



Impact Investment Landscape for Women's Health

Spotlight on Colombia & Peru

NOVEMBER 2019

PREFACE

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Investing in women's health is a critical component of investing in women's economic and social development.

The Linked Foundation is committed to investing in opportunities that improve the health and economic self-reliance of women and their families in Latin America. In 2017 we decided to focus on areas related to the reproductive health of women, including contraception, maternal health, and preventative care such as cancer screening. Within this area, Linked is interested in supporting high-impact, financially sustainable solutions. While health social enterprises and nonprofits with sustainability-oriented programs are generally gaining traction in the region, the Foundation has found it challenging to identify market-based, investable opportunities to improve women's health in Latin America.

As we aspire to catalyze investment in Latin America for women's health, we sought to generate knowledge for dissemination in the impact investment community. To this end, we funded a landscaping effort to be conducted by colleagues at the William Davidson Institute (WDI) at the University of Michigan. The landscaping focused on two countries, Colombia and Peru. We hope that this paper provides the stimulus and information needed regarding the business and impact opportunities for women's health in Latin America and inspires a sense of urgency to extend this work beyond Colombia and Peru.

PREFACE

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Access to quality healthcare is foundational for women to care for themselves and their families. From this, they can break out (or stay out) of poverty, acquire education, run their small businesses and repay their microfinance loans.

International development and the donor community has long prioritized women's health. As countries in Latin America have 'graduated' from donor funding in recent decades, this has (in some cases/countries) negatively impacted women on the margins, whether in urban poor settings or rural remote areas. While country economies and health systems have advanced, underserved women in Latin America have not necessarily obtained or maintained access to critical healthcare services and products when and where they need them. At the same time, impact investment has largely focused in areas such as microfinance, fintech and agriculture – with considerably less attention to the healthcare sector. For these reasons, this line of research and dialogue is incredibly valuable.

In conducting this study for the Linked Foundation, WDI brings a global health viewpoint, with the goal of generating near-term actionable knowledge as well as longer-term understanding and sustained efforts towards investing in women's health, and healthcare more broadly. At WDI, we are guided by the principle that thriving businesses drive economic development and improve social welfare in low- and middle-income countries (LMICs). In healthcare, we study how the private sector can be leveraged to expand access for underserved populations and improve health outcomes.

From an impact investment standpoint, healthcare presents a unique set of challenges from other sectors – requiring a different lens and potentially steps beyond pursuit of individual investment opportunities. Hopefully this mapping exercise will facilitate exploration and investment, as well as a deeper interest in developing an ecosystem across the region for women's health investment.

ACKNOWLEDGEMENTS

We want to thank the many interviewees across multiple organizations who shared their time, expertise and views during the course of our research. We are extremely grateful also for the many referrals and introductions, as these provided important leads in our mapping process. Indeed, we hope that this paper will serve as an early building block for more insights to follow, to generate ideas for innovation and partnership and to generally advance the cause of impact investment for women's health across the Latin American region.

We also express our gratitude to the Linked Foundation for initiating this important work at a key time for the Latin American region. We had the opportunity to discuss initial findings with individuals at meetings at CLIQ: Nexus (La Cumbre Latinoamericana de Inversión de Impacto en Quito in Quito, Ecuador, October 2019); SOCAP (Social Capital Markets in San Francisco, California, October 2019); and FLII for Central America (Foro Latinoamericano de Innovación e Inversión, Antigua, Guatemala, November 2019).

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ACRONYMS & KEY DEFINITIONS

ADRES	Administradora de los Recursos del Sistema General de Seguridad Social en Salud (In Colombia: the entity that manages the financial resources of the General Social Security System to cover provision of services through public and private sector entities)
AFS	Asociación Familia Sana
ANDE	Aspen Network of Development Entrepreneurs
ASIFA	Asociación de Salud Integral para la Familia
ASIM	Asociación Salud Integral de la Mujer
APMF	Asociación Peruana Mujer y Familia
AVISAA	Asociación Vida y Salud de la Gran
EPS	Entidades Promotoras de Salud (Health promoting entities)
EPS-S	Entidades Promotoras de Salud Subsidiadas (Subsidized Health promoting entities)
ESE	Empresas Sociales del Estado. (State social organizations)
ESS	Empresas Solidarias de Salud. (Health Solidarity Companies)
GIIN	Global Impact Investing Network
HPV	Human Papilloma Virus
IDB	Inter-American Development Bank
IPPF	International Planned Parenthood Federation
INS	Instituto Nacional de Salud
IPS	Institución Prestadora de Servicios (Health providing institutions)
LatAm	Latin America
LAVCA	Latin American Private Equity & Venture Capital Association
MMR	maternal mortality rate
MOH	Ministry of Health

MSF	Médecins Sans Frontieres
NGO	non-governmental organization
PAHO	Pan American Health Organization
PPG	Planned Parenthood Global
PPP	purchasing power parity
SIS	Sistema Integrado de Salud (Integrated Health System: a comprehensive health system implemented by the Ministry of Health in Peru)
SPOG	Sociedad de Obstetricia y Ginecología de Peru
SRH	sexual and reproductive health
SDG	Sustainable Development Goal
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UPCH	Universidad Peruana Cayetano Heredia
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

The William Davidson Institute (WDI) at the University of Michigan (U-M) conducted a landscaping study for the Linked Foundation in order to assist in catalyzing impact investment interest and capital to the most-needed areas of women's health in Latin America. Colombia and Peru were selected as the countries for study, based upon an initial scoring process across twelve countries. The country scoring utilized indicator sets for two domains: extent of unmet need in women's health and readiness for investments. For the selected countries, the overall goals were to identify gaps in service provision, identify areas of opportunity for investment, pipeline opportunities, and examples of impact-forward, sustainability-oriented women's health programs. Ideally the types of investment for various organizations could also be described. The work was conducted between May – November 2019. WDI worked closely with Linked throughout execution of the project.

Investment in women's health might be readily considered a subset of gender lens investing. As described in IDB Invest and ESADE's recent report, a key area for incorporating gender into investment decisions is to invest in companies developing products and services that positively impact women.¹ Accessible and quality healthcare is a foundational investment as an underpinning to women's economic empowerment and ability to successfully conduct their lives and to care for their families. Sustainable Development Goal (SDG) 3 is "*To ensure healthy lives and promote wellbeing for all at all ages*", and within this macro goal, several of the health targets focus on women, including 3.1: by 2030, "*Reduce the global maternal mortality ratio (MMR) to less than 70 per 100,000 live births*". To provide context on how Colombia and Peru are doing relative to the 3.1 goal, WHO reported that the MMR for the two countries was 64 and 68 per 100,000 respectively, so not far below the 70 global goal which applies to all, including the low-income countries.

For the purposes of this landscaping process, women's health is treated as a focused arena within the broader realm of the health, with the greatest focus on sexual and reproductive health (SRH), maternal mortality, and breast / cervical cancer. Gender violence is generally included in a broad definition of women's health, for the relation to SRH. From an impact standpoint, the mapping centered on health investments that would focus on providing basic, affordable, safe and sustainable investments in health to women, particularly marginalized groups and low-income individuals. This was consistent with WHO's principles and the SDGs, and as described in Principles for Responsible Investment (PRI), Impact Investing Market Map.²

Ideally women's health would also include mental health services, as well as diagnostics and treatment for non-communicable diseases such as diabetes, hypertension and heart disease. While some of the health clinics and facilities noted in this report do indeed provide those services, it was generally outside the definition of women's health. For the search process, it was critical to consider each country's broader context, i.e. current access to health services and products through the country's health system, as well as the gaps which exist. This includes the financing and provision of products

¹ Gender Lens Investing: How Finance Can Accelerate Gender Equality in Latin America and the Caribbean, IDB Invest and ESADE, March 2019

² PRI, Impact Investing Market Map 2018

and services across both the public and private sectors. Additionally, human rights and gender sensitivity are essential components to healthcare delivery and innovation.

Following are the key takeaways from this mapping process, which will be discussed in detail throughout the report.

- 1) In the short-term, the women's health pipeline presents a promising but limited set of investment-ready opportunities in Colombia and Peru. Generally speaking, both the social enterprises and innovators/start-ups need support to build their business cases.
- 2) Successful models include social enterprises pairing revenue generation with social mission.
- 3) Emerging models are linking technology with healthcare to increase access to information, generate demand for health products and serve people in remote regions.
- 4) Ecosystem development and an enabling environment are needed for long-term catalytic effect, including support for innovators and social enterprises to become investment ready. Mobilizing resources to establish an innovation development platform dedicated to women's health, with coordinated activities, will produce the best pipeline.
- 5) Partnering with the government to close the circle of health services and treatment is fundamental to the success of ventures seeking to serve women's health needs.
- 6) There is a set of start-up, innovator-led health companies that do not have a women-only focus in Colombia and Peru. Additionally, the identified companies represent a range of potential social impact which can be evaluated by individual investors.
- 7) A regional approach for women's health in Latin America is likely to generate a more robust list of potential investment opportunities.

About the Study

Background

The process of identifying opportunities for investment in women’s health in Latin America bifurcates into 1) understanding a country’s structural, market and normative issues that may contribute to access barriers for women’s health, and 2) considering how a country’s business ecosystem may facilitate or inhibit the opportunity for investment in sustainable social enterprise business models. Understanding such potential issues and ecosystem factors is important to seeing high-impact opportunities and facilitating investment-based solutions.

Scouting for investment opportunities is generally an ongoing effort that occurs through networking and engaging in a given sector through the help of accelerators and similar organizations. In this case, we were aiming to complete a landscape scan for two countries, in a relatively short period of time.

Methodology for Country Selection

The first step of the project was to develop a country prioritization in order to select one or two countries for a focused landscaping effort. We started with an initial set of 12 countries, mutually agreed upon with the Linked Foundation.

The 12-country set included: Argentina, Bolivia, Colombia, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, El Salvador, and Paraguay, Peru, and Uruguay.

We started with two domains directly associated with our goal of landscaping impact investment opportunities in women’s health:

- ⇒ Extent of unmet need in women’s health; with a focus on reproductive health
- ⇒ Readiness for investment

For both of these two domains, the next step was to identify the criteria and indicators for each domain. To develop a scoring mechanism that would allow comparison across the countries, we examined and selected standardized measures from sources such as the World Health Organization (WHO), the Pan-American Health Organization (PAHO), United States Agency for International Development (USAID), and The World Economic Forum. Key criteria for indicator selection were standardized measures available for all 12 countries from independent, well-established, credible organizations. We grouped the metrics and indicators into the following sub-groups:

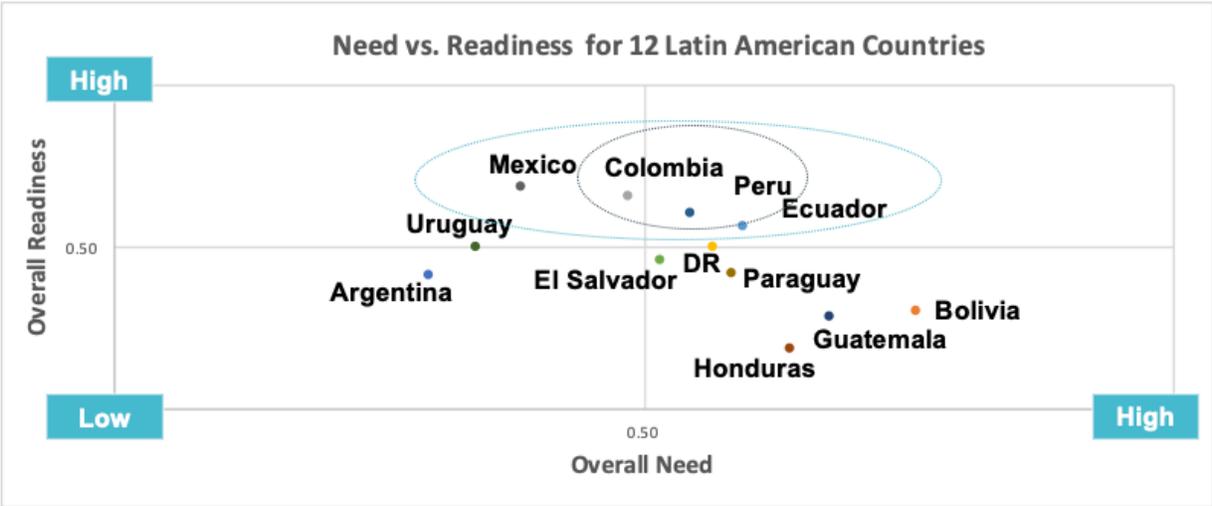
Overall Need	Overall Readiness
Need for Social Investment	Country Readiness
Unmet Need in Women’s Health	Social Enterprise Climate
	Ease of Doing Business

Population statistics and health metrics (specific to women) constituted the indicator sets for Unmet Women’s Health Need. Within health, the predominant indicators related to reproductive health, maternal health, health sector access, and country financing of health care. Indicators for breast cancer and cervical cancer were not included due to difficulties in getting the data from reliable sources at the time of the scoring step. Country infrastructure, social enterprise climate, and measures from the Global Competitiveness Index constituted the indicator sets for Readiness for Investment.

The subsequent steps in the process were as follows:

- Populate the data sets for each country by domain and criteria
- Normalize each set of data to a 0 to 1 scale
- Apply the country score calculator for each domain / data set; generate scores for each country by domain and then a total country score

Once the scoring was completed, the 12 countries were mapped onto a matrix, with overall need and overall readiness as the x and y axes, respectively. The results of the baseline scenario scoring process are represented in the following matrix:



Based on this scoring, four countries emerged as the best choices based on readiness: Mexico, Colombia, Peru and Ecuador. Peru and Colombia emerged as the two with the highest blend of both maximal readiness and need. It is not surprising that countries with greater need would also have lower readiness for investment. We also conducted some scenario iteration, varying which indicators were included. The reduced indicator set widened the dispersion but not the relative positioning of the 12 countries on the matrix.

We supplemented the scoring process with ~ eight interviews with experts in Latin America health and investment to incorporate key opinion leader views. From the interviews and regional knowledge, we additionally ‘rated’ each country based on two other factors: a) practicality in completing the landscape effort, and b) ease of technical execution of investment projects.

Based on final analysis derived from data and interviews, Colombia and Peru were chosen for the landscaping exercise.

Method for Landscaping and Opportunity Scouting

With the country selection of Colombia and Peru complete, we began the landscaping process. Within the focus on women's health, we were looking across service delivery enterprises; technology including med-tech such as devices, diagnostics, and digital technology, incubators from academic institutions; and non-governmental organizations which have been providing reproductive health services for many years.

The landscaping process consisted of two work streams:

- 1) Mapping and understanding the current service provision of women's healthcare, including:
 - a) Identification of gaps in service and inequity in access
 - b) Considering the root causes of the gaps / inequity
 - c) Identification of areas of opportunity for investment
- 2) Identifying current pipeline opportunities and examples of impact-forward, sustainability-oriented women's health programs
 - a) Organization identification
 - b) Describing potential investments

The work approach was a blend of desk research, networking, telephone interviews and in-country visits to Colombia and Peru, of seven workdays in duration per country. Search criteria included enterprises serving women's health needs through a variety of means, including service delivery, products, medical technology, and digital technology with revenue-generating business models. While the goal was to find sustainable entities with the potential for scale, we were receptive to early stage ideas. Since social enterprises and young start-ups are often local organizations with limited presence, on-the-ground networks are essential to a scouting and search process. Given the limited time for the project, we networked through the social enterprise and innovative networks, including incubators and accelerators to identify as many leads as possible.

From this work, the mapping of intersections across needs and opportunities was completed. This report captures the results of the work.

Limitations

This is an early foray into mapping the landscape of impact investment opportunities for women's health in Latin America, and there is limited published research to draw upon; necessitating a largely primary research effort to identify opportunities. Conducted in a relatively short period of time (June –

September 2019) and largely through networking, this research may not have identified all of the possible opportunities which currently exist in Colombia and Peru.

Additionally, information collection relied heavily on interviews conducted with market actors in Colombia and Peru which are subjective in nature. Views expressed are our own, and omissions of organizations are not intentional. Thank you to the several organizations which shared their early stage investment concepts. While it was beyond the scope of this report to include the concepts, further details are available, and introductions can be made.

Several companies and enterprises are named and described at a high level in the course of this document. Most entities did not have formal, prepared proposals for investment. Observations on individual organizations represent author views and do not imply endorsement by either WDI or the Linked Foundation. It was beyond the scope of the project to complete due diligence at an individual organization level.

Key Findings: Landscape for Impact Investment in Women's Health: Colombia and Peru

Women's Health and Context in Latin America

Women's health focuses on needs that are unique to women and girls, namely: sexual and reproductive health (SRH), maternal health, gender violence, and the related mental health implications. While chronic diseases such as diabetes, hypertension and related factors such as nutrition and obesity are highly critical for women's health, the focus in this landscaping was on those health considerations which are unique to women. SRH, maternal health and gender violence are overriding factors in women's empowerment which enable them to live to their full socioeconomic potential. SRH and gender violence are directly linked to rights and education, as well as service delivery. Structural, cultural and legal barriers prevent women and adolescent girls from fully accessing the information and services which they need.

The context around SRH, maternal health and gender violence in Latin America generally and in Colombia and Peru specifically highlights the great potential for social impact.

- Latin America is the only region in the world where the number of pregnant girls under 15 years of age increases, and each year, more than 2 million girls between 15 and 18 become pregnant. (Planned Parenthood Global and United Nations Population Fund)
- 14 of the 25 countries in the world with the highest rates of femicide are in Latin America and the Caribbean. More than 1 million adolescent girls in Latin America have suffered sexual violence or other types of forced sexual acts. (UNICEF 2017)
- National data for both Colombia and Peru hide the extreme disparities between rural and urban, as well as ethnic gender differences. For example, Peru has an estimated 51 indigenous groups, across which the total fertility rate was 7.7 children per woman and the mortality rate was 10.6 per 1000, double the national rate.³
- Historical violence in both countries continues to have significant consequences on the population's health. Data from Colombia, reported by Médecins Sans Frontières (MSF) for 2015-2016 on the areas of Buenaventura and Tumaco illustrates the negative physical and mental health from ongoing exposure to violence, including depression and anxiety rates of 25 and 13% amongst people assisted by MSF.⁴ Additionally, their medical data indicated that just 9% of rape cases were treated within the first 72 hours.

³ PAHO, Health in the Americas <https://www.paho.org/salud-en-las-americas-2017/?p=3232>

⁴ MSF, Colombia: In the shadow of the peace process, The impact of other situations of violence on the population's health

Enterprise and Investment Types

The landscaping search was designed for a broad reach, with the guiding principle of organizations that are having a positive impact on women’s health. Potential investments could include direct healthcare delivery services in SRH, maternal health, mental health relating to gender violence, and also ideally would include cancer screening and treatment, and HIV/HPV care. In addition to care delivery, the scanning and search effort sought to find any medical technology opportunities such as diagnostics, digital apps and telemedicine, in order to develop a broad pipeline. Existing opportunities with potential for scale were of particular interest.

Social enterprises were of particular interest, given the focus on women’s health. Social enterprises are private companies - either for-profit or nonprofit - that combine a sustainable, private sector business model with social goals. Social enterprises seek to generate revenue and often profits, and pair these goals with a strong social mission.

Potential for Social Impact

While Colombia and Peru are upper middle-income countries, inequity in healthcare access creates pockets of high unmet need. Figure 1 summarizes the need areas and possible solutions at a conceptual level. Currently there are a limited number of ‘investment ready’ opportunities in women’s health – but there is significant potential to make progress, through both individual organizations as well as ecosystem development.

Figure 1: Areas of Opportunity for Investment in Women’s Health

Need Areas	Description	Possible Solutions
Business model innovation for existing social enterprises serving women	Organizations which started with donor-based models need investment and technical assistance to transition and maintain / evolve service delivery	Investing in existing NGOs, in transition to social enterprise
Increased access to service delivery for all women where it is not currently sufficient	Systemic barriers resulting in higher rates of teen pregnancy, maternal mortality and gender violence in: <ul style="list-style-type: none"> • Rural, remote areas • Indigenous communities • Urban poor • For women without health coverage 	Scaling existing facilities and new delivery models for greater reach, such as avoiding the investment in brick and mortar clinics Funding new services into existing delivery sites (i.e. specialized cancer treatment,

<p>Increasing the quality and breadth of care which specifically target women through existing healthcare systems</p>	<p>Facilities serving marginalized and poor women, where the range and quality of care is highly limited or compromised, for example:</p> <ul style="list-style-type: none"> • Time from diagnosis to treatment • Range of services needed such as diagnostics and cancer treatment <p>Liquidity issues in system – payment delays to providers, resulting in cash flow issues, causing:</p> <ul style="list-style-type: none"> • Lower quality • Limited breadth of care • Delays in service provision and treatments 	<p>to reduce requirement for travel to capital cities for treatment)</p> <p>.....</p> <p>Application of technology to improve delivery of health information and services and improving referral system</p> <p>.....</p> <p>Cash management and financing methods such as factoring solutions</p>
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Key Takeaways from Mapping Process

According to LAVCA’s October 2018 report for Latin America, health as a sector had received \$15 million USD across 28 deals, in comparison to a total of \$1,443 million USD across 280 deals.⁵ This \$15 million is just 1% of the total, and dwarfed by the relatively massive investments in microfinance (\$785 million), agriculture (\$306 million) and ICT (\$146 million). With this as background, it was not surprising to find a limited set of opportunities within just two countries, and for a narrower focus of women’s health.

What follows are key takeaways from the mapping process, during which we will highlight select organizations. The intention of highlighting these organizations is twofold: to introduce potential opportunities that can be evaluated or developed, as well as to represent archetypal organizations or opportunities addressing the need areas summarized above. Additional organizations are listed later in the report.

1. In the short-term, the women’s health pipeline presents a promising but limited set of investment-ready opportunities in Colombia and Peru. Generally speaking, both the social enterprises and innovators/start-ups need support to build their business cases.

The search process yielded a limited number of ‘investment ready’ opportunities in women’s health. In-country investors explain that healthcare is not like other sectors for impact investment, where the opportunities are ‘ready to go’. Health-related enterprises with potential projects or growth plans needing investment have typically not prepared their term sheets, nor are they necessarily able to

⁵ LAVCA, The Impact Investing Landscape in Latin America, Trends 2016 & 2017, October 2018

describe the type of investment mechanism they are seeking. Additionally, there is limited early stage funding according to in-country incubators.

Colombia's entrepreneurship ecosystem does not focus on health, most likely due to the nature of the country's health system. Investor and incubator representatives explained that fintech and other technology efforts are far more common, and just a few of these organizations have health as an established 'vertical' in their organizations. The health enterprises which were mentioned were frequently oriented towards digital health and apps, targeting middle- and high-income population segments and rarely just women. Interviews confirmed the struggle to source scalable investments, particularly in the realm of social enterprise in health.

Entrepreneurship programs such as Endeavor Colombia (which does have healthcare as a vertical) scout for entrepreneurs to nurture which are already operating in the range of \$1 million annual revenue, with highly innovative models. They are not looking at traditional entities such as hospitals and other health providing institutions in Colombia known as Institución Prestadora de Servicios (IPS). This reduces the potential for investment in the institutional, private providers which make up much of Colombia's healthcare system. Additionally, the non-profit image of highly successful, leading providers of women's healthcare in Colombia, such as Profamilia and Fundación Oriéntame mean that increased awareness and understanding can perhaps foster investment opportunities. Organizations which formed as non-profits with donor support have often evolved to sustainable social enterprise models with the potential for scale, and they will benefit from guidance in how to describe investment concepts and consider various forms of capital.

Peru's innovation ecosystem similarly does not have a focus on healthcare delivery if considering new start-up clinic organizations. That said, there are several primary care clinics in rural and urban poor settings which have a strong focus on women's health and SRH needs, as evidenced by their partnerships with Planned Parenthood Global. These enterprises are listed below. In the incubator space, BioIncuba has a life sciences focus, supporting efforts in diagnostics, devices and basic sciences.

2. Successful models include social enterprises pairing revenue generation with social mission.

Successful models exist in which the non-profits serving women's health needs utilize commercial practices along with programmatic funding to achieve social and financial objectives.

In Colombia, two well-established social enterprises stand out for their excellent reputation in women's health, specifically SRH. These are *Profamilia* and *Fundación Oriéntame*: both utilize a rights-based approach with differentiated attention models to meet the varying needs of Colombia's ethnically diverse women.

- *Profamilia* is a private, non-profit organizations specializing in SRH services, with 35 clinics across Colombia. They utilize care delivery and social intervention models which are differentiated to cultural and socioeconomic contexts. Their user population is very economically diverse, including individuals covered by insurance contracts as well as vulnerable people without ability to pay. <https://profamilia.org.co/>

- *Fundación Oriéntame* provides a range of SRH services in their eight clinics, with preferential rates for teens. They also have an affiliated organization, Fundación ESAR which trains women's healthcare providers across Latin America in best clinical and business practices. <https://www.orientame.org.co/>

Additional organizations in Colombia include organizations which address women's empowerment and health through direct health services, and training modules that may either be highly targeted such to certain audiences (such as pregnant teenage girls) or broader efforts for community, employer and school audiences. Fundación Juanfe and Nuestro Flo are two such enterprises:

- *Fundación Juanfe* is a private non-profit social enterprise which serves extremely poor teenage girls in Cartagena and Medellín, Colombia during their first pregnancies. They utilize a 360-degree model with a range of holistic services to guide the girls in job training, to break out of the cycle of extreme poverty and repeated pregnancies. This prevents subsequent pregnancies in the next five years following attendance of the program, reducing maternal mortality and breaking poverty traps, allowing their children to have better opportunities for life. The program pillars are empowerment in sexual and reproductive rights, education with core values, healthy habits, physical and mental health and life planning as well as financial autonomy. They have revenue generating models including social enterprises in Chile and Panama, as well as bakery models. Juanfe's main center of operation is in Cartagena, a city in the Caribbean region of Colombia that presents high levels of inequality and teen pregnancy rates. Model expansion is occurring elsewhere in Colombia, as well as in Panama, Chile, Paraguay and Mexico. <https://juanfe.org/>
- *Nuestro Flo* is a social enterprise in Colombia, focused on the promotion of gender equality and diversity / non-discrimination through running educational workshops, producing learning materials for schools and using the arts to advance the empowerment of women. They work with entrepreneurs from Afro-Colombian communities and run interventions for companies such as coffee and chocolate producers. Their business model is to conduct workshops for employers and to work directly with local communities, with a mixed funding model. Their first branded project was *El Negro EstaDeModa*, to provide an integrated and coherent solution to the two interrelated challenges of racial discrimination and social/economic development of black communities. Their main goal is to help Afro-Colombians to overcome poverty and exclusion. <https://www.elnegroestademoda.com/>

From Peru, we highlight two social enterprises with very different areas of focus:

- *APROPO* is a long-established social marketing organization (SMO) with their own successful brand of condoms and a deep commitment to conducting awareness and education programs for youth, now utilizing chatbot technology. Headquartered in Lima but with offices across Peru, APROPO is now working to support the establishment of a midwife service delivery program, called RIAMA. <https://www.apropo.org.pe/>

- *Hands on Peru* is a nonprofit that runs *Centro de Salud Publica* – a community health center model to develop programs to promote the physical, mental and communal health in the village of Villa Los Angeles, Huanchaquito Peru. They serve Peruvians in low socioeconomic status who are not able to access good preventive and other healthcare due to the weak public sector system. Their health programs focus on promotion, prevention, education, evaluation, investigation and community participation. They have established a sustainable program which involves funding from global health rotational programs. <http://www.handsonperu.org/>

Additionally in Peru, as noted, there are several primary health clinics which have in the past or are currently partnering with PPG. These will be described more later, but they include: *Asociacion Familia Sana (AFS)*, *Asociación Peruana Mujer y Familia (APMF)*, *Asociación de Salud Integral para la Familia (ASIFA)*, and *Asociación Vida y Salud de la Gran Familia (AVISAA)*.

3. Emerging models are linking technology with healthcare to increase access to information, generate demand for health products and serve people in remote regions.

Telemedicine, tablet technology and remote diagnostics emerged as the examples of linking technology with healthcare to increase access to people in the mountainous and Amazon regions of Colombia and Peru. A few examples stand out as possible investment opportunities, and as prompts for stimulating further innovation.

First, as a country, Colombia has promoted the application of telemedicine to address barriers related to geographic and functional access, comprehensiveness and continuity of care. According to the Ministry of Health and Social Protection, 242 public health institutions had provided telemedicine services to remote areas or regions where health services were in short supply by 2016.⁶ A number of telemedicine companies emerged during the mapping of opportunities. These require further study to assess the target market segments – whether serving upper-middle income individuals too busy to get to the doctor’s office or extending reach to remote regions and lower-income people. Similarly in Peru, the *Sociedad de Obstetricia y Ginecología de Perú (SPOG)* is initiating research and planning for a telemedicine-based project in order to increase care delivery for women in rural and remote areas of the country.

Second, the organization *Mamas del Rio* in Peru has spearheaded the use of a specialized app for tablets, which is enabling community health workers (CHWs) in approximately 80 rural communities in the Loreto Region of the Peruvian Amazon to educate pregnant women and collect and send health data in order to ultimately reduce maternal and neonatal mortality. The program design was informed in part by randomized control trial (RCT) evidence from previous experiences in Latin America, Africa and Asia showing that home visits by CHWs can reduce neonatal mortality. App and tablet technology are leveraging the good mobile coverage and existing network of underutilized CHWs in Peru.

⁶ PAHO, Health in the Americas, <https://www.paho.org/salud-en-las-americas-2017/?p=2342>

Not necessarily limited to remote regions, the use of artificial intelligence and chatbots for smart phones is finding application across SRH and mental health applications, with the potential for high-value social impact. Artificial intelligence and chatbot providers can readily serve Colombia, Peru and other countries in the region, regardless of where they are based. *TNH Health* (Brazil) provides chatbot solutions and population health management tools for a variety of healthcare applications, including maternal care and mental health, to partners in Brazil and other countries in Latin America. TNH estimates that 80% of their mental health chatbot users are women. *APROPO* recently launched their chatbot initiative, utilizing Watson, technology from IBM. *APROPO*'s chatbot delivers information on sexuality and contraceptives to adolescents. More complex topics such as domestic and sexual violence are directed to human counselors. Chatbot implementors emphasize that they don't have to create new behaviors because the solutions are smart phone -based.

Finally, *Medical Innovation and Technology* is a 'tech for social good' company based in Lima, Peru and is committed to using asynchronous tele-ultrasound diagnostic technology to provide medical imaging solutions for rural pregnant women. This addresses the lack of specialists, accessibility and medical equipment in remote areas of Peru. The company's strategy is to offer turnkey solutions in order to reduce the high rate of maternal mortality in rural areas due to preventable, yet undetected high-risk conditions such as placental abnormalities or obstetric hemorrhage. Medical imaging is fundamental to supporting timely diagnosis, to then facilitate treatment and save mothers' lives.

4. Ecosystem development and an enabling environment are needed for long-term catalytic effect, including support for innovators and social enterprises to become investment ready. Mobilizing resources to establish an innovation development platform dedicated to women's health, with coordinated activities, will produce the best pipeline.

Noting that the health sector in Latin America is not as prepared to attract and engage with impact investment as is agriculture, fintech and energy, interviewees described the need to establish a platform to help develop the opportunities. While this will take time, it increases the probability of a pipeline emerging in the longer term. There is significant potential to make progress, through both individual organizations as well as ecosystem development.

Ecosystem needs for healthcare, and women's health specifically, take three predominant forms:

1) Mechanisms to motivate innovation that address societal needs, i.e. in underserved and marginalized sectors

Many of the 'health' ventures identified during the mapping process and in discussions with angel fund investors were more truly 'wellness' or 'fitness' in nature. Those are not included in this report because they were not women-focused, and they also appeared to target higher income population segments. Market actors in both Colombia and Peru suggested the need to incentivize creativity and technology targeted towards persistent societal needs such as the inequity in access to healthcare.

One such organization promoting this idea was *SociaLab Colombia*, part of the *SociaLab* network, which focuses on supporting solutions through topic-focused challenges and open innovation calls. They

described recent efforts, such as Challenge 12, organized with SAP and Accenture. This was an open innovation call for ideas with a gender focus and the potential for sustainability, whose impact would be aimed at reducing the inequality that affects girls, adolescent and adult women in various aspects of their lives.

Additionally, a handful of investment organizations are initiating or considering health-focused funds which could model the efforts which have occurred in other sectors.

2) Regulatory system strengthening in order to create an enabling environment for the development and commercialization of new technology is needed in Peru

In-country discussions indicated that the conservative approach of select government agencies is slowing the potential of technology development and commercialization. Programs in biotechnology and biodiversity, and centers of scientific excellence such as Universidad Peruana Cayetano Heredia, the Biomedical Sciences Research Institute at Ricardo Palma University, and ARCPER along with other entities and with the support of CONCYTEC are generating scientific and technological knowledge that requires advanced regulatory capacity.

3) Targeting incubation and capacity building efforts towards social enterprises and innovators who are seeking to work on women's health issues – to help them build their business cases, develop pitches and understand capital options

Health as a sector has not received the interest and support that agriculture, microfinance and fintech have received from the impact investment community, and this is apparent in the limited set of readily investable opportunities. This becomes even more the case with the narrower focus on women's health. This also reflects the greater complexity of healthcare, given the necessary interconnection of public and private sector as well as the payment structures. Existing social enterprises which have been serving women through cross-subsidized business models, as well as from donor funds are recognizing the need and opportunity to evolve both their delivery and financial models. These organizations will need knowledge transfer to understand capital options, based upon for-profit or non-profit configuration.

5. Partnering with the government to close the circle of health services and treatment is fundamental to the success of ventures seeking to serve women's health needs.

Healthcare is often an interconnected system across the spectrum from education and awareness, to diagnosis and treatment – and provision of care often takes place in both the public and private sector.

As will be described in more detail later, Colombia's health system consists of a general social security health system, where public and private health providers cover the population under the subsidized and non-subsidized schemes. The subsidized plan within the General Social Security Health System covers anyone who cannot pay, and health care is provided by public and private institutional health service providers. In some cases, poor women will also opt to pay for services with uncovered fees out-of-pocket in the private sector, especially when purchasing the medicines for minor treatments (i.e. throat infection). Since poor women may visit a private clinic in order to avoid the long wait times of

the public health system, these private sector and entrepreneurial enterprises often develop and provide screening, diagnostic and referral processes for disease states such as breast and cervical cancer, or maternal risks such as placental abnormalities. However, in case an abnormal diagnosis is detected women ultimately will be directed back into the institutional social security health service for treatment, unless they are very high income with the ability to select elite private clinics under pre-paid health insurance coverage.

In Peru, *Mamas del Rio* makes referrals for care of pregnant women into the health system and is planning to sell their program to government agencies, as well as to private companies (such as in the mining industry) working in native communities, hoping the government and the mining industry will see the benefits of preventive medicine and timely treatment. However, the health system in Peru will need to have the infrastructure and the capacity to provide timely services, as physicians and nurses are not always willing to move to remote areas in the jungle and other rural areas.

Medical Innovation and Technology is another company that recognizes this structural reality in Peru, and therefore their business plan includes working with the government in order to not only receive reimbursement, but also to make referrals into the health networks where treatment will be delivered after diagnosis.

As part of their women's training and empowerment programs for microcredit and savings clients in Cali, Colombia, *Fundación WWB* educates women about their rights in health, safety and justice; and provides informational directories for local health clinics and other providers. They also supplement information provided by the public system, which may be either lacking in comprehensive content or accessibility.

Hope Peru is a social enterprise targeting the high rates of cervical cancer in Peru. They have developed an HPV detection / self-testing educational service and test kit for both commercial and social segments, utilizing community-based teams to conduct outreach and education to generate demand and use of the test kits. For women who test positive, then they will be referred into their applicable health system, which will be a public clinic for many.

What all of these enterprises have in common is the recognition that private sector social enterprises will often not be able to fully address women's health needs, but they need to partner with the public sector if they want to serve women in marginalized, vulnerable situations.

6. There is a set of start-up, innovator-led health companies that do not have a women-only focus in Colombia and Peru. Additionally, the identified companies represent a range of potential social impact which can be evaluated by individual investors.

Bionoma, *Doktuz*, *Glucolib*, and *Patient First Services* are for-profit companies in Peru, each addressing a different aspect of health care. These include diagnostic testing for diseases such as fascioliasis, employer-paid occupational health services (with a longer-term interest in women's health), non-invasive monitoring of blood glucose levels for individuals with diabetes, and mail-order pharmacy / access services for individuals with specialty diseases, respectively. These have varying potential to

serve individuals across the income quintiles. In general, these companies are closer to ready for investment exploration, or are already underway.

Other health companies identified that appear to be targeting upper income quintiles include *1Doc3*, *Doc-doc*, *DoctoPro*, *DROP* and *FeelsGood*.

Companies such as *Doktuz*, *NatClar* and *Pulso Salud* in Peru are all examples of healthcare delivery companies operating in the occupational sector, contracting with employers to conduct the annually required preventive exams and on-site clinics for employees. Such companies have expressed interest in both extending their services to employee families, as well as utilizing telemedicine and other remote care delivery methods. In-country collaborations between such occupational health companies and specialized clinical delivery/education organizations such as PPG could be designed and invested in as a means to increase women's health offerings. For example, this could increase services in a remote mining area where the employed men have access to healthcare via the employer-contracted service, but their wives and children do not, due to lack of both public and private clinics in such geographies.

7. A regional approach for women's health in Latin America is likely to generate a more robust list of potential investment opportunities.

A regional approach may produce more breadth and depth of opportunities. While this will require discernment of national health system differences, it will also leverage technology for chatbots, remote diagnostics and telemedicine. Technology such as remote mammograms and ultrasound can be readily scaled from one country to another. Similarly, diagnostic solutions such as for HPV and cervical cancer screening and treatment present the potential for scale. Finding the technology winners and then investing for scale across the region has the potential for increased impact – both social and financial.

Social enterprises serving women (and their families) in remote rural communities are generally time-consuming to find, because they generally have limited online presence and marketing, and are therefore not very visible outside of boots-on-the ground approaches. Therefore, a regional and sustained market knowledge base will increase the healthcare pipeline for all investors. Additionally, non-profit health organizations which are delivering care with both clinical and operational excellence may present opportunities for regional expansion.

Finally, this regional approach would facilitate ongoing collaboration with key market actors such as Planned Parenthood Global (PPG). For example, PPG has in-country staff partnering with an ever-evolving set of clinic organizations, across several Latin American countries. This type of ongoing networking effort would not only facilitate identification of clinics serving women and their families, but provides a tracking method of sorts, for enterprises reaching scale and with interest / potential for collaborations in telemedicine and other delivery innovations. Additionally this would contribute to the development of an ecosystem in which the NGO culture and vernacular could connect more directly with the impact investment community.

Detailed Findings: Introduction to Colombia and Peru

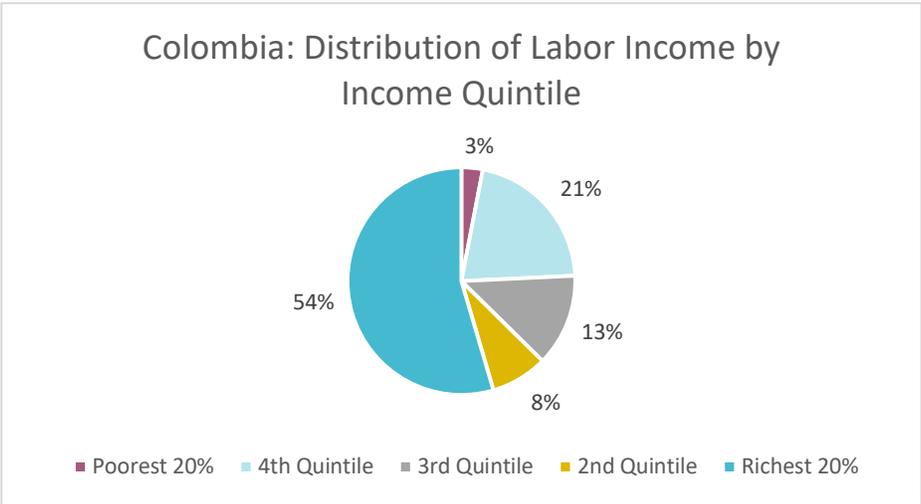
Regional and country context is critical to understanding the landscape for investment and considering the type of social impact sought in potential opportunities. A brief introduction to both Colombia and Peru will provide better understanding of the resultant needs in women’s health and how investment strategies might be developed.

Background

In the past 10 years, both Colombia and Peru have moved from low-middle-income to middle-high income countries, and this growth has allowed for the middle class to grow and increase their purchasing power parity (PPP).⁷ However, great inequalities remain between the lowest and highest quintiles, affecting the capacity of the population living in rural areas to access basic services, including health, water sanitation and other essential services.

Figure 2 below shows that over 50% of Colombia’s income is held by the richest quintile of the population, while the poorest quintile holds just 3% of total income. Similarly in Peru, Figure 3 shows that the richest quintile of the population has 47% of the country’s income while the poorest quintile has just 4%.

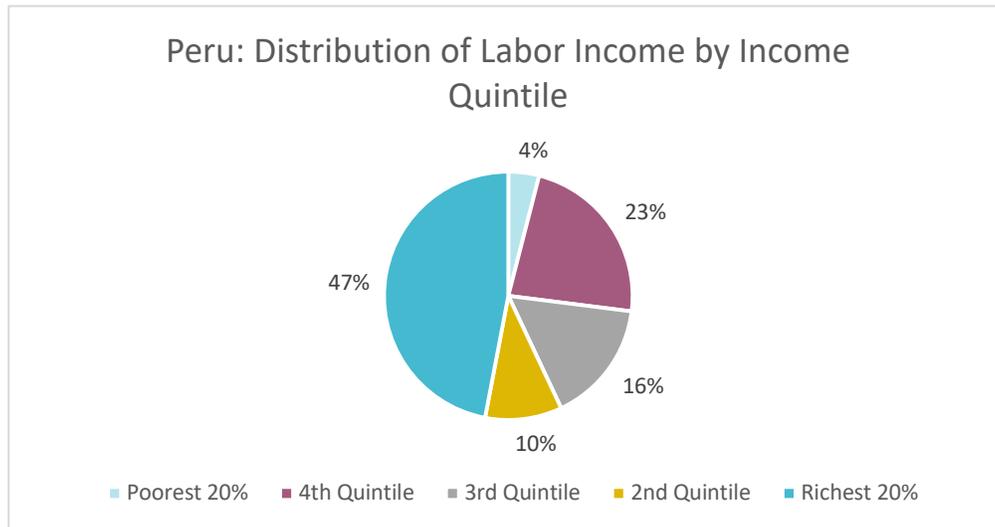
Figure 2: Colombia’s Income by Wealth Quintile



Source: LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank), 2015

⁷ Purchasing power parity (PPP) is an economic theory that compares different countries' currencies through a "basket of goods" approach. According to this concept, two currencies are in equilibrium or at par when a basket of goods (taking into account the exchange rate) is priced the same in both countries.

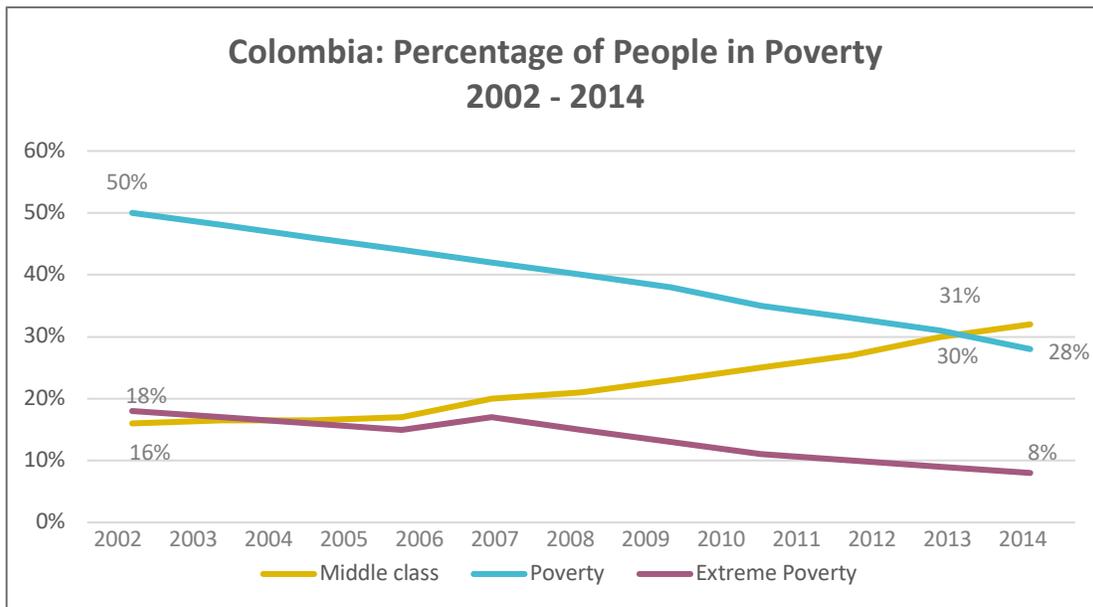
Figure 3: Peru's Income by Wealth Quintile



Source: LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank), 2015

Inequality is higher in rural than in urban areas in Latin America and the Caribbean (LAC) yet has decreased during the past 10 years. Figure 4 below shows that the percentage of all Colombians in poverty declined from 50% in 2002 to 28% by 2014. According to the World Bank, women represented 52% of the poor in 2017.⁸

Figure 4: People in Poverty in Colombia

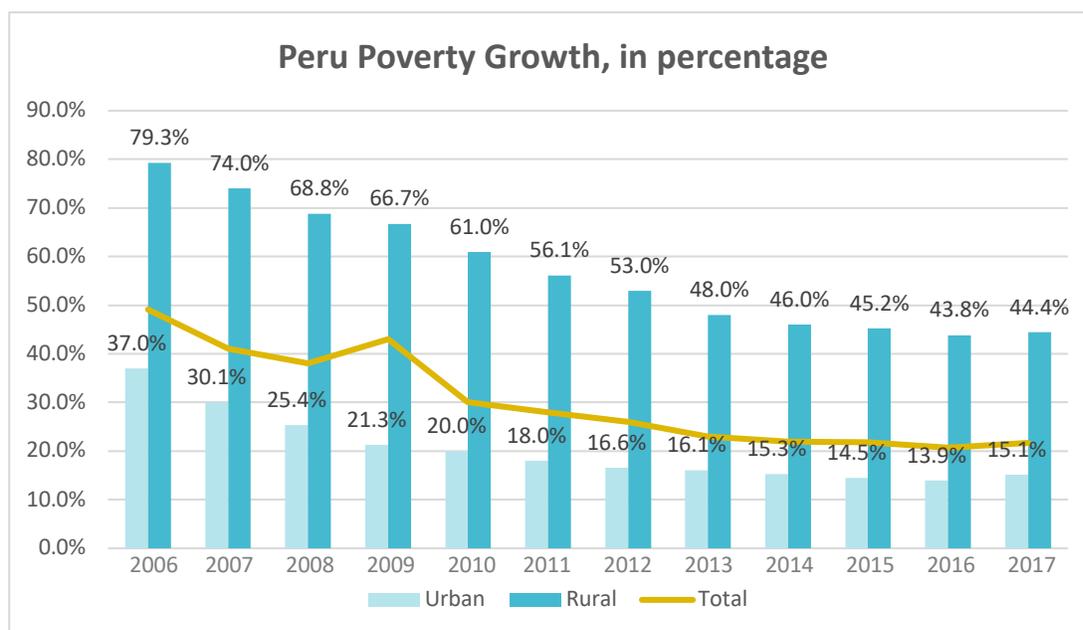


Source: Poverty: National Administrative Department of Statistics – DANE

⁸ World Bank, Poverty & Equity Notes, Gender Differences in Poverty in Colombia, August 2018.

Figure 5 shows that while the overall percentage of Peruvians in poverty has declined from 37% in 2006 to 15% in 2017, the rate of rural poverty is considerably higher than the average, at 44%.

Figure 5: People in Poverty in Peru



Source: INEI, 2017

In the case of Colombia, inequality across all quintiles is higher than in Peru: in rural areas, the GINI coefficient is 0.448 and in urban areas is 0.485, whereas in Peru, the GINI coefficients are 0.406 and 0.393 respectively.⁹ Based on the GINI coefficient, Colombia is the fourth most unequal country in the world.¹⁰

Comparative Indicators: Health Measures and Access

National statistics (see Figure 6 below) belie the inequity of access and current outcomes within both Colombia and Peru. Cancer statistics in particular are difficult to collect and likely understate the incidence / prevalence, and certainly do not indicate the mortality rates from cancer (that data does not seem to be available).

While the adolescent fertility rate (AFR) is lower than the LAC average, this is again across these middle / upper middle-income countries, but the AFR is dramatically higher in the Amazon, Andean regions of the countries.

⁹ <https://www.worldbank.org/en/topic/poverty/lac-equity-lab1/income-inequality/urban-rural-inequality>

¹⁰ World Bank, "Taking on inequality". 2016

Figure 6: National & Regional Health Statistics for Women

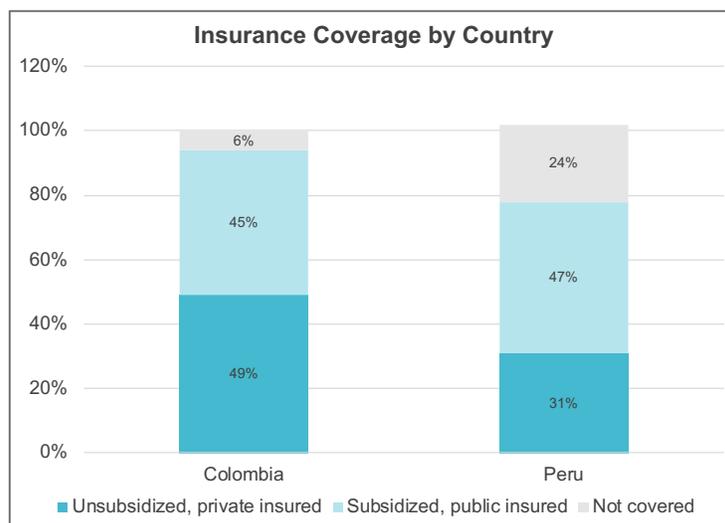
	COLOMBIA	PERU	LATIN AMERICA & CARIBBEAN
Total Population	49.4M	32.6M	652M
Adolescent Fertility Rate (births/1000 women, aged 15-19)	47.5%	47.5%	61.3%
Total Fertility Rate (children/women)	1.8	2.3	2.0
Contraceptive Prevalence rate (modern methods)	75.3	55.2*	69.5
Number of all new cancer cases (females)	54,017	35,873	730,239
Number of new breast cancer cases	13,380	6,985	199,734
Number of new cervical cancer cases	3,853	4,103	56,187
Number of new ovarian cancer cases	2,414	1,331	23,285

Sources: PAHO 2018 Indicators, *Most recent data (2015-17)
 Globocan 2018, WHO International Agency for Research on Cancer

Looking at the insurance coverage for the two countries is also important to the process of identifying and understanding opportunities for investment in health, particularly for delivery organizations. Figure 7 provides a comparison for the two countries, which highlights that just 6% of Colombians have no health insurance coverage at all, whereas an estimated 24% of Peruvians have no health insurance.

In Colombia the general social security health system provides coverage for 94% of the population, based on two capitated systems (subsidized and non-subsidized schemes, where people in the non-subsidized system support the subsidized population, and both systems provide services through public and private health institutions). In Peru most of the population has to rely on Ministry of Health services, and only formal employees have access to health services through either the social security institute (ESSALUD) or private health insurance companies. The 24% of Peruvians with no health insurance coverage reflects the extent of the informal economy in the country, and no systematic coverage for these informal workers. The health system description will be further discussed in the country health system sections.

Figure 7: Extent of Insurance Coverage in Colombia and Peru



Source: Colombia MOH and UPCH

Historical and New Challenges

Both countries face historical as well as new humanitarian crises which create urgent healthcare needs, including mental health. Colombia has an estimated 7.7 million displaced citizens, resulting from the years of guerilla terrorism and far-right paramilitary conflict, according to the United Nations High Commissioner for Refugees (UNHCR). Peru was affected by terrorism and political violence incited by the communist group, Sendero Luminoso.

Internal conflicts in both countries have generated a massive migration from rural to urban areas, creating a crisis for cities that were not prepared to absorb such an influx of population. However, this situation also generated an opportunity for both the public and private sectors to look for resources, both internal and external, to cover the demand for services of all nature, including health services.

In Colombia, during the peak of the drug cartel era (i.e. 1975-1993) and guerrilla terrorism (1990-2016), the displacement of rural population skyrocketed and created a need to restructure the health system to respond to the increasing demand for health services, especially in urban areas. This resulted in the development of a responsive health system that would provide comprehensive coverage to both rural and urban populations, based on their ability (or inability) to pay for health services. The Law 100 enacted in 1993 created a health system where universal health coverage classifies the population based on ability to pay, socio-economic strata and employment status. That way, the population with no capacity to pay for health services would be subsidized by those who could pay.

In Peru, right after the Fujimori era (1990-2000), the health system concentrated efforts of the Ministry of Health and the Social Security Institute (ESSALUD) to cover uninsured and insured population

respectively.¹¹ However, a great portion of both the uninsured and insured population has some ability to pay and prefer to use private clinics for their health care, as the services provided by the MOH have perceived quality issues and ESSALUD's waiting time for appointments can be lengthy. These two factors created a significant opportunity for private clinics to be established in the country and offer packages of health services, including occupational health, to both individuals and companies on behalf of their employees.

As Colombia and Peru struggle to offer health services to their own populations and improve the structure and infrastructure of the health system, another challenge has emerged in the region with the Venezuelan country crisis which is causing high rates of migration and impacting neighboring countries. As of September 2019, Colombia had received approximately 1.4 million Venezuelan migrants while Peru has received approximately 800,000 Venezuelan migrants, according to UNHCR. The increased demands on healthcare systems is immense, particularly given that most Venezuelan migrants arrive with multiple unmet health needs, particularly in sexual and reproductive health, and with limited purchasing power to pay for health services. However, Colombia and Peru are trying to adjust the health systems so that the migrants receive basic health services, especially for women and children.

Detailed Findings: Colombia

Country Health System

Health and social security are granted as rights to all people in Colombia, since the 1991 Constitution and after Law 100 was enacted in 1993. There are two predominant types of health insurance in the country: 1) the Entidades Promotoras de Salud (EPS) which is public healthcare insurance that is mandatory for all people, and 2) Prepagada, which is private, pre-paid health insurance. EPS entities play a role equivalent to US health insurance companies. (See Figure 8 below.)

The Ministry of Health and Social Protection (Ministerio de Salud y Protección Social, MinSalud) oversees Colombia's healthcare system, setting policy and promoting health as well as ensuring that EPS entities provide access to a basic package of health services for both subsidized and non-subsidized populations by contracting with reliable health institutions (i.e. public hospitals and private clinics, called IPS). In addition, MinSalud monitors the transfer of funds and capitated payments from ADRES (the financial administrative entity which collects the funds from employers, employees, taxes, royalties on oil and mining to finance the general social security health system) to the different EPS so that IPS get the funding to provide timely health services to their target populations.

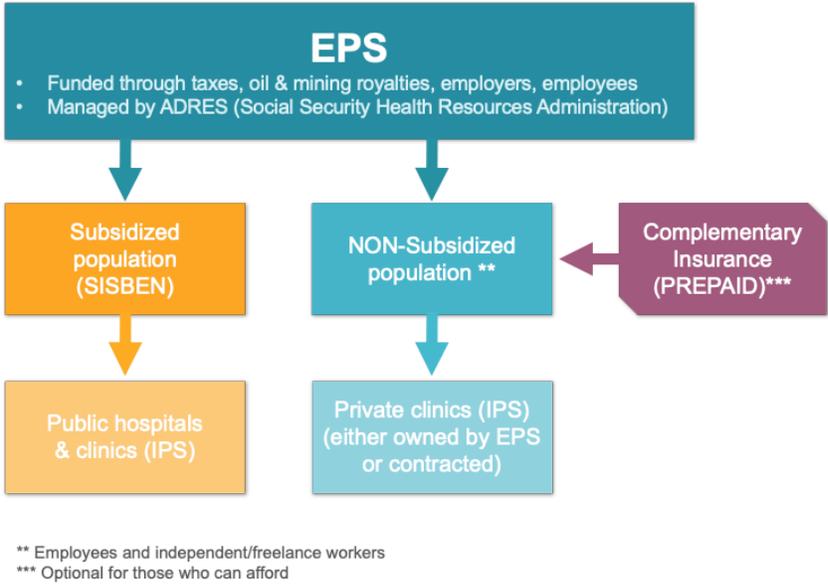
While Colombia has theoretically high access, with ~ 94% of the population covered by health insurance, this does not materialize in daily life. While coverage has increased, the quality of care has actually decreased for low income people who don't have access to pre-paid health insurances and

¹¹ ESSALUD covers health services for employees with formal employment, for both private and public entities. It's mandatory for all employers and employees to contribute a portion of their salaries to ESSALUD, whether or not they use the institute's health clinics and services.

have to wait days, sometimes months, to get a consultation let alone a treatment. On the other hand, the closing of some EPS has placed a huge burden on the capacity of well-functioning, more efficient EPS which have absorbed the affiliates from the failed EPS, creating a capacity problem for the remaining EPS and IPS. In addition, the EPS entities are experiencing significant financial and liquidity pressure, causing prevention and population health programs to be minimal.

Even though the health system in Colombia has room for improvement, it provides comprehensive coverage as it guarantees diagnostic and treatment services, which include surgeries and the provision of supplies ranging from essential medicines to highly specialized drugs and treatments for orphan and catastrophic diseases. Timeliness in the provision of these services is one of the areas where the system needs to improve.

Figure 8: Colombia’s Health System



Overview of Innovation Ecosystem & Key Actors

Colombia’s market actors described a need to motivate innovation in the health sector, particularly innovation with a social orientation. The entrepreneurship ecosystem is not specialized or segmented, and generally the health startups are not focused on serving women in lower income quintiles or with limited access to services. Investor and incubator representatives explained that fintech and other technology spaces are more common, and few organizations have health as an established vertical in their organizations. Those health enterprises which were mentioned were frequently oriented towards digital health and apps, targeting middle- and high-income population segments.

Interviews confirmed the struggle to source scalable investments, particularly in the realm of social enterprise. This likely would be exacerbated within the competitive and cash-squeezed healthcare

sector, given the well-established EPS and IPS structure, which has been faced with a liquidity challenge since 2014 due to delays in transfer of funds from ADRES to EPS. As noted previously, Colombia's health system includes several major health insurance companies (AXA Colpatria, COLMEDICA, Colsanitas, Alliance Seguros, Seguros Bolivar, Seguros Falabella, and SURA), as well as provider organizations.

Key actors in the innovation ecosystem include the Aspen Network for Development Entrepreneurs (ANDE), Endeavor, SocialLab and RutaN. Founder Institute now has a Bogotá-based program and has begun to graduate classes. INNPulsa Colombia is the national government's business growth management unit, created in 2012 to promote entrepreneurship, innovation and productivity. Colciencias is the government agency that focuses on technology and innovation in life sciences.

Large universities run school hospitals where they serve patients from a variety of EPS. Some are state hospitals (ESEs, ESS) and provide the whole range of health services, including reproductive health for men and women. Since the health system in Colombia is comprehensive, all IPS (public hospitals and private clinics) have to offer all health services. However, not all IPS provide specialized treatment (i.e. radiotherapy) but the referral system amongst different IPS works really well.

The National University (UN) is the largest network of public academic institutions in Colombia and it has branches across the country. In terms of research, it has 600 groups of researchers working on different health areas. For example, one group is working on isolating a gastrointestinal virus that could help chemotherapy treatment target only the malignant cells. Another area of ongoing research focuses on the identification of biomarkers that can predict pre-eclampsia and diabetes in pregnant women to prevent high risk pregnancy and delivery.

The school hospitals are the best researchers and incubators on women's health themes. The National University in Bogotá offers the whole range of women's health services, but the Dean of the Faculty of Medicine recognizes that there's a gap in assisted fertility services, as the equipment and technology is expensive. Due to the fact that government scientific institutions like Colciencias and CONECTA provide funding and technical assistance to school hospitals, and since hospitals also generate funds, they can easily accept loans and other forms of funding to further research and implementation of health innovations.

On the other hand, the Institute of Biotechnology in Bogotá is one of the largest institutions in Latin America. They have several initiatives related to health, medicines, and environment. However, more conversations and specific themes need to be explored with the Institute.

There are several leading NGO organizations in Colombia, which support women's needs in various ways, including health. Key organizations include Colombia Diversa, Fundación Oriéntame, Fundación WWB, Fundación ESAR, Fundación Juanfe, and Profamilia.

Potential Pipeline

In this mapping process for Colombia, four organizational types were identified as potential investment opportunities:

- 1) Social enterprises directly focused on women's health: most specifically *Profamilia* and *Fundación Oriéntame*. These entities have scale and proven business models. As non-profit organizations, they will need different types of investment mechanisms from for-profit entities.
- 2) Social enterprises with broader efforts towards women's and girls' empowerment, that also address healthcare needs of women with a strong focus on social impact: these would include: *Fundación Juanfe* and *Fundación WWB*. *Fundación WWB* has a blended model, teaching women through a variety of fee-based, sustainable programs. The foundation is also considering a microinsurance product for women's health through its bank affiliate. This broader social enterprise category with 'bundled offerings' could also include *Nuestro Flo* and *Fútbol Con Corazón* which focuses on teaching health concepts through a sports pedagogy and has a blended business model.
- 3) The EPS and IPS entities: in other words, the traditional companies operating in the public and private insurance and delivery system because they provide health services to the entire population, both those who have private insurances and those who are part of the general social security health system. One potential mechanism to improve access to healthcare for women is to invest in the current EPS entities which are cash / quality strapped, but are serving low-income, rural and minority populations. Another opportunity is to invest directly in IPS which are the public hospitals and private clinics that provide health services directly and cover the whole spectrum of the income quintiles: from Q1 through Q5 in both rural and urban areas.
- 4) Just one or two for-profit entities with a focus on women were identified, such as *Plani*, which is a distribution business for menstrual cups and diaphragms, initially targeting middle- and higher -income women.

For summary descriptions of organizations which were identified through this research, we have grouped them into four categories:

- Health Enterprises – Women Focused
- For-Profit Health Companies – Women
- For-Profit Health Companies – General
- NGOs With Relevance to Women's Health

What follows below are summary descriptions of the organizations. When possible, notations are included regarding the organization's stated interest in potential investment. In most cases, the organizations did not have ready-to-go term sheets or even early stage pitches. This serves as evidence of the early stage of this space, and the need for ecosystem development / incubation support to entities targeting women's health.

Health Enterprises – Women Focused

We previously mentioned *Fundación Oriéntame*, *Fundación Juanfe*, and *Profamilia*. In addition, the following organizations are key non-profit enterprises focused on providing high quality products and services for women's health:

DKT International is a registered, non-profit organization founded in 1989 to expand social marketing strategies on some of the largest countries with the greatest needs for family planning, HIV/AIDS prevention and safe abortion. Even though DKT works mostly with the private sector, they also support the public sector, often partnering with government health facilities to reach the total market. Five of the 10 largest contraceptive social marketing programs in the world are DKT programs. As of 2018, DKT generated over 44.6 million couple years of protection (CYPs) and has presence in 24 countries, with a sales presence in 60 countries, including regional offices in Brazil and Mexico. In Latin America, DKT now sells condoms in Venezuela, Guatemala, El Salvador, Chile and Uruguay. DKT is working on bringing a full range of other family planning products to these and other countries in the near future, including Colombia, Ecuador, Peru, and Paraguay. <https://www.dktinternational.org/>

Fundación ESAR is based in Colombia and provides clinical training and technical assistance to a network of medical professionals including midwives in private practice providing reproductive health services in 10 Latin American countries. ESAR ensures high quality care delivery and provides technical support in clinic management. The program is currently advancing the use of virtual training and telemedicine technology with clinic partners across the region. <https://www.Fundaciónesar.org>

For-Profit Health Companies - Women

Plani is a B2C telemedicine company and website platform for women that focuses on providing contraceptives directly to women each month via a subscription / delivery model. Services include online prescription and gynecologist consultations, serving as a channel for government insurance, with additional services in the B2B channel for employers. <https://plani.co/>

For-Profit Health Companies – General

1DOC3 is a digital e-health platform that connects 490 million Spanish-speaking people with licensed and trusted doctors. Users find personalized answers to their health-related questions. Doctors build their online reputation, find new patients and create the biggest health related question-and-answer curated database in Spanish. The platform is available via web, App, SMS and USSD (unstructured supplementary service data), allowing users to have access to a doctor no matter where they are, or even without internet access. <https://www.1doc3.com/>

Beecky is a chatbot based company focused on helping patients / physicians in managing medical appointments. (2019)

Doc-doc is a telemedicine platform focused on facilitating access to general medical practitioners by either video call or home visits. <https://www.doc-doc.com/> (2019)

Portunus is a company offering personalized medicine to optimize health treatments through the use of patient DNA. (2019)

Non-Government Organizations with Relevance to Women's Health

Given the severe inequality in Colombia and the gender issues facing marginalized women in particular, there are many services related to health that are critical for women's empowerment.

Colombia Diversa is the leading human rights organization for LGBT people in Colombia. Their work focused on three main areas: to promote and defend the human and legal rights of LGBT people, to positively transform perceptions about LGBT people, and to advance the political impact of the LGBT community in Colombia. One of the main concerns is to promote access to health for this population and they are planning to engage in conversations with Profamilia and other organizations who plan to introduce specialized services for the LGBT population. <https://colombiadiversa.org/>

Fútbol Con Corazón is a social company that uses soccer pedagogy for children and young people. They have a unique blend of non-profit and for-profit structure, with the overall goal to teach gender equity, health, and violence prevention through social and emotional skills education, within the sport of soccer, with an applied curriculum as the pedagogical tool. <https://www.fcc.futbol/>

Fundación Laudes Infantis is an NGO which focuses on three activities: 1) training in social entrepreneurship and community leadership; 2) training for employment; and 3) promotion of human and environmental rights. The third component has the greatest linkage to health, particularly tools related to psychosocial needs and access to services (including health and nutrition). They utilize a 'barter' methodology, in other words, a system of social co-responsibility, offering services in exchange for contributions of time. The foundation focuses their work in three poor, high-need areas of Bogotá: Ciudad Bolívar, Usme and San Cristóbal. <https://laudesinfantis.org/en/>

Fundación WWB's mission is to promote processes of empowerment for low-income entrepreneurs in Colombia, to contribute to their transformation into autonomous women who are capable of making the right decisions to build a decent life and to improve their socioeconomic status and that of their families. The foundation launched in the early 1980s, providing microcredit in Colombia within the Women's World Banking network. They established Banco WWB in December 2010 to extend its network and offer savings products. Since that time, Fundación WWB has continued its work through a separate legal status from the bank, and maintains a social focus approach, including efforts in digital and financial literacy, gender equity, gender violence reduction and health-related initiatives. <https://www.Fundaciónwwbcolombia.org/>

Fundación Renacer focuses on the eradication of commercial sexual exploitation of children and adolescents <https://Fundaciónrenacer.org/>

Key Challenges and Opportunities

Considering Colombia's current health system, which conceptually has 94% of the population covered, yet has a number of structural factors creating unmet need for rural, low-income and other marginalized women, a few key opportunities for investment emerge. These are conceptual in nature, with a few specific enterprises that stand out as potential opportunities (italicized below).

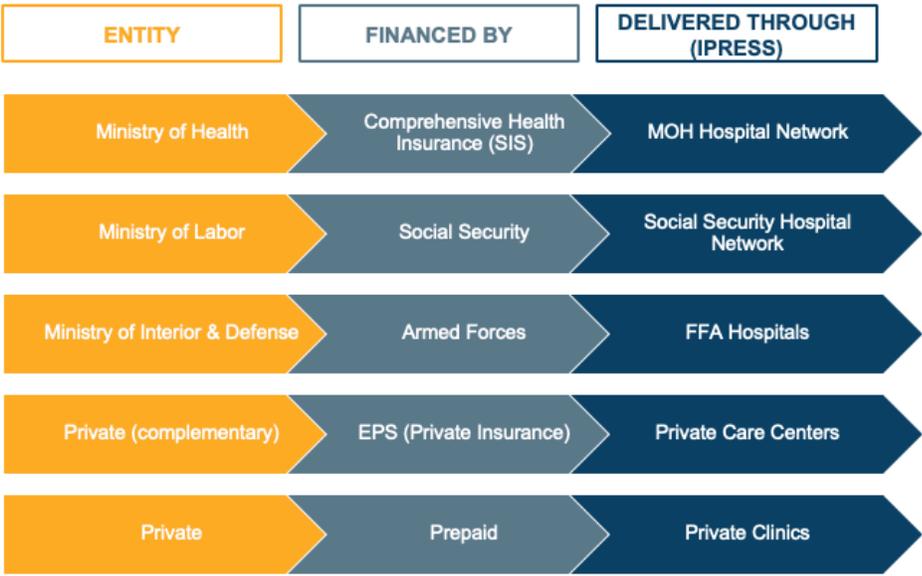
- 1) Colombia has universal health coverage, yet service providers face cash flow uncertainty due to ADRES delaying reimbursements to EPS by 90 to 120 days. This creates opportunity for factoring services / cash management, particularly to those EPS entities which are cash and quality strapped, but are serving low-income, rural and minority populations. Improved cash flow will enable these EPS entities to increase their level of service.
- 2) Marginalized populations served by both EPS/IPS entities in Colombia's SISBEN and IPS system, experience lower quality service and limited access to key services such as cancer screening in Colombia. This means that they either go to leading NGOs such as *Profamilia* and *Fundación Oriéntame* or else they simply may not be able to access the necessary care in a timely way. Investing in entities such as *Profamilia* (with delivery models including mobile brigades and express clinics) are a key means of investing in enterprises that have proven their clinical and operational expertise in serving women across the income spectrum.
- 3) Traditional health insurance and delivery companies in Colombia most certainly represent investment opportunities for coverage and growth as well as positive social impact, especially for marginalized populations. This could take the form of investing directly in IPS entities, which are the hospitals and clinics directly providing health services across the entire wealth spectrum of the population, in both rural and urban areas. IPS enterprises such as *Fundación Cardio Infantil* (<https://cardioinfantil.org>) and *Instituto Roosevelt* (<https://www.institutoroosevelt.com>) in Bogotá are example prospects. This space has been attracting the attention of multi-national corporations such as UnitedHealthcare, which has already made investments in the region.
- 4) Access models such as *Bive* in Colombia <http://bive.co/> provide capitated service agreements and networks of providers (with user-membership cards) for concentrated populations such as coffee growers. This could be extended to other groups such as women working in artisanal coops and flower farms. This could also take the form of microinsurance products in healthcare, which entities such as *Banco W (Fundación WWB)* have underway for Colombia. To make these initiatives more effective, the involvement of local governments is key in order to ensure that the capacity to provide timely treatment, if needed, happens in a timely manner.

Detailed Findings: Peru

Country Health System

Peru’s health system is structured quite differently from Colombia. It is highly fragmented, in structure, funding and delivery. Approximately 70% of care is delivered through the Ministry of Health, which has funding challenges. Just about 8% of Peru’s population is served by the private sector, of which there are few clinics which serve the poor. Rural communities and indigenous populations have the worst access. In Peru, the limited access is concentrated in the Andean and Amazon communities, but also amongst the urban poor in peri-urban, marginal areas.

Figure 9: Peru’s Health System



Funding and management of health services rely on different actors:

The Ministry of Health allocates funds to provide health services (consults and medicines) through an integrated health system (SIS) to guarantee – in theory – comprehensive health coverage for the poorest population. However, liquidity and funding timeliness hinder the capacity of the MOH to provide full coverage. Also, the capacity of the hospitals is outgrown by the population who needs health services.

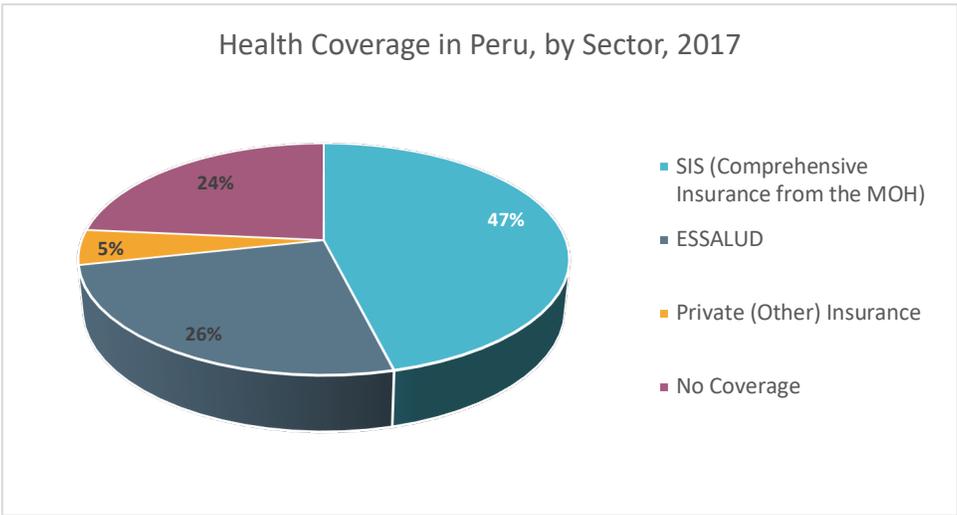
ESSALUD, the social security institute, receives its funding through the Ministry of Labor, which collects mandatory financial per capita contributions from employers and formally employed citizens. ESSALUD owns a network of hospitals, but also sub-contracts private clinics to provide health services to its insured population. However, waiting times for consults, surgical procedures and diagnostic tests can be lengthy, forcing insured employees to look for other alternatives, especially through private health insurance companies.

The population enrolled through the Armed Forces has a special health system and they can only access free health services through Armed Forces hospitals. However, military personnel and their families can look for other alternatives if they have the financial capacity to pay for private health insurance services.

The private (complementary) health insurance and the private (prepaid) health insurance are options for the populations covered by the previous entities (i.e. MOH, ESSALUD, Armed Forces), as long as they have the capacity to pay for these services. However, if someone is diagnosed with an illness that requires treatment (i.e. cancer, surgery), they would either have to go back to their institution and get the treatment or would have to pay out-of-pocket for medicines and treatment, except those insured by ESSALUD and the Armed Forces. In all cases, re-entering the system to seek treatment represents going back to the long waiting times to receive the services. The most affected populations will always be the poorest, most vulnerable populations.

Despite all efforts to “organize” the health system, nearly 24%¹² of the population in Peru doesn’t have any health coverage, based on 2017 data. Most likely, this population belongs to the lowest income quintile, lives in rural areas and has limited access to basic services (i.e. health, water, sanitation).

Figure 10: Peru’s Coverage Dominated by SIS and ESSALUD



Source: UPCH and MOH

Overview of Innovation Ecosystem & Key Actors

Peru has a vibrant yet fragmented innovation ecosystem. While there are several capacity development entities, there is limited focus on the health sector, particularly with a social impact orientation. Competitions and workshops are more common in fintech, the digital sector and even mining, than in

¹² Data provided by Doctora Patricia García, Faculty member of University Cayetano Heredia in Lima, Peru

health. The *Universidad Peruana Cayetano Heredia* (UPCH) is clearly an epicenter of healthcare innovation and dedication to communities in need.

Innovate Peru was established in 2014 to increase business productivity through strengthening of the innovation ecosystem actors and facilitation of interaction. As part of this effort and with support from the Inter-American Development Bank (IDB) the country established twenty university-based incubators. Of this group, BioIncuba, (a spinoff from the University of Peru Cayetano Heredia) is the only incubator focused in life sciences.

In addition to the incubator / accelerator organizations, another key actor is ASEP. ASEP started as part of ASELA (Asociación de Emprendedores en America Latina; (ASEC in Colombia), and was funded by IDB through their social lab. They represent entrepreneurs at the public policy level. For example, ASEP has been advocating for a bill/law so that large corporations pay the entrepreneurs in 30 days max to benefit small and medium enterprises. In this and other ways, ASEP articulates processes: it serves as a link between academia and companies to share tools and other innovations.

Potential Pipeline

In the mapping process for Peru, a few opportunities stood out. These included *Medical Innovation and Technology* as a tech for social good company, with a technology-based solution to advance healthcare for women in remote regions. This company also has longer term potential for expansion into other imaging areas, as well as geographic expansion. *Red Innova* is an example of a clinic network that serves women as part of broader primary care services, with the potential for in-country and service expansion. Other clinics also providing women's health services as part of their broader primary healthcare offering include *Asociacion Peruana Mujer y Familia* and *Asociacion Vida y Salud de la Gran Familia*. These are all listed as health enterprises – primary care. Several non-women focused healthcare companies were noteworthy, including *Bionoma*, *Doktuz*, *Glucolib* and *Patient First Services*.

As with the section on Colombia, what follows are summary descriptions of the organizations identified, grouped into the same categories, with the addition of Health Enterprises – Primary Care. This addition for Peru reflects several clinics that have worked directly with Planned Parenthood Global (PPG), either as current or prior (i.e. graduated) partners. While these are listed as primary care entities, a significant portion of the services provided are SRH in nature and focused on women. When possible, notations are included regarding the organization's stated interest in potential investment. In most cases, the organizations did not have ready-to-go term sheets or even early stage pitches. This serves as evidence of the early stage of this space, and the need for ecosystem development / incubation support to entities targeting women's health.

Health Enterprises – Women-Focused

APROPO is a non-profit, social marketing organization focused on two areas: 1) provision of sexual/reproductive health information, education and counseling with a focus on adolescents and 2) condom / lubricant sales. The organization has been in existence for 36 years and operates in three Peruvian cities, and also has an online / chatbot presence. <http://www.sexoseguro.pe/> The organization is 70% financially sustainable, with a long track record of social impact and financial

sustainability. APROPO has established a new entity, *RIAMA* to develop an integrated network to increase contraceptive access through a midwife model. <https://www.apropo.org.pe/>

HOPE Peru is a non-profit organization, founded by Dr. Patricia Garcia and hosted within the UPCH focused on providing a self-testing solution for women in HPV detection. The organization applies molecular HPV test technology with self-collected vaginal samples to increase detection coverage for women and reduce the risk of progression to cervical cancer. The social model utilizes community women in the community teaching others, along with technology to monitor test distribution, follow-up and SMS for patient communications. The long-term vision is to be a self-sustaining social enterprise, serving both commercial and subsidized (low-income) social segments. <https://hopeperuproject.org/>

INPPARES is a non-profit organization and an affiliate of International Planned Parenthood Foundation (IPPF), founded in 1979. They operate nine clinics in Peru. Several of the clinics have onsite pharmacies. The predominant services are women's health (gynecology, SRH), cardiology, and vasectomies. 75% of the income is locally generated, with 25% coming through project funding. <https://inppares.org/>

Mamas del Rio is a non-profit organization founded by Dr. Magaly Blas at UPCH. It focuses on reducing maternal and neonatal mortality through a community health worker program, with a specially designed app for tablets. The CHWs help women to recognize their pregnancy, get registered and complete six educational visits (three prenatal, three postnatal). <https://mamasdelrio.org/en/>

Health Enterprises – Primary Care

Asociacion Familia Sana (AFS) is a large, high-volume clinic + community outreach and training program. A graduated partner from Planned Parenthood Global (PPG). Located in Cajamarca, provides approximately 22,000 services annually. <https://es-la.facebook.com/pages/Asociaci%C3%B3n-Familia-Sana/313986669014722>

Asociación Peruana Mujer y Familia (APMF) has two clinics, mobile services, and a network of community-based providers to care for the integral health of women and their families. Services include gynecology and obstetrics, ultrasound, laboratory and dentistry. Deliver approximately 10,000 services annually. Current PPG partner. <https://www.mujoyfamilia.org.pe/>

Asociación de Salud Integral para la Familia (ASIFA) is an urban-based clinic plus network of nurse-midwives. Located in Tacna and delivers approximately 7000 services annually. Current PPG partner. <https://www.facebook.com/AsifaSaludTacna/>

Asociación Salud Integral de la Mujer (ASIM) is a semi-rural clinic plus pharmacy plus network of youth and adult outreach workers. Located in Ucayali and delivers approximately 2,500 services annually. Current PPG partner. <https://www.facebook.com/2316217151953244/posts/d41d8cd9/2316223015285991/>

Asociación Vida y Salud de la Gran Familia (AVISAA) consists of one urban clinic + a network of trained community-based health care providers. Located in Piura and delivers approximately 18,000 services annually. Current PPG partner.

Red Innova Group is a network of private health clinics which provides care to Peruvians receiving their insurance / healthcare through ESSALUD. They also serve healthcare clients who are willing to pay out-of-pocket for services. Red Innova has four locations in Peru, including Independence, Zarate, La Victoria and Jesus Maria. Red Innova is pursuing a project with the National Institute of Neoplastic Diseases (INEN) to provide cancer treatment.

For-Profit Health Companies - Women

A short list of companies was identified, with a range of target market segments. Here we share summary descriptions of the representative companies found in Peru in this category:

Biofilia is a B2B distributor company created in 2018. They have two product lines: 1) menstrual and reproductive natural care, and 2) high end natural cosmetics. Biofilia is serving as a distributor for DivaCup, Caya Diaphragm and Handmade Beauty products. Biofilia is the first company to bring the diaphragm to Peru, and menstrual cups are also relatively new in Peru. For both products, Biofilia plans for consumer and physician education to be a key component of their marketing strategy. Over time, they intend to develop strategic alliances and reach lower income populations, potentially with differentiated pricing. Biofilia is seeking a debt or equity investment to improve distribution logistics and administrative systems, increase volume and conduct market research. <https://www.biofilia.pe/>

Medical Innovation and Technology is focused on providing remote / tele-ultrasound solutions in rural Peru. The company was founded by Benjamin Castañeda, Chair of Biomedical Engineering from Pontificia Universidad Católica del Peru. The company was formed to apply imaging and information technology with care delivery protocols to the critical lack of trained imaging technicians and radiologists, along with the lack of equipment and connectivity in remote regions of Peru. <http://www.medical-int.com/>

For-Profit Health Companies – General

Through the landscaping process, several health sector opportunities were identified outside of the women's health sub-sector. Similar to the general finding, few of these have fully prepared their business case or developed term sheets to present their investment needs.

Bionoma is a startup biotechnology company developing diagnostic technology which utilizes the antibodies derived from alpaca. A current product includes fascioliasis diagnosis services to Peruvian diagnostic labs and clinics. The company was founded at UPCH. In the future, Bionoma intends to introduce a new generation of diagnostic kits based on nanobodies for detection of diseases such as Hepatitis B and C, HIV, H Pylori, and F hepatica. <http://www.bionoma.com.pe/>

Doktuz is a B2B company with a market entry strategy in occupational health, serving companies which subsidize health exams for their workers as required by law. Doktuz is conceptualizing other healthcare services such as in women's health. <https://www.doktuz.com/>

FeelsGood is a B2B company utilizing virtual reality technology to provide supportive care services such as anxiety and stress reduction for oncology patients and other medical rehabilitation applications.

Glucolib is a medical device company developing a non-invasive glucose monitoring device for patients with diabetes. The technology allows for glucose levels to be measured through the earlobe and eliminates the need to draw blood. They are seeking to raise \$500,000 USD to complete development and commercialize by July 2020. <http://www.glucolib.com/>

Hello Zum is a platform company which integrates insurance distribution channels that helps manage all sales and post-sales process for insurance distribution. It is not specific to health insurance. <https://www.hellozum.com/>

InkaDoctor is a mobile app company to provide chat and video consultations between patients and physicians, with a geolocation capability to facilitate access to the nearest hospitals, clinics, medical centers and specialists. <https://inkadoctor.com>

MapSalud serves as an online insurance broker that consolidates and compares information including for health insurance. <https://www.mapsalud.com/>

Misha Rastrera is an eco-conservation company sourcing traditional plants from the jungle and highlands, in order to produce natural health-focused food, skin and haircare products. They utilize an online distribution channel and are starting to have brick and mortar and pop-up shops. The company is earning accolades for their full circle impact – economic and environmental impact for the communities and employees, as well as health impact for consumers. <https://www.misharastrera.com>

NatClar is a B2B company that performs occupational health services with the intensive use of information technology in all processes, with a health information system, or HIS HL7 that records each performance of the service, generating data, information and knowledge. The information is used for occupational health surveillance and chronic disease control programs that impact the productivity of clients' employees. <https://www.natclar.com.pe/>

Patient First Services is a specialty pharmacy company which provides patient support programs and adherence monitoring, along with other services for pharmaceutical clients. They serve both public and private sector patients.

Pixed utilizes 3D printing technology for customized production of prosthetics. <https://www.pixedcorp.com/>

Pulso Salud is a B2B company which specializes in occupational health and preventive medicine, focused on sectors such as mining, construction, fishing, energy, oil, gas, services, banking, education, retail, among others, operating in Arequipa, Talara and Lima. <http://pulsosalud.com/>

Non-Profit Organizations with Relevance to Women's Health

Federación Nacional de Mujeres Indígenas, Campesinas y Asalariadas del Perú (FENMUCARINAP) is a national network of rural and indigenous women, that have historically only worked on land and cultural rights. Fenmucarinap is a community-based organization working on issues related to bodily

autonomy to combat the violence experienced by rural indigenous women and is now beginning work to extend family planning services through this network. This will take the form of the network of wise women being trained to deliver SRH and contraceptives, and to make referrals into the health system when appropriate. <http://fenmucarinap.org.pe/>

Fundación Peruana de Cancer (FPC) is also known as the Peruvian Cancer Foundation (EN). FPC is a non-profit organization focused on helping low-income cancer patients through multiple mechanisms, including accommodation during their treatment at the Instituto Nacional de Enfermedades Neoplásicas (INEN), providing INEN and other oncology units with medical equipment and supplies to help cancer patients, scholarship and loans to physicians and other health professional to improve low-income cancer patients' treatments, and finally in cancer control by providing funding for cancer research in areas such as cervical cancer. <https://www.fpc.pe/>

Hands On Peru (HOP) is a non-profit organization that was founded in response to the deep inequities in healthcare in northern Peru. HOP delivers healthcare and nutritional education and prevention efforts and runs dental and medical clinics as well as knitting programs for women and after-school programs for children. Their model is sustainable through fee collection from beneficiaries, medical volunteer fees and their knitting program. They coordinate closely with the local public health clinic. www.handsonperu.org

Manuela Ramos is a non-profit organization founded in 1978 and focused on improving the rights and position of women in Peru through microfinance efforts as well as advocacy and training through community workshops. They educate women, primarily in rural areas of Peru, about gender equity, domestic violence, women's rights and environmental awareness. Their microfinance program is a successful tool used by Manuela Ramos, and it goes hand-in-hand with their efforts to address the unequal balance of power between men and women, which leads to gender, physical and sexual abuse. <https://lasmanuelas.org>

Peruvian American Medical Society (PAMS) Para El Peru is a non-profit organization in Peru, originating from a 1973 volunteer organization of Peruvian physicians in the United States. PAMS conducts medical missions to provide healthcare, and facilitates the transfer of medical equipment, supplies and medications. They have modernized pediatric, neonatal, gastrointestinal, cardiac and surgical units of local healthcare facilities, and have developed dialysis, burn and cardiovascular units. In 2011, PAMS opened a Community Medical Center in Chincha. PAMS is currently pursuing investment for a new clinic with a range of specialized services. <https://www.pams.org/en/>

Pro Mujer is a development organization working in Peru (along with five other Latin American countries) which has combined microfinance with women's empowerment activities and healthcare services. These efforts include provision of education, training and leadership skills to women entrepreneurs. <https://promujer.org/>

Sociedad de Obstetricia y Ginecología de Perú (SPOG) is Peru's national professional association of ob-gyns. The society is in the early stages of initiating a project to establish the use of telemedicine to improve access in women's health in rural areas. Telemedicine technology partners have not been determined yet. <http://www.spog.org.pe/web/>

Key Challenges and Opportunities

Peru's challenges and opportunities differ from Colombia's, consistent with differences in country context. Peru's more fragmented healthcare system and an estimated quarter of the population lacking health insurance coverage creates different types of opportunities. Both countries have healthcare inequity, presenting opportunities for enterprises which can use cross-subsidization models in order to serve women across the income spectrum.

- 1) The more fragmented nature of Peru's healthcare system means that there are more opportunities for innovation in meeting the needs of women in remote settings, through social enterprise models such as *Mamas del Rio* and to invest in private provider organizations such as the *Red Innova Group*. Beyond these and the other limited current opportunities, there is a clear need to foster and incentivize innovation, in order to motivate efforts that will create greater social impact along with financial returns by serving lower-income, rural and marginalized populations.
- 2) Several entities identified in the health sector have not fully developed their business cases for investment. Non-profit organizations such as *INPPARES* with long histories of serving Indigenous women's healthcare needs will benefit from knowledge transfer and collaboration to determine the appropriate types of investment and how to articulate their projects and innovations in order to attract capital.
- 3) Investing in women's health may involve investing in social enterprises which are advancing women's empowerment more broadly. This includes artisanal and agricultural cooperatives which currently reach and organize women entrepreneurs, in order to teach them about the value of their health as well as to create a channel for reaching these women. Multiform investing that facilitates collaboration between healthcare delivery enterprises and other necessary services for these women will be important.
- 4) The regulatory approval process for healthcare innovations such as medical devices is currently a challenge for innovators in Peru. Entities such as *Medical Innovation and Technology*, *Bionoma* and *Misha Rastrera* may have their market opportunities limited or slowed by current regulatory infrastructure. Local government organizations (DIGEMID, INS) have not been able to keep pace with technology and innovation so they lack the expertise and processes to certify, register and license these products. Investor support for regulatory advancement could have long term benefit for pipeline development and technology commercialization, ultimately enhancing the potential for positive health impact.

Select Examples From Other Geographies

Given the highly specialized nature of women's health as a sub-sector, the value of a regional approach for Latin America became apparent during the research process. Additionally, companies with digital health technology were suggested for their potential to expand into the region. The following are all health-focused enterprises which provide examples of service delivery in the region or technology companies pursuing partnerships in the region. Several but not all are primarily focused on women's health.

CEMOPLAF is a leading non-profit organization in Ecuador focused on providing SRH awareness, education and services to women and girls, with a particular focus on indigenous, rural and low-income populations. Founded in 1974, CEMOPLAF's model has evolved over the years, from when they were founded in part with donor funding. CEMOPLAF operates in nine provinces, three of which are predominantly indigenous. They have partnerships with the MOH, the Red Cross, and work closely with agricultural co-ops through mobile brigades and other clinic models to serve women working in the flower, banana and cacao growing regions. <https://www.cemoplaf.org.ec/en/home/>

Clínica de Familia is a leading social enterprise (independent clinic), providing comprehensive health services, education and research in La Romana, in the Dominican Republic. They provide FP services, obstetrics and gynecology, cervical cancer screening, and HIV treatment, including an HIV vertical transmission program. Their target populations include women with HIV, Haitian and Venezuelan migrants, sex workers and adolescents. They also run the Maternal and Child Adolescents Module (MAMI) for adolescents, in partnership with the Francisco Gonzalvo Hospital which includes comprehensive sex education in area schools. <https://www.clinicadefamilia.org.do/>

ClickMedix (US) is a global mobile health (mHealth) social enterprise founded by faculty and students from MIT and Carnegie Mellon University addressing global healthcare challenges, including in Latin America. <https://clickmedix.com/>

DoctoPro was founded in Ecuador to facilitate better management of scheduling and clinical information, as well as patient communications in private health services. DoctoPro covers all medical and dental specialties, and functions as a SaaS platform, with a monthly or annual fee to doctors for access, usage, maintenance and support. DoctoPro is currently looking for Series A funding for \$500,000 USD in exchange for 15% equity. <https://www.doctopro.com/>

Miracle Feet is a non-profit organization which provides organizational, technical and financial support to clinics through the world in order to provide treatment to children born with clubfoot. The organization currently has partner clinics in Bolivia, Brazil, Ecuador, Guatemala, Nicaragua, and Paraguay. Their business model is to partner with governments and public sector clinics to build technical capacity in the correction of club foot. They are formulating a strategy to scale their proven model, which could include a package of training and support services. While club foot affects both boys and girls, given that girls are generally disadvantaged in Latin America, they become even more marginalized with the disability of a non-corrected club foot which generally prevents attendance at school and certainly employment opportunities. <https://www.miraclefeet.org/>

Nivi is a for-profit social enterprise currently operating in Kenya. Nivi provides a digital marketplace for information on reproductive health, delivering services through SMS and interactive voice response services by telephone. They utilize AI, behavioral science and the cloud to provide ready access to health information and services. Nivi, Inc. was officially incorporated in 2016 with a social mission to improve access to reproductive health services for women and men in need and is now being scaled up across Kenya as the first digital consumer-facing contraceptives screening and provider referral engine in East Africa. Nivi is interested in expanding to Latin America.

<https://www.nivi.io/>

Sisu Global Health is a medical device company (US) with a Hemafuse, which is a handheld, mechanical device for intraoperative autotransfusion of blood collected from an internal hemorrhage, meant to replace or augment donor blood in emergency situations. Ectopic pregnancies are a leading indication for use. The product has been registered in Ghana and Kenya, and the company has a global strategy. This is a technology that would be easily expanded to Latin America, as many men and women die from hemorrhage due to different causes, including ectopic pregnancies in women, especially in the rural areas. <https://sisuglobal.health/>

TNH Health (Brazil) is a population health management platform company focused on providing artificial-intelligence powered Bots, as well as analytics to track health trends.

<https://tnh.health/en/about>

ViperMed (Uruguay) is a digital solutions company serving the pharmaceutical sector which provides patient education, software development, ehealth, telemedicine, digital medicine, behavioral change and pharmaceutical training. <https://www.vipermed.agency/>

Woom Fertility (Spain) is a mobile application that enables individuals to make decisions about their reproductive and female health, including tracking and communications technology, as well as identification of reproductive clinics and treatments, health insurance and women's health products.

<https://woomfertility.com/>

About the Linked Foundation

The Linked Foundation's mission is to promote and invest in solutions that improve the health and economic self-reliance of women and their families in Latin America and the United States. They invest technical and financial resources to develop and scale social enterprises that improve the health of communities, and they focus on women as important agents of change as health and economic decision-makers. The foundation is currently developing and investing in several sustainable health solutions for women and their families in Latin America.

<http://linkedfoundation.org/>

About the William Davidson Institute

Established at the University of Michigan in 1992, the William Davidson Institute (WDI) is an independent, non-profit research and educational organization. Serving both profit-seeking and non-profit firms, WDI is guided by our founding principle that thriving businesses drive economic development and improve social welfare in low- and middle-income countries (LMICs). Our consulting work focuses on developing, adapting and applying sound business principles in four interrelated sectors necessary for a thriving economy: professional education, energy, healthcare and finance, in addition to offering performance measurement and improvement services that span these sectors.

<https://wdi.umich.edu/>

Annex A: List of Interviewees

Virginia Baffigo	Former Director	NIH and ESSALUD, Peru
Enrique (Zik) Coronado	Consultant Former Founder	Mamas del Rio, others like MiDoctorcito, Peru
Jorge de Angelo	Associate Director	Acumen, Colombia
Angela Fuentes	Manager, Business Incubator	National Agrarian University – La Molina, Peru
Gabriela Salvador	Director, Latin America & Caribbean	Americares
Lina Rossi	Chapter Manager	ANDE Colombia
Rolando Ancevalle Hinostroza Miguel Diaz Ortiz Trixi Vargas Vasquez	Director General Commercial Manager Manager of Projects	APROPO, Peru
Yvanna Bernasconi Viacava Mariella Soto	Executive Director Director of Institutional Relations	ASEP – Asociacion de Emprededores de Peru
Sybil Caballero	Director of Ventures & Fellowships	ASHOKA, Latin Region
Jorge Farfan	Regional Investment Director, Latin America	Bamboo Capital Finance, Colombia
Diana Quintero	Co-Founder	Bive, Colombia
Daniela Blume	Co-Founder	Biofilia, Peru
Gonzalo Allos Olga Timeteo	Project Manager Director General	BioIncuba, Peru
Jenniffer Espinoza Pilar Garcia	Co-Founder Co-Founder	Bionoma, Peru
Juan Buenavides Alejandro Hermoza	President / CEO Vice President of Sustainability	Buenaventura Mining Company, Peru
Rosanna Ramos-Velita	Chair of Board	Caja Rural de Ahorro y Crédito Los Andes, Peru
Teresa Alvarez Robert	Executive Director	CEMOPLAF, Ecuador
Andres Chavarro	Director INCUBA	Center for Innovations & Entrepreneurship, Colegio de Estudios Superiores de Administracion (CESA), Colombia
Ting Shih	Founder & CEO	ClickMedix, USA

Marcela Sanchez Lucia Baca	Executive Director Researcher	Colombia Diversa, Colombia
Henry Harman	Director, Policy & Program	Concytec Peru
Spiros Paulo Fournogerakis Paulo Caffani	New Business Development Country Manager	DKT, Brazil
Abraham Abramovitz Daniel Niego Lucco Alfonso Bedoya Suarez	Founder, CEO Co-Founder, Director of Communications Co-Founder, Director of Technology	Doktuz, Peru
Luis Jose Giove Zunini	Head of Incubator & Corporate Relations	Emprende UP, Universidad El Pacífico, Perú
Camila Salamanca	Director	Endeavor, Colombia
Lucienne Villegas	Senior Associate	Endeavor, Peru
David Lodwig	Manager, Transactions & Corporate Finance Services	Ernst & Young, Peru
Roberto Persivale		Fledge
Diana Catalina López Liliana Leal Castrillón	Director of Projects Deputy Director of Replicability and Projects	Fundación Juanfe, Cartagena, Colombia
Paola Pena García Jacqueline Moreno Mendoza	Resource Coordinator Founder	Fundación Laudes Infantis, Bogotá, Colombia
Daniela Konietzko	Executive Director	Fundación WWB, Cali, Colombia
María Vivas	Executive Director	Fundación Orientame, Fundación ESAR, Bogotá Colombia
Marcela Falquez	Portfolio Officer	Global Partnerships, Bogotá, Colombia
Eloha Vasquez	CEO	Glucolib, Peru
Tina Assi	Senior Program Officer	Grand Challenges Canada
Juan Pablo Bustamante Romero	CEO Mentor	Grupo Vital Peru Endeavor Peru
Katie Baric	Co-Founder & Executive Director	Hands On Peru
Patricia Garcia		HOPE Peru
Justin Schwartz	Accelerator Coordinator	IMPAQTO Ecuador
Sarah Dunn Phillips Ernesto Ortiz	Manager, Innovator Network Faculty, Peru Advisor	Innovations in Health
Pío Iván Gómez	Sr. Medical Advisor, Head Professor Faculty of Medicine	IPPF National University of Colombia

Meradith Leebrick	Associate Director, Social Enterprise	IPPF/WHR, New York
Irma Ramos Lucy Lopez	Director Deputy Director	INPPARES, Peru
Carla Grados Villamar	Director General	Kunan Social Enterprise, Peru
Jessica Graf	Founder, Managing Director	Le Fils Consulting
Magaly Blas	Founder & Director; Faculty	Mamas del Rio UPCH, Peru
Victoria Villanueva Susana Galdós	Founder Founder	Manuela Ramos, Peru
Chesca Colloredo-Mansfeld Jennifer Everhart	Co-Founder, Executive Director Director of Programs	Miracle Feet, USA
Benjamin Castañeda	Founder & CEO	Medical Innovation & Technology, Peru
Diego Venegas	Ministry Official	Ministry of Health, Peru
Carlos Alvarez Carhuaricra	General Manager	NatClar, Peru
Isabel Castillo	Portfolio Manager	NeSst Peru
Daniel Reyes Elizondo	Acceleration Manager	New Ventures
Mabel Gonzalez	Co-Founder	Nuestro Flo, Colombia
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