are multilateral financial mechanisms that support global development. These funds, of which the largest is the Global Fund to Fight Aids, Tuberculosis, and Malaria (commonly known as "The Global

Fund”), focus predominantly on global public issues, such as infectious diseases, climate change, and food security.²⁸ To support these multilateral efforts, these FIFs serve as fund managers, effectively providing financial services, such as capital management and accounting services, and technical and legal expertise. Notably and in contrast to the IBRD, IDA, and IFC trust funds, the FIFs are externally governed and make their own funding decisions, with the bank holding voting rights in only some cases.²⁹

The Global Financing Facility

In addition to traditional IDA/IBRD lending and trust fund management, the WBG launched the Global Financing Facility for Every Women and Child (GFF) in 2015 to help LMICs developing sustainable financing strategies for health. In particular, the GFF focuses primarily on reproductive, maternal, neonatal, child, and adolescent health and nutrition (RMNCAH-N), with an aim toward closing the \$33 billion annual financing gap needed to meet the RMNCAH-N targets outlined by the Sustainable Development Goals (SDGs).³⁰ To do this, the GFF draws on the financial and technical expertise at the World Bank to catalyze diverse and innovative financing plans. Using a combination of leveraged debt, pooled financing, and risk sharing, the GFF supports country-driven investment cases that promote RMNCAH-N. Ultimately through this model, the GFF aims to gradually shift low-income countries away from relying on development aid and onto a sustainable financing path as countries reap the economic rewards to strengthen the health system (Addendum 1, online only, available at: [10.1016/j.surg.2018.07.040](https://doi.org/10.1016/j.surg.2018.07.040)). Despite being only 3 years old, the GFF currently operates in 16 countries, with a plan to expand to 50 LMICs within 5 years.

IDA development bonds: A paradigm shift

Until recently, the IDA served primarily as a funding agency, with a model of donation-based fundraising that had accumulated \$158 billion for development assistance. The IDA used these cash holdings to loan money at minimal or zero interest rates to low-income countries to help them fund development projects. In April 2018, however, the IDA took a new approach to its own financing and, in turn, toward financing development in low-income countries.³¹ For the first time in IDA history, it issued its own \$1.5 billion bond on the global capital markets to raise capital for global development. The IDA aimed to leverage its own institutional credit to raise additional capital from private investors that it could pay back over time in a fashion similar to that used by non-profit hospitals and educational institutions to raise money for capital projects. Because of its strong institutional history, its large equity fund, and its lack of debt, the IDA received an AAA rating,³² and its bonds sold quickly to investors across global capital markets with more than \$4.6 billion of ordering demand for the \$1.5 billion bonds.³³ This bond issuance for an organization like the IDA on the world’s capital markets marked a global first for development finance. With this new source of additional leveraged funding, the IDA hopes to scale up its loan and credit programs and more rapidly achieve the UN’s SDGs by 2030.³¹

Data

Second, the WBG hosts a preeminent data coordinating and measurement organization known as the Development Data Group.³⁴ This group collects and coordinates statistics and data from across the member countries of the WBG and maintains 69 databases that include a broad range of macro-level population, financial, and sector-specific information. Freely available to the public through the WBG DataBank, these databases include

thousands of global, regional, and country-level indicators covering areas such as health, gender, education, business, poverty and equity, debt, economics, and commodity prices.³⁵ Most notably, the World Development Indicators (WDIs) and health, nutrition, and population statistics databases include nearly 2000 health-focused indicators across 264 countries and groups dating as far back as 1960. The WDI database in particular, which originated from the 1978 World Development Report, is the WBG’s most used knowledge resource, attracting more than 20 million annual visitors to the site.³⁶ In addition to important health statistics such as maternal mortality ratios, since 2016, the WDI has included 4 key performance indicators (KPIs) related to surgical care that arose from the Lancet Commission on Global Surgery³⁷ (see section: Surgery and the World Bank Group). In addition, the WBG hosts a wealth of other data, such as the Microdata Library, as well as a range of daily Time Series and Geospatial data.^{38,39} Finally, the WBG frequently authors publications on health outcomes and other global development research, such as the education, violent conflict, jobs reform, and global economic prospects.⁴⁰

The most important recent publication was the “2018 Atlas of the Sustainable Development Goals” published in May 2018 (Addendum 2, online only, available at [10.1016/j.surg.2018.07.040](https://doi.org/10.1016/j.surg.2018.07.040)),⁴¹ a comprehensive report on the global progress toward achieving the 17 Sustainable Development Goals. For the first time in 2018, this annual report sourced data from the 2015 Lancet Commission on Global Surgery and included insights on access to surgical care, marking an important step forward for the global surgery movement.

Policy reform and advocacy: Health and the sustainable development goals

Universal health coverage and strengthening of health systems

Uniquely positioned to lead health advocacy efforts around the world, the WBG plays an important role in the expansion of universal health coverage, and has promoted the *strengthening* of health systems programs toward this end.⁴² This has not always been the approach of the World Bank to improving health, because in the 1970s to 1990s, the World Bank focused more closely on population control, direct lending, and health reform.⁴²

More recently, however, the WBG has collaborated closely with the World Health Organization to reprioritize its health systems and strengthen Universal Health Coverage (UHC) and the 2030 Sustainable Development Goals agenda.⁴³ In particular, the World Bank has taken a comprehensive and all-inclusive approach to the strengthening of health systems by supporting engagement with stakeholders in both the public and private sector as a strategy for reaching the SDGs.⁴³ It has supported the UHC as a critical driver of the SDGs and has incorporated the strengthening of the health systems and UHC into its strategy for alleviation of poverty and human development toward the SDGs.⁴³

In addition to leadership on health policy, the World Bank has provided technical assistance for UHC and the strengthening of health systems. Assessment of successful implementation of UHC is based on the evaluation of both access to care and financial protection while seeking health services.⁴⁴ By assessing and guiding policies designed to encourage UHC reforms in developing countries, the World Bank has globalized the UHC effort of individual countries. Over 40 countries⁴⁵ have been evaluated through as case studies⁴⁶ and have published in an open repository to guide future policy development.

Unifying financing and health: The Human Capital Project

Finally, one of the most recent efforts to integrate health promotion and development financing is the Human Capital Project of the WBG. Launched in 2017, the project underscores the critical role that a healthy and educated population plays in the economic development of a country, and through it, the WBG has focused on better understanding the profound link between human capital and economic growth.⁴⁷

This new initiative represents a paradigm shift. Instead of measuring wealth through things like economic output, the WBG is beginning to include human capital as an essential component of a nation's overall wealth. The WBG has taken the philosophy that "investing in people is investing in economic growth."⁴⁷ One major focus of this initiative, for example, is the elimination of chronic childhood malnutrition, because the WBG recognizes the lifelong effects that health in early life can have on the productivity of the workforce. Similarly, the World Bank has identified lack of access to essential health services and the risk of catastrophic health expenditures as "human capital crises," and has begun guiding financing toward the development of human capital.⁴⁷

As the Human Capital Project moves forward, the WBG plans to begin ranking nations on their human capital and on their human capital flow, which represents the investments countries are actively making to improve human capital. In early 2018, the WBG launched a report that measured the wealth of 141 nations across the 4 aggregates: natural capital, produced capital, foreign assets, and human capital; this represented the first time the WBG has measured human capital,^{48,49} and involves a new perspective on the importance of promoting human health for economic growth.

Surgery and the World Bank Group

Dr. Kim has been an advocate for surgery and global health since before his tenure as President of the WBG. In 2008, in what is now seen as a watershed moment for the global surgery movement, Dr. Kim co-authored a widely circulated piece with Dr. Paul Farmer that declared surgery the "neglected stepchild of global public health,"⁵⁰ arguing that despite the high incidences of surgical diseases in developing countries, the major global funders of health did not see it as a priority.

As President of the WBG, Dr Kim has continued to promote the importance of surgery in global health. In 2014, Dr. Kim gave the inaugural address for the Lancet Commission on Global Surgery (LCOGS), calling on the commissioners to "make the case that surgery is an indivisible, indispensable part of health care."⁵¹ In 2015, in a keynote address at the launch events of the LCOGS in London, UK and Boston, MA, he said: "We have to think in a fundamentally different way about healthcare and surgery's role in it in developing countries. Not only is access to surgery the right thing to do morally, it is also important to ending extreme poverty and boosting shared prosperity."⁵²

Finally, in a 2017 address at the UHC forum in Tokyo, he suggested that surgery is a "a crucial component of building strong health systems."⁹ In recent years, the advocacy efforts of Dr Kim and the actions of his inspired staff members have translated the support of the WBG into global surgery on several fronts.

First, the World Bank has begun organizing and including KPIs for surgical care in its database of WDIs.⁵³ Notably, the World Bank now publishes country level data on 4 of the 6 KPIs championed by the LCOGS in 2015³⁷ (Table 1): specialist surgical workforce density, number of surgical procedures performed, risk of impoverishing expenditure for surgical care, and risk of catastrophic expenditure for surgical care.⁵³

Second, in 2015, the editors of the third edition of *Disease Control Priorities* (DCP-3), a World Bank publication that aims to

provide evidence-based information on effective policies and programs for the leading global disease, dedicated 1 of 9 volumes to "Essential Surgery."⁵⁴ The DCP-3 Essential Surgery volume identified 44 essential surgical procedures that are cost effective, are feasible, and would address large burdens of disease, and thereby provided data that advocated for the inclusion of these surgical interventions in all health systems.

In short, the WBG has been instrumental toward collecting and promoting key patient- and system-level surgical data around the world. Dr. Kim has made clear that the WBG is committed to integrating surgical, anesthesia, and obstetric care as part of health systems strengthening.⁹

Future engagements for surgery

Undoubtedly, the most important role the WBG could play in advancing surgery care is through funding for the surgical system strengthening. With the emerging focus of the WBG on innovating financing mechanisms, there may be new opportunities for the WBG to fund surgical care. In particular, there are clear areas of overlap between surgery and the focus of the GFF on maternal and child health. Access to cesarean section, for example, decreases dramatically maternal and neonatal mortality; similarly, access to laparotomy and fracture treatment will be essential to decreasing youth mortality from road traffic accidents, the leading cause of preventable adolescent death.⁵⁵ In addition, surgical interventions can effectively treat the array of congenital conditions, fistulas, and cervical and childhood cancers faced by maternal and child populations worldwide. Although GFF investment cases have centered on aspects of this, such as improving emergency obstetric care in Liberia,⁵⁶ the GFF and WBG have not yet focused on broad strengthening of such surgical systems.

With the emerging interest in National Surgical, Obstetric, and Anesthesia Plans (NSOAPs) in LMICs,⁵⁷ however, this may present a new opportunity for an alignment between the surgical community and the GFF. NSOAPs are country-driven, evidence-based, costed investment cases for surgical scale-up that are results oriented and tied to process indicators. These plans have been completed in Zambia, Tanzania, Ethiopia, and Rwanda, and are in process in several other LMICs; unfortunately these plans predominantly lack the financial planning needed to move ahead with implementation. Whereas NSOAPs will undoubtedly promote maternal and child health and well-being, these plans could serve as a grounded starting point for future GFF and WBG investment foci.

Many more LMICs, however, lack the financial and technical support needed to begin NSOAP development. Successful plans so far have relied on governmental partnerships with both academic and private sector organizations. These one-off partnerships do not have the resources to scale the NSOAP process. With its focus on data, health systems strengthening, and health financing, the WBG could serve as a global leader in facilitating NSOAP development.

Beyond the financing of UHC and the health systems strengthening, the WBG could also support surgery through catastrophic insurance financing. After the 2014 Ebola epidemic, the WBG launched the Pandemic Emergency Financing Facility (PEF),⁵⁸ an innovative FIF that leverages IBRD-issued bonds to support an insurance market for pandemic risk.⁵⁹ The PEF is designed to offer surge financing to low-income countries facing disease outbreaks in the hope of providing the infusion of capital needed to stem those outbreaks before they reach pandemic proportions,⁵⁹ and the WBG has committed \$500 million to support the PEF over the next 5 years.⁵⁸

The risks of impoverishing expenditure and catastrophic expenditure are among the most important burdens for those in need of surgical care.³⁷ Although the PEF is in its early stages, it is a pro-

Table 1
LCOGS Key Performance Indicators.

LCOGS Indicator No.	Key performance indicator	World Bank database	No. of countries with data reported	Country with highest rate	Country with lowest rate
1	Access to timely surgery	None	—	—	—
2	Specialist surgical workforce density (per 100,000)	World development indicators	173	Monaco (196.7 per 100,000)	Afghanistan (0.03 per 100,000)
3	No. of surgical procedures performed (per 100,000)	World development indicators	58	Australia (28,907 per 100,000)	Ethiopia (43 per 100,000)
4	Perioperative mortality rate	None	—	—	—
5	Risk of impoverishing expenditure for surgical care	World development indicators	186	Burundi (99% of people at risk)	18 countries with 0% of people at risk
6	Risk of catastrophic expenditure for surgical care	World development indicators	186	Afghanistan (93% of people at risk)	Tuvalu, Monaco, Japan, Germany, Denmark, and Kiribati (0% of people at risk)

Sources: Lancet Commission on Global Surgery³⁷; World Bank Databank.⁵³

found new mechanism for using IBRD resources to catalyze an insurance market for catastrophic expenditure. As the WBG expands this initiative, it should consider if there is an opportunity for creating a similar market for insuring against the impoverishing and catastrophic expenditures associated with surgical care. Limiting catastrophic expenditure for surgical patients would align with the mission of the WBG to eliminate extreme poverty.

In addition to financing surgical planning and care, the WBG should expand its technical support for surgical data by promoting the collection of essential surgical KPIs worldwide at national and regional levels. The recent addition of the 4 key indicators of the LCOGS in the WDI database was an important first step, but data are still missing for many countries, and 2 essential surgical indicators are still unavailable. The WBG could play an important role, through either financial or technical support, in helping developing nations collect these critical surgical metrics to provide benchmarks for health system capacity and national surgical planning.

Finally, the WBG can continue to play a leading role in facilitating knowledge sharing and advocacy between the surgery community, developmental institutions, and the global public. Since Dr. Kim first proclaimed surgery was a neglected area of global health, the surgery and development communities have produced a multitude of research and policy measures aimed at improving surgical care worldwide. Nonetheless, surgery remains on the sidelines of the UHC agenda, and access to timely, safe, and affordable surgical care remains out of reach for most of the world's poor. Dr. Kim has been a vocal supporter of surgery,⁹ and the WBG should continue to take up and scale up this charge as it scales its development work in the coming years (Addendum 3, online only, available at [10.1016/j.surg.2018.07.040](https://doi.org/10.1016/j.surg.2018.07.040)).

Conclusion

Over the past 70 years, the WBG has evolved from a financier for European postwar reconstruction to the largest global development organization working to end poverty and promote shared prosperity. The WBG plays an essential role in the advancement of global health and actively develops innovative financing mechanisms to fund sustainable health care programs in the world's poorest countries. As the WBG continues to effect change in global health and development, it must also focus on the importance of surgical care in promoting health and avoiding poverty in LMICs. The surgery community should play an active role in advocating for the WBG to play a broad role in surgical system strengthening where urgently needed.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.surg.2018.07.040](https://doi.org/10.1016/j.surg.2018.07.040).

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