Digital Financial Services to Improve Health Outcomes and Health Systems

Technical Application

December 20, 2019

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These limitations are not in any way intended to restrict continuing business discussions between PATH and Accenture.

Notwithstanding the Letters of Commitment, Accenture reserves the right to propose a different team to provide the services which will be of comparable experience and skills to the one suggested in this proposal.

These limitations are not in any way intended to restrict continuing business discussions between PATH and Accenture.

The contracting party for any contract in connection with any services and offerings described in this Proposal involving our global deliveries may be Accenture International Limited, a company duly incorporated and validly existing under the laws of Ireland.

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EXECUTIVE SUMMARY

Accenture LLP and Jhpiego are pleased to submit this final application to express our interest in exploring the extent to which digital financial services ("DFS") in low-resource settings have contributed to increased financial protection, increased demand and use of health services, and ultimately improved health systems performance. The consortium, which combines Accenture's global consulting experience and innovation capabilities with Jhpiego's intimate knowledge and experience in the global health context (including digital health, health financing, digital financial services, access to essential services, and health service responsiveness) would bring a well-positioned perspective to help PATH and Digital Square build on United States Agency for International Development's (USAID) encouraging early research which has deepened the global understanding around benefits, challenges, and impact of DFS in health. This final application highlights the global expertise that Accenture and Jhpiego would bring to this engagement, including:

↘ **Deep global health and health system strengthening experience**

Accenture has worked with INGOs, donors, foundations, corporates, multilaterals and governments on 250+ global health initiatives to deliver sustainable impact. We work extensively to strengthen our clients' programmatic portfolios, enabled by enterprise operations and systems. We draw on the specialization of Accenture's 20,000+ healthcare industry professionals and 1,000+ international development professionals serving over 70 developing countries. We help our clients in emerging markets by offering strategy support to identify and capitalize on market trends, design and implement digital strategies, and develop effective and scalable programs. Accenture worked on a health system strengthening project in collaboration with the Aurum Project and the CDC. The project provided technical assistance on the development of the National Health Planning framework in the planning directorate of the National Department of Health (NDoH). The planning framework aimed to strengthen District Planning and Monitoring at the NDoH in order to improve service delivery and deliver better outcomes at the district and provincial level.

Jhpiego motivates health care providers to record and use service delivery data as an integrated component of training to improve responsiveness and quality of service delivery promoting a more client-centered approach. Accurate recordkeeping is important not only to health system strengthening, but also to scaling up high-impact interventions for quality health services. Jhpiego has provided in-service training courses on the importance of recordkeeping, development of tools, and application of data for program and quality improvement. In countries such as Tanzania and Nigeria, Jhpiego has integrated Malaria in Pregnancy (MIP) control and treatment components with ANC and RH services, working with governments to provide technical assistance to strengthen M&E capacity to capture the progress and challenges of integrated health programming. In Lesotho, Malawi and Tanzania, Jhpiego developed the current data collection tools for VMMC that have been adopted by the MOH and integrated into the national HMIS system. The 2013 report, Strengthening Health Management Information Systems for Maternal and Child Health: Documenting MCHIP's Contributions, summarizes how the Jhpiego-led MCHIP contributed to improving global and local data management, data quality assessments. Also highlighted is MCHIP's work in seven countries to strengthen data flow and aggregation for both facility- and community-based programs and built the capacity of health care workers in these countries to use HMIS tools correctly and consistently. MCHIP facilitated the use of information products that enable quick visualization of data such as service delivery trends posters and scorecards in 12 countries, leading to routine use of data for program monitoring and planning. These tools can lead to quicker action, increased accountability, and revitalization of commitments to improve health outcomes.

⬊ Strong digital financial inclusion experience and applications in health and beyond

Accenture works with several commercial and NGO financial service organizations to promote the economic inclusion of low-income populations, particularly those that cut across and beyond the health. We leverage our digital capabilities to help clients remain at the forefront of emerging technologies, increase their reach and scale through innovative digital and mobile solutions, and amplify their impact through data and analytics. For example, we worked with Mastercard to identify innovative applications of their digital payment solutions throughout healthcare value chains in underserved communities, while with the Grameen Foundation in India, we leveraged artificial intelligence to develop a multilingual virtual financial advisor to empower skilled field agents and drive financial inclusion in underserved regions.

Over the decades, Jhpiego has integrated cutting edge digital health tools into our work, recognizing the power and benefit of technology to improve quality of care, affect health outcomes, and empower health workers to make complex decisions. Under the USAID-funded MAISHA project, Jhpiego collaborated with D-tree International in Tanzania on the mHealth for Safer Deliveries initiative, which incorporated a mobile decision-making application with a mobile money component for CHWs. Phones were equipped with an open source decision-support application and an EzyPesa (mobile banking) account. The tools included forms for registration of pregnant women, prior permission of decision-makers for transport, screening for danger signs at all phases, referral forms, and postnatal follow-up forms. In addition, the application allowed for registration of health facility contacts, transport provider contacts, and pre-negotiated transport rates.

⬊ Digital and health landscaping experience in LMICs

Accenture has carried out numerous technology and digital landscape assessments for development sector clients to inform information systems & digital strategies. For instance, we worked with Amref Health Africa on an mHealth innovation market landscape and developed the strategy, design and implementation of their mobile Community Health Worker training platform that has allowed for the training of over 35,000 community health workers. We also delivered an mHealth technology strategy for Living Goods (LG), where we developed a global mHealth technology landscape assessment for Sub Saharan Africa, Asia, and Latin America, and provided recommendations for partnership based on LG's level of technology maturity and potential partner capabilities. More, Accenture helped Philips to assess the economic and social potential for a new infant resuscitation technology across Africa, first through a wide secondary research effort, followed by deep-dive assessments in two markets. And finally, we supported PATH's Digital Square efforts in South Africa to conduct a detailed landscape assessments of national partner management and community focused information systems.

Jhpiego seeks to achieve positive health outcomes in the most effective and efficient manner possible, putting the patient at the center of each intervention. Jhpiego leads with the health objective, not the technology. We seek to first understand and identify the health problem to be solved and the assets that can be leveraged, the context and environment as well as constraints and enabling factors, and then determine the contribution digital health can make and the most appropriate digital health solution. From as early as 1987, when Jhpiego introduced computer-assisted instruction to simulate clinical situations in several of its US-based courses, to the internet boom in 1995 when Jhpiego launched ReproLine, an online source for reproductive health information, to the mobile revolution with point-of-care and decision support

tools for health workers on personal digital assistants, smartphones and tablets, digital health has been an integral part of Jhpiego's approach to development.

⤷ Our long-standing relationships with PATH and USAID

Accenture has built a trusted relationship with PATH for nearly a decade across all parts of the organization. In 2010, Accenture first worked with PATH to develop an overall finance IT strategy and vision to show how investments in business process and information technology will support finance operations in the future –improving operational excellence, accountability, and continued growth. Accenture also helped to develop a donor engagement strategy for PATH's Global Health Innovation Hub, enabling PATH to continue its strategic and focused approach to fundraising. Additionally, we partnered with PATH, Pfizer, Gavi and the Ministry of Health to pilot an open source 2D barcoding tool for serialized and secure supply chains in Nicaragua, with discussions on expansion in Gambia. We also partnered with PATH, the Bill & Melinda Gates Foundation, USAID and 25+ cross sector organizations to create a control tower blueprint (The Visibility & Analytics Network) to bring leading supply chain visibility and analytics to the African public sector, starting with South Africa. We are excited to continue our strong relationship with PATH to contribute to the vision of improving the health of more than 400 million people by 2030.

Jhpiego currently implements 108 awards from various donors, including USAID. In addition to the USAID-funded MAISHA project in Tanzania, Jhpiego has led USAID's flagship MNCH/FP/RH projects, including MCSP, demonstrating the expertise and experience required to seamlessly manage small and large programs with multiple core and field investments in 32 countries. Jhpiego is a proven and trusted implementing partner with a strong record of delivering results, in addition to having strong implementation science and research capabilities and systems.

⤷ ADP's unique, low cost sustainable consulting model

ADP represents a unique model where Accenture employees from across the globe are seconded to work on high-impact projects that benefit the development sector, at a reduced rate from Accenture's commercial rates. Through our ADP practice, we have delivered over 1,400 high-impact projects that are focused on strengthening and improving the effectiveness of development sector organizations, as well as how business and technology experience can be leveraged to address key international development issues, such as health, education, disaster recovery, agriculture, urban development, energy, financial inclusion, fostering private sector development, and promoting innovation.

The consortium team of Accenture and Jhpiego is well-positioned to support PATH, Digital Square and USAID on this landscape report to explore the extent to which DFS in low-resource settings have contributed to increased financial protection, increased demand and use of health services, and ultimately improved health systems performance. In addition to bring complementary capabilities across the international development, global health, and digital financial services landscape, Accenture and Jhpiego would bring a seamless approach to co-managing the project and all its activities and deliverables, highlighting the strongest assets of each organization where most applicable.

INTRODUCING THE CONSORTIUM TEAM

Accenture

Accenture is a leading global professional services company, providing an extensive range of services and solutions in strategy, consulting, digital, technology and operations, with more than 490,000 employees working in 120 countries. As a business unit within Accenture, Accenture Development Partnerships ("ADP") collaborates with international development organizations to deliver innovative solutions that truly change the way people work and live around the world. Accenture leverages a unique award-winning cost-sharing model which allows us to apply the full breadth of our global assets, capabilities, and resources to the international development sector and provide our clients with leading insights and winning strategies.

Accenture is well-positioned to support the proposed landscape report based on our experience in the DFS space, our digital health expertise, and partnerships we've made in global health. Across the international development sector, Accenture has delivered more than 1,500 projects that have helped donors, foundations, corporates, and INGOs assess and expand initiatives in developing countries around the world. In consideration of the current scope, Accenture has carried out numerous technology and digital landscape assessments for development sector clients to inform and implement digital strategies. In the financial inclusion arena, we worked with FSD Africa on a refresh of their digital finance strategy to position the organization to deepen their impact across Africa's changing financial sector. We have also been engaging closely with the Better than Cash Alliance to provide landscape research and define action-oriented recommendations on scaling payment digitization and adoption of digital financial services for small merchants in the supply chain of fast-moving consumer goods companies in Mexico. In health, we worked with Amref Health Africa on an mHealth innovation market landscape and developed the strategy, design and implementation of their mHealth training platform that has allowed for the training of over 35,000 Community Health Workers. We delivered an mHealth technology strategy for Living Goods, where we developed a global mHealth technology landscape assessment for Sub Saharan Africa, Asia, and Latin America, and provided recommendations for partnership based on their level of technology maturity and potential partner capabilities. Lastly, we have helped Philips to assess the economic and social potential for a new infant resuscitation technology across Africa, first through a wide secondary research effort, followed by deep-dive assessments in two priority markets.

To deliver on the scope of work, Accenture would leverage relationships with subject matter advisors from across Accenture, bringing a wealth of experience across financial services, global health, international development, communications, and technology. Our financial services practice engages with 90 percent of the insurance companies in the Fortune Global 500, while our digital health practice engages with 21 of the top 25 firms in life sciences, the top 10 in med tech, and the top 5 in medical diagnostics. As Accenture is ranked the No. 1 largest healthcare management consulting firm, our ADP practice has drawn heavily upon this relationship to deliver 300+ global health initiatives with leading INGOs, donors, foundations, corporates, multilaterals and governments to create sustainable impact.

Jhpiego

Jhpiego is an international NGO affiliated with Johns Hopkins University (JHU), putting evidence-based health innovations into everyday practice to overcome barriers to high-quality health care since 1973. Jhpiego currently implements 108 awards from various donors including USAID, CDC, bi-lateral institutions, national governments, multi-lateral institutions, corporations and foundations, among others, and had an FY2019 budget of $350 million. Jhpiego empowers health workers and beneficiaries by designing and implementing effective, low-cost, hands-on solutions that strengthen the delivery of health care services, following the household-to-hospital continuum of care. We partner with organizations from the community to the national levels, building sustainable, local capacity through advocacy, policy development, human resources for health and quality and performance improvement approaches. Jhpiego has worked with more than 150 countries throughout Africa, Asia, the Caribbean, Europe, Latin America and the Middle East. The majority of Jhpiego's projects relate to maternal, newborn and child health, family planning, reproductive health, HIV/AIDS and infection prevention and control. Jhpiego's Digital Health unit seeks to implement innovative and evidence-based technology tools into everyday practice to break down barriers to high-quality health care for the world's most vulnerable populations.

Jhpiego has a physical presence in 36 countries and has led USAID's flagship MNCH/FP/RH projects, including MCSP, demonstrating the expertise and experience required to seamlessly manage small and large programs with multiple core and field investments in 32 countries. Jhpiego is a proven and trusted implementing partner with a strong record of delivering results, in addition to having strong implementation science and research capabilities and systems. At any one time, Jhpiego is implementing 70+ rigorous human subjects research studies globally. In 2017 alone, Jhpiego had 82 IRB approved studies in process. These studies address questions around integration, quality improvement, scale-up (acceptability and sustainability), and intervention effectiveness. Jhpiego frequently collaborates with Johns Hopkins University expert faculty and researchers and taps into their extensive network of educational and research institutions. By building strong M&E systems and conducting targeted implementation research (IR) and effectiveness evaluations, Jhpiego ensures that programs continuously implement proven interventions. The organization seeks to improve project quality and impact through collection and use of targeted data and ongoing program learning. Jhpiego also assures integration of best practices in research methods, ethics and institutional review board compliance into its research so that client safety and confidentiality are ensured and key findings essential to building program knowledge in the field can be published and widely disseminated. Jhpiego also recognizes that an essential part of strategic learning is the dissemination of results and lessons learned to the wider public health community. Thus, through the establishment of the Publications Initiative, Jhpiego is sharing findings and results through peer-reviewed publications at increasing rates.

OUR PERSPECTIVE ON DFS FOR HEALTH

Problem Statement

The burden of sudden and unexpected healthcare expenses, most often still explicitly paid out-of-pocket, can have a catastrophic impact on households in low-resource settings. Roughly 100 million people are pushed into extreme poverty by healthcare expenditures and therefore still experience this lack of financial protection.[1] Every year, nearly 300,000 women die from complications of pregnancy and childbirth, and an estimated three million newborns die within the first month of life.[2] The vast majority of these avoidable deaths occur in developing countries, where the health system is often fragmented, underfunded and understaffed. As a result, quality health services are unavailable or inaccessible—leading many women to give birth in facilities without adequate equipment and staff, or at home without skilled providers. Under-resourced health systems can exacerbate other health issues for women and their families as well, such as an increased burden of disease (malaria, HIV/AIDS, tuberculosis (TB), the Ebola virus disease (EBV), etc.) and impact access to critical FP/RH services.

The SDG for health seeks to "ensure healthy lives and promote well-being for all at all ages." Among the goal targets are achieving "universal health coverage, including financial risk protection," and "access to safe, effective, quality and affordable essential medicines and vaccines for all." These "goals within goals" align with the WHO finance and medical products building blocks. Through effective universal health coverage, all people can access preventive, curative, rehabilitative and palliative health services, without risk of financial hardship. Increasing public funding for health—through budget allocation, taxation, compulsory insurance contributions, and innovative funding mechanisms—can help reduce out-of-pocket expenditures.

Making the Case for DFS in Health

Accenture and Jhpiego recognize the potential that DFS and digital health solutions can have in transforming the global health sectors in last-mile and low-resource communities, while also understanding that, like any intervention, it is no panacea.

Since its founding, Jhpiego's approach to interventions for DFS and financial inclusion align with countries' health financing goals, such as leveraging private sector resources and strengthening facilities to achieve the quality standards needed for government reimbursement of services. These interventions span the range of finance stakeholders: from encouraging governments to include medications on their national essential medicine lists and expanding availability; to advocating for social insurance coverage of essential services and supporting public-private partnerships at the district and provincials levels; to supporting health facility accreditation in accordance with insurance scheme requirements; to raising awareness and participation in insurance schemes at the household and community levels.

Over the decades, Jhpiego has integrated cutting edge digital health tools into our work, recognizing the power and benefit of technology to improve access and the quality of care. From as early as 1987, when

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[1] Bustreo F. 2015. Financing the Health Sustainable Development Goal. Global Health and Diplomacy.
[2] World Health Organization (WHO) and UNICEF. 2012. Countdown to 2015: Maternal, Newborn and Child Survival: Building a Future for Women and Children: The 2012 Report. Geneva: WHO and UNICEF. See full report at http://www.countdown2015mnch.org/

Jhpiego introduced computer-assisted instruction to simulate clinical situations in several of its US-based courses, to the internet boom in 1995 when Jhpiego launched ReproLine, an online source for reproductive health information, to the mobile revolution with point-of-care and decision support tools for health workers on personal digital assistants, smartphones and tablets, digital health has been an integral part of Jhpiego's approach to improve health outcomes and health systems performance through technology to reach marginalized communities and to increase financial inclusion. At Jhpiego, mobile technology has been used to support everything from household level data collection to rapid facility readiness assessments to task analysis of to define the scope of practice of health providers.

Jhpiego's Data Science Impact and Learning unit under which our Digital Health unit sits, seeks to implement innovative and evidence-based technology tools and data science and advanced analytics into everyday practice to break down barriers to high-quality health care for the world's most vulnerable populations. Jhpiego strengthens health services in limited-resource settings where it is essential to identify simple, low-cost solutions that leverage all available resources. Jhpiego knows that strong data collection and information systems are the backbone of strong health systems. Established information systems allow for continuous monitoring of health, performance, and quality indicators across the health system. Performance gaps and poor quality of care measures can be highlighted so that action plans for performance improvement can be generated and followed up on. Health indicators can be monitored in real-time and on a longitudinal basis, allowing experts to identify trends, warning signs, and weaknesses in the health care delivery system. Improved data/information allows for improved decision-making by providers as well as policymakers so that the heart of an issue can be addressed in a timely and impactful manner.

Jhpiego has experience implementing a variety of electronic information systems that facilitate the collection and transfer of data to centrally aggregated databases, and the dissemination of that information in a meaningful way back to stakeholders at different levels of the health system. Jhpiego frequently employs mobile applications for data collection in large-scale evaluations or studies in contexts as diverse as Guinea, Uganda, Kenya, and India. Using mobile technology has many benefits for the collection of public health data, including fewer errors in data entry, faster time from collection of data to aggregation and ability to use data, ability to monitor data collectors in the field and provide support as necessary, and capability to collect rich multimedia and geotagged data.

Under MAISHA project, Jhpiego collaborated with D-tree International in Tanzania on the mHealth for Safer Deliveries initiative, which incorporated a mobile decision-making application with a mobile money component for CHWs. Phones were equipped with an open source decision-support application and an EzyPesa (mobile banking) account. The tools included forms for registration of pregnant women, prior permission of decision-makers for transport, screening for danger signs at all phases, referral forms, and postnatal follow-up forms. In addition, the application allowed for registration of health facility contacts, transport provider contacts, and pre-negotiated transport rates. The primary benefits of using these technologies were: 1) capacity for immediate feedback given to the CHW and client, and 2) the ability to store the information that is collected and retrieve it in the future to inform and improve the quality care.

Jhpiego has supported costed national planning and scale-up efforts in contexts such as Kenya. Through the Bill and Melinda Gates-funded Advance Family Planning (AFP) Initiative, Jhpiego conducted advocacy with county governments that led to the development of costed family planning implementation plans and establishing budget line items for FP so that local health systems will be able to better address the unmet need for family planning. As a result, Government officials in six counties increased FP budget allocations by

over $1.4 million in the upcoming FY2017/18 fiscal year. Since advocacy efforts began in FY15/16, there has been a 474% increase in FP budget allocations in the six focus counties. In India, Jhpiego has been able to leverage private and public donor contributions to mobilize local government investments, which have increased from $3.37 million in FY10/11 to $42.7 million in FY16/17 throughout the seven Jhpiego focus states. Jhpiego approaches have been replicated by host country governments with most recent examples in Indonesia, Kenya, India, Pakistan, and Rwanda, contributing to scalability and sustainability of donor investments.

A Focus on Kenya

It is generally expected that a dichotomy of digital advancement exists between urban and rural geographies. However, a more robust understanding of the sliding scale of influence and adoption of new technologies for the sake of health system improvement or improved financial access and protection within populations can be drawn by assessing urban, peri-urban, and rural. For this reason, we choose to assess the variation across markets within a single country – in this case, Kenya – which will enable us to both distinguish between these settings and also have a stronger conceptual understanding of similar technologies across markets with naturally occurring crossover as digital technologies don't have geographical bounds.

As we believe that a market-based approach is particularly compelling for the purposes of this engagement, the primary research will take place concurrently across three counties in Kenya. In our research, we will leverage Nairobi County for an urban setting, Kisumu County for a peri-urban setting, and Kitui County for a rural setting.

Urban setting: Nairobi County

With a population of roughly 4.4 million and a population density of 6,247/sq km, Nairobi County's distribution portrays a pyramid that is heavy at the base, with the population less than 15 years being approximately 9 percent in 2020 and 80+ being 0.2 percent. [3] This youth population compose a key market segment and are driving use and adoption of digital financing services such as Mobile Money and their placement in the population makes them key to financial inclusion in Kenya and across sub-Saharan Africa.[4] According to various research, 60 - 80 percent of the population live in urban slum areas with 73 percent of urban slum residents falling below the poverty line.[5]

Mobile phone use is well established in Kenya despite the high poverty levels. It is estimated that the mobile network covers at least 96 percent of the Kenyan population, with 52.2 million registered sim card users as of June 2019. Translating a SIM card penetration level of 109.2 percent.[6]

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[3] 2019 Kenya Population and Housing Census
[4] https://www.cgdev.org/blog/where-mobile-money-making-biggest-difference-financial-inclusion-young-people
[5] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0083428
[6] https://ca.go.ke/document/emerging-digital-technologies-for-kenya/

Peri-urban Setting: Kisumu County

With a population of roughly 1.2 million and a population density of 554/sq km, Kisumu County located on the shores of Lake Victoria and serves as the main commercial and transport hub for the Western part of Kenya and the East African region. [7] The county's strategic position serves as a gateway for Kenya into the rest of the African Great Lakes region. Given this geographic advantage, the major economic activities of the residents are trade, farming and fishing. The county has highly fertile land and variations in temperature and rainfall with two rainy seasons per year across the region that provides a suitable environment for a broad range of crops over approximately 1.6 million hectares of agricultural land.[8] However, it is estimated that only 58 percent of this land is currently used; furthermore, majority of farming is subsistence driven leading to relatively low production volumes.

Absolute poverty stands at 60 percent (538,485) with urban population poverty of 70 percent (246,521) and rural population poverty of 63 percent (403,098). Estimated food poverty stands at 61 percent (369,837).[9] The poverty situation is compounded by health needs of the population. Major disease burdens include Malaria, HIV, TB, diarrheal diseases, respiratory diseases and injuries.

In Kisumu, 52 percent of the population have a mobile phone. Internet usage at home is low (19 percent) as reported in a 2015-2016 household survey, but still 66 percent of the county's population have used the internet in mobility.[10] Of those who have used the internet, only 3.6 percent reported using to seek health information and only 3.8 percent reported using internet for banking. The highest reasons of use remain social network engagement (70 percent), consuming media such as music or video (46 percent), or informative reading (22 percent). However, for adults over 18 years of age, 87 percent are subscribed to a mobile money transfer platform and 50 percent are subscribed to a mobile banking platform. Most cash transfers in Kisumu are for education (77 percent) and food (9 percent) expenditures.

Rural Setting: Kitui County

With a population of roughly 1.1 million and a population density of 37/sq km, Kitui county is resource rich with commercially viable coal reserves[11]. Other mineral resource include limestone, iron ore and sand. Forty-six percent of the Tsavo East National Park is in Kitui County and has a great heritage with great untapped tourism potential. Proximity to Nairobi and the Standard Gauge Railway offers great opportunities for economic transformation.

Despite the great potential, the county is among the Arid and Semi-Arid (ASAL) counties characterized by relatively high levels of poverty. The level

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[7] 2019 Kenya Population and Housing Census
[8] Kisumu County Integrated Development Plan, 2018-2022
[9] Kisumu Health Sector Working Group Report for the Medium-Term Expenditure for the Financial Year 2020/2021 to 2022/2023
[10] Kenya Integrated Household Budget Survey, 2015-2016
[11] 2019 Kenya Population and Housing Census

of absolute poverty is estimated at 47.5 percent compared to the national average of 36.1 percent in 2016. The agricultural sector plays a major role in the county's economy by contributing about 87.3 percent of income earned by the rural population. However, rainfall in the county is erratic thus necessitating the use of irrigation to augment food production.[12]

Livestock cushions farmers against adverse condition especially in times of drought. The sector largely contributes to income generation and food security in main livestock zones. In lower midland and inner midlands of the county, it contributes approximately 40 – 50 percent of total household incomes while in upper midlands of the county, it contributes 20 – 30 percent of household incomes.[13]

Kitui county is served by mobile telephone service providers by Safaricom, Airtel, and Telecom but the quality of coverage varies with the location. The county is served by 12 post offices run by the Postal Corporation of Kenya (PCK) which oversees mail and parcel delivery as well as offering data communication services. Kitui County has fiber optic connection, but it is yet to be extended to serve all key departments in the county.[14]

In Kitui, only 38 percent of the population have a mobile phone. Internet usage at home is very low (11 percent) as reported in a 2015-2016 household survey, but a high proportion, 84 percent, of the county's population have used the internet in mobility.[15] Of those who have used the internet, only 0.6 percent reported using to seek health information and only 0.7 percent reported using internet for banking. The highest reasons of use are social network engagement (71 percent) or informative reading (30 percent). Even with the low rates of use for banking (only 9 percent of adults over 18 are subscribed to a mobile banking platform), 65 percent of the population 18 and above are subscribed to a mobile money transfer platform. Most cash transfers in Kitui are for food (43 percent) and health (31 percent) expenditures.

Comparison across Markets

Accenture and Jhpiego will look to dig deeper into each of these markets to better understand geographical and nuances and key implementation considerations for DFS in health. As stated previously, it is important to gain a strong understanding of similar technologies across markets. With that being said, an early look at these 3 Kenya counties may lead to interesting – and possibly unexpected – observations.

Mobile Access: As the below chart indicates, access to a mobile phone for those 18 and over is certainly high, at 76.7 percent at the national level.[16] However, regional variations are to expected, with the same figure for Kitui county lagging behind at 68.3 percent. In Nairobi, nearly 94 percent of the population aged 18 and over have access to a mobile phone.

Mobile subscriptions – taking into account mobile money transfer platforms and mobile banking platforms – tells an interesting story. The case for mobile money transfers is to be expected given the prevalence of M-Pesa across the country, with 74.8 percent of the overall population subscribing and a higher proportion

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[12] Kitui County Integrated Development Plan, 2018-2022
[13] Kitui County Integrated Development Plan, 2018-2022
[14] Kitui County Integrated Development Plan, 2018-2022
[15] Kenya Integrated Household Budget Survey, 2015-2016
[16] Kenya Integrated Household Budget Survey, 2015-2016

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in urban areas (89.8 percent for Nairobi county) than rural areas (65.4 percent for Kitui county). However, somewhat surprising are the figures for mobile banking. With the national average at 13.9 percent, Kisumu county witnesses a surprising 50.1 percent of the population, higher than any other county in the country.

Access to Mobile Subscriptions (Ages 18+)
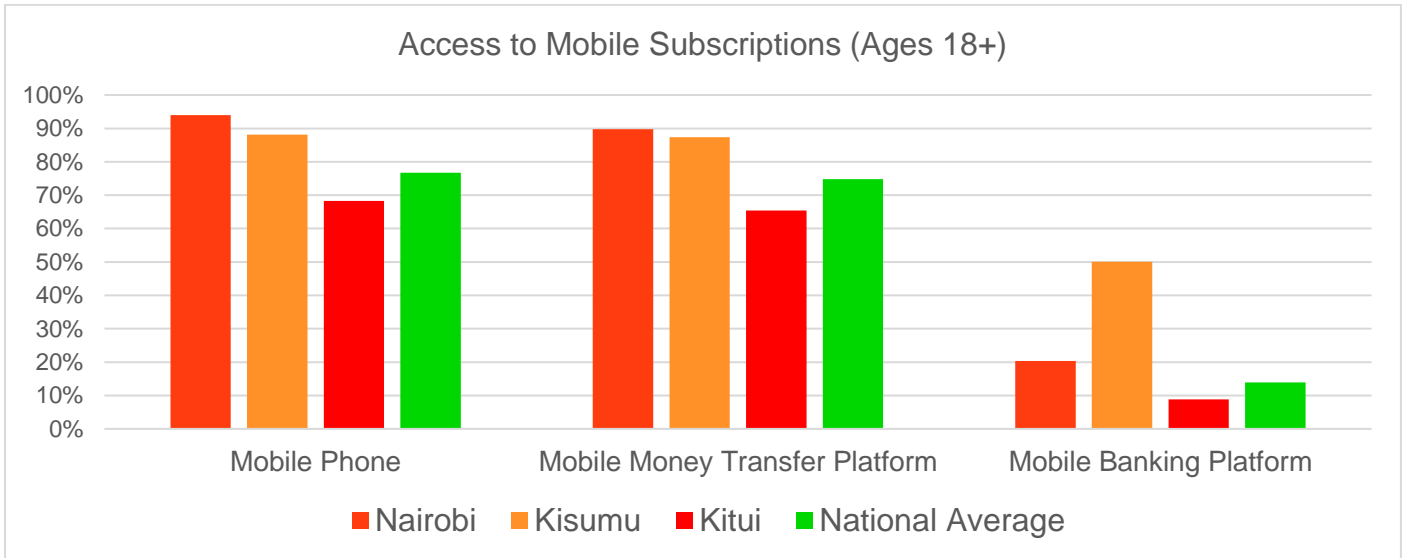
It is interesting to also explore potential barriers for not having a phone. A few of those reasons are depicted in the below chart. One thought-provoking observation is the fact that respondents in Kisumu county are more likely than their Nairobi county or Kitui county counterparts to say they do not need a phone, yet also less likely to express cost being a factor, either for the device itself or ongoing maintenance.

Nevertheless, an important barrier – especially for youth populations – may be restrictions imposed from external forces (parent/guardian), which seems a more prevalent issue in Kisumu county. Beyond expected challenges pertaining to price, there may be other hidden costs – e.g. transportation costs – that may hinder access to mobile phones and the digital financial services they may offer.

Reasons for Not Having a Phone
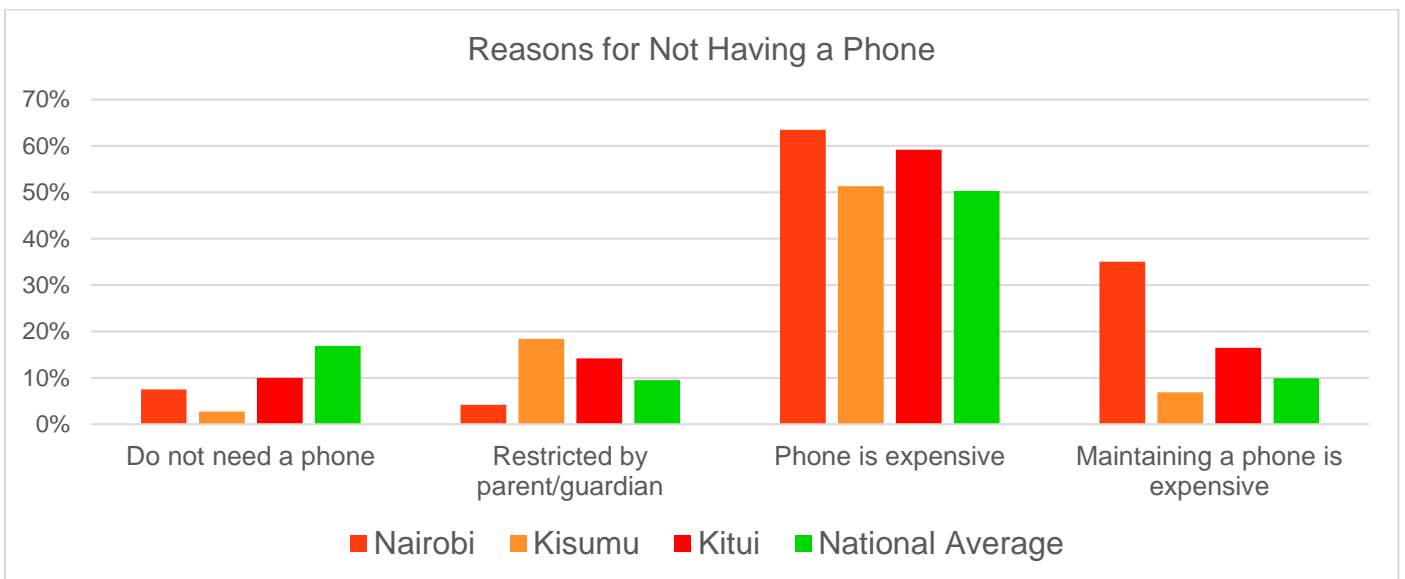
Cash Transfers: Whereas mobile money schemes show deep penetration in urban settings, cash transfer mechanisms appear more prevalent in rural areas (where the average across the country is 40.2 percent of householders receiving cash transfers) than urban areas (where the average across the country is 33.5 percent of householders receiving cash transfers), as the chart below indicates. The majority of cash transfers are received from sources inside of Kenya, and furthermore from individual sources (e.g. family members in urban settings).
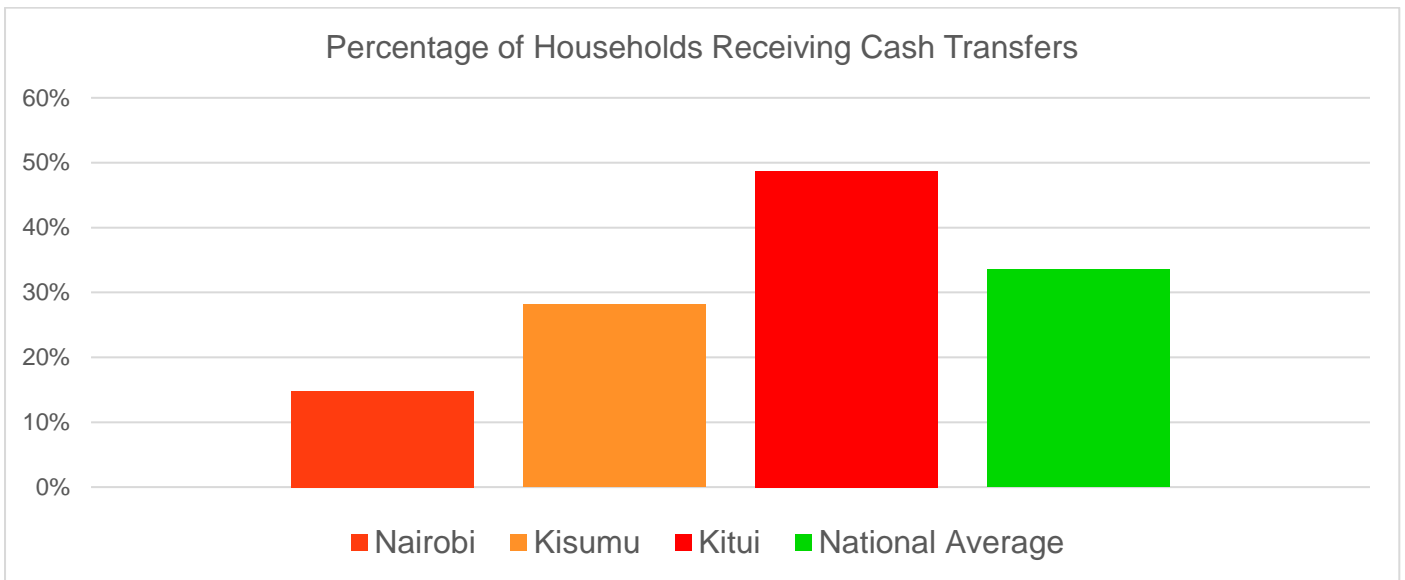
When analyzing the expenditure data for cash transfers, it is revealing to note that 31.3 percent of cash transfers received by households in Kitui from within Kenya are spent on health, compared to only 2.2 percent for Nairobi, 5.5 percent for Kisumu, and 6.9 percent for the national average.
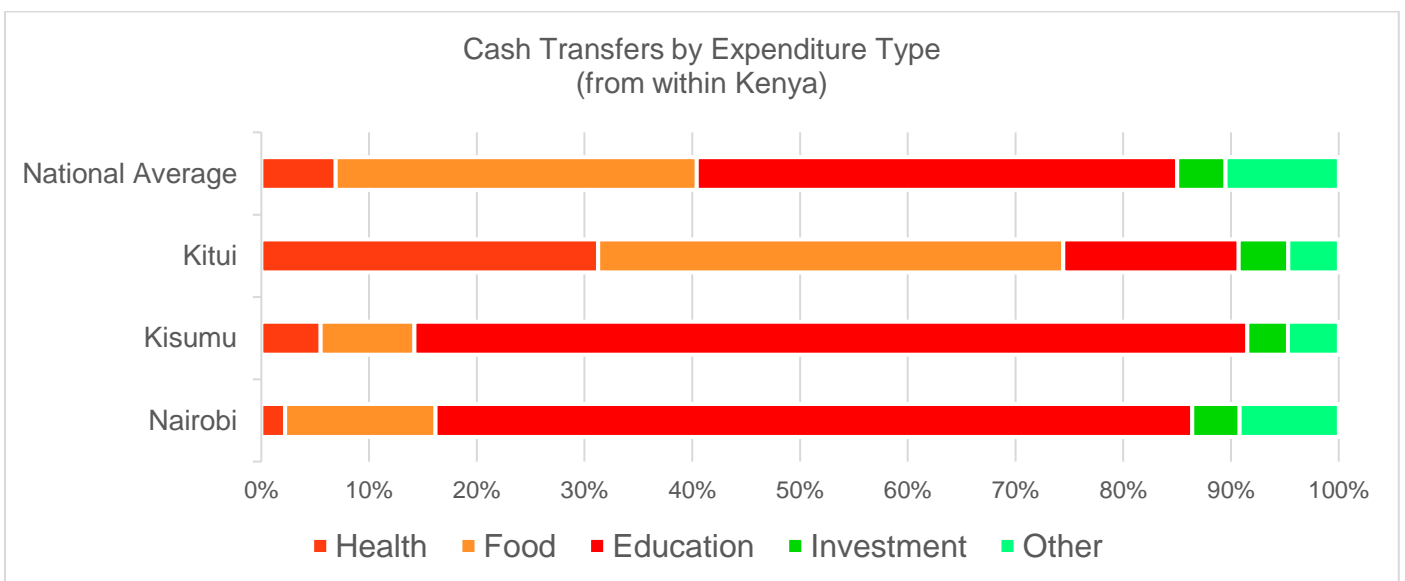
DFS for Health in Kenya

The Kenyan market is a particularly compelling environment to explore due to the tremendous level of entrepreneurial activity taking place in the ecosystem, particularly around digital financial services. With Nairobi as a setting buzzing with new enterprises, many solutions have been built on top of existing DFS platforms across sectors, including health, energy access, agriculture, and so on. The health value chain is ripe for disruption, especially taking into account the complexity of information or funds that move between the various nodes. For the purpose of discussion, we take a simplistic view of that health value chain below.

Kenya has witnessed new solutions and enterprises bringing DFS solutions to market which benefit actors across the value cha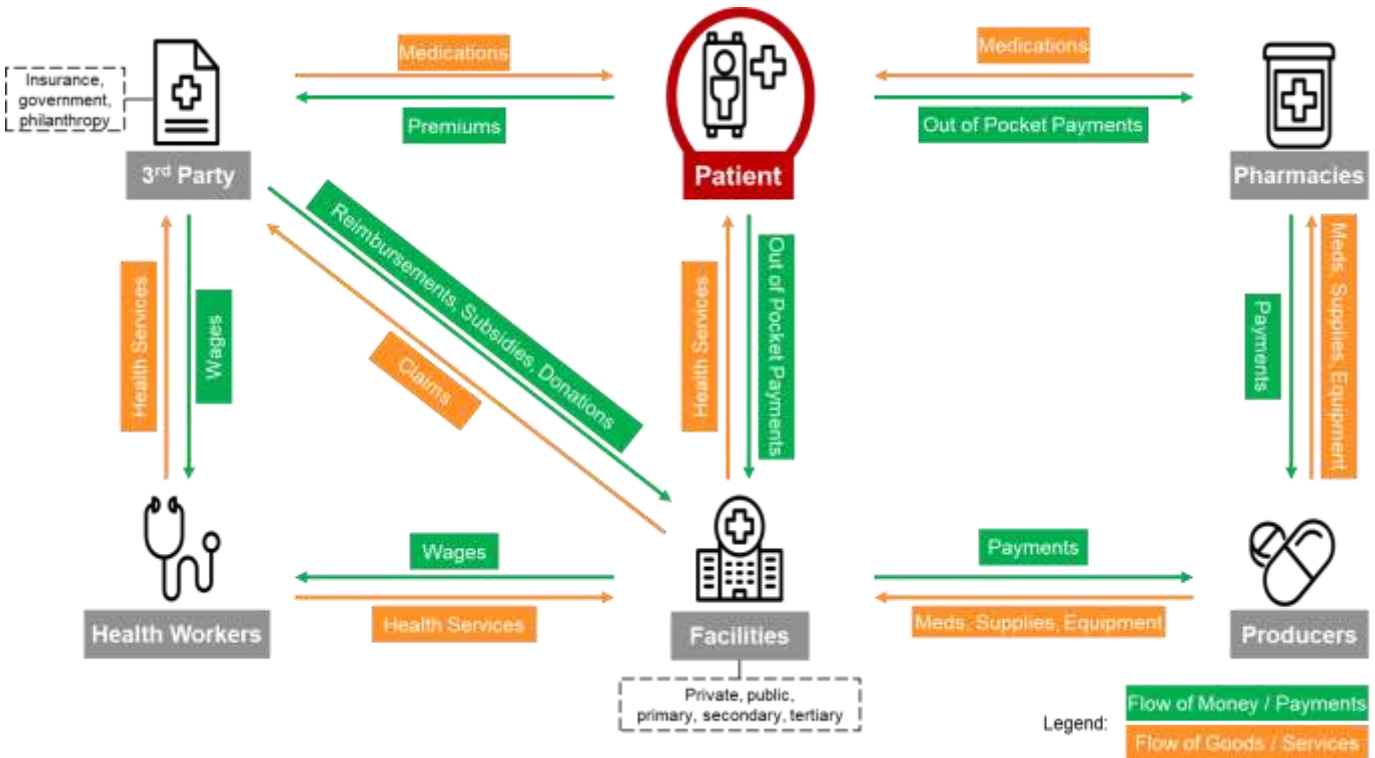in, both increasing financial protection for patients as well as strengthening health systems overall. A few of those examples of DFS applications in the Kenya health market are listed below:

- **M-TIBA** → M-TIBA is a mobile-based service that allows you to set funds aside for healthcare. Funds are stored in M-TIBA and can only be used to pay for services and medication at specific healthcare facilities which carry the M-TIBA logo. Funds can be transferred from M-Pesa to M-TIBA.

- **Fearless Health** → MicroEnsure's Fearless Health integrates insurance with other products designed to help customers get the inpatient and outpatient care they need without delaying treatment because of the costs.

- **mHMtaani** → With support from USAID, under the APHIAplus Nairobi-Coast project, Pathfinder launched mHMtaani or "Mobile health for our communities." The project aims to promote healthier communities by using mobile technology to monitor and track the health of pregnant mothers, as well as use an app to monitor the activities of community health workers and pay them using mobile money based on their performance. mHMtaani works to improve service delivery for children and adults at the community level using CommCare, a recognized mHealth platform provided by Dimagi.

- **Changamka** → Changamka was founded on the belief that mobile technologies can be leveraged to improve the demand side financing initiatives to improve access to healthcare for the lower economy,

underserved populations in the developing world. One product is a pre-paid smart card that is linked to MPESA to help women steadily save money in order to pay for quality antenatal, maternity and postnatal services at participating facilities.

- **National Health Insurance Fund** → The National Health Insurance Fund (NHIF) has a partnership with M-Pesa to allow subscribers to pay premiums with mobile money.

A few other DFS examples outside of health include the following:

- **Tugende** → Tugende finances income-generating assets for proven entrepreneurs, empowering those previously perceived to be too risky for credit. Their primary product is a lease-to-own motorcycle financing package which includes training, life and health insurance, driving permits, and active support.
- **Aspira** → Aspira was launched by Cim Finance in 2018, providing a free credit assessment and access to financing with flexible payment terms on leading consumer products.
- **BOMA Project** → The BOMA Project's Rural Entrepreneur Access Project (REAP) is a gender-focused model helping women overcome extreme poverty through a series of sequenced interventions and a defined exit strategy. An initial step is conditional cash transfers, followed by access to a personal bank account and subsequent mobile money account with M-Pesa.
- **Musoni** → Musoni is aiming to be the most efficient microfinance institution in Kenya, through its cashless, paperless, and data-driven operations. In addition, Musoni supports other microfinance institutions with its best practice software platform.

Accenture and Jhpiego would leverage these innovations, among others, in developing a global scan of DFS applications, both in health and beyond.

Achieving USAID's Strategic Outcomes

Accenture and Jhpiego look forward to working with PATH, Digital Square, USAID, and our partners to capture insights that improve existing and future DFS interventions, enhancing design elements and enabling infrastructure to contribute to the achievement of USAID's four strategic outcomes:

- Financial Protection for vulnerable individuals and households

- Access to Essential Services to facilitate payments and extend the reach of health services

- Population Coverage by leveraging new channels, products, and services

- Health Service Responsiveness which reinforces relevance and trust

DFS in health have the power to address longstanding issues around access to care, care seeking behavior, and the multifaceted bottlenecks of cashflow across the healthcare value chain. Improved applications of DFS have the potential to "provide sustained, equitable access to essential, high-quality health services responsive to people's needs without financial hardship, thereby protecting poor and underserved people from illness, death, and extreme poverty."[17] In markets around the world, DFS for health have shown promising early results for individuals in accessing healthcare services. Those that stand to gain from a greater proliferation of DFS applications also include the vast web of stakeholders involved in health value chains, including insurers, pharmacies, public- and private-sector providers, donors, medical device and pharmaceutical manufacturers and financial service providers.

However, the potential of DFS for health has yet to be fully realized due to technology bottlenecks, opacity around the potential benefits and ideal applications of DFS, a dearth of evaluation and proper data collection, resource and infrastructure constraints, and an imbalance between institutional human resource demand and qualified supply.[18] DFS can dramatically improve outcomes across several dimensions: (1) Increasing financial protection, especially among the most vulnerable health clients; (2) Increasing demand for and usage of health services; (3) Improving the performance of health systems overall, defined by both quality and responsiveness. By understanding the applications from a global landscape and lessons from a local context, PATH and Digital Square have the potential to coordinate their strategy and better allocate resources to solutions that would drive meaningful impact across both goals. We agree that strategic implementation on a global scale could advance the dual goals of strengthening financial protection for households and individuals living on or beyond the economic margins, while supporting health sector strengthening and performance.

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[17] USAID's Vision for Health Systems Strengthening
[18] mHealth Challenges and Opportunities in Emerging Markets. Accenture.

accenture | jhpiego

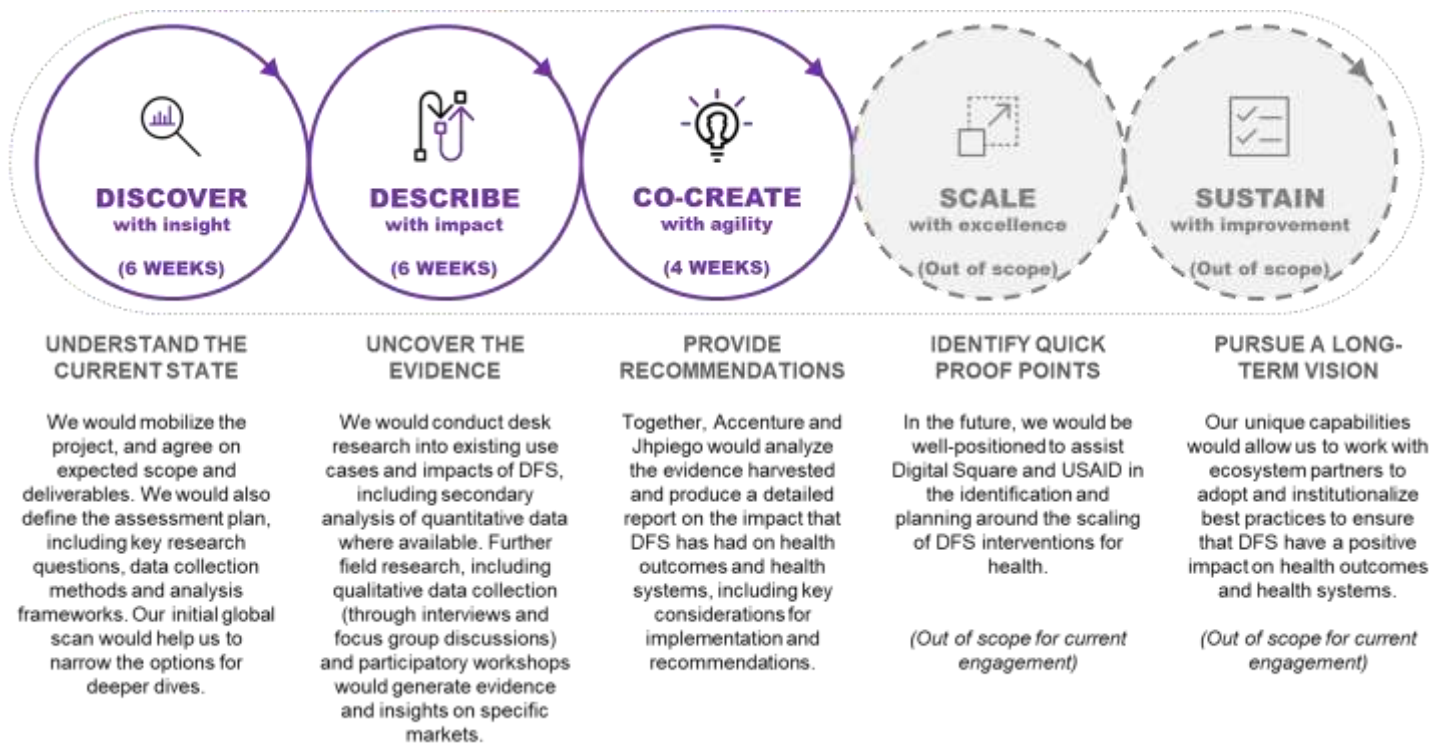# OUR PROPOSED APPROACH

High-Level Budget Summary

We would offer to deliver on the activities and deliverables for this engagement for a **total fee of USD 186,654**. This budget would include time for full-time project personnel, part-time subject matter advisors, and travel expense associated with in-market research.

Accenture reserves the right to modify its proposed pricing based on completion of due diligence activities, final approval by Accenture management, and PATH and Accenture's agreement on a definitive agreement covering the work associated with this pricing.

Objectives & Activities

Accenture and Jhpiego would work together seamlessly, aligned by a tested methodology. This methodology would seek to iterate within project teams to drive more innovative outcomes. Our methodology puts the user experience at the heart, all while taking a human-centered research and design approach. With a keen focus on value creation and insights driven by data, the process would use both quantitative and qualitative methodologies to create thought-provoking frameworks and insights.

The Accenture-Jhpiego project team would generate and synthesize evidence for this engagement over the course of 16 weeks, distributed across the 3 phases detailed below. The landscape assessment engagement would be punctuated with regular touchpoints to align on progress, and with 3 workshops that would shape the research and ideate on actionable next steps.

DISCOVER with insight (6 WEEKS)	DESCRIBE with impact (6 WEEKS)	CO-CREATE with agility (4 WEEKS)	SCALE with excellence (Out of scope)	SUSTAIN with improvement (Out of scope)
UNDERSTAND THE CURRENT STATE	UNCOVER THE EVIDENCE	PROVIDE RECOMMENDATIONS	IDENTIFY QUICK PROOF POINTS	PURSUE A LONG-TERM VISION
We would mobilize the project, and agree on expected scope and deliverables. We would also define the assessment plan, including key research questions, data collection methods and analysis frameworks. Our initial global scan would help us to narrow the options for deeper dives.	We would conduct desk research into existing use cases and impacts of DFS, including secondary analysis of quantitative data where available. Further field research, including qualitative data collection (through interviews and focus group discussions) and participatory workshops would generate evidence and insights on specific markets.	Together, Accenture and Jhpiego would analyze the evidence harvested and produce a detailed report on the impact that DFS has had on health outcomes and health systems, including key considerations for implementation and recommendations.	In the future, we would be well-positioned to assist Digital Square and USAID in the identification and planning around the scaling of DFS interventions for health. *(Out of scope for current engagement)*	Our unique capabilities would allow us to work with ecosystem partners to adopt and institutionalize best practices to ensure that DFS have a positive impact on health outcomes and health systems. *(Out of scope for current engagement)*

The following provides a more detailed illustration of the objectives, activities, and deliverables for each of the 3 phases. For each activity and deliverable listed, we include the consortium partner in parentheses (Accenture or Jhpiego) who would be primarily responsible.

Phase 1: Discover

Phase 1 Objective: Over the first 6 weeks, Accenture and Jhpiego would work closely to mobilize the project, define the assessment plan, and conduct top-down, secondary research. This would allow us to take a global approach at mapping the constellation of use cases for DFS in health. This would include identifying early hypotheses on implementation considerations for DFS in health. A key element of this process would be to conduct a workshop with key project stakeholders (see workshop #1 below) to further validate the assessment framework and initial hypotheses to be tested in Kenya during primary data collection (phase 2).

Phase 1 Overview: Leveraging Accenture's global footprint and extensive research experience, the project team would conduct secondary research to map use cases. With close connection and roots with Johns Hopkins University, Jhpiego is well suited to lead and collaborate on design, implementation, and analysis for collaborative evidence gathering into the landscape of DFS. Navigating some of the increasingly complex local and international regulation on how to engage and collect information from individuals is familiar to Jhpiego as they have many ongoing protocols and regularly engage with country ethics review committees. During the first phase, we will support determining the level and type of ethical approvals required in US and Kenya, facilitate rapid review and approval, and obtain necessary permissions from local authorities to engage with workshop participants and key informants or focus groups from Nairobi, Kisumu, and Kitui.

Assessment plan: Defining the assessment plan that addresses the requirements of Digital Health and the specifications of our landscaping assessment is pivotal for the smooth implementation and success of data collection and analysis. Jhpiego will facilitate the early steps of developing assessment questions that will drive the design. Clear articulation and discovery of contextually nuanced learning objectives will enable the optimal research questions to set out clearly and directly in collecting data for landscaping of DFS. Once the objectives are defined, designing the data collection and analysis methods together will including specific consideration and human centered design processes for how to plan stakeholder engagement, focus group data collection, documentation of experiences and insights, protection of participant identity/information, and framework for triangulation/synthesis of findings. Jhpiego will work both in the US and with study coordination staff in the Jhpiego Kenya office to ensure composition of data collection team and the management of all logistics are in place to ensure effective and efficient completion of objectives.

Assessment framework: Beyond technical knowledge of assessment design, Jhpiego has experience with iterative problem formation and how to collaboratively define the intent and purpose of a given study. Developing a clear and high-quality assessment framework will help our consortia, donor, and stakeholders engaged later in the process understand the question, methods, and expected results of this landscaping. Assessment frameworks are developed for each study to clarify how the design will inform the learning objectives; Jhpiego has also developed theories of change to assess broad sets of interventions as they relate to populations and specific health improvement needs. We will bring that expertise into the assessment framework to better place DFS alongside or crossing over to the landscape of digital health.

Phase 1 Key Activities:

- Establish kick-off meeting to align on key objectives for the engagement, overall project plan, assessment framework and methodology, finalized scope, and deliverables (Accenture)
- Develop inception report (Deliverable #1) to present finalized project plan and scope (Accenture)

- Define key assessment questions, hypotheses, and data collection methods to arrive at insights for the following areas: (1) financial protection; (2) increased demand and use; (3) health systems performance (to also include obtaining requisite approvals for primary data collection) (Jhpiego)
- Identify, collect, and review relevant documents on existing research on the current uses and impact of DFS (Accenture)
- Document findings from literature review to begin mapping the constellation of use cases for DFS in health (Accenture)
- Gather data on existing DFS implementations from publicly available sources (Accenture)
- Develop use case framework (Deliverable #2) to capture and catalogue a global scan of DFS implementations (Jhpiego)
- Conduct remote interviews with key subject matter experts from Jhpiego, Accenture, USAID, PATH, Digital Square, and key global health stakeholders to validate assessment framework (Accenture)
- Plan and implement Workshop #1 (details below) to further validate assessment framework (Accenture)
- Develop a preliminary findings report (Deliverable #3) to highlight literature reviewed to date, any initial preliminary findings from data analysis, as well as outputs from the workshop (Accenture)

> *Workshop #1: How are existing DFS use cases improving health outcomes and health systems?*
>
> Objective: Further validate assessment framework and initial hypotheses to be tested in Kenya during the fieldwork of phase 2.
>
> Attendees: Jhpiego project team members, Accenture project team members, PATH and Digital Square project stakeholders, USAID project stakeholders
>
> Location: Baltimore, MD, USA
>
> Timing: Half-day workshop during week 5
>
> Key Outputs: Towards the conclusion of the 'Discover' phase, the project team would conduct a half-day workshop in person to better understand the global findings from the secondary research. This workshop would make sense of the use case framework deliverable and provide guidance for the primary research to be conducted in Kenya during phase 2.

Phase 1 Key Deliverables:

1. **Inception Report** (to be delivered at the end of the 2nd week): The inception report would present finalized project plan and scope as well as a preliminary structure for the landscape report.

2. **Use Case Framework** (to be delivered at the end of the 5th week): The use case framework would provide an illustration of the global constellation of DFS use cases for health, taking into account the application of key DFS tools (payments, credit, savings, insurance, etc) to distinct nodes along the value chain (patients, healthcare providers, payers, medical equipment manufacturers, pharmaceutical companies, etc). This process would capture where implementations have focused on financial protection, increased demand and use, health systems performance, or a combination.

3. **Preliminary Findings Report** (to be delivered at the end of the 6th week): The preliminary findings report would provide PATH, Digital Square, and USAID stakeholders with a rough look of the literature reviewed to date, data analysis efforts, as well as outputs from the workshop.

Phase 2: Describe

Phase 2 Objective: Over 6 weeks, Accenture and Jhpiego would conduct detailed quantitative and qualitative research to further investigate the impact that selected interventions have had on financial protection, the demand and use of health services, and health systems performance. After the team has gathered substantial evidence, the project team would conduct another workshop (see workshop #2 below) to better understand the barriers and challenges that were faced with the implementation of DFS.

Phase 2 Overview: With Jhpiego's local offices and relationships built over the years, we have a strong understanding and ease in which to bring stakeholders together and also to ensure timely and efficient planning of data collection. With Accenture, we will consider participants from each of the following groups to ensure holistic understanding of successes, challenges, contextual and programmatic factors affecting implementation, unintended consequences:

- Multiple levels of health system

- Multiple sectors of community/population

- Gender, youth, marginalized groups

As Jhpiego will be leading the data collection interview process in three markets, creating the interview schedule is a precursory activity preferably led locally with support from the regular country liaisons both for ease of logistics and for local and trusted interviewers and expertise in qualitative data methods. We will consider where and how individual or group interviews, or other consultative activities, should be conducted to facilitate open experience sharing and critical reflection in a way that also captures the data required to inform the landscape analysis.

Data collection in Urban, Peri-Urban, Rural markets: Jhpiego will conduct data collection interviews with key targeted groups and individuals in the three selected markets: urban, peri-urban, rural. The final design of the interview or focus group discussion guides will be determined through the discover process. Jhpiego staff or contractors will conduct the interviews across the markets with oversight from project staff. The data collection of qualitative data will include recordings and transcription. Travel for supervision of data collection will be organized locally for the oversight team. Depending on the finally selected approach to collecting data from key groups in the selected markets in Kenya, Jhpiego will direct the study on the ground with a study coordinator, data collectors, and oversight. Supervision and final design will be based on the methodology selected. Recordings will be used where participants consent as a reference and validation of data collectors notes but will not be used for transcription. Jhpiego will be responsible for data collection while Accenture will perform the analysis. Internally, the project team would meet to review results together, with the final write-up being done by Accenture.

Workshop facilitation: Jhpiego has invested in building capacity over the last several years in human centered design. With a close relationship with the Johns Hopkins Carey Business School, a course has been developed which teaches design thinking for innovative problem solving that relates specifically to global health challenges. Many Jhpiego staff globally have been certified in design thinking and local workshops have been held successfully which implement key components and principles of this approach. With experienced and engaging local and global facilitators, we have frequently led workshops, trainings, and stakeholder engagement meetings with diverse participants and activities. We propose to either develop a co-facilitation

team, or to add value as lead facilitators for the second workshop which will be more focused on XYZ. With our deep knowledge of health systems, we are ready and eager to engage with health care providers, health informatics developers, and other implementing partners within the global health field to better understand the DFS landscape as it relates to health.

Phase 2 Key Activities:

- Identify DFS implementations in Kenya to assess further, one in each of the following regions: (1) urban; (2) peri-urban; (3) rural (Jhpiego)
- Based on learnings from Phase 1, align on stakeholder interviews, develop interview schedule, and create interview guides (Jhpiego)
- Plan travel to these three regions within Kenya to conduct deep-dive primary data collection with key stakeholders (to potentially include: DFS implementing institutions, policy makers, funders, beneficiaries) (Jhpiego)
- Gather and analyze relevant publicly available document to further support the assessment of 3 DFS implementations in Kenya (Accenture)
- Travel to each of the 3 identified Kenyan markets (urban, peri-urban, rural) (Jhpiego)
- Identify and conduct interviews with key stakeholders in each market (Jhpiego)
- Plan and implement Workshops #2 (details below) as full-day workshop in Nairobi to consolidate learnings from each of the 3 identified Kenyan markets (urban, peri-urban, rural) and further validate hypotheses (Jhpiego)
- Develop evaluation framework (Deliverable #4) to triangulate and interpret data from qualitative and quantitative sources (Jhpiego)

Workshop #2: What can we learn from the Kenyan experience of implementing DFS for health across urban, peri-urban, and rural settings?

Objective: Qualify key implementation considerations for DFS applications in specific settings, taking into account key barriers, adaptations, and success factors.

Attendees: Jhpiego project team members, Accenture project team members, key stakeholders as identified from deep dive analysis conducted in urban, peri-urban, rural settings across Kenya

Location: Nairobi, Kenya

Timing: Full-day workshop during week 11

Key Outputs: Towards the conclusion of the 'Describe' phase, the project team would conduct a full-day workshop in person to better understand the lessons learned from the 3 market deep-dives. This workshop would make sense of those learnings in a local context and how those might inform a more global evaluation framework when thinking about DFS for health.

Phase 2 Key Deliverables:

4. **Evaluation Framework** (to be delivered at the end of the 12th week): The evaluation framework will build on the primary research conducted during phase 2 to develop a nuanced approach to the implementation considerations and enabling factors for successful DFS applications in health.

Phase 3: Co-create

Phase 3 Objective: Over 4 weeks, the project team would synthesize the findings to date and plan for the delivery of the final landscape report. This would involve planning for the final workshop (see workshop #3 below) which would investigate ways to overcome barriers, based on the learnings from existing interventions.

Phase 3 Overview: Building on established frameworks for evaluation of digital health, health financing, service delivery, social protection, and demand-generation interventions, as well as insights gleaned from Discover and Describe phases, Jhpiego will facilitate development of a pragmatic framework for evaluation of DFS solutions. Development of this framework will be an iterative co-creation process, informed by common and divergent findings from deep-dives into different markets to ensure wide applicability across contexts and types of DFS.

To extract the most value from the short timeframe and limited data collection, collaboration between Jhpiego and Accenture will closely continue as the data is analyzed. As often occurs, on the ground engagement provides unique perspectives into key issues and themes which will be useful in compiling the final analysis report.

Phase 3 Key Activities:

- Conduct detailed analysis of the collected evidence to synthesize impact of digitization in low-resource settings on financial protection, demand and supply of health services, and quality of health services (would focus on key implementation considerations of DFS interventions – i.e. strengths, weaknesses, challenges, enabling environments, interoperability, ease of implementation, suitability for USAID, total costs of ownership, sustainability, and expected or realized impact) (Accenture)

- Validate and refine hypothesis (Accenture)

- Further refine evaluation framework for donors, ministries, and implementing partners to assess DFS solutions according to key dimensions (Jhpiego)

- Share assessment draft with PATH, Digital Square and USAID and incorporate feedback (Accenture)

- Incorporate feedback to prepare and submit final draft of landscape assessment report (Accenture)

- Support follow-up as needed (Accenture)

- Plan for Workshop #3 (see details below) to better evaluate recommendations for implementation (Accenture)

- Develop Final Landscape Report (Deliverable #5) (Accenture)

Workshop #3: How might we overcome barriers standing in the way of greater financial protection and improved health system performance?

Objective: Synthesize learnings from global secondary research in phase 1 and deep-dive primary data collection in phase 2 to further qualify implementation considerations of DFS for health.

Attendees: Jhpiego project team members, Accenture project team members, PATH project stakeholders, USAID project stakeholders

Location: Baltimore, MD, USA

Timing: Full-day workshop during week 15

Key Outputs: Towards the conclusion of the 'Co-create' phase and the project overall, the Accenture project team would conduct a full-day in-person workshop with PATH, Digital Square and USAID stakeholders to arrive at implications and strategic recommendations for implementation based on the analysis of existing interventions. The project team would then synthesize the outcomes of this workshop in its final report.

Phase 3 Key Deliverables:

5. **Final Landscape Report** (to be delivered at the end of the 16th week): The Final Landscape Report would synthesize key findings from the primary and secondary research, evaluation framework outputs from the three workshops, and feedback from relevant stakeholders.

Summary of Deliverables

Deliverable:	To Be Delivered:	Description:
Inception Report	2nd week	The inception report would present finalized project plan and scope as well as a preliminary structure for the landscape report.
Use Case Framework	5th week	The use case framework would provide an illustration of the global constellation of DFS use cases for health, taking into account the application of key DFS tools (payments, credit, savings, insurance, etc) to distinct nodes along the value chain (patients, healthcare providers, payers, medical equipment manufacturers, pharmaceutical companies, etc).
Preliminary Findings Report	6th week	The preliminary findings report would provide PATH, Digital Square, and USAID stakeholders with a rough look of the literature reviewed to date, data analysis efforts, as well as outputs from the workshop.
Evaluation Framework	12th week	The evaluation framework will build on the evidence generated during phase 2 to develop a nuanced approach to the implementation considerations and enabling factors for successful DFS applications in health.
Final Landscape Report	16th week	The Final Landscape Report would synthesize key findings from the primary and secondary research, evaluation framework outputs from the three workshops, and feedback from relevant stakeholders.

Key Considerations

Key elements to the final, detailed landscape report would capture several components to consider for future implementation or support, including:

➥ Barriers and/or challenges during implementation of DFS and how these were overcome

➥ Critical implementation environmental considerations, including political, technological, economic, cultural, and regulatory elements

➥ Success factors and enablers (e.g. change management, revenue models) that contributed to appropriate levels of adoption and desired outcomes of digital enablement

➥ Risks and mitigations, including trade-off and opportunity considerations between the dual-pronged goals

➥ Framework to overcome situations where increasing financial protection and increasing demand and use might be in direct conflict

Risk Mitigation

The project team would stand up a detailed data-driven risk management framework comprised of four overarching categories: Strategic Risk (market, political, and competitive factors), Operational Risk (systemic or people-related factors), Financial Risk (revenue, cost, and liability factors), and Compliance Risk (regulatory, procedural, and contractual factors). These risks and underlying factors would be carefully tracked and managed during our weekly stakeholder meetings.

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Schedule

We propose the preceding phases and key activities over a 16-week duration to meet the desired outcomes:

Phase	Activities	Primary Responsibility	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Discover	Establish kick-off meeting to align on key objectives for the engagement, overall project plan, assessment framework and methodology, finalized scope, and deliverables	Accenture	★															
	Develop inception report (Deliverable #1) to present finalized project plan and scope	Accenture	■	▲														
	Define key assessment questions, hypotheses, and data collection methods to arrive at insights for the following areas: (1) financial protection; (2) increased demand and use; (3) health systems performance	Jhpiego	■	■														
	Identify, collect, and review relevant documents on existing research on the current uses and impact of DFS	Accenture	■	■	■													
	Document findings from literature review to begin building the "constellation" of use cases for DFS in health	Accenture		■	■	■												
	Gather data on existing DFS implementations from publicly available sources	Accenture	■	■	■	■												
	Develop use case framework (Deliverable #2) to capture and catalogue a global scan of DFS implementations	Jhpiego			■	■	▲											
	Conduct remote interviews with key subject matter experts from Jhpiego, Accenture, USAID, PATH, Digital Square, and key global health stakeholders to validate assessment framework	Accenture		■	■	■	■											
	Plan and implement Workshop #1 to further validate assessment framework	Accenture					★											
	Develop a preliminary findings report (Deliverable #3) to highlight literature reviewed to date, any initial preliminary findings from data analysis, as well as outputs from the workshop	Accenture				■	■	▲										
Describe	Identify DFS implementations in Kenya to assess further, one in each of the following regions: (1) urban; (2) peri-urban; (3) rural	Jhpiego							■									
	Based on learnings from Phase 1, align on stakeholder interviews, develop interview schedule, and create interview guides	Jhpiego							■									
	Plan travel to these three regions within Kenya to conduct deep-dive primary data collection with key stakeholders (to potentially include: DFS implementing institutions, policy makers, funders, beneficiaries)	Jhpiego							■	■								
	Gather and analyze relevant publicly available document to further support the assessment of 3 DFS implementations in Kenya	Accenture								■	■	■						
	Travel to each of the 3 identified Kenyan markets (urban, peri-urban, rural)	Jhpiego									■	■	■					
	Identify and conduct interviews with key stakeholders in each market	Jhpiego									■	■	■					
	Plan and implement Workshops #2 as full-day workshop in Nairobi to consolidate learnings from each of the 3 identified Kenyan markets (urban, peri-urban, rural) and further validate hypotheses	Jhpiego											★					
	Develop evaluation framework (Deliverable #4) to triangulate and interpret data from qualitative and quantitative sources	Jhpiego											■	▲				
Co-create	Conduct detailed analysis of the collected evidence to synthesize impact of digitization in low-resource settings on financial protection, demand and supply of health services, and quality of health services	Accenture													■			
	Validate and refine hypothesis	Accenture													■			
	Further refine evaluation framework for donors, ministries, and implementing partners to assess DFS solutions according to key dimensions	Jhpiego													■	■		
	Share assessment draft with PATH, Digital Square and USAID and incorporate feedback	Accenture														■		
	Incorporate feedback to prepare and submit final draft of landscape assessment report	Accenture															■	
	Support follow-up as needed	Accenture															■	
	Plan for Workshop #3 to better evaluate recommendations for implementation	Accenture															★	
	Develop Final Landscape Report (Deliverable #5)	Accenture															■	▲

Legend
★ Key Workshops
▲ Key Deliverables
◇ Status Meeting

APPENDIX

Organizational Overview

Accenture

Accenture is a global management consulting and professional services firm founded in 1989, with an annual revenue of $43B in 2019. Accenture provides an extensive range of services and solutions in strategy, consulting, digital, technology and operations, with more than 490,000 people serving clients in over 120 countries. We combine experience and specialized skills across more than 40 industries and within all business functions, working at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. Accenture works with 94 of the Fortune 100 companies and more than three-quarters of the Fortune Global 500, providing consulting and outsourcing services to help organizations increase performance achieve their vision. Our clients are diversified across a range of industries, including Products, Resources, Communications & High Technology, Financial Services, and Health & Public Service.

Accenture Strategy – We shape our clients' future by combining comprehensive business insight with the understanding of how technology, business change and innovation impact industry and business requirements.

Accenture Consulting – We bring together industry experience to help our clients transform their businesses to compete in today's digital world.

Accenture Digital – We help our clients to unleash the power of digital by providing analytics, interactive marketing, and mobility services to create new value.

accenturestrategy
accentureconsulting
accenturedigital
accenturetechnology
accentureoperations

Accenture's Offerings

Accenture Technology – We power our clients' businesses with "leading edge" established and emerging technologies. We are the world's largest independent technology services provider.

Accenture Operations – We operate business processes and infrastructure as a service on behalf of our clients.

As a multinational organization serving more than three-quarters of the Fortune Global 500, and 94 of the Fortune 100 companies, Accenture employees comprise a global network with access to private sector leaders in every industry. Through this network, we leverage deep understanding of markets and sectors, as well as trusted relationships with development and business actors to promote high-impact partnerships. To date, we have supported hundreds of cross-sector partnership projects, contributing to our breadth of assets and tools including governance models, business cases, evaluation frameworks, surveys and research on leading practices.

Accenture Development Partnerships

ADP is a business unit within Accenture that collaborates with international development organizations to help deliver innovative solutions that truly change the way people work and live. ADP has completed over 1,200 projects in more than 70 developing countries with over 140 client organizations – donors, foundations, international and local NGO's, and businesses. ADP harnesses the full breadth of Accenture's unique assets, capabilities, and services for development sector impact and engages more than 500 high-performing Accenture employees year-on-year.

ADP's innovative business model makes Accenture consulting services available at competitive rates through a three-way commitment. Our participants allocate part of their salary for the time they are working on ADP assignments, Accenture covers overheads and forgoes any profit, and our clients cover the base level costs. Through this model, the ADP business model is the epitome of a business model that enables shared value through our collaborations with our clients.
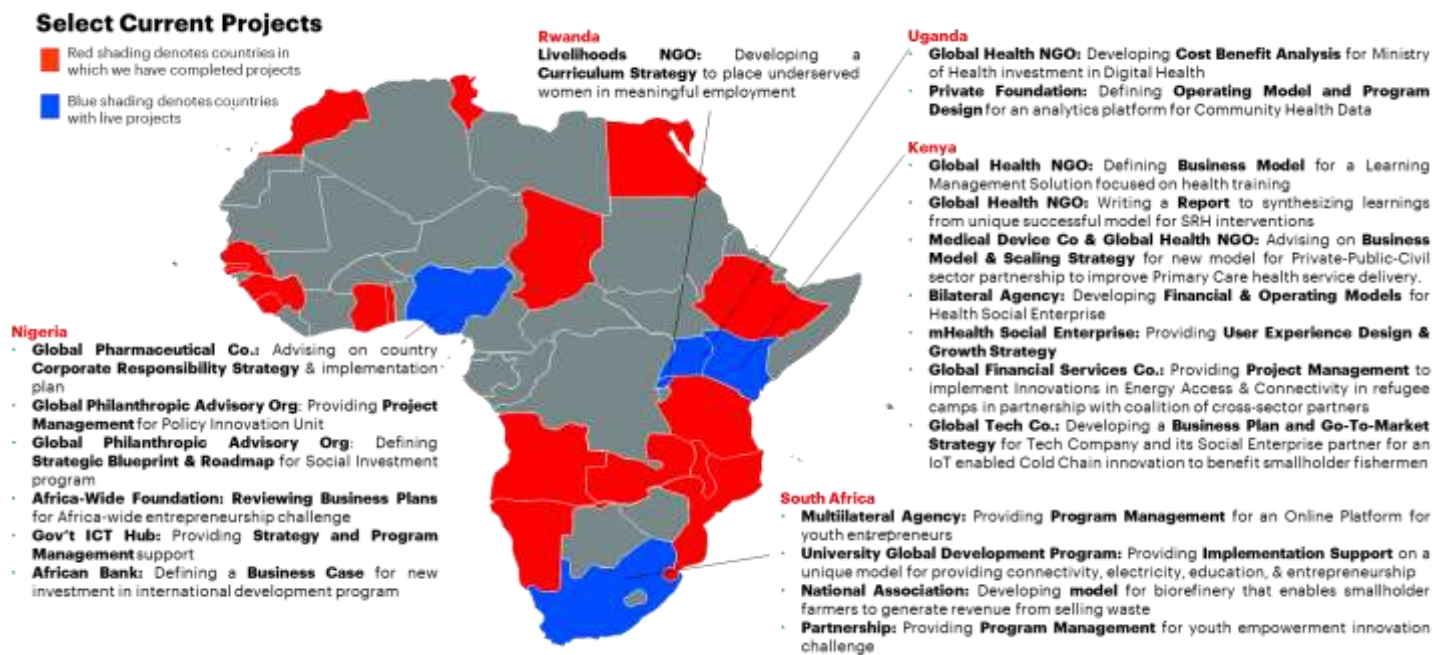
ADP offers development sector clients the full range of consulting capabilities that Accenture provides to its commercial clients, from developing organizational strategy and business model development, to designing more efficient processes and implementing technology solutions. We believe that ADP offers a model of teaming with international development organizations distinct from other players in the market.

AGRICULTURE	ENERGY	FINANCIAL INCLUSION	GLOBAL HEALTH	LIVELIHOODS & EDUCATION	HUMANITARIAN RESPONSE
• Connected Crop Solution for Smallholder Farmers	• Pico Products (Lighting, Solar Home Systems)	• BOP Payment Solutions	• Maternal, Child & Reproductive Health	• Enterprise & Supplier Development	• Disaster Preparedness and Relief
• Agriculture Value Chain Strengthening	• Microgrids, Minigrids, & Decentralized Energy Systems	• Micro Insurance	• Non-communicable diseases	• Job Readiness & Placement	• Humanitarian Supply Chain
• Market Access & Channel Development	• Clean Cookstoves and Fuels	• Blockchain, Digital Identity & Security	• Infectious Diseases	• Workforce Development	• Migration and Civil Conflict
• Environmental Forecasting	• Smart Communities	• Financial Literacy	• Health Workforce Development	• Talent Sourcing (employer side)	• Education and Livelihoods for Refugees
• Nutrition	• BOP Demand Forecasting & Strengthening	• Access to Financial Services	• Health Financing	• Digital Skills Development	• Digital Strategy and Scalability
• Post Harvest Loss	• Local Content Development for Extractives	• Cash Transfers	• Digital Health and Supply Chain	• Inclusive Workforce and Sourcing	• Humanitarian Program Data Management

ADP's Sector Expertise

ADP's work in Africa

Accenture has been working in Africa for over 40 years and currently employs over 3,300 people within the continent, including 355 management consulting professionals. Accenture has worked in 40 countries across the continent, with permanent offices and operations in 13 countries. Through a system of seven offices and our network of field-based teams, Accenture has developed a deep understanding of working within the African continent. Accenture has conducted 162 not-for-profit projects for 55 African clients, including governments and NGOs and has established a strong track record delivering a wide range of projects with clients across sectors.

Select Current Projects

Red shading denotes countries in which we have completed projects

Blue shading denotes countries with live projects

Rwanda
Livelihoods NGO: Developing a **Curriculum Strategy** to place underserved women in meaningful employment

Nigeria
- **Global Pharmaceutical Co.:** Advising on country **Corporate Responsibility Strategy** & implementation plan
- **Global Philanthropic Advisory Org:** Providing **Project Management** for Policy Innovation Unit
- **Global Philanthropic Advisory Org:** Defining **Strategic Blueprint & Roadmap** for Social Investment program
- **Africa-Wide Foundation:** Reviewing Business Plans for Africa-wide entrepreneurship challenge
- **Gov't ICT Hub:** Providing **Strategy and Program Management** support
- **African Bank:** Defining a **Business Case** for new investment in international development program

Uganda
- **Global Health NGO:** Developing **Cost Benefit Analysis** for Ministry of Health investment in Digital Health
- **Private Foundation:** Defining **Operating Model and Program Design** for an analytics platform for Community Health Data

Kenya
- **Global Health NGO:** Defining **Business Model** for a Learning Management Solution focused on health training
- **Global Health NGO:** Writing a **Report** to synthesizing learnings from unique successful model for SRH interventions
- **Medical Device Co & Global Health NGO:** Advising on **Business Model & Scaling Strategy** for new model for Private-Public-Civil sector partnership to improve Primary Care health service delivery.
- **Bilateral Agency:** Developing **Financial & Operating Models** for Health Social Enterprise
- **mHealth Social Enterprise:** Providing **User Experience Design & Growth Strategy**
- **Global Financial Services Co.:** Providing **Project Management** to implement Innovations in Energy Access & Connectivity in refugee camps in partnership with coalition of cross-sector partners
- **Global Tech Co.:** Developing a **Business Plan and Go-To-Market Strategy** for Tech Company and its Social Enterprise partner for an IoT enabled Cold Chain innovation to benefit smallholder fishermen

South Africa
- **Multilateral Agency:** Providing **Program Management** for an Online Platform for youth entrepreneurs
- **University Global Development Program:** Providing **Implementation Support** on a unique model for providing connectivity, electricity, education, & entrepreneurship
- **National Association:** Developing **model** for biorefinery that enables smallholder farmers to generate revenue from selling waste
- **Partnership:** Providing **Program Management** for youth empowerment innovation challenge

We have conducted studies for major development sector organizations and regulators on opportunities associated with market access via digital finance. For example, through our work with the Government of Kenya ICT Board, we assessed and developed recommendations for digitizing government payments in Kenya and identified almost $6 billion in associated cost savings and revenue generating opportunities. We considered key factors of digitization in government, payments systems and methods of cost modelling to develop recommendations that were the major influence in the Kenyan ICT Board's decision to implement government digitization.

We have a deep understanding of the marketplace, due to our work with both non-profit and commercial clients. Our commercial industries include banking, energy, consumer goods and telecommunications. We would leverage our work and experience in the commercial markets for performing the current state assessment and identifying key insights and opportunities. For example, in Kenya, Accenture conducted an in-depth country market assessment to measure provision of affordable electricity services to rural communities, assess key successes, constraints and likely future trends, understand the perspectives of key stakeholders such as private sector players, technology suppliers, government, micro-enterprise and rural economic development agencies, financiers, investors and donors on the current state and future potential for renewable energy projects. This work demonstrates our ability to analyze nascent markets for technology fit across diverse geographies.

Based on our work in Africa, we have published various thought leadership pieces on the Africa landscape and markets. Below is an overview of a few recent thought leadership pieces:

	Africa: The New Frontier for Growth After decades of poor performance Africa has worked its way into the global dialogue on economic opportunity and growth. Accenture analyzed Africa's growth prospects across five dimensions, concluding that this growth is not only sustainable, but is set to increase.
	The Dynamic African Consumer Market: Exploring Growth Opportunities in Sub-Saharan Africa The growth of Africa's consumer markets presents an opportunity too big to ignore. However, companies intent on pursuing high performance through developing African markets need to adjust their expectations and strategies in accordance with African realities.
	Expansion into Africa: Challenges and Success Factors Revealed For many African businesses, geographic expansion is an attractive way to penetrate new markets and deliver the growth they seek on the journey to high performance. There are notable advantages to participation in the already large African market: it is set to grow strongly, and it is close by.

ADP's work in Global Health

Accenture holds over 20 years of experience in health strategy transformation, health administration, and clinical and health system strengthening across large health systems, medical centers and communities. We help healthcare providers, governments and funders deliver market-leading clinical and health management solutions. Our 20,000+ professionals support 86 percent of healthcare organizations and 95 percent of life sciences companies in the Global Fortune 500. We utilize our extensive understanding of the key challenges and trends of today's healthcare environment to enable new care delivery models that drive optimal health outcomes, efficient healthcare spend, and affordability.

Accenture Development Partnerships leverages this deep industry knowledge and complements it with a robust experience and

Our global health differentiators

understanding of the international development context. Drawing on these specializations, ADP has completed over 250 global health projects around the world. Our field experience has allowed us to develop strong, long-standing relationships with key global health players, from grassroots community organizations to multinational international NGOs.

We have engaged three-quarters of our Global Health clients for at least five years – these strong and trusted cross-sector relationships have allowed our partners to increase access to health services and expand their programmatic impact in exciting, innovative ways. Like our clients, we are missions-driven to create significant global health impact, including both social and economic outcomes. Our robust, integrated approach takes innovation to execution at scale.

Illustrative list of ADP's global health clients

Our experience in digital health spans a broad set of client engagements:

Amref Health – Building and Scaling LEAP (an mLearning Solution for Community Health Workers: By 2035, there will be an estimated global shortfall of 12.9 million skilled health professionals in Africa. However, training these community health workers via traditional methods poses a number of challenges, including high costs, geographic reach, poor long-term engagement, high attrition rates, and an inability to rapidly mobilize health workers in times of crisis. To overcome these challenges, Amref sought to develop a new mobile health learning platform built using basic mobile phone technology. Accenture's collaboration with Amref and other partners on this project is an excellent example of how Accenture brings innovation to create wide-reaching positive social change. We began by understanding the market landscape and identified innovation needed through basic phones. We worked closely with Mezzanine to design a product which later became Leap and is now being used by almost 100K Health Workers. We assisted with setting up a social enterprise within Amref to enable the organization to effectively scale Leap and other similar platforms through cross-sector partnerships. This included developing a business plan and building capacity of the team to operate as an mHealth social enterprise. Results included: (1) Created a unique cross-sector partnership comprising Amref Health Africa, Accenture, the Kenyan Ministry of Health, M-Pesa Foundation, Safaricom, and Mezzanine; (2) Built a mobile health learning application for CHVs and CHWs known as "Leap," designed for both basic mobile phones and smart phones; (3) Set up a Social Enterprise within Amref: Amref Enterprise Limited

Amref Health – Revamping the JIBU Health App: Amref developed a mobile application to enable health workers across Africa gain access to important health information and training content to more effectively provide health services. The App, called JIBU, was initially developed in 2016 and achieved minimal adoption due to the App not being user friendly. Amref wanted recommendations on how to revamp the visual design and overall experience of JIBU. The objective was to produce a design that would allow users to have a better experience and help them attain better learning outcomes through App use. Accenture employed a Human-Centered Design (HCD) approach to help Amref identify user needs and understand how a redesigned App can optimally address those needs. We conducted immersive user-centric research to understand 'what' health workers need, 'why' they need it, and 'how' to provide it. We then interpreted and analyzed the research findings to produce insights. This involved prioritization of opportunities for optimization of user experience and development of initial designs which were tested to gain user feedback and iterate based on that feedback. We sought input on draft designs from Amref and the 3rd party technology developer to iterate and produce final design deliverables. Results included: (1) Design outputs, including Android OS wireframes, Feature Phone wireframes, dashboard views, and a comprehensive "Style Guide" to provide detailed guidance on design elements such as colour, spacing, placement, etc.; (2) Summary user personas and user journeys

Living Goods – Defining the mHealth Technology Strategy: Living Goods provides Community Health Promoters with cell phones equipped with powerful apps which help in diagnosing child illness, send daily dosage reminders to patients, and flag pregnant women at high risk of complications. LG is entering a phase of rapid scaling with ambitions to expand their model. They wanted to have a good view of the current global mHealth landscape, understand if its current platform is sufficient to

achieve their Vision 2030, and determine how to best support their partners to drive performance. As a strategic partner, Accenture helped to find relevant solutions to these problems. We conducted an mHealth capability maturity assessment to identify and recommend an appropriate strategic option between build, buy, and partner on mHealth. We also conducted an mHealth landscape assessment in geographies such as Africa, South Asia and Latin America to seek (and then recommend) the best fit mHealth solution partner. Finally, we created a partnership framework for LG encapsulating details on LG's role in the mHealth ecosystem. Results included: (1) Identified current mHealth capability gaps (people, processes and tools) and potential initiatives to close the gaps; (2) Scoped time, effort, and cost required to close the capability gaps; (3) Identified positive points and areas of improvement in LG partnership with its current mHealth solution provider; (4) Identified strengths and limitations of the key prospective mHealth solution providers

Market Assessment, Research, and Project Management for a Bespoke Healthcare Tablet: In much of the developing world, monitoring and evaluation systems in the health sector lean on paper-based data collection and reporting of health information. These systems are outdated and not reliable (risks of losing data, misreading it). There is a need to deliver healthcare to the world's poorest communities by designing and building a bespoke tablet that meets community health workers needs particularly in rural areas and supports them in their daily activities. The use of the tablet could be extended to other verticals (agricultural extension workers, rural education, field workers). We gathered device requirements & specifications through: (1) 39 in country health worker interviews in Tanzania, Zambia and Bangladesh; (3) 22 Interviews with health ministers and experts at a digital health convention in Lesotho; (3) 35 additional expert interviews. We also conducted a detailed market assessment and market sizing for the device including defining the key target users and use cases, defining the target audience size and determining growth drivers for the addressable market. Results included: Created detailed specifications for 2 prototypes to take forward for testing and gathering purchasing interest. We compared and analysed prototype specification against available devices in the market and no current existing specialised or commercial tablet fully meets the requirements for a community health worker.

Strategy and Implementation Plan for Phones for Health: The Phones for Health partners - The GSM Association's Development Fund, The U.S. President's Emergency Plan for AIDS Relief (PEPFAR), Accenture Development Partnerships, U.S. Centers for Disease Control (CDC), U.S. Centers for Disease Control Foundation (CDC Foundation), Motorola, MTN, Voxiva - are initially focused on 10 African countries to build solutions whereby rural health facility workers are able to report routine immunization, epidemiological and outbreak data via their mobile phones. The ADP team were asked over a four-month period to apply their technical and project management skills to secure on-time project implementation and adoption by the Kenyan Ministry of Health. The two major focus areas were program planning and management, application testing, and training documentation development. The ADP team spent considerable effort working with the application developers in Peru and the Ministry of Health to validate that the module met the MOH requirements. Also created a framework for UAT and training materials for each level of the MOH hierarchy that was transitioned to the local team. The disease surveillance functionality was de-scoped and prioritized in order to put it back on track for successful delivery to the MOH; the immunization design specifications were approved on target with minimal changes required; and the client welcomed and adopted the recommendations of the ADP team for the implementation roadmap.

Designing a Data-Driven Digital Community Health Strategy: Mothers and children are dying from preventable causes at an unacceptable rate. The client's Health Team is focused on a ten-year strategy to improve the "last mile" of community healthcare in developing economies with a focus on maternal and child mortality. Accenture partnered with the client to build a data-driven community health strategy that outlined an innovative approach to empowering community health workers by leveraging advances in technology to optimize the delivery of care. Accenture developed board presentation strategy outlining the problem, vision and approach, and expected impact over the next 10 years and designed video and journey map for presentation outlining key players in the community health space that would benefit from this approach. We also outlined design requirements and value proposition of data & technology platform. We created financial model detailing financial requirements to build and scale the platform and built country selection model to score and select geographies primed for intake of the strategy and platform. We developed recommended operating model options including pros/cons of considered models and timeline for phasing. Also, conducted two workshops with key global stakeholders to design and validate approach of strategy. Finally, crafted high-level three-year roadmap with key milestones and metrics to measure impact. As a result, we achieved unanimous approval of $60M from the Board of Trustees over the next three years based on financial model. Client team secured additional $30M initial co-financing commitments and interest from key partners following stakeholder workshops. Extension of strategy team for continued support into design and planning post-board approval (currently in-progress)

Accenture Development Partnerships brings a focused perspective on disruptive and innovative best practices for digital applications in global health:

	Accenture Digital Health Technology Vision 2018 explores five trends that underscore the importance of building a foundation of trust as technology has a greater impact on our lives: *Citizen AI, Extended Reality, Data Veracity, Frictionless Business and Internet of Thinking.*
	mHealth Challenges and Opportunities in Emerging Markets addresses health care challenges that are specific to emerging markets—which must typically deal with a lack of resources, lack of infrastructure, lack of qualified health care workers and lack of data to draw insights— and discusses how Accenture can positively reshape patient outcomes by leveraging
	Digital: Transforming Refugee Healthcare explores how the convergence of community-based healthcare workers and digital technologies can enable refugees to enjoy better health in stronger communities while they determine the next step in their journey

ADP's work in Financial Inclusion

We've built a strong network with leading financial inclusion organizations through our extensive work in analysing, developing, and recommending digital solutions. We continuously leverage our technology capabilities to position our partners at the forefront of digital finance technologies, increase their reach and scale through innovative digital and mobile solutions, and amplify their impact through data and analytics. We have been a strategic and technical advisor to many actors at the heart of financial inclusion, including:

FSD Africa - Digital Finance Strategy: Accenture worked with FSD Africa to help create its digital finance strategy to position the organization to have a greater impact across Africa's changing financial sector. Across Sub-Saharan Africa, new players and new business models, including fintech mobile money and mobile credit, are rapidly taking hold, providing new opportunities to provide sustainable financial services that benefit previously underserved consumers and businesses. The Accenture project team worked directly with FSDA's leadership team in Nairobi, conducting interviews with members of the FSDA organization to evaluate the current strategy, as well as external partners, thought leaders and Accenture executives with extensive experience across financial services, supplemented with desk research to identify the latest thinking on digital finance and fintech trends. The Accenture and FSDA leadership teams developed a Digital Finance strategy that will enable FSDA to continue their leading role in enabling digital financial services. We also designed a "future proofing" process to facilitate ongoing updates to the strategy, which was documented in a summary report with supporting presentation materials, a three-year budget, staffing plan and org design.

CGAP - Financial Inclusion Strategy: CGAP works toward a world in which everyone has access to the financial services they need to improve their lives. It combines a pragmatic approach to market development with an evidence-based advocacy platform to ease poor people's access to finance. ADP teamed with CGAP to help define their strategy to remain a key leader of financial inclusion policy and research globally. The strategy seeks to incorporate the rise of Digital, the change in the demographics of the poor, and the evolving role of the private and public sector in providing access to financial services in developing countries. Through active engagement with industry stakeholders, members and staff, ADP supported CGAP to establish a vision for the industry, to determine what needs to happen to achieve it and what role CGAP can play in the next five years. ADP worked closely with the CGAP's core strategy team to support developing the vision, rationale and key components of the next phase of CGAP and facilitated internal as well as multi-stakeholder meetings, interviews, survey and workshops. The strategic approach included scenario planning workshops with thought leaders and CGAP partners in North America, Europe, Africa and Asia, facilitated by the ADP team.

Mercy Corps - Financial Inclusion Strategy: Accenture delivered a detailed analysis of the financial inclusion landscape relevant to Mercy Corps that was used to direct leaderships toward an understanding of how the sector was changing and highlight strategic opportunities for Mercy Corps. In light of a rapidly shifting financial inclusion sector as well as rapidly shifting Mercy Corps strategy, it was a critical time for Mercy Corps to evaluate its efforts to date, develop a renewed financial inclusion focus, and align this focus to the organization's future strategy. Together, Accenture and Mercy Corps developed a financial inclusion strategy with recommendations on ways to reposition Mercy Corps' resources and efforts to better respond to internal needs for FI expertise and ultimately the needs of their

beneficiaries. Accenture conducted internal and external stakeholders' interviews, performed desk-research to identify trends and created a SWOT analysis and a strategy that would shed light on the internal impediments and external opportunities that could shape Mercy Corps' financial inclusion work.

FSD Tanzania - Technical Assistance for Agriculture Finance: Accenture worked with FSD Tanzania to support expansion of agricultural lending or otherwise assist them in better serving the agricultural sector. We analyzed the data, performed landscape analysis of interested financial institutions. The team worked with two banks to help them develop business cases for specific agricultural products and provided technical assistance to those financial institutions to roll out new product offerings and business strategies, thereby advancing financial inclusion.

CARE - Financial Inclusion Maturity Model: To help banks better understand the challenges, strategies and capabilities associated with financial inclusion, Accenture and CARE International have jointly identified key insights on how banks can grow profitably by being more inclusive. We examined the capabilities and strategies of 30 leading banks across 12 emerging economies to diagnose how banks can best meet the financial needs of unbanked consumers.

Accenture has long been thought leadership in the financial inclusion space. Working closely with key partners –FSD Africa and CARE – Accenture developed a thought leadership series which outlined the opportunity for banks to serve the base of the pyramid through profitable, sustainable services while simultaneously improving financial inclusion. Our research helped the financial inclusion movement to quantify the size of the potential impact and identify opportunities to develop new business models to catalyze change:

Why?	What?	How?
Billion Reasons to Bank Inclusively	**Within Reach: How banks in emerging economies can grow profitably by becoming more inclusive**	**Seeking Sustainable Change in Africa's Financial Systems**
Making the case… • Banks could generate over $380 billion in revenue from inclusive banking • Closing the small business credit gap could generate $268 to $270 billion • Including unbanked adults in the formal financial system could generate $110 billion	Defining the value… • Only a few banks are aligning their strategies to address these markets in a commercially sustainable way • By assessing 30 banks, we derive six key insights for banks to become successful at inclusive banking (more on the insights below)	Taking the first step… • Both incumbent and growing financial institutions face barriers as organizations seek to explore and develop inclusive business models • The report provides recommendations on how to trigger and drive sustainable growth

Throughout this work, we leveraged insights from the financial services ecosystem. The Within Reach report required extensive surveying of 30 banks in 12 countries. To conduct the analysis, we developed a reusable framework for evaluating how banks and other financial institutions can grow profitably by being more inclusive. Through our research and surveys, we conclude that there are six key insights:

1. Invest now or be left behind
2. Get the products right by taking a new view on customer segments
3. Start with payments and savings, then consider extending to credit
4. Use savings and loan groups as an entry strategy
5. Find the right balance between physical and digital channel capabilities
6. Align the operating model to a financial inclusion strategy

Our recent thought leadership partnership with Mastercard highlights Accenture's ability to bring its financial services and digital payments expertise to advance the development agenda:

	"**The Next Frontier in Financial Inclusion: Moving Beyond Access to Usage**" addresses the gap that exists today between access to and usage of financial services. Mobile networks reach nearly 90 percent of the population in developing nations today, making digital financial access ever more feasible. But access is meaningless if people do not use the service. Today, about one in five bank or mobile money accounts is inactive. This paper three key components necessary to moving the newly included from access to usage: 1. Focus human-centered design on customer needs and cultural considerations 2. Build financial knowledge and change behavior 3. Build robust ecosystems to enable scale
	"**Building Digital Liquidity to Enable Payments at the Base of the Pyramid**" discusses the need to build digital liquidity in a deliberate, balanced, and inclusive manner. This can be achieved by targeting consistent and replicable financial flows in the lives of underserved consumers. There are three areas of focus: 1. Payment inflows 2. Payment outflows 3. Value chain payments
	"**The Role for Last Mile Partners in Expanding Payments at the Base of the Pyramid**" acknowledges that there are private enterprises that have largely solved the "last-mile" problem and are embedded within underserved consumers. These "last mile partners" can be an effective proponent of the next front for financial inclusion efforts through the enablement of digital payments. They also stand to benefit from a greater focus on business sustainability. Five sectors where a greater focus on digital payments can have a profound impact on financial inclusion are: 1. Contract manufacturing 2. Mass transit 3. Fast-moving consumer goods 4. Energy access 5. Agribusiness

Accenture has co-authored numerous thought leadership pieces with organizations which are the forefront of their respective sectors. All these organizations are strategically pursuing new and innovative solutions to tackle the world's largest problems:

Vision of the Future: Financial Inclusion 2025

ADP supported CGAP in a series of four workshops in Accra, Bangalore, London and Washington, D.C with the goal of generating potential future scenarios for financial inclusion, considering driving forces such as digital technologies, globalization, climate change, migration and conflict. Through this exercise, we gained valuable insights that helped us to identify — for the industry at large and CGAP specifically — the main opportunities to ensure financial services better serve the needs of poor people in a rapidly evolving context. The work included an analysis of survey and interview results, presentation materials on research findings, planning and delivering the workshops, writing scenarios, documenting findings from thought leaders, and publishing the summary reports and blog post.

Connecting Refugees: How Internet and Mobile Connectivity can Improve Refugee Well-Being and Transform Humanitarian Action

ADP partnered with UNHCR to research and publish the first ever global assessment of connectivity needs of refugees. Together, we surveyed refugees globally to understand the critical importance of connectivity for displaced people and found that access to cellular service and Wi-Fi was nearly as important as access to fresh food and clean water. Our methodology consisted of a surveys, interviews, and analysis of refugees from 95 UNHCR offices in 44 countries. We also gathered feedback from refugees through targeted focus groups in 10 countries and conducted an analysis of proprietary mobile network coverage data.

The State of the World's Cash Report: Cash Transfer Programming in Humanitarian Aid

The purpose of report is to critically analyze the current state of Cash Transfer Programs in humanitarian aid, and the extent to which commitments have been achieved, to provide shared insights that can accelerate the progress. The methodology for this report included primary and secondary research. Over 40 key informants were interviewed, and over 200 practitioners and 35 organizations were surveyed. Secondary research was undertaken drawing on a significant volume of reports, studies, reviews, data analysis and articles.

Jhpiego

The consortium would rely heavily on Jhpiego's deep knowledge and expertise in the global health sector. In addition to the many capabilities discussed previously, Jhpiego's expertise around research, quality improvement, and data collection and information systems will be a vital component to a successful delivery for this scope of work.

Jhpiego's Research Work

With funding from Merck for Mothers, Jhpiego is working with private health facilities in Jharkhand and Uttar Pradesh, India to improve MNH and FP services. Mobile technology was used to support health care information management, and to encourage healthy behaviors, and provision of mobile diagnostics among pregnant women seeking care in targeted facilities. Contact information of clients was collected during routine antenatal care visits, digitized with the help of a technology partner and customized messages were sent to encourage prescription adherence. This activity was introduced as a pilot intervention in 23 facilities in Uttar Pradesh and 8 facilities in Jharkhand. Approximately 5,800 clients have been enrolled by the private provider through this innovation, and approximately 152,400 SMS messages have been sent to enrolled clients.

Quality of Antenatal Care and Household Wealth as Determinants of Institutional Delivery in Pakistan: Results of a Cross-sectional Household Survey (2015)

Pakistan has a high burden of maternal and newborn mortality, which would be largely preventable through appreciate antenatal and delivery care. While the influence of socio-economic status on institutional delivery is well established in the literature, relatively little is known about the relationship between the quality of antenatal care and institutional delivery. A household survey of 4,000 currently married women who had given birth in the two years before the survey was conducted in Sindh province in 2013. The survey collected data on socio-economic and demographic variables, the quality of antenatal care provided during a woman's last pregnancy and whether she delivered at a health facility. Logistic regression was used to estimate adjusted odds ratios and 95% confidence intervals around independent variables for institutional delivery. In the multivariate analysis, a variable measuring quality of antenatal care showed the strongest association with institutional delivery. Moreover, there was a dose-response relationship between the number of elements of quality provided and the odds of institutional delivery: receiving one element of quality increased the odds of institutional delivery 1.7 times, receiving three elements increased the odds 3.8 times and receiving seven elements increased the odds 10.6 times. Household wealth had a statistically significant relationship with institutional delivery but the effect was weaker than that of quality of care. Urban-rural differentials in institutional delivery did not remain significant after adjusting for household wealth and education. Conclusions were that the quality of antenatal care provided to a woman during her pregnancy is more strongly associated with institutional delivery than household wealth. Improving the quality of care at health facilities in Sindh should be the foremost priority. Improving the quality of antenatal care services is likely to contribute to rapid increases in skilled birth attendance and better health outcomes for women and children.

Jhpiego's Quality Improvement Work

Project IQ (Global/PEPFAR countries) supports the implementation of VMMC by standardizing quality approaches and building capacity for improved timeliness, accessibility, actionality, and quality of VMMC data. This CDC-funded project has worked to develop two separate but complementary mobile applications. Both built on CommCare, the External Quality Assurance (EQA) app is intended for use by external evaluators, such as the CDC or government/oversight bodies, while the Continuous Quality Improvement (CQI) app is for VMMC facilities to evaluate themselves and address any weaknesses on a routine and ongoing basis. The EQA application has been tested in Malawi, Kenya, and Tanzania, with user feedback driving each iteration. The CQI application has been tested in Botswana and Malawi, and is near finalization.

Jhpiego's Standards-Based Management and Recognition (SBM-R) process is a practical management approach for improving the performance and quality of health services. It is a proactive approach, focusing not on problems but rather on the standardized level of performance and quality to be attained. SBM-R addresses appropriate standards of care, practical means of implementation of the standards, and effective support to quality improvement efforts. SBM-R results in the achievement of standardized, high-quality health care using a streamlined, step-by-step methodology, the creative management of the process of change, and the joint and active involvement of providers, clients and communities in the improvement process.

In 2014, Jhpiego developed a mobile application to facilitate data collection and feedback at the facility level for the SBM-R quality improvement approach. One component of SBM-R is developing or identifying country-specific standards of performance that can be implemented at health facilities for continuous quality improvement. The app was a tool to monitor and measure these standards. This performance assessment data was collected on an Android smartphone at the facility level and then data was uploaded immediately if a connection is available, or stored locally until Internet access becomes available.

Malawi and Ghana used the app as part of monitoring standards and improvement efforts. The Supportive Technical Assistance for Revitalizing Community-Based Health Planning and Services (STAR CHPS) project in Ghana used SMB-R to monitor the delivery of health services at community facilities. SBM-R was also used in the Support for Service Delivery Integration (SSDI-Services) Project in Malawi. The project focused on improving access and enhancing the quality of care at health facilities.

MCSP (Jhpiego working with consortium members) developed mobile versions of the knowledge, practices, and coverage household survey modules and the MNCH QoC health facility assessment study tools using an open-source mobile software application–CommCare–and building on the CommCare modules created by MCSP in Tanzania and Nigeria, respectively. These were made publicly available on mcsprogram.org. Survey mobile modules have been created in generic versions of XML forms that have been prepared. These mobile applications, which enable built-in data quality control checks and real-time tracking of data collection, allow for streamlined data collection and cleaning, paving the way for improved data quality and faster data analysis. The modules are available here: http://www.mcsprogram.org/resource/knowledge-practice-coverage-tool/.

Jhpiego's Data Collection and Information Systems Work

In Botswana, a Jhpiego-funded demonstration project is using CommCare to digitally track participants for a study aimed at assessing the feasibility of DNA sample self-collection during HPV screening. A small group of providers were trained to use the CommCare application to register clients and enter their test kit information, capture their test results, and follow up on client with appropriate treatment. Using built-in algorithms, the application provides decision support for eligibility screening and workflow assistance by notifying providers when to contact clients and showing only the appropriate data collection forms. With clients often visiting multiple health facilities for care and only one centralized laboratory for obtaining test results, the digital application is making it feasible for clients to get testing and treatment within the recommended period of time. Data is securely and almost instantly transferred between facilities/providers, removing the burden of responsibility for transferring paperwork from the client and ensuring quality reporting.

In Pakistan, as a subawardee to Palladium, Jhpiego worked on the DFID-funded Innovative Quality Postpartum Family Planning Services in Punjab from 2017 to 2018. A telephonic approach was introduced for post-services follow-up targeting 66% (project target was 10%) of the clients out of which 47% were reached who were using PPFP (PPIUCD and implants) method. From those who were reached 79% were satisfied and continued the method without any side effect while 12% continued with side effects. This makes a total continuation rate of 91% PPFP method.

From 2008 to 2013, through the USAID-funded MAISHA program and in partnership with the Ministry of Health and Social Welfare for Tanzania, Jhpiego and D-tree International worked together to develop a set of mobile tools for health workers around maternal, newborn, and child health for health providers and community health workers. The goal of the MAISHA program was to ensure delivery of high-quality care to pregnant mothers following MOH guidelines. The applications included an electronic registration form, checklists, screening protocols, and education prompts to strengthen facility/community linkages, serve as job aids, track individual client records for individualized care, and consolidate monthly records and streamline reporting.

PPFP Choices: PPFP Choices (August 2016 start; expected end in December 2019) is a Jhpiego program, with funding from the Bill and Melinda Gates Foundation and Merck for Mothers, in collaboration with the governments of Indonesia and Kenya, which aims to work within existing public and private health facilities to strengthen the quality of post-pregnancy family planning (PPFP) and ultimately advance and scale up PPFP. The primary research question is: What are the key determinants at service delivery, provider and client levels that influence the uptake of post-pregnancy family planning in the public and private health care sectors in Indonesia and Kenya? This study employs a quasi-experimental design with an intervention and control group. The intervention package is implemented in phases: the comparison group will eventually receive the intervention package after the final study assessment. A mixed method approach will be used; both quantitative and qualitative data will be collected at multiple timepoints. Data is collected in public and private facility settings to explore individual, community and institutional supply- and demand-side factors influencing PPFP uptake. Enrolled post-pregnancy clients are followed up prospectively. The study sample is 4,751 for Kenya and 4,531 for Indonesia.

Information Systems: DHIS 2 and HRIS

In Tanzania, Jhpiego has been working closely with the MoHSW at both national and regional levels to develop and strengthen use of DHIS 2 for health information management and data use for decision making. Jhpiego provided technical assistance for the development of numerous modules for DHIS 2, including those for voluntary medical male circumcision (VMMC), cervical cancer prevention and treatment, post-exposure prophylaxis and others. Ancillary to the modules, Jhpiego also supported the development of standardized tools, summary forms, and reporting systems for the aforementioned technical areas and built the capacity of partners, districts and regions to enter and use the data. Jhpiego is a member of the national Technical Working Group on M&E and on the national committee on DHIS 2 rollout.

In Mozambique, Jhpiego has been providing technical support in building eSIP-Saúde, the MOH Human Resource Information System (HRIS) with CDC through PEPAR funds. The development of eSIP-Saúde started 2011, and it was first officially used for the MOH HRH (Human Resource for Health) annual report in 2014. It is an integrated system built upon on the MOH and Government of Mozambique's existing systems (including payroll), and is a part of the MOH HIS architecture. This innovative approach has saved significant resources in applications development costs.

The eSIP-Saúde information system is in operation in all 11 provinces and MOH central level and is used by over 200 HR personnel at the central, provincial and district level that tracks the skills and deployment of over 44,246 employees throughout Mozambique. . The HRH data from eSIP-Saúde is used for HRS statistics, HR management, salary, pre- and in-service training, and forecasting. It provides information on the number of people and where they are and is the main database for payroll. This system also has an online communication and feedback platform.

eSIP-Saúde includes a Pre-service Education Information System (SIFIn) and In-service Training Information System (SIFo) to capture data on pre-service training as well as in-service training provided to health workers already working in the public health system. SIFo records about 400 trainings per year, which accounts for approximately 67% of the trainings that take place, with about 7,000 participants. This database disaggregates the number of in-service trainings per subject, by partner and participant.

Through SIFIn, comprehensive data is collected on currently enrolled and graduating health career students from 15 of the 16 MOH pre-service institutions in all provinces in Mozambique. Since 2011, the system achieved 95% coverage of HRH information within just three years and is the main source of HRH data for use by the MOH for monitoring and decision-making. The pre-service information system (developed by the MOH with technical support from Jhpiego), functions as an academic register for automatic and reliable handling of student and faculty data, while compiling and disseminating aggregate data to the central level of the MOH. These databases are web-based systems that include standalone versions for locations with a slow or nonexistent Internet connection.

Detailed CVs

Accenture and Jhpiego would propose an integrated team to drive this engagement, with extensive support from both organizations for ongoing delivery of the scope of work as well as executive contribution from a broad team of subject matter advisors.[19]

Michelle Willcox, MSPH

Proposed Position: Jhpiego, M&E Advisor I - Costing

Summary:

Inquisitive, personable, independent and data-driven professional with strong experience in the confluence of public health research and health system innovations. Interested in health financing, system strengthening, and translating research evidence into action. Substantial background in program administration, quantitative and qualitative analysis, and data management. Experienced with STATA, R, MAXDQA, LiST, TreeAge, Power BI, and ArcGIS.

Professional Experience:

Jhpiego, an Affiliate of Johns Hopkins   **Baltimore, MD**
M&E Advisor I, Monitoring, Evaluation, and Research Unit   Jul 2017 – Present
- Conducting cost analyses for purposes of sustainability reviews of programs, academic research in cost-effectiveness, and cost modeling to advocate for future funding of health program activities
- Directing and implementing economic evaluation studies from proposal to dissemination
- Developing and initiating a Global MER Forum with bi-monthly presentations, brief series, and moderated communication for over 300 global colleagues
- Leading internal capacity building for cost analysis, economic evaluation, data visualization, and health systems modeling
- Providing technical assistance for country teams in Tanzania, Myanmar, Philippines, Democratic Republic of the Congo

M&E Specialist, Monitoring, Evaluation, and Research Unit   May 2016 – Jul 2017
- Created a dataset of unique commodity and activity costs based on technical areas of work and facilitated the use of the data for better understanding program cost, regional differences in spending, and ways to tangibly connect fundraising with key tasks
- Supported ongoing research and new program development related to costing analyses

Program Administrator   Jul 2015 – Apr 2016
  Accelerating Newborn Survival in Project Fives Alive! Site – Jhpiego Ghana
- Implemented costing analysis of the Low Dose High Frequency training model for in-service facility-based training of nurses and midwives in Central, Western, and Upper West regions
  Establishing Pathways to Scale Up Low Dose High Frequency Training Methods – Jhpiego Uganda
- Directed program costs and outcomes data collection and analysis for three sub-grantee local NGOs implementing LDHF training programs and comparator workshop trainings
- Trained and managed a data collection team of 8 midwives to conduct 149 health provider interviews across 9 districts

The World Bank Group   **Baltimore, MD**
Consultant, Desk Review PETA in Health Policy in Latin America   Jun 2015
- Conducted research across Spanish and English published literature of Participation, Empowerment, Transparency and Accountability and analyzed influence, impact, and measurement of these tenants within health policy

Johns Hopkins Bloomberg School of Public Health, Department of International Health   **Baltimore, MD**
Economic Evaluation Coordinator, MOTECH project at The Grameen Foundation Ghana, Accra   Oct 2014 – May 2015
- Led cost-effectiveness analysis of the Mobile Technology for Community Health (MOTECH) Initiative, interviewed headquarter staff and field site coordinators, estimated population impact with Lives Saved Tool, identified cost drivers
Graduate Intern, Curamericas Guatemala, Departmento de Huehuetenango, USAID Funded   Jun 2014 – Jul 2014
- Trained staff on economic evaluation, identified gaps in data collection, created cost-effectiveness analysis plan
Graduate Research Assistant, District Splitting Impact in Uganda's Health System   Dec 2013 – Aug 2014

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[19] If additional CVs or Letters of Commitments are needed, they can be made available upon request.

- Analyzed health district performance measures using STATA to determine impact of decentralization in Uganda's health system; found correlation between decreased health service utilization and the creation of new districts

Johns Hopkins School of Medicine, Department of General Pediatrics **Baltimore, MD**
Project Coordinator Mar 2013 – Jan 2014
- Managed statewide research grant to improve referral rates and use of standardized tools for developmental screening at primary care practices for children ages 0-5
- Implemented protocol and rebuilt excel database for supporting adolescent patients transition into adult care
- Supervised 4 Research Assistants in participant enrollment for an adolescent text messaging intervention to improve HPV immunization completion rates

The Health Management Academy **Alexandria, VA**
Research Program Director, Research Department Jan – Apr 2012
- Led a comprehensive program of educational content, research studies, and health system initiatives for the Chief Financial Officer Forum, Treasurer Forum, Philanthropy Forum, and Investment Strategy Conference
Research Assistant, Research Department Aug 2010 – Jan 2012
- Researched health system CFO, Treasurer, and CIO best practices in responding to health reform and market changes
Collected, validated, and analyzed financial performance data of quarterly benchmarking project for 45 health systems each with
an average investment portfolio of $2.1 billion; shared results confidentially to inform portfolio management

Education:

Johns Hopkins Bloomberg School of Public Health Baltimore, MD
   Master of Science in Public Health, Health Systems, Department of International Health, *GPA 3.88* May 2015
   Certificate of Public Health Economics June 2014
George Mason University Fairfax, VA
- B.S., Health Science, Health Systems Management, *Magna Cum Laude* May 2010
- Recipient of *The Undergraduate Award for Excellence in Health Administration* (May 2010)

Publications:

- Willcox, M., Harrison, H., Asiedu, A., Nelson, A., Gomez, P., Lefevre, A. "Incremental cost and cost-effectiveness of low-dose, high-frequency training in basic emergency obstetric and newborn care as compared to status quo: part of a cluster-randomized training intervention evaluation in Ghana," Globalization and Health. 201; 13(88). December 2017.
- Clark, MPA, MHA, MA, FACHE, P., Willcox, M., "Maximizing the Value of Smart Pumps: Strategy, Adoption and Implementation among America's Leading Health Systems," white paper, The Health Management Academy Benchmarking Series, disseminated September 2010.
- Event Organizer, *The Right to Health and Evolution of Universal Health Coverage in Latin America,* with the Latino Public Health Network, a graduate student group raising awareness for Latino public health issues across the Americas

Hannah Tappis

Proposed Position: Jhpiego, Sr. Advisor II, MEL

Summary:

Applied social scientist; 15 years of health program design, management, monitoring, evaluation and research experience in fragile settings; Recognized expert in evaluation of cash-based humanitarian assistance and social protection programs; Proven capacity to lead complex quantitative and qualitative research and translate evidence into public health action; 40+ peer reviewed publications

Professional Experience:

Jhpiego

Senior Technical Advisor (2014-present)   *Technical Leadership and Innovations Unit* (Baltimore, USA)

- Provided leadership and technical support to strengthen rigor of monitoring, evaluation and research activities in 19 projects across 13 countries, and to translate findings into actionable recommendations for national, sub-national and project-level decision makers.
- Supported the design, start-up, implementation, re-design and internal evaluation of HEMAYAT, a $60 million USAID bilateral assistance project to improve family planning and maternal, newborn and child health services in Afghanistan.
  - Designed and led the first ever national assessment of quality maternal and newborn care at health facilities in Afghanistan, securing UNICEF co-funding to increase scope of study to address policymaker demands. Results informed national and sub-national service delivery strengthening strategies and donor priorities.
  - Provided technical support and oversight for assessments of midwifery pre-service education and community health nursing practice, using participatory methods to engage stakeholders and facilitate research uptake.
  - Co-developed theory of change for a quality improvement initiative at 53 health facilities, and facilitated an internal evaluation using action-oriented implementation research methods to examine how contextual factors affected intervention processes and outcomes over 1 year of implementation.
  - Provided gap-filling support for routine monitoring and evaluation and knowledge management tasks.
- Mentored headquarter and country office staff to take on increasing responsibility for research data collection, analysis and dissemination, or to gain experience necessary to publish journal articles and become eligible to serve as principal investigators.
- Served on internal IRBHelp team, responsible for human subjects research determination, study protocol review, and clinical/behavioral trial registration, to ensure compliance with JHU, donor and government research policies.
- Co-developed toolkits and facilitated trainings on publishing evaluation and research findings in peer-reviewed journals contributing to increased understanding of how to assess contributions of Jhpiego programs to global evidence.
- Served on WHO expert panels on sexual, reproductive, maternal, newborn and child health, monitoring and evaluation, and research in humanitarian settings.

Johns Hopkins Bloomberg School of Public Health

Associate Faculty (2014-present)   *Department of International Health, Health Systems Division* (Baltimore, USA)

- Led and contributed to action-oriented implementation research in complex, politically sensitive, and insecure environments – including acquisition of funding, study protocol development, data collector training, technical oversight, analysis, process documentation, and dissemination.
- Co-led evaluations of health financing mechanisms in eastern Democratic Republic of Congo; impacts of digital financial services (cash transfers), shelter and protection programs for refugees in Europe; cash transfers for lean-season food assistance in Zimbabwe; gender impacts of multipurpose cash assistance for Syrian refugees in Lebanon; and economic impacts of cash and voucher assistance programs in Northern Syria, all of which directly contributed to humanitarian program design and/or guidance development.
- Served on WHO expert panels on sexual, reproductive, maternal, newborn and child health, monitoring and evaluation, and research in humanitarian settings.
- Served on Technical Review Panel for USAID and IRC-led Grand Bargain Cash work stream on Efficiency, Effectiveness and Value for Money, contributing to technical guidance on cost-efficiency analysis best practices for humanitarian programs.
- Core team member for development of measurement and data use guidance for a core set of public health indicators in humanitarian (non-camp) settings.
- Led case studies of reproductive, maternal, newborn, child and adolescent health and nutrition in conflict-affected areas of South Sudan, DRC and Yemen.
- Taught, advised and mentored students in Doctor of Public Health, Masters of Public Health and Masters of Health Sciences program in the School of Public Health. Advising students in Doctor of Philosophy program in School of Nursing.

Johns Hopkins Bloomberg School of Public Health

Research Fellow (2009-2013)   *Center for Refugee and Disaster Response* (Baltimore, USA)
- Led development and pilot testing of a Balanced Scorecard for reproductive health services in refugee camps, now part of the UN Refugee Agency's health information system.
- Co-led systematic review of the effectiveness and value for money of cash transfers in humanitarian settings, which continues to be cited in research funding opportunities, technical guidance, and good practice recommendations.
- Authored UNHCR's Operational Guidelines for Improving Newborn Health in Protracted Refugee Settings.
- Served as co-investigator for reproductive age mortality study in Afghanistan, and analysis of changes in maternal health policy and outcomes between 2001 and 2011.
- Led food security and commodity pipeline assessments for USAID's Food for Peace Program in South Sudan.
- Provided technical support to the Afghanistan National AIDS Control Program, including review of monitoring and evaluation plans and tool development for rapid assessment and Integrated Biological and Behavioral Surveillance studies among most at-risk populations (injection drug users, sex workers, road transport workers, prisoners).

United Nations High Commissioner for Refugees

Field Research Consultant (Jun –Dec 2013)   *Division of Program Support and Management* (Kasulu, Tanzania)
- Led neonatal mortality study including survey of 17,500 women, verbal autopsies and health facility record review in Tanzania's Nyarugusu refugee camp, identifying needs for improved surveillance and reporting in refugee settings.

Catholic Relief Services

***Health in Emergencies Consultant* (Jun-Oct 2012)**   *Program Quality Support Department* (Baltimore, USA)
- Evaluated organizational capacity to respond to health needs in acute and slow-onset emergencies and facilitated workshops on health emergency preparedness and response for Program Quality Support Department staff.

International Rescue Committee

Interim Deputy Director of Programs *– IRC Pakistan* (Islamabad, Pakistan)   **Jul 2011 – Aug 2011**
- Responsible for $37 million multi-sector humanitarian assistance program for conflict and flood-affected populations.

GOAL Ireland

Health & Nutrition Program Development Consultant *- GOAL Ethiopia* (Addis Ababa, Ethiopia)   **Mar 2011 – May 2011**
- Technical advisor and lead writer for a $50 million USAID multi-agency nutrition program application in Ethiopia.

- Team leader for development of a $1.2 million USAID Child Survival and Health Grants Program application in Ethiopia.

International Rescue Committee

Gender Based Violence Program Manager- *GBV Technical Unit* (New York, USA)   **Jan 2009 - May 2009**
- Provided technical support to IRC's multi-sector gender based violence prevention and response programs in 17 conflict-affected countries, primarily in the areas of program design, monitoring, evaluation and partnership development.

Programs Manager- *IRC Sierra Leone* (Freetown, Sierra Leone)   **Jan 2007 - Dec 2008**
- Designed and launched health, education, and women's empowerment programs ranging from $60,000- $5 million.
- Directly managed final year and closeout of EuropeAid community development and USAID governance programs.
- Designed and coordinated evaluations of community development, governance and reproductive health programs.
- Conducted trainings on program design, budget management, and donor compliance for mid-senior level field staff.
- Managed all grant applications and communication with ECHO, EuropeAid, IrishAid, US DOS, USAID, UNICEF and UNIFEM.
- Served on senior management team, responsible for country program strategic planning & organizational development.

Grants, Monitoring and Evaluation Manager- *IRC Northern Caucasus* (Nazran, Ingushetia)   **Aug 2005 – Dec 2006**
- Coordinated needs assessments of IDP settlements in Republics of Chechnya, Dagestan, Ingushetia and North Ossetia.
- Designed education, youth empowerment, health, water and sanitation, shelter, and economic recovery programs in Chechnya, Ingushetia and North Ossetia ranging from $25,000 to $1.3 million.
- Led emergency response efforts providing water access, latrines and non-food items to internally displaced persons living in temporary accommodation in Dagestan.
- Trained community development and civil society program staff on managing sub-grants to local partners.
- Managed all grant applications and communication with ECHO, EuropeAid, Irish Aid, US DOS, USAID, and UNICEF.
- Supervised up to eight national program monitoring and reporting staff responsible for donor and government compliance.

Program Assistant- IRC Tanzania (Kibondo, Tanzania)   **Jun 2004 – Jul 2005**
- Coordinated multi-sectoral assessment for expansion of humanitarian services from five to eight refugee camps.
- Developed Mass Influx Contingency Plan and Refugee Health System Quality of Care Assessments.
- Managed all grant applications and communication with ECHO, UNHCR, and US DOS.

Responsible for writing and production of program reports, funding proposals and communications materials.

Education:

Johns Hopkins Bloomberg School of Public Health

Doctor of Public Health (DrPH), International Health   **Mar 2014**

Masters of Public Health, Health Leadership and Management, Certificate in Public Health Informatics   **May 2010**

Princeton University

Bachelor of Arts, History, Certificates in Latin American & African Studies   **Jun 2004**

Geographic Experience:

Residence: Afghanistan (1 year), Russian Federation (1.5 years), Sierra Leone (2 years), Tanzania (1 year)

Short term: Afghanistan, Democratic Republic of Congo, Ethiopia, Ghana, Greece, Honduras, Iraq, Jordan, Lebanon, Kenya,

(<3 months   Malawi, Mozambique, Nepal, Nicaragua, Nigeria, Pakistan, Serbia, South Sudan, Syria, Tanzania, Turkey,

 per visit)   Yemen, Zimbabwe

Publications:

Peer-Reviewed Journal Articles

1. Nelson A, Cooper C, Kamara S, Taylor N, Zikeh T, Kanneh-Kesselly C, Schuster A, Fields R, Hossain I, Oseni L, Getahun B, Fiedler A, **Tappis H.** Operationalizing integrated immunization and family planning services in rural Liberia: Lessons learned from evaluating service quality and utilization. *Global Health Science and Practice.* September 2019.

2. Atiqzai F, Manalai P, Amin S, Edmond K, Naziri M, Soroush MS, Sultana S, Yousufi K, **Tappis H.** Quality of essential newborn care at health facilities in Afghanistan: a cross-sectional assessment. *BMJ Open*. In press.

3. Nelson AR, Cooper CM, Kamara S, Taylor ND, Zikeh T, Kanneh-Kesselly C, Hussein I, Oseni L, Getahun B, Fiedler A, **Tappis H.** Operationalizing integrated immunization and family planning services in rural Liberia: Lessons learned from evaluating service quality and utilization. *Global Health Science and Practice*. In press.

4. Asiedu A, Nelson AR, Gomez PP, **Tappis H**, Effah F, Allen C. *"It builds your confidence… you've done well"*: Healthcare workers' experiences of participating in a low-dose, high-frequency training to improve newborn survival on the day of birth in Ghana. *Gates Open Research.* May 2019.

5. Boerma T, **Tappis H,** Saad-Haddad G, Das JK, Melesse DY, DeJong J, Spiegel P, Black R, Victora C, Bhutta Z, Barros A. Armed conflicts and national trends in reproductive, maternal, newborn and child health in sub-Saharan Africa: what can national health surveys tell us? *BMJ Global Health*. May 2019.

6. Rogers E, **Tappis H,** Doocy S, Martinez K, Villeminot N, Suk A, Kumar D, Pietzsch S, Puett C. Costs and cost-effectiveness of three point-of-use water treatment technologies added to community-based treatment of severe acute malnutrition in Sindh Province, Pakistan. *Global Health Action.* March 2019.

7. Pfitzer A, Maly C, **Tappis H,** Kabue M, Mackenzie D, Healy S, Sritvastava V, Ndirangu G. Characteristics of successful integrated family planning and maternal and child health services: Findings from a mixed-method, descriptive evaluation. *F1000.* Published online in advance of peer review.

8. Ansari N, Manalai P, Maruf F, Currie S, Stekelenburg J, van Roosmalen J, Kim YM, **Tappis H.** Quality of care in early detection and management of pre-eclampsia/eclampsia in health facilities in Afghanistan. *BMC Pregnancy and Childbirth*. January 2019.

9. Doocy S, **Tappis H,** Villeminot N, Suk A, Kumar D, Fazal S, Grant A**,** Pietzsch S. Point-of-use water treatment improves recovery rates among children with severe acute malnutrition in Pakistan: results from a site-randomized trial. *Public Health Nutrition.* August 2018.

10. Gomez P, Nelson A, Asiedu A, Allen C, Appiagyei M, Bannerman C, Darko P, Duodu J, **Tappis H.** Accelerating newborn survival in Ghana through a low-dose, high-frequency health worker training approach: a cluster-randomized trial. *BMC Pregnancy and Childbirth*. March 2018.

11. Countdown to 2030 Collaboration. Countdown to 2030: Tracking progress towards universal coverage for reproductive, maternal, newborn and child health. *Lancet.* January 2018.

12. Foster A, Evans D, Garcia M, Knaster S, Krause S, McGinn T, Rich S, Shah M, **Tappis H**, Wheeler E, 2017 IAFM Taskforce. The 2017 Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings: Revising the Global Standards. *Reproductive Health Matters*. December 2017.

13. **Tappis H,** Lyles E, Burton A, Jordan Health Access Study Team, Lebanon Health Access Study Team, Doocy S. Maternal health care utilization among Syrian refugees in Lebanon and Jordan. *Maternal and Child Health*. September 2017.

14. Cooper C, Ogutu A, Matiri E, **Tappis H**, Mackenzie D, Pfitzer A, Galloway R. Maximizing Opportunities: Family Planning and Maternal, Infant, and Young Child Nutrition Integration in Bondo Sub-County, Kenya. *Maternal and Child Health*. August 2017.

15. **Tappis H,** Doocy S. The effectiveness and value-for-money of cash-based humanitarian assistance: a systematic review. *Journal of Development Effectiveness*. August 2017.

16. Doocy S, **Tappis H**, Lyles E, Witiw J, Aken V. Emergency food assistance in northern Syria: an evaluation of transfer programs in Idleb Governorate. *Food and Nutrition Bulletin.* June 2017.

17. Bartlett L, LeFevre A, Zimmerman L, Saeedzai S, Turkmani S, Zabih W, **Tappis H,** Becker S, Winch P, Koblinsky M, Rahmanzai A. Progress and inequalities in maternal mortality in Afghanistan: findings from the RAMOS II study. *Lancet Global Health*. May 2017.

18. Nidvetska S, Rodriguez-Llanes JM, Aujoulat I, Gil Cuesta J, **Tappis H,** Van Loenhout JAF, Guha-Sapir D. Maternal and child health of internally displaced persons in Ukraine: a qualitative study. *International Journal of Environmental Research and Public Health.* January 2017.

19. Doocy S, **Tappis H**, Lyles E. Are cash-based interventions a feasible approach for expanding humanitarian assistance in Syria? *Journal of International Humanitarian Action*. January 2017.

20. Agha S, **Tappis H.** Timing of antenatal care initiation in Sindh, Pakistan: implications for programs. *BMC Pregnancy and Childbirth*. July 2016.

21. **Tappis H,** Freeman J, Glass N, Doocy S. Effectiveness of Interventions, Programs and Strategies for Gender-Based Violence Prevention in Refugee Populations: An Integrative Review. *PLOS Currents Disasters*. April 2016.

22. **Tappis H,** Koblinsky M, Winch P, Turkmani S, Bartlett L. Context matters: successes and challenges of intrapartum care scale-up in four districts of Afghanistan. *Global Public Health*. 11(4): April 2016.

23. **Tappis H,** Koblinsky M, Doocy S, Warren N, Peters DH. Bypassing primary care facilities for childbirth: findings from a multilevel analysis of skilled birth attendance determinants in Afghanistan. *Journal of Midwifery and Women's Health*. 61 (2): March 2016.

24. Haver J, Ansari N, Zainullah P, Kim YM, **Tappis H**. Misoprostol for Prevention of Postpartum Hemorrhage at Home Birth in Afghanistan: Program Expansion Experience. *Journal of Midwifery and Women's Health*. 61 (2); March 2016.

25. **Tappis H,** Kazi A, Hameed W, Dahar Z, Ali A, Agha S. The role of quality health services and discussion about birth spacing in postpartum contraceptive use in Sindh, Pakistan: a multilevel analysis. *PLoS One*. 10(10): October 2015.

26. Ndirangu G, Gichangi A, Kanyuru L, Otai J, Mulindi R, Lynam P, Koskei N, **Tappis H,** Archer L. Using Young Mothers' Clubs to improve knowledge of postpartum hemorrhage and family planning in informal settlements in Nairobi, Kenya. *Journal of Community Health.* 40 (4): August 2015.

27. Faqir M, Zainullah P, **Tappis H,** Mungia J, Currie S, Kim, YM. Availability and distribution of human resources for provision of comprehensive emergency obstetric and newborn care in Afghanistan: a cross-sectional study. *Conflict and Health*. 9 (9): March 2015.

28. Ansari N, Zainullah P, Kim YM, **Tappis H,** Kols A, Currie C, Haver J, van Roosmalen J, Broerse JEW, Stekelenburg J. Assessing post-abortion care in health facilities in Afghanistan: a cross-sectional study. *BMC Pregnancy and Childbirth.* 15(6): January 2015.

29. Paul A, Doocy S, **Tappis H,** Funna S. Preventing malnutrition in post-conflict, food insecure settings: a case study from South Sudan. *PLoS Currents Disasters*. July 2014.

30. Evans CL, Kim YM, Yari K, Ansari N, **Tappis H**. Using direct clinical observation to assess the quality of cesarean delivery in Afghanistan: an exploratory study. *BMC Pregnancy and Childbirth.* 14(176): May 2014.

31. Fogarty L, Kim YM, Juon HS, **Tappis H,** Noh JW, Zainullah P, Rozario A. Job satisfaction and retention of healthcare providers in Afghanistan and Malawi. *Human Resources for Health.* 12(11): February 2014.

32. Doocy S, **Tappis H,** Paul A, Klemm R, Funna S. Preventing malnutrition in children under two (PM2A): a case study in the food insecure context of South Sudan. *World Health and Population.* I4 (4): November 2013.

33. Kim YM, Ansari N, Kols A, **Tappis H,** Currie S, Bailey P, van Roosmalen J, Stekelenburg J. Prevention and management of severe pre-eclampsia/eclampsia in Afghanistan. *BMC Pregnancy and Childbirth.* 13(185): October 2013.

34. Kim YM, Ansari N, Kols A, **Tappis H,** Currie S, Bailey P, Semba R, Sun K, van Roosmalen J, Stekelenburg, J. Assessing the capacity for newborn resuscitation and factors associated with providers' knowledge and skills: A cross-sectional study in Afghanistan. *BMC Pediatrics.* 13(140): September 2013.

35. **Tappis H,** Doocy S, Paul A, Funna S. Food security and development in South Sudan: A call to action. *Public Health Nutrition.* 16(9): September 2013.

36. **Tappis H,** Doocy S, Amoako S. Food commodity pipeline management in transitional settings: challenges and lessons learned from the first USAID food development program in South Sudan. *Global Health: Science and Practice.* 1(2): August 2013.

37. **Tappis H,** Doocy S, Haskew C, Wilkinson C, Oman A, Spiegel P. UNHCR feeding program performance in Kenya and Tanzania: A retrospective analysis of routine health information system data. *Food and Nutrition Bulletin.* 33(2): June 2012.

38. Kim YM, **Tappis H,** Ansari N, Zainullah P, Evans C, Bartlett L, Zaka N, Zeck W. Quality of cesarean delivery services and documentation in first-line referral facilities in Afghanistan: a chart review. *BMC Pregnancy and Childbirth.* 12(1): March 2012.

39. **Tappis H**, Biermann E, Glass N, Tileva M, and Doocy S. Domestic violence among Iraqi refugees in Syria. *Health Care for Women International.* 33(3): March 2012.

40. Kim YM, Zainullah P, Muniga J, **Tappis H,** Bartlett L, Zaka N. Availability and quality of emergency obstetric and neonatal care services in Afghanistan. *International Journal of Gynecology and Obstetrics.* 116: January 2012.

41. Doocy S, **Tappis H,** Haskew C, Wilkinson C, Spiegel P. Performance of UNHCR nutrition programs in post-emergency refugee camps. *Conflict and Health* 5(23): October 2011*.*

42. Weiss WM, Vu A, **Tappis H,** Meyer S, Haskew C, Speigel P. Utilization of outpatient services in refugee settlement health facilities: a comparison by age, gender and refugee versus host national status. *Conflict and Health.* 5 (19): September 2011.

43. Meyer S, **Tappis H**, Weiss W, Speigel P, Vu A. Health service utilization in refugee sites: more needs to be done. *American Journal of Disaster Medicine.* 6 (4): July/August 2011.

Book Chapters

1. Bartlett L, Aitken I, Smith JM, Thomas LJ, Rosen HE, **Tappis H**, Burnham G. "Addressing maternal health in emergency settings", chapter 16 in eds. Hussain J, Binns AM, Webber R. *Maternal and Perinatal Health in Developing Countries".* June 2012.

Reports (Selected Reports related to Digital Financial Services)

1. **Tappis H,** Doocy S, *A Case Study of OFDA-Funded Health Facility Support in North Kivu.* 2019. [Submitted to US Office of Foreign Disaster Assistance]

2. Doocy S, **Tappis H,** Lyles E. *Protection Needs and Risks for Migrants in Europe: A Situation Analysis of Five Countries.* 2017. [Submitted to Catholic Relief Services]

3. Lof B, Doocy S, **Tappis H.** *Evaluation of WFP's Lean Season Assistance through the Protracted Relief and Recovery Operation 200453 in Zimbabwe.* 2017. [Submitted to WFP Zimbabwe Country Office].

4. Doocy S, **Tappis H**, Lyles E. *Cash-based Response Feasibility Assessment in Northern Syria*. 2016. Global Communities.

5. **Tappis H** and Doocy, S**.** *Cash-based approaches in humanitarian emergencies: a systematic review.* 2016. 3ie Systematic Review Report 28. London: International Initiative for Impact Evaluation (3ie).

6. Doocy S, **Tappis H**, Lyles E. *Emergency Transfers in Northern Syria: An Economic Evaluation of GOAL Food Assistance Programs in Idleb Governorate*. 2015. GOAL Syria.

Liz Kizzier

Proposed Position: Jhpiego, Sr. Program Officer

Summary:

Over 20 years of experience developing and managing international public health programs in low resource settings, working with diverse populations, and providing key operational leadership, guidance and support. Strong leadership, management, financial, technical writing, facilitation and organizational skills.

Professional Experience:

JHPIEGO Corporation   **2016-Present**
Senior Technical Manager & Program Officer
- Provide overall country backstop and support for Jhpiego's portfolio of projects in Kenya
- Ensure that good project management practices and tools are being used to stay on scope, schedule, and budget for all country supported projects
- Support quality improvement and assurance initiatives and support Kenya to win new business
- Led Jhpiego's interests and funding opportunities for maternal and early newborn infection.
- Led proposal design and development for new maternal sepsis grants in Tanzania and India.

International Rescue Committee – **Baltimore, MD**   **2014-2015**
Maternal & Child Health Volunteer
- Volunteered for six months to redesign and strengthen the agency's Pregnancy Support Program and eight-week curriculum for pregnant refugees who are in the process of resettling in the Baltimore area
- Worked directly with over 40 pregnant refugee women conducting prenatal and postpartum assessments and linking them with community resources to improve maternal and newborn health

Save the Children – **Washington, DC**   **2006-2012**
Director of Operations, Department of Health & Nutrition & Saving Newborn Lives Program
- Provided oversight and leadership to the Department of Health & Nutrition's (DHN) and Saving Newborn Lives (SNL) program's operational systems to ensure efficiency and effectiveness, including administrative support, program operating guidelines, policies and procedures, financial and human resource needs, knowledge management, and procurement of contractual services
- Served as a member of SNL and DHN Senior Leadership Team contributing to the development and realization of annual workplanning and agency strategic plans
- Worked closely with all units in DHN as well as other Save the Children departments in Westport and Washington to coordinate and ensure adherence to Agency policies and procedures associated with DHN's operations
- Managed and coordinated all aspects of DHN and SNL staffing and HR needs, including development of job descriptions, recruitment, hiring, change of status, orientation, retention, and resignation processes
- Directly supervised and managed the operations and finances for SNL's $60 million worldwide program to support newborn health activities in 18 countries in accordance with grant requirements
- Oversaw and managed all budgetary and contractual aspects of SNL to ensure accountability and fiscal responsibility, including financial reports, annual budgeting processes, sub-grants, and contracts
- Supervised five staff members on the SNL Operations Team. Responsible for setting performance objectives, conducting mid-year reviews and annual performance evaluations, identifying career opportunities, and building staff capacity
- Coordinated, organized, and submitted annual donor reports according to grant guidelines

JHPIEGO Corporation – **Johns Hopkins University   - Baltimore**   **2001-2005**
Senior Program Manager for Maternal and Newborn Health
- In partnership with management team, responsible for the overall management, strategic development, and implementation of USAID 5-year $75M global maternal and newborn health programs (MNH Program and ACCESS)
- Designed and managed field programs in Africa, Latin America and Asia incorporating appropriate maternal and newborn training approaches, cultivating partnerships and alliances, and prioritizing host country needs
- Worked directly with the Program Director to provide guidance and leadership for the management and implementation of a global program and core funded initiatives
- Worked directly with Deputy Director and Technical Team to ensure that appropriate technical support was in place for the effective implementation of program activities
- Provided management guidance and oversight for the development of key program documents and reports for a large and complex USAID-funded award

- Developed annual training programs, workplans, and budgets for West Africa including Cameroon and Mauritania in partnership with Ministry officials and UN organizations
- Managed $1.5m grant from AMDD Program to developed competency based Emergency Obstetric Care training programs for health care providers in South Asia and Francophone Africa

United States Agency for International Development - Kenya   **1998 – 2000**
Population and Health Advisor for USAID/Kenya
- Provided technical support and operational oversight to health activities sponsored by USAID/Kenya
- Managed USAID funded NGOs and health programs related to family planning, maternal and child health, HIV/AIDS, and service delivery
- Monitored the development and implementation of annual workplans
- Managed the development of new initiatives in reproductive health

AmeriCorps Training and Education Director – New Orleans   **1995 – 1997**
- Developed and coordinated training and educational activities for staff and Corpsmembers
- Supervised and managed daily activities and projects for 60-80 Corpsmembers
- Designed multicultural training curriculums for staff and Corpsmembers incorporating various adult learning methodologies

Peace Corps Technical Health Trainer – Gabon   **1994**
- Managed all facets of the first Pre-Service Technical Health Training for incoming Peace Corps/Gabon Volunteers, including training design, implementation, delivery, and evaluation
- Developed a comprehensive training program focused on community needs and community mobilization in collaboration with Health APCD and Country Director
- Incorporated country health priorities and policies into training design as expressed by host-country stakeholders and Ministry of Health

Peace Corps Health Education Volunteer – Central African Republic   **1990 - 1992**
- Assisted in rural health clinic to promote maternal and child health
- Developed and initiated health education programs at three different grade levels
- Organized and facilitated health trainings for local women's groups

Education:

- **Tulane University School of Public Health and Tropical Medicine:** Masters of Public Health, Health Education and Communication, May 1994
- **Denison University:** Bachelor of Arts - Psychology, May 1989

Geographic Experience:

Kenya, Tanzania, Mozambique, Central African Republic, Gabon, Cameroon, Mauritania, Haiti, and Nepal

Susan Ontiri, MPH

Proposed Position: Jhpiego, Overall lead / support study coordinator

Summary:

Ms. Susan Ontiri, MPH, is a Kenyan trained on Public Health and Epidemiology with more than 9 years of experience monitoring and evaluating donor-funded health development projects in Kenya. Currently, she serves as the Senior Monitoring Evaluation and Learning Advisor in Jhpiego, Kenya. Previously with Ipas Africa Alliance as the Monitoring Evaluation and Research Advisor, she led M&E activities for sexual and reproductive health programs in Western Kenya and oversaw the monitoring and evaluation activities of 33 local implementing partners. She brings experience developing participatory M&E systems that track implementation of community-based SBCC and gender equity project activities through use of methodologies including participatory impact diagrams, evaluation wheels and most significant change techniques.

Well versed in MOH data management systems, including DHIS-2, she has trained providers at the facility level to collect and utilize data to inform decision making and forecast commodity needs. Ms. Ontiri has extensive experience setting up and implementing various research projects. She is currently a Principal Investigator for three ongoing studies on RMNCAH.

Professional Experience:

Jhpiego   October 2018–Present

Senior Monitoring, Evaluation and Learning Advisor, RMNCAH Projects   Nairobi, Kenya

I provide technical guidance on monitoring evaluation and learning activities for Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Projects specifically the USAID funded Afya Halisi and Bill and Melinda Gates funded Advanced Family Planning. I am currently the principal investigator of three learning (research) agendas on: Evaluating the dynamics of contraceptive use and discontinuation among women of reproductive age and Assessing the effectiveness of a combined approach towards Improving Utilization of Adolescent Sexual Reproductive Health Services in Kenya and Gender Analysis. My role spans from designing of the studies, data collection, analysis and leading publication efforts. I serve as a member of several national technical working groups including family planning, maternal and newborn health, Child health & adolescent health and Health Information System. I have led the process of sourcing, hiring and overseeing external consultancy teams whose role was to conduct evaluation of projects to inform programming. I have been instrumental in supporting the Ministry to increase the visibility of RMNCAH data in the health information system by reviewing existing indicators in HIS and use of data visualization tools for performance monitoring.

Jhpiego   May 2016–September 2018

Monitoring, Evaluation and Research Advisor, Maternal and Child Survival Program   Nairobi, Kenya

Provided technical oversight to M&E and research activities for the $15.5 million USAID-funded MCSP program in four counties in Kenya. Led the development of project dashboards that has improved use of data for decision making for project staff. Conducts facility assessments for the scale-up sub-counties and led the project close-out initiatives for three sub-counties. Serves as an active member of the Kisumu and Migori M&E TWG, national FP Measurement TWG and participates in the continued development of tools and M&E frameworks at the national level that strengthen use of FP data for decision making. Conducted three project assessments to establish baseline of key performance indicators, and to assess the mid-line performance of the project.

Ipas Africa Alliance   July 2013–April 2016

Monitoring, Evaluation and Research Advisor   Nairobi, Kenya

As the M&E advisor for both the $6 million Dutch-funded SRH project and the $8 million Susan Thompson Buffet Foundation-funded SRH projects in Western Kenya, I provided M&E guidance to 25 project staff and 33 community-based sub-grantee organizations. Provided technical support for M&E of SRH program activities in Kakamega, Bungoma, Busia, Siaya, Trans Nzoia, Vihiga and Uasin Gishu counties. Set up participatory M&E methodologies for monitoring the implementation of the SBCC programs. This process supported 12 communities to identify and monitor community-level indicators from their lens. Built the capacity of in-country teams and the local implementing partners to create and utilize M&E frameworks as a tool to increase efficacy of data collection and analysis. Conducted routine data quality audits in the field, M&E data validation and analysis. Oversaw and ensured that all staff comply with the MER SOPs. Ensured timely submission of project reports and other deliverables as specified by donors. Supported the development and implementation of research protocols by conceptualizing the study design, drafting sections of study protocols, seeking IRB clearance and communicating with the IRB to answer questions and revising application materials as needed, and conducting data cleaning and analysis. Disseminated internal M&E and study findings. Presented research findings at conferences (Kenya Obstetrical Gynaecological Society, African Federation of

Obstetricians and Gynaecologists). Supervised 12 M&E associates and four evaluation consultants, five data entry clerks. Mapped indicators and corrected DHIS functioning errors for the USAID-funded Health IT project during the development of a USAID system for monitoring RMNCAH/FP/Nutrition and WASH programs.

Amref Headquarters   **April 2012–June 2013**

Corporate Monitoring and Evaluation Officer   Nairobi, Kenya

Managed the M&E function of the Amref International Program, including providing oversight to all M&E activities across operational country offices in Ethiopia, Tanzania, Uganda, South Africa, Kenya, South Sudan, West Africa and the regional projects. Set up and facilitated the M&E community of practice that brought together over 50 M&E staff. Led the development of the Amref Indicator Reference Guide. Developed and revised reporting and documentation tools to record country program achievements, results and document best practices and lessons learned. Developed reports of Amref impact, outcomes and outputs for the strategic direction under the 3-year business plan. Verified data to eliminate inconsistencies, omissions and other general errors. Managed data entry, compilation and analysis and preparation of statistical reports from surveys and varied health-related sources. Provided technical support to the $5 million EU-funded Integrated HIV/SRH project by tracking project indicators, conducting data analysis and developing of project dashboards. Set up the M&E system for the Stand Up for African Mothers campaign project. Worked with the database team to ensure the quality and completeness of data being captured by the Amref Information Management System. Conducted regular support visits to the Amref projects to support country M&E staff in alignment to the business plan. Collaborated with partners and governmental organization to gather information and engaged in knowledge sharing platforms both internally and outside Amref to learn and adapt in alignment with research findings.

Amref Kenya   **February 2011–March 2012**

Assistant National Coordinator   Nairobi, Kenya

Provided support to 12 drought response projects across the country under the $1 million bridge funding for the Amref Kenya short term emergency response project that aimed to improve nutrition for mothers and children under the age of 5, increase access and utilization of health services and increase access to safe water and access to appropriate sanitation and hygiene practices. Led project performance management, continuous quality improvement and operations research on nutrition practices among the Turkana community. This led to a modification of the project approach of distributing only Plumpy'Nut for children to also providing maize and beans to feed the family to avoid consumption of ready-to-use-therapeutic foods by fathers. Conducted project performance evaluations, documented findings and shared lessons learned. Developed implementation work plans, result frameworks, log frames (using LFA approach), annual work plans and budgets and data collection tools to improve the accuracy and timeliness of project reporting as well as ensured that pathways for data sharing existed. Compiled all donor required reporting documents throughout project implementation including project profiles and progress briefs. Prepared regular updates and reports for senior management team to communicate project achievements and allow for efficient project monitoring. Conducted regular site visits to provide support to projects and conduct routine data quality audits. Facilitated M&E of project processes in order to achieve desired project outputs and outcomes within the allotted timeframe.

Amref Kenya   **2010**

Monitoring and Evaluation Assistant   Kitui

Under the $3 million EU-funded Integrated Health Project implemented in Kitui County, performed data entry including collation into program databases and actively interrogated data for discrepancies and errors to verify accuracy and validity during the project close out. Participated in operations research on community practices on water storage and treatment leading to adaptation of program design to suit the beneficiaries.

Moi University/MTRH/AMPATH   **2008–2009**

Research Fellow (short term engagement assignments)   Nairobi, Kenya

Worked closely with principal investigators of three research programs on the effect of post-election violence on health care workers, concurrent sexual partnership and the risk of HIV/AIDs. Contributed to the development of data collection tools including questionnaires, observational checklists and key informant guides. Collected and organized data through administration of questionnaires and interview guides for over 30 participants. Conducted quantitative data analysis using software including SPSS in addition to conducing qualitative analysis of program data using NVIVO.

Education:

- PhD candidate, Global Health, University of Groningen, Netherlands
- 2016 MPH, Epidemiology and Population Health, Maseno University, Kenya
- 2010 BSc., Environmental Health, Moi University School of Public Health, Kenya

Post Graduate Certifications:

- 2011: Quantitative data analysis using SPSS: Karolinska University, Sweden
- 2012: Quantitative data analysis using STATA: Addis Global Institute of Health, Addis Ababa, Ethiopia
- 2014: Monitoring of SBCC programs using participatory M&E methodologies, Cape Town, South Africa

Languages:

Swahili: Native; English: Fluent;

Publications:

1. Ontiri S, Mutea L, Muganda M, Mutanda P, Ajema C, Okoth S, et al. Protocol for a prospective mixed-methods longitudinal study to evaluate the dynamics of contraceptive use, discontinuation, and switching in Kenya. Reprod Health. 2019;16(1):134.
2. Mutea L, Ontiri S, Macharia S, Tzobotaro M, Ajema C, Odiara V, et al. Evaluating the effectiveness of a combined approach to improve utilization of adolescent sexual reproductive health services in Kenya: a quasi-experimental design study protocol. Reprod Health. 2019;16(1):153. Epub 2019/10/31. doi: 10.1186/s12978-019-0825-3.
3. Ontiri S, Ndirangu G, Kabue M, et al (2019). Long-acting reversible contraception uptake and associated factors among women of reproductive age in rural Kenya. International Journal of Environmental Research and Public Health. 16, 1543; doi:10.3390/ijerph16091543 (Available online at: https://www.mdpi.com/1660-4601/16/9/1543)

Stephen Mutwiwa, MD, MPH, PHD

Proposed Position: Jhpiego, Country Director

Summary:

I am a Kenyan physician, with over 19 years' experience managing and implementing large-scale, donor-funded complex integrated health projects in resource-limited settings.

Currently I am Country Director for Jhpiego Kenya ensuring market leadership, program and technical excellence and effectively providing oversight to a portfolio of > $170M. This involves ensuring strategic, programmatic, management and leadership oversight for the Country programs with over 200 staff establishment. Key responsibilities include oversight on human resource management, leading new business development activities, program administration and management, high level representation, networking and partnership building as well strategy guidance.

Previously I held the position of Country Director Rwanda and Chief of Party for a large USAID-funded RMNCAH global program providing technical assistance and service delivery through strengthening of both the central and decentralized health system in Rwanda. This is part of the global flagship program for ending preventable maternal and child deaths implemented in over 25 countries. I managed over 100 staff and an average of $13M annual budget. This is the project that informed the seven-year Health sector strategic plan for Rwanda in RMNCH interventions, supported development of two key strategies for the sector (MNCH & ASRH/FP strategies), and ensured roll out of key policy revisions including new quality of care indicators in the National HMIS.

Key role in this position was representing Jhpiego in high level meetings with donors, senior government leaders and other partners. During the 2018 ICFP conference in Kigali, I hosted a Jhpiego partners's reception which was graced by Ministers of Health from five different countries. I have also represented Jhpiego in National and international conferences, in US congress and representatives' offices and at the Wilson center seminar series in Washington D.C

While holding this position I was called upon to lead the Jhpiego Kenya office through a process and time of restructuring and reposition which I successfully did for a period of eight (8) months. Key deliverables included instituting cost cutting measures, building staff more and trust in leadership and addressing donor and stakeholder relationships.

I have also worked, at technical, management and operations level, as the Deputy Chief of Party for USAID-funded $100M APHIAPLUS KAMILI project, I co-managed the technical and financial integrity of the program's advocacy and service delivery in 11 counties in Kenya. I led a team of over 80 staff in a regional office in Kenya, implementing integrated HIV/RH/FP/ MNCH programs. The outstanding success of this program saw its lifetime extended by the donor to 8-years and its budget to 135M USD. I have contributed to the development of the national protocol for mapping out Kenya's key populations and implementation of the minimum package.

I was also the National PMTCT Program Manager (2008–2011) of a CDC cooperative agreement, where I oversaw an initiative that supported 453 government health facilities to provide PMTCT/RH/FP and MNCH services across the Kenyan districts. The program, which offered HTC to approximately10% of the pregnant mothers' national output in Kenya that, was extended for 12 extra months because of its successful implementation.

Professional Experience:

Jhpiego Kenya   **May 2019 – Present**

Country Director

This involves ensuring strategic, programmatic, management and leadership oversight for the Country programs with over 200 staff establishment. Key responsibilities include oversight on human resource management, leading new business development activities, program administration and management, high level representation, networking and partnership building as well strategy guidance.

Jhpiego Rwanda   **October 2018-May 2019**

Country Director Jhpiego Rwanda; Chief of Party, MCSP Rwanda & Acting Kenya Country Director

I provided strategic, technical and programmatic leadership to Kenya and Rwanda for Jhpiego business involving guidance to various technical projects funded by USG agencies, Corporates, Foundations and philanthropists. I ensure the quality and integrity of our business model as well as represent Jhpiego in different donors, partners and senior government official forums.

Jhpiego Rwanda   **July 2015 – May 2019**

Country Director Jhpiego Rwanda; Chief of Party, MCSP Rwanda

As the Country Director, of Jhpiego Rwanda I was responsible for the Strategic, programmatic, and technical leadership of the Country programs. This inclueds the financial, human resource and administrative performance of the Country office. At the same time, I was the Chief of Party of the Global maternal and child survival program (MCSP) in Rwanda. This USAID's global flagship program for ending preventable maternal and child deaths implemented in over 25 priority countries. In this role, I was the key focal person for donor relations, partnership with key senior Ministry of Health officials, relevant UN organizations among others. In the three years' period for this program: -

- Played a key role in the development of the 7-years Health sector strategic plan (HSSP IV),
- Led the development of the MNCH & ASRH/FP Strategic plans (2018-2024), national policies, guidelines and technic materials.
- Provided secretariat support for the MCH TWG and the led the relevant sub-groups.
- Supported the MOH to scale up PPFP in Rwanda and the proportion of the women leaving the delivery room in the 10-supported district rose from zero to 53%.
- Rolled out a novel capacity-building model for health providers that saw over 3,000 providers receive training and mentorship in various RMNCH technical areas.
- Supported the MOH to include facility-level data dashboards for key indicators in the dhis2 national HMIS.

Jhpiego Kenya   **2011–July 2015**

Deputy Chief of Party, (APHIAplus KAMILI project)

Managed APHIAPLUS KAMILI Project, a consortium of nine NGO partners to implement integrated HIV/RH/FP/MNCH service delivery activities in Eastern province, providing leadership and supervision to partner staff to ensure that the team delivers on programmatic targets. With an annual budget of approximately $20M, supporting 1,076 public, faith-based and private facilities, 196 community health units, 34 community-based organizations that offer comprehensive services to 134,000 OVC, 40 workplace prevention sites, 405 schools and 25 tertiary institutions, among others. Led strategy formulation, including development of objectives, roles and responsibilities of staff. Provided technical leadership and priority setting for the program. Ensured that the program is technically sound, evidence-based and responsive to MOH needs, beneficiaries and stakeholders. Wrote and/or reviewed technical components of publications related to the program and its development. Represented the program with the MOH, non-governmental organizations, USAID and other groups in-country as appropriate. Developed and maintained excellent relationships with colleagues and stakeholders in the province and counties. Prepared timely submission of all programmatic and financial reports to partners and stakeholders. Worked with program and financial staff to prepare and track progress of program and activity budgets.

Worked with M&E staff to develop the monitoring and evaluation framework and track data/results. Notable achievements in this role include:

- Successfully set up the program's regional field office, that in the same year hosted the then American Ambassador to Kenya on his tour of USG-funded health programs in the region.
- Set up a drop-in-center for key population services along the Northern corridor (Nairobi-Mombasa highway) in Kenya.
- Built the capacity of MOH staff as champions for specific health interventions. One such champion was supported to build a state-of-the-art newborn care unit in a remote district hospital, which has become a learning center in the county; the unit's staff received a Presidential Award in 2013 for their achievement. This is just one among the many champions supported.
- Coordinated scale-up of PMTCT services to 127 new sites over a two-month period, leading to more than 2,000 HIV-positive mothers receiving ARV prophylaxis in that year.
- In 2014, worked with the team and the county governments to raise the reporting rates for FP commodities in the National DHIS2 from below 50% to over 80% in the 11 supported counties, two months ahead of the USAID deadline.
- In the same year, provided leadership in scale-up of BEmONC services in over 50 government health facilities. Developed a tracking tool for this activity that has attracted a lot of interest from the donor and other implementing partners and was adopted as a National tool.
- Also provided strategic leadership to the team to implement the new national ARV guidelines, which led to more than 1,600 new clients receiving ARVs over an eight-week period.
- Is a member of the Jhpiego Kenya dream team that developed the first country 5-year strategic plan.

NARESA   **2008–2011**

National PMTCT Program Manager, NARESA, Nairobi, Kenya

Provided programmatic and technical oversight on a CDC-funded, five-year program designed to scale-up PMTCT activities in Eastern, Central and Nyanza provinces of Kenya. Supported 453 government health facilities to provide PMTCT services. Provided counseling and testing for HIV to more than 10% of the national output for pregnant women in Kenya. The program provided HTC to over 500,000 pregnant mothers, put more than 50,000 HIV-positive women on ARV prophylaxis, and counseled and tested over

20,000 male partners of pregnant women. Provided early infant diagnosis to over 50,000 HIV-exposed babies. Served as a member of the national TWG for PMTCT and key populations in Kenya.

Med Sup Voi District Hospital   **2001–2005**

Medical Officer, Med Sup Voi District Hospital, Kenya

Oversaw the operations of the hospital's health services as well as supervision of the clinical and support staff. This included oversight of financial operations of the hospital. Spearheaded the establishment of the first HIV care and treatment site in the whole district in 2004.

Education:

- 2013 PhD (Health Systems Research), Great University of Kisumu, Kenya
- 2008 MPH, University of Nairobi, Kenya
- 1999 MBCHB, University of Nairobi, Kenya

Douglas Mwendwa

Proposed Position: Finance & Admin Director

Summary:

Mr. Mwendwa is a dynamic, results oriented Finance professional with more than 24 years' experience in managing grants, finance, administration, information technology and human resource. His experience is drawn from both commercial and NGO sectors. He possesses a wealth of experience in establishing and implementing sustainable financial policies, procedures and systems; managing multi-donor projects; designing and implementing operational planning and budgeting tools; and analyzing financial reports. He has extensive expertise and experience in managing financial functions, reporting, compliance and risk, multiple grants, complex partnerships, procurement, human resources and devolved operating planning and budgeting. He currently serves as Finance Director at Jhpiego, and previously held senior finance and administration roles at Heifer International.

Mr. Mwendwa currently manages finance and administration of Jhpiego Kenya country office with an average annual budget of $35 million. He has experience in managing finance and administration of USAID, CDC and non-USG funded projects in Jhpiego and Heifer International. Some of the projects he has supported in Jhpiego include:

- $63 million Reproductive Maternal, Neonatal Child and Adolescents Health (RMNCAH) Project (Afya Halisi)
- $39 million HIV Service Delivery Support Activity, Cluster 3 (Afya Kamilisha)
- $136 million APHIAplus Health Service Delivery Project Central/Eastern program, a seven-year project funded by USAID.
- $14 million Maternal Child Health Integrated Program (MCHIP), a five-year project funded by USAID.
- $15 million Maternal Child Survival Program (MCSP), a three-year project funded by USAID.
- $13 million APHIAplus Western Kenya project, a five-year project funded by USAID through PATH.
- $8 million Strengthening Preservice HIV Training in Preservice Medical Training Colleges in Public and Private Health Sectors' project, a four-year project funded by CDC.
- $27 million Urban Health Reproductive Health Initiative (Tupange), a six-year project funded by Bill & Melinda Gates Foundation.
- $23 million Bridge to Scale Oral PrEP (Ji-linde) project, a four-year project funded by Bill & Melinda Gates Foundation.

Professional Experience:

Jhpiego   **Nairobi, Kenya**

Finance Director   **2014 – Present**

Senior Finance Manager   **2012 – 2014**

- Provides overall leadership to Jhpiego Kenya Finance Department.
- Directly supervises three staff: one Senior Project Finance Manager, one Finance Manager and one Senior Project Finance Officer.
- Responsible for financial reporting of all Jhpiego Kenya USG and Non-USG funded projects with an average annual budget of $33 million per year.
- Coordinates preparation of quarterly financial reports and annual budgets for submission to USAID and other donors.
- Liaises with USAID and other donors on finance and management aspects of Jhiego Kenya projects.
- Provides leadership to program staff to develop annual work plans and annual operational budgets.
- Manages effective utilization of Jhpiego's financial management system to ensure accurate financial tracking and reporting and ensure compliance with Jhpiego policies and donor and legal requirements.
- Reviews monthly program expenditures, in accordance with the approved budget, and prepares monthly variance reports tor headquarters.
- Provides supervision, guidance and mentorship of staff and ensures team spirit within the finance, administration and grants team. Trains and mentors Finance and program staff as needed.
- Provides financial and administrative technical advice to all project staff for effective program implementation.
- Administers sub-agreements, drafts award documents, and monitors grants payments and ensures compliance to award terms and conditions.
- Collaborates with internal and external auditors and ensures prompt implementation of audit recommendations.

Heifer International   Nairobi, Kenya

Regional Director, Finance & Administration for Kenya, Rwanda, and Uganda,   **2010 – 2012**

East Africa Dairy Development (EADD) Project

Supported a $47 million four-year Bill & Melinda Gates-funded regional project in Kenya, Rwanda and Uganda.

- Built financial systems and standardized accounting procedures across the three project countries.
- Worked closely with the regional team and country teams to manage a US$5 Million Investment Fund to support 68 Dairy Farmer Associations (DFFBAs) to access loans from commercial banks on the basis of negotiated bank guarantee schemes.
- Led regional and country teams on devolved annual operational planning and budgeting process.
- Negotiated with EADD team for DFBA financing agreements with various banks in East Africa.
- Oversaw project audits.
- Worked with the project team to resolve complex partnership issues and project management decisions.
- Developed clear, cohesive and consolidated financial reports that identified opportunities for improved project management and monitoring.
- Developed and implemented performance management initiatives to communicate performance expectations and motivate staff to attain expectations.
- Consolidated the project's work plans and reports.

Heifer International   Nairobi, Kenya

Director of Finance & Administration   **2005 – 2010**

Provided effective financial, administrative, human resource, and information technology management to the organization.

- Responsible for financial reporting of all Heifer International – Kenya projects with an average annual budget of $7 million per year.
- Provided finance and administrative oversight to The Kenya Food Security Consortium (PL 480 Title II program in Kenya) and Dairy Set Aside (DSA) II projects funded by USAID.
- Established and maintained systems that supported accurate and timely program financial reporting.
- Monitored and enforced compliance to rules, regulations and practices.
- Reviewed and oversaw staff performance appraisal system for the organization.
- Prepared progress and annual program and statutory reports.
- Oversaw successful change of accounting software from AcTan to Solomon IV. Supported installation and implementation of Solomon IV and developed effective multi-donor reporting systems.
- Led in review of accounting and HR policies for Africa Area Program (14 countries).
- Led in development and implementation of the organization's procurement and vehicle management manuals.
- Reduced external audit turnaround period from six to three months after end of the financial year.
- Led initiatives that saw the organization cut communication and office expenses by 30%.

Heifer International   Nairobi, Kenya

Business Development Coordinator   **2002 – 2004**

Established a Business Development Services Department to support sustainable improvement of the efficiency and profitability of milk production and marketing through development of business service providers in the various project areas in Rift Valley, Coast, Nyanza and Central Kenya regions. Specific duties included:

- Set up effective governance, management, accounting and quality assurance systems in four dairy plants located in Bomet, Kericho, Nyandarua and Nandi counties.
- Introduced internal auditing function in the dairy plants.
- Designed and implemented staff performance appraisal system in the dairy plants.

TFS Cargo Services Ltd.   Nairobi, Kenya

Chief Accountant   **1996 – 2002**

Planned, organized, and led activities of the Accounts/IT Department. Ensured statutory compliance. Set up the organization's manual accounting system and computerized accounting function before leading installation and implementation of fully integrated operations/accounting software.

Kenya Finance Bank Ltd.   **Nairobi, Kenya**

Accountant   **1995 – 1997**

Prepared management and statutory reports, participated in money market dealing, and handled branch operations.

Pollmans Tours & Safaris Ltd.   **Mombasa, Kenya**

Accountant   **1994 – 1995**

Prepared monthly management accounts, reconciled general ledger and subsidiary accounts, and processed suppliers' payments.

Education:

- 2012 MBA, Finance, University of Leicester, UK
- 1994 BA, Business Management, Second Class Honors, Upper Division, Moi University, Eldoret, Kenya

Post-Graduate Certifications:

2016 Jhpiego Global Management Training.

2016 PMD Pro 1: Essentials of Project Management, Inside NGO.

2004 Bullet Proof Manager, Series 3, Crestcom Training, Nairobi.

2003 Certified Public Secretaries of Kenya (CPSK), Kenya Accountants and Secretaries National Examination Board (KASNEB).

2001 Certified Public Accountants of Kenya (CPAK), Kenya Accountants and Secretaries National Examination Board (KASNEB).

Languages:

English: Fluent; Kiswahili: Fluent; Kikamba: Fluent

Geographic Experience:

Nationality: Kenya

Long Term: Kenya

Short term: Uganda, Tanzania, Rwanda, Zambia, Cameroon, South Sudan, Zimbabwe, Mozambique, Ghana, Senegal, USA, The Netherlands, United Kingdom, Switzerland, Jordan, United Arab Emirates, Thailand, Ethiopia, Zambia, Madagascar

Professional Affiliations:

Institute of Certified Public Accountants of Kenya (ICPAK), Membership No. 3369

Institute of Certified Public Secretaries of Kenya (ICPSK), Membership No. 1724

The Kenya Institute of Management (KIM), Membership No. 20005

Natasha Sunderji

Proposed Position: Accenture Development Partnerships, Global Health Lead

Summary:

Natasha is the Global Health Lead for Accenture Development Partnerships. She helps global health organizations to shape and bring innovative ideas to market to increase their business and social impact. Natasha has 15 years of healthcare consulting experience in growth strategy, business model design, new business & foundation start-ups, digital health, and cross sector partnerships with public, private, and international development clients in Africa, Asia, Latin America, Europe, and North America. She has written numerous articles and reports on the promise of digital health and the challenges in scaling leading solutions (e.g. Devex, Broadband Commission for Sustainable Development).

Professional Experience:

- **PSI / Bill and Melinda Gates Foundation:** Developed a white paper exploring the potential of HIV self-testing to address barriers to testing and how to shape a healthy marketplace.

- **UNITAID / Medicines Patent Pool:** Collaborated with private sector, nonprofit, and multilateral partners to design and launch a medicines patent pool to increase access to HIV/AIDS medications in LMICs through voluntary licensing. Designed the business and governance model for a net new entity.

- **Global Health Nonprofit:** Developed a separate business unit strategy to enable the organization to tap into for-profit opportunities and tap into diversified funding sources for increased scale.

- **Amref/Philips:** Designed the business and financial model for a public-private partnership to improve the quality of primary healthcare and cost efficiency of care delivery.

- **Global Health Nonprofit:** Designed the strategy, business model, and funding approach to source and scale health technologies from emerging markets to better address BOP needs.

- **Global Health Nonprofit:** Developed the business and governance model to increase SRH services in Latin America and reduce reliance on support from its federation.

- **Global Health Nonprofit:** Developed the business model and distribution strategy to improve efficiency of the organization's reproductive health supply chain through the creation of a new commercial entity responsible for its management.

- **Global Health Nonprofit:** Assessed market opportunity to introduce a health provider search platform to better connect patients to quality primary care providers in Kenya.

- **Global Health Nonprofit:** Developed a 3-year strategy to more effectively encourage positive health outcomes using nudges and incentives through their mobile technology platform.

- **Global Pharmaceutical Company:** Led the visioning, strategy, and design of a broad-based multi-stakeholder partnership coalition accelerating innovation in breast cancer diagnostics.

- **Merck for Mothers:** Developed a strategy to improve the data driven decision making capabilities of healthcare professionals in Tanzania to improve health outcomes.

- **Aga Khan University Hospital, Nairobi:** Evaluated the East African disease burden and healthcare providers to identify under-served populations, Identified opportunities to collaborate with private insurers to increase affordability of hospital services.

Education:

- Master's in Public Policy from Harvard Kennedy School.
- Bachelor's in biomedical engineering from University of Toronto

Alicia Eerenstein

Proposed Position: Accenture Development Partnerships, PATH Client Account Lead

Summary:

Alicia Eerenstein is senior manager in the Global Programs for Accenture Development Partnerships, based in Los Angeles, CA, with a focus on supporting donors and international NGOs on areas of growth strategy and organisational strengthening. She has led several successful strategic transformation programs across multiple private sector industries focusing on identifying areas of opportunities to achieve key business objectives, with recent engagements focused on coffee/cocoa. Alicia joined Accenture in 2008 and has experience across industries, including the development sector, consumer goods, resources, higher education, financial services and health.

Professional Experience:

- **Fourth Sector Development in Cocoa – International NGO & Developmet Group, DC:** Currently overseeing the work to articulate the corporate value case for, challenges to and practical steps for sourcing from for-benefit enterprises (with a deep dive in cocoa in Ghana) to deliver commercial, environmental and social benefit.

- **Coffee Retail Go-to-Market Strategy – International NGO -Engagement Lead, DC:** Oversaw the work to create a go-to-market strategy and 3-year implementation roadmap for a coffee social enterprise based on market insights and opportunity sizing in order to achieve a sustainability aligned to organizational impact objectives.

- **Clean Cooking & Fuels Enterprise Needs Assessment – Alliance & Financial Services Company -Subject Matter Advisor, DC:** Provided subject matter advisory support on the work to conduct a "lessons learned" exercise on a Clean Cooking Working Capital Fund (launched in 2015) and understand what is needed to catalyze the growth of the clean cooking and fuels enterprises.

- **Merger & Acquisition Assessment – International NGO - Engagement Lead, DC:** Oversaw the work to conduct a robust assessment of a merger opportunity between a midsized and small development organizations, including a detailed business diagnostic, business case and in partnership with legal counsel, a joint entity organization design, governance structure and partnership term sheet.

- **Coca-Cola Partnership Strategy – International NGO - Engagement Lead, DC:** Oversaw the work to develop an INGO's vision and value proposition for a partnership with Coca-Cola, leveraging their Village Savings and Loan Association (VSLA) network as the vehicle for generating women economic empowerment through entrepreneurship.

- **Organization Transformation Strategy – International NGO - Engagement/Project Lead, DC:** Oversaw and led the work supporting an INGO develop a transformed organization strategy (strategic goals aligned to a future vision with enabling objectives and Key Performance Indicators) in order to remain relevant and impactful in the 21st century and progressing towards being a platform organization.

- **Asset Map – International NGO - Project Lead, DC:** Led work to create a future state asset map, identifying how the current and future assets can be optimized to broaden organizational reach and deepen impact. To support C-Suite and Board level decision-making on the future of the organization, developed a business case for new assets and presented the project readout at the annual board meeting.

Education:

- MBA in Sustainable Management at Presidio Graduate School. During her studies, she provided consultancy services to a social enterprise startup and was a Fink Foundation Fellow with ImpactAssets, a nonprofit impact investing firm which hosts a Seed Ventures Platform, channeling funds into seed-stage ventures. Through her work she supported the firm's objective of increasing the flow of capital into investments
- B.A. Psychology, Yale University

Kristopher Ansin

Proposed Position: Accenture Development Partnerships, Global Health Oversight

Summary:

Kris is a Manager with Accenture Development Partnerships, concentrating on health and ADP's East Africa portfolio. His current work includes growth strategy, project management, innovative financing, new innovations, and organizational model design. Kris's work has concentrated on global health, financial inclusion, agriculture and new technologies concentrating on East Africa. Prior to Accenture, Kris ran a maternal and child health NGO is West Africa. He has earned an MBA from Yale and a Master of Public health from Tulane University.

Professional Experience:

- **Global Telco-Project Manager, IoT Cold Chain Innovation:** Manage team and partnership between funder, global telco, and startup to develop go to market strategy, collect primary research and customer insights, and develop business model and plan to implement IoT cold chain solution in smallholder fishing value chain

- **Amref & Philips – Project Manager, Partnership for Primary Care:** Managed team and NGO, MoH and multinational firm stakeholders to pilot a first-in-Kenya Public Private Partnership pilot, outsourcing operations of public facilities to champion an innovative model to achieve greater quality of care and financial sustainability.

- **Global Financial Services Firm – Project Consultant, BoP Financial Products Innovations:** Developed "Base of Pyramid" payments product strategies for international credit card company to achieve economic and social returns. Focused on global health landscape & industry mapping, internal & external stakeholder interviews, journey mapping, design thinking & innovation facilitation, opportunity market sizing

- **Global Beer Producer, Small Retailer Development:** Led strategy engagement for global beer producer and distributor to develop shared value small retailer development program, driving volume and enhancing license to trade while improving incomes and responsible trading practices for 4 million small retailers across African markets.

- **International Community Health NGO, Organization Leadership:** Executive Director of 65-person maternal and child health NGO in Mali. Developed and executed organization strategy, raised funds through private and institutional donors, managed organization operations, and supported RCT evaluation

Education:

- Master of Business Administration from Yale University
- Master of Public Health from Tulane University
- Bachelor of Science in biological anthropology from George Washington University

Languages:

English, French

Geographic Experience:

Kenya, Uganda, Rwanda, Tanzania, Mali, Senegal, South Africa, Zambia, India

Mark Degenhart

Proposed Position: Accenture Development Partnerships, Project Manager

Summary:

Mark is a New York-based Manager with Accenture Development Partnerships. His work has focused on financial inclusion, global health, and agriculture. He has worked with large NGOs on financial inclusion strategies as well as with a large payment company on driving thought leadership to identify new pathways that leverage digital payments for underserved segments. Prior to Accenture, Mark spent time working in the capital markets focused on investment strategies for individual and institutional clients. Mark earned a B.S. in Finance & Economics with a minor in International Relations from Lehigh University.

Professional Experience:

Accenture   **New York, NY**
Strategy & Partnerships Manager, Accenture Development Partnerships (ADP)   Spring 2017 - Present

- **Mastercard, *Product Strategy for Base of the Pyramid Consumers (New York, NY)*:** Developed product opportunities for Mastercard to enter new markets, identify use cases, and drive financial inclusion for underserved users, leveraging top-down insights on market sizing, an analysis of consumer journeys, and product fit across four key industry verticals.
- **B Lab, *SDG Action Manager Product Development Support (New York, NY)*:** Provided support – identifying the user needs, customer segmentation, value proposition, user journeys, and market differentiation – for a new B2B impact assessment product enabling companies to align their strategy to the United Nation's Sustainable Development Goals.
- **FSD Africa, *Digital Finance Strategy (Nairobi, Kenya)*:** Created a digital finance strategy to enable FSD Africa to better leverage emerging trends related to data analytics and digital technologies, develop the capacity of sub-Saharan Africa's financial sector, and establish KPIs to monitor progress on its programmatic work focused on financial inclusion.
- **Mercy Corps, *Financial Inclusion Strategy (Portland, OR)*:** Established an organization-wide strategy that rationalized existing efforts across programmatic work, microfinance holdings, and impact investing into a cohesive financial inclusion go-to-market strategy, leveraging an internal assessment of capabilities and external analysis of market needs.
- **Lutheran World Relief & IMA World Health, *M&A Strategy Assessment (Baltimore, MD & Washington, D.C.)*:** Conducted a detailed merger due diligence of two NGOs prior to announced merger, working directly with both CEOs and leadership teams to assess the strategic, financial, and cultural drivers behind the merger, as well as external factors.
- **Grand Challenges Canada, *Accelerator Program Lead (New York, NY)*:** Provided post-investment advisory support (developed business models and defined go-to-market strategies) for the impact investor's 'Saving Brains' portfolio of early-stage social enterprises focused on innovative solutions to maternal health and early childhood development issues.
- **The Intrapreneur Lab, *Team Mentor (New York, NY)*:** Provided bespoke coaching for a team of intrapreneurs seeking to introduce an innovative impact-focused product at Barclays, which received internal funding to take forward.

Management Consultant, Financial Services   Fall 2014 - Spring 2017

- **Leading Multinational Bank, *Client Segmentation (New York, NY)*:** Cultivated relationships between the private bank and commercial bank to find solutions that would retain and better service client relationships worth $1 billion in deposits.
- **Leading Multinational Bank, *Digital Wealth Management (New York, NY)*:** Developed the program management function for a firm-wide digital wealth management transformation that spanned multiple lines of business.

Douglas C Lane & Associates   **New York, NY**
Associate, Equity Trading & Client Services   Fall 2011 - Fall 2014

- Executed equity and fixed income trades for boutique registered investment advisory firm with AUM of $4.5 billion.
- Provided bespoke services (from account opening to retirement distributions) for individual and institutional clients.
- Assisted portfolio managers with market outlook and ongoing research and reporting needs for customized portfolios.

Pro Mujer   **New York, NY**
Microfinance Intern   Summer 2010
Conducted a competitive analysis of the Peruvian market for microfinance and healthcare services to identify customer needs and areas of high saturation, presenting management with a list of candidates for collaboration and/or combination.

Education:

- B.S., Finance & Economics, minor International Relations (Lehigh University 2011)

Geographic Experience:

United States, Kenya

Publications:

1. Dan Salazar, Mark Degenhart, et. al., "The Role of a Market Organizer in Advancing Financial Inclusion," Mastercard, forthcoming 2019
2. Dan Salazar, Mark Degenhart, et. al., "The Role for Last Mile Partners in Expanding Payments at the Base of the Pyramid," Mastercard, January 2019
3. Dan Salazar, Mark Degenhart, et. al., "Building Digital Liquidity to Enable Payments at the Base of the Pyramid," Mastercard, November 2018
4. Dan Salazar, Mark Degenhart, et. al., "The Next Frontier in Financial Inclusion: Moving Beyond Access to Usage," Mastercard, September 2018

Nicholas Valenzia[20]

Proposed Position: Accenture Development Partnerships, Project Consultant

Summary:

Nick is a UX Consultant at Accenture Development Partnerships. He has experience in International Development projects across Portugal, Uganda and Kenya, and has also worked for corporate clients in the Telecoms, Retail and Public Health industries in the UK, as well as engagements at several tech start ups.

Nick's focus has been in the area of UX and Human-Centred Design for mobile technology. He is a trained Design Thinking facilitator and Scrum Master, having worked in various Agile projects.

Professional Experience:

- **Product Owner, Mobile App –British Telecoms Network Provider:** Lead the UX Design and Product roadmap for mobile app to be used by telecoms engineers. Defined a rapid prototyping process to get early feedback on designs. App changes were deployed in a successful pilot before being rolled out nationally to +20,000 users.

- **UX Strategy & Product Delivery Lead – Triggerise:** Lead the design, prototyping, and pilot for a AI face recognition software designed to improve access to health services for 40,000 users in Kenya. Developed a UX growth strategy for the organisations tech and ops teams.

- **Organisation Assessment & Joint Funding Proposal – Medic Mobile:** Created comparative organisational assessments which lead to major funding proposal.

- **User Design & Customer Journeys Lead – Leading UK Telco:** Owned the definition of the Customer Experience for a new Mobile proposition. Used Design Thinking methods to create customer journeys integrating technology, business and 3rd party vendor requirements.

- **Scrum Master and Tech Delivery Lead - Leading UK Telco:** Scrum Master responsible for leading the design, build, test & deploy of a flagship product for client's Small Business segment, with +140,000 target customers. Also defined a process to identify and implement 50+ customer/agent experience improvements (technical & process) for client's Business Broadband product.

- **Ecosystem Analyst – Tech Start Up UK Network:** Originated new emerging technology pipeline through engagement with top UK Universities, and developed strategic training modules for GDPR legislation. Created industry Points-of-view and developed joint go-to-market propositions with corporates and start ups.

- **Agile Business Analyst, Digital Health Transformation – UK National Health Provider:** Established project management processes and conducted requirements for Digital transformation project. Lead pilot project for a new solution which would allow patients to conduct first-line appointments by video call.

Education:

- BA (1st Class Joint Honours), Kings College London

Languages:

English, French & Spanish

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[20] If these individuals are not available at the time the project is scheduled to begin, we would provide personnel with comparable skills and experience.

Arushi Garg[21]

Proposed Position: Accenture Development Partnerships, Offshore Consultant

Summary:

Arushi has extensive experience in sustainability and development. She has undertaken multiple research analysis and strategy engagements in the field of Sustainable Development Goals, digital finance, community health and clean energy.

Professional Experience:

ESG Strategy Design for a Leading Logistics Company in Europe: *Assessing company's existing ESG-related initiatives and developing strategy recommendations and roadmap* (Nov 2019)

- Evaluated the company's positioning with respect to its peers, on sustainability strategy
- Undertook a benchmarking from investor's perspective and performance on ESG criteria
- Conducted gap analysis and defined KPIs for performance on sustainability parameters

Research and Strategy Development with United Nations Capital Development Fund: *Analyzing the financing landscape for SDGs and potential for digital financing to improve private sector flows* (May 2019)

- Conducted extensive research on the SDGs and source of financing for each individually
- Developed a framework to identify the gaps and opportunities in financing of SGDs
- Evaluated different digital technologies and their potential to increase the flow of capital
- Presented insights to be used as inputs for the UNCDF white paper and Task Force meetings (link)

Quantification and Business Case Development with World Economic Forum: *Developing a white paper on Accelerating Sustainable Production in Michigan Automotive Industry using 4IR technology* (Dec 2018)

- Assessed economic, social and environmental value generated by adopting fourth industrial revolution technologies in automobile industry
- Synthesized data from stakeholder interviews to draw insights on the adoption and potential for technologies
- Developed the content for the whitepaper that was published in Davos meeting in 2019 (link)

Building Accenture's Healthcare and Financial Inclusion capabilities: *Streamlining content and learnings from project outcomes in accordance with the engagement strategy in digital health and financial inclusion* (on-going)

- Assessed developments in digital health as well as financial inclusion space and opportunity for Accenture engagement
- Analyzed over 50 healthcare/financial inclusion projects done in the past to curate content for client conversations and pitches

Community health strategy design with United Nations Development Programme (Pre-Accenture): *Planning and implementing clean sanitation initiative in Rural India* (Jan 2017)

- Designed a clean sanitation plan for 78 villages and a skills curriculum for local youth converting 46,100 households to first-time toilet users and generating employment for 15,000 people
- Strategized the adoption of sanitation practices by formulating a participatory approach with local leaders and administration

Education:

- MBA from Indian School of Business (Major in Finance and Public Policy) – 2017-2018
- Economics Honours from University of Delhi – 2012-2015

Languages:

English, Hindi

Geographic Experience:

India, Europe, US, Africa

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[21] If these individuals are not available at the time the project is scheduled to begin, we would provide personnel with comparable skills and experience.