

Equal measure

Latin America's greatest barrier to economic growth – and by extension, the good health of its people – is the gap between rich and poor, writes *Emily Brooks*

Latin America is the region with the highest inequality in the world, a situation that has remained unchanged over the past 40 years, and the single largest factor that retards its economic growth. The disparity between rich and poor is reflected in the accessibility of healthcare. A Christian Aid report¹ published in April stated that this is a region "where geographic location and ethnic group are hugely important in determining life chances... there are large gaps in education provision, in areas such as nutrition, health, access to water and electricity, and in standard social protections such as social security coverage and pensions." Although poverty has decreased overall in Latin America, the report criticises governments for not properly designing their public policies around such extremes of rich and poor; it also points the finger at the top tier of society, who are resistant to tax reforms that would see them cede significant parts on their wealth in the wider interest of alleviating poverty.

Health spend for the region as a whole averages out at 2.8% of GDP, but spending is often concentrated in urban areas, and does not reach the poorest rural sections of the population. The divide between rich and poor has contributed to a typical pattern: communicable diseases, malnutrition and poor maternal health on the one

hand, with an accompanying rise in non-communicable diseases (NCDs) in the rising middle classes. Non-communicable diseases account for 62% of deaths in Latin America (for comparison, the figure is 85% in OECD countries, and 21% in sub-Saharan Africa), and demographic change over the next few decades will be dominated by an ageing population, and the associated increase in demand for healthcare.

A 2011 report by the World Bank focusing on this change of demographic² questions Latin America's preparedness for this additional burden – and states that it will be particularly difficult for low- and middle-income countries to meet the elderly's health needs. It recommends that healthcare systems be strengthened to provide better primary services, as well as "develop healthcare policies to expand across the prevention and treatment of NCDs, especially among the poor. In many countries, health insurance is restricted to the higher-income population, while public health services provide subsidised access to services focused on communicable diseases and maternal and child services, while treatment of NCDs is paid largely out of pocket and becomes the main cause of financial hardship related to health events."

Catching up with change

All of this seems a long way from discussions about how healthcare design can help improve patient experience and health outcomes. Is Latin America just too busy fire-fighting? Ana Carolina Potier Mendes, partner at Brazilian specialist healthcare architects Pró-Saúde Profissionais Associados, says that her major challenges are "how to attend to the needs

of the client – related to short schedules and, most of the time, lack of money – as well as a lot of bureaucracy in the country, and the high speed of change in the world." More holistic philosophies are not at the forefront because "most of the facilities are still investing in basic issues that have to be resolved. But there is a rapid and growing discussion on those sorts of matters and we can already see the application of that discussion in most of the biggest projects in Brazil." She adds that "although the country has been passing through a boom of investment in construction, there is still



Pró-Saúde Profissionais Associados' new hospital for Porto Velho will serve 1.5m people



Hospital Universitario San Vicente de Paul, Rio Negro, Colombia

As Hospital San Vicente de Paul approaches its centenary, it has its eyes set on the future. Perkins+Will, together with Colombian firm Condisegno, unveiled a new hospital here at the end of last year that reflects the culture and history of the original facility, but incorporates technological advances and a strong sustainability agenda (it is the first LEED-certified healthcare facility in Latin America). A circular public lobby connects all functions of the hospital, while the three clinic buildings use a clear colour-coding system to aid with wayfinding. Patient rooms are all single-handed, with an attached family area in every ICU recovery room. The hospital's clean, contemporary interior has a sense of quality that is intended to give patients a reassuring experience; it makes the most of local building materials, including warm red brickwork and dark wood veneer.

Completion date: 2011
 Number of beds: 260
 Size: 50,000sqm
 Architects: Perkins+Will, Condisegno



a big gap dividing the hospitals with huge investments and the hospitals with lack of resources – but this distance has been reduced more nowadays.” The firm’s new R\$73m (£22.5m) hospital in Porto Velho, capital of the state of Rondônia, will start to be built at the beginning of next year. It is hoped that the 17,000sqm, 254-bed facility will relieve severe overcrowding in the city’s existing João Paulo II hospital, whose emergency department currently serves the state’s entire population, some 1.5 million people.

Flagship facilities

Several international architectural firms are making their presence felt with projects in Latin America. HKS, which has an office in São Paulo, has formed a strategic partnership with Texas’s Methodist International, with aim of offering a broad package of services to Latin American healthcare professionals – business development, clinical operations and care delivery models from Methodist International, and world-class facility design from HKS. Further examples of hospitals looking north for design inspiration include Clinica las Condes, RTKL’s collaboration with MOBIL Architects in Santiago, Chile, and Gresham, Smith & Partners’ Clinica Delgado in Lima, Peru, a scheme for insurance group Grupo Salud (see case studies).

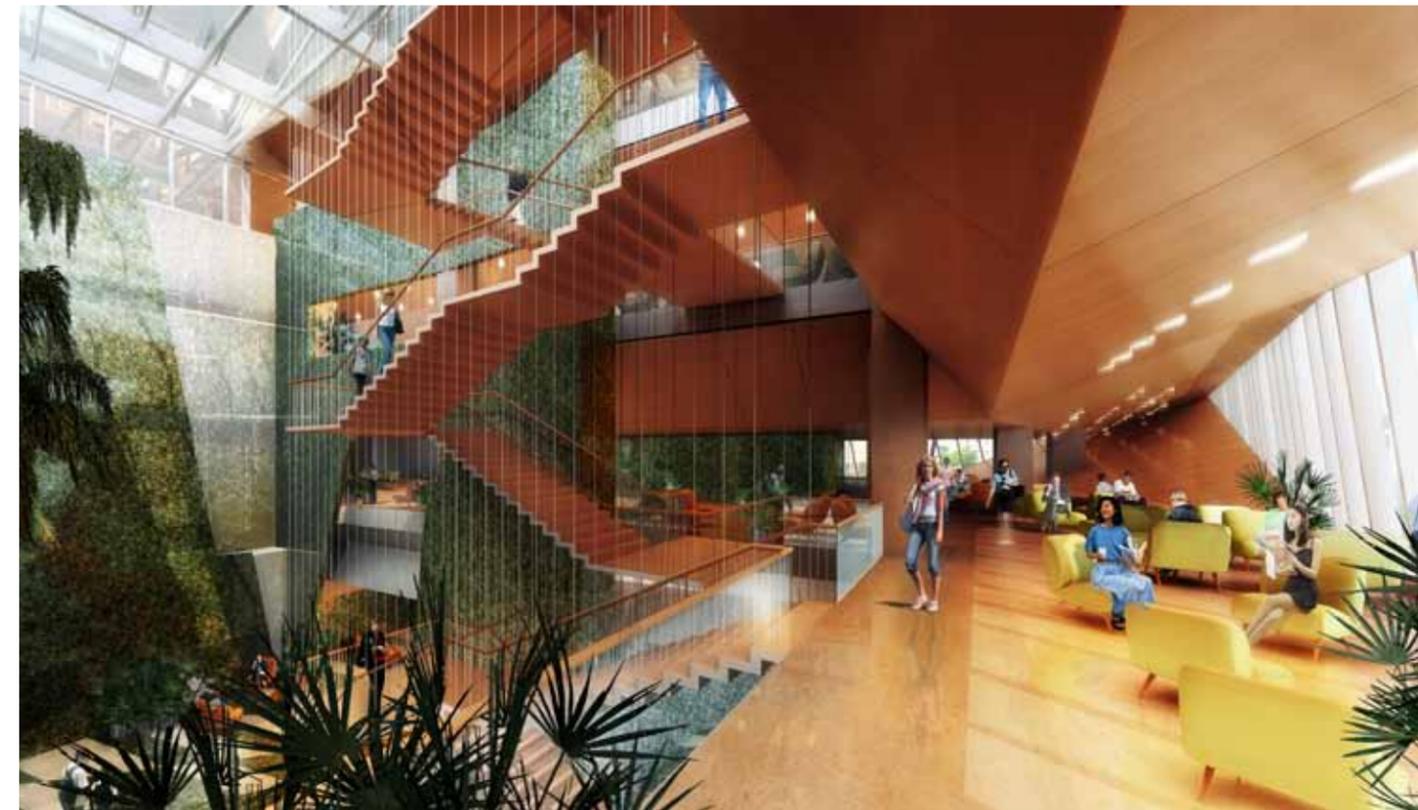
There is still a big gap dividing hospitals with huge investments and hospitals with lack of resources

These projects reflect a rise in demand for private healthcare and have in common enlightened clients that want to create flagship facilities with a strong sense of community integration. “They wanted something that would be an iconic building – something that would be recognisable not only in the community, but in their country as well,” says Greg Wieland, project designer for Gresham, Smith & Partners. For Clinica Delgado, the practice envisaged the integration of local cultural pointers – and local building materials – with high-quality, patient-centric spaces and American-style hospital management. These include a four-storey atrium that Wieland describes as “something really special”, with local-granite-clad walls, an indoor waterfall and suspended stairway; there’s also a rooftop garden. The jagged shape of the facade’s glass curtain wall is a complex design and one that certainly offers the distinctiveness that Grupo Salud were searching for: as Wieland puts it, “They needed strong architecture as well as strong human experience.”

Clinica Delgado will be managed by the American Hospital Management Company, further indication that facilities are looking to North America not just for architectural services but for the business and procurement side, too. The IFC has loaned \$25m to the project, seeing Grupo Salud as a “reputable sponsor” and recognising the opportunity of the company creating vertically integrated insurance and healthcare provider systems, also commonly found in the US. In Santiago, RTKL and MOBIL are working on the former’s first Latin American healthcare project, a bed-tower extension to Clinica Las Condes, expected to open late 2013. The hospital is affiliated to Johns Hopkins International (JHI), and RTKL’s Scott Rawlings says that the commission came about



Brazil’s first healthcare PPP, Hospital do Subúrbio, is being used as a model for further facilities



Completion date: Estimated April 2015
 Client: Grupo Salud
 Number of beds: 144
 Size: 35,000sqm
 Architect: Gresham, Smith & Partners

Clinica Delgado, Lima, Peru
 Gresham, Smith & Partners says its aim for this building is to be the best hospital in Latin America – and certainly a beacon of excellence for Peru. The tone is set with the building’s facade, a complex, angular curtain wall of transparent and fritted glass that soars upwards at the corner where two streets meet, its form inspired by the rocky outcrops of Machu Pichu. The fritted glass, made locally, will provide solar shading and is set off by swathes of greenish local granite. These fractured surfaces and building materials are repeated inside, in a four-storey atrium space. A tight site means there are five storeys below grade, and ten above (all parking is underground); patient rooms are finished in natural materials and the positioning of the beds orientates the patient towards the natural light, with views to an adjacent archeological site and the surrounding community. The hospital will be strong on cardiology and oncology, reflecting the region’s increasing burden of non-communicable diseases, as well as a desire to attract medical tourists from elsewhere in Latin America, and further afield in North America (it is being built in partnership with an international operator, American Hospital Management Company).

Clinica Las Condes, Santiago, Chile

RTKL's first healthcare project in Latin America is a private hospital in Santiago; RTKL's Scott Rawlings says that the project "is an opportunity to combine state-of-the-art healthcare planning concepts with a real love of design and the environment". The hospital, in need of expansion, created a masterplan with Johns Hopkins International, which in turn recommended RTKL to design this 292-bed extension. The two bed-towers will more than double capacity, with state-of-art patient care units (both medical and ICU) and a new surgical suite. Its facilities will incorporate advanced technologies and hotel-like environments with plazas, gardens, water features and artwork. The expanded hospital will also have a stronger focus on accommodating the needs of patients' families – visiting groups tends to be large, so there is more generous waiting space. Lastly, this is a hospital that tries to "give back" to the community: the ground and first floors are set back from the walkway, with the remaining floors cantilevered over them, encouraging pedestrian use; and there are many reasons for the wider community to visit, with public and education space, a cafe and a local art programme.



Completion date: Estimated late 2013
 Client: Clinica Las Condes
 Number of beds: 292
 Size: 120,000sqm
 Architects: RTKL, MOBIL Architects



through its recommendation: "I think the client here was looking for cutting-edge healthcare planning and had confidence in Johns Hopkins' recommendation. Also, the collaboration between RTKL and JHI was seamless and productive. We really enjoy joining forces to bring clients a much wider platform of services." He adds that MOBIL, which acted as local partner on the project, "brought significant talent to the table. Their insight into the client and the region was critical."

Sustainability issues

The IFC has also supported several public-private partnerships in Latin America, including Brazil's first healthcare PPP, Hospital do Subúrbio, which opened in 2010. For Tlalnepanla Hospital in Mexico, a 120-bed facility, the IFC is using its financial muscle to push the sustainability agenda – it will be required to have a LEED Silver certificate for both the hospital's construction and operations. In August, the IFC announced \$12m of financing for Hospitaria, an energy-efficient 50-bed hospital in northern Monterrey, Mexico, that will improve access to health services for low- and middle-income communities; it opens this October.



Hospitaria, a new energy-efficient 50-bed hospital in northern Monterrey, Mexico, has received \$12m of IFC investment

Rawlings says that, in Chile at least, “they are very sensitive to sustainability and the human experience,” although it is perhaps telling that there is no LEED equivalent for Latin America (or its individual countries). The World Bank has said that public institutions such as hospitals should be acting as flagship projects to promote the long-term savings opportunities that sustainable procurement can provide, and this ought to naturally extend to the fabric of the buildings themselves. The first LEED-certified hospital in Latin America is the Hospital Universitario San Vicente de Paul in Rionegro, Colombia, designed by Condisegno and Perkins+Will (see case study). It uses vernacular building materials, including local brick (used inside and out), Colombian marble and wood veneer from nearby forests. Approximately 80% of the building is naturally ventilated; rainwater harvesting and an on-site wastewater treatment plant conserve water.

RTKL and GS&P both paint a picture of Latin America as family focused, which is reflected in how hospitals are arranged. “In Peru, and Latin America, family is very important, so waiting rooms have to be a little larger. The LDRs [labour, delivery and recovery room] needed adjacent VIP rooms,” says GS&P’s Alba Lopez-Isla, project architect for Clinica Delgado. The firm’s Frank Swaans, vice-president of global healthcare services, also mentions a different approach to infection control, “more like how the US was doing it in the 50s,” but explains the delicate balancing act of taking

the best of “western” design ideals and merging them with local concerns: “On one hand we’ve been hired to design an American-style hospital but you can’t just plop that down with no regard to local cultures and standards.” Swaans says that senior hospital staff were surprised by their level of clinical knowledge – “good communication with physicians was really important. They weren’t used to architects being able to communicate in a technical way” – and, on their side, GS&P was surprised by the local availability of high-quality materials, such as the glass that will be used for Clinical Delgado’s complex facade.

Both GS&P and RTKL say that they are seeking further business in Latin America, but Rawlings says that “they simply are not building as much healthcare as you might think”. When finished, their projects will undoubtedly attract attention for their cause, however, and it will be up to enlightened governments, insurance groups and private developers to take forward the ideas that they contain.

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References

1. *The Scandal of Inequality in Latin America and the Caribbean*. Christian Aid, April 2012. Accessed at: <http://bit.ly/OlzcYz>
2. *Population Aging: Is Latin America Ready?* World Bank, 2011. Accessed at: <http://bit.ly/fbYKfH>

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