STRATEGIC PLAN

FY 2016 –2021

Accompanying a progressive government, strengthening health systems, driving innovation, and achieving national scale up

Partners In Health

Inshuti Mu Buzima

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Executive Summary

In the last two decades, Rwanda has transformed; from a country once defined by the genocide against the Tutsi that claimed the lives of one million people, Rwanda now leads the developing world in progressing towards a middle-income nation. The health outcomes Rwanda has achieved are remarkable and it is now the only country in sub-Saharan Africa on track to meet all of its health-related Millennium Development Goals. Life expectancy has climbed from 28 years in 1994 to 62 years in 2015. Some of the major improvements made in the area of infectious disease include: HIV prevalence has been halved since its high of 6.2%, new HIV infections fell 60%, AIDS-related mortality fell 82%, and tuberculosis mortality dropped 77% between 2000 and 2012. Additionally the health of mothers and newborns have improved dramatically, from 2005 to 2015 the maternal mortality rate decreased from 1,071 to 210 maternal deaths per 100,000 live births, delivery at health facility increased from 28% to 91%, and the children under five mortality rate declined from 152 to 50 death per 1,000 live births.

These incredible successes create the responsibility for PIH-IMB to support the Government of Rwanda in maintaining and accelerating the progress made. Additionally, PIH-IMB will work to spread the lessons learned beyond Rwanda's borders by contributing to the larger global health agenda. In the next five years our priorities will be to:

- Support Rwanda in achieving Universal Health Care coverage.
- Support innovative approaches to health delivery, especially in oncology, neonatology, NCDs, maternal and child health, and surgery.
- Address social and economic determinants of health of the patients and communities we serve.
- Generate knowledge by creating innovation learning and teaching centers.
- Build research capacity in Rwanda to drive research in areas that impact the health of Rwandans and lead to policy change.

STRATEGIC FRAMEWORK

In order to guide our strategic plan the Executive Committee has developed PIH-IMB specific Vision and Mission statements and defined our core values.

Our Vision is thriving communities of healthy, happy and productive people, where social justice and universal quality health services are available to all.

Our Mission is to support Rwanda in designing, building and implementing a world class health system that provides equitable, accessible and high quality services to all in need.

Our Values are Ubumuntu (I am, because you are), Ubupfura (Integrity), Agaciro (Dignity), Kugira Ishyaka (Loyalty), Ubwubahane (Mutual respect and trust), Ubunyangamugayo (Wisdom), and Ubumwe (Solidarity).

STRATEGIC OBJECTIVES

The PIH-IMB Senior Leadership Team has translated our Vision, Mission and Values into a set of measurable Strategic Objectives and Goals which will guide our planning over the next five years. This plan will provide a framework to enable us to measure our progress in achieving this ambitious strategy. The key guidance for setting our goals is based on the following premises:

- PIH-IMB works by supporting the Government of Rwanda.
- PIH-IMB is a health focused NGO that understands that health is dependent on other factors and therefore works to also address social and economic determinants of health.
- PIH-IMB is born from an academic background and therefore we will continue to invest in capacity building and in research so that lessons learned can be shared.
- PIH-IMB will work to strengthen internal systems to provide continued learning and be able to adapt to the changing environment over the next five years.

People and patients, especially the poor and vulnerable, are at the center of all our work. Our strategic objectives and goals are as follows:

1. **Strengthen and support comprehensive district health systems to provide high quality and fully accessible services for the people and communities we serve.**
    A. Control and eliminate high burden infectious diseases.
    B. Eliminate preventable maternal, newborn, and child mortality and morbidity and promote family health and wellness.
    C. Contribute to the goal of achieving zero death from under five malnutrition in the PIH-IMB catchment areas.
    D. Provide high-quality chronic care services integrated into the primary health care system of the PIH-IMB supported districts.
    E. Achieve universal health care at the community and facility levels.
    F. Strengthen district health care systems as model platforms for care delivery, training, and research.

2. **Support the MOH and RBC to innovate, design, develop, and scale evidence-based programs and strategies to raise the national standard of health services in Rwanda.**
    A. Support the development of a national policy and platform of care for non-communicable diseases and injuries.
    B. Lead the establishment of national capacity for oncology services.
    C. Demonstrate and scale decentralized mental health services to address the burden of mental disease.
    D. Accelerate the national reduction of neonatal and child mortality.
    E. Support the MOH to pioneer innovative approaches for epidemic surveillance and control.
    F. Strengthen partnership with MOH/RBC for exchanging knowledge and Technologies.

3. **Provide essential knowledge, skills, and attitudes for frontline health workers to tackle global health priorities.**
    A. Partner with leading national and global universities to enhance undergraduate and post-graduate education relevant to global health priorities.
    B. Develop and deliver accredited and innovative in-service continuous education to the district health workforce.
    C. Support the MOH and RBC to develop and deliver nationwide training in line with the national health sector strategic plan.
    D. Provide PIH-IMB workforce with the knowledge and skills required to support the PIH-IMB strategic plan.
    E. Utilize the district programs as a platform for hosting global health scholars in experiential learning and research.

4. **To generate and disseminate research to improve health care delivery and advocate for evidence-based policy change with local and global impact.**
    A. Generate and disseminate new knowledge to influence policy and practice in global health delivery.
    B. Develop local and national capacity to produce high-quality research in Rwanda
    C. Build a world-class strategic and sustainable research institute.
    D. Improve capacity to obtain high-level grants.

5. **Address the social determinants of health through targeted support to the most vulnerable and through advocacy and engagement with the communities we serve.**
    A. Improved economic development and livelihood through agriculture production, income generating activities, small business development and financial literacy.
    B. Evidence based decision-making informing future programming.

6. **Invest in our staff and build strong PIH-IMB organizational systems and processes that optimize efficiency and effectiveness in carrying out the PIH-IMB mission.**
    A. Consolidate and strengthen our information systems to optimize them and support our vision for a fully-fledged health informatics department.
    B. Ensuring Human Resources Management systems and policies are supportive of the PIH-IMB strategic plan.
    C. By July 2017 have in place financial and grants management systems that optimize efficiency and effectiveness in carrying out the PIH-IMB mission.
    D. To ensure the availability of quality operations support services to PIH-IMB programs and partners in an equitable, efficient and sustainable manner.
    E. Establishment and strengthening of the External Affairs Department.

STRATEGIC PLAN

FY 2016 –2021

A word from Executive Director
Dr. Alex Coutinho

Partners in Health since 1987, has been a global advocate for development and health, a voice for the voiceless and a consistent champion for the poor, the downtrodden and the sick. From the earliest days of our existence our entry point into Global Health and development has been to introduce clinical services for the poor, for conditions like multi-drug resistant TB and HIV that had previously been thought impossible to treat in low resource or developing contexts. Our earliest programs in Haiti and Peru served as rallying points to express global outrage at the inequity of the world and in particular the immoral inequity of the distribution and availability of health care and lifesaving treatments.

As Partners in Health gained experience in delivering clinical programs in poor rural areas it became very clear that it was also necessary to take these services closer to where people lived and so a community based program based on the expanded roles of community health workers was born and survives and thrives to this very day. In addition it was clear that pills and potions were essential but not sufficient for our patients to get well, and that in addition we needed for some patients to provide good housing, nutritious food, education and other buffering social services, to enable the transition from sick to healthy to thriving people.

In 2005 Partners in Health was invited by the Government of Rwanda to bring its programs, its partners (Harvard University and Brigham and Women's Hospital) and its ethos to Rwanda at a time when Rwanda was slowly emerging from its painful past and trying to rebuild institutions destroyed by years of neglect and a Genocide against the Tutsi that took over a million lives. In Rwanda PIH found solidarity with our vision and principles, we found a progressive government that was committed to a better life for all of its people and we found a government that was determined to chart its own destiny and stand on its own two feet and then take the lead point in marching towards achieving the millennium development goals and now the sustainable development goals.

From 2005 – 2010 PIH in Rwanda, known as Inshuti Mu Buzima - in partnership with the Government of Rwanda participated in resurrecting a damaged health sector and in particular in putting in place an excellent community health system and a world class HIV care and treatment program. From 2010 – 2015 we were able to start investing in innovations and helped start the first oncology program in Rwanda, were able to fast track improvements in neonatology, begin a new community based program in non-communicable diseases as well as launched a community based mental health program. In addition we consolidated our programs to train front line health workers in quality care for the sick, carry out relevant research in our rural sites and provide technical assistance to the Ministry of Health and the Rwanda Biomedical Center – in particular in electronic medical records and in the technical areas of oncology, neonatology, NCD's and mental health.

This new strategy 2016 -21 builds on the considerable experience and gains of the first 10 years of PIH-IMB experience in Rwanda and seeks to leverage those gains to drive innovation to scale, to train large numbers of Rwandans in technical and management

areas for health as well as carry out implementation research to inform policy and practice. This new strategy will see us strengthen our partnerships with existing in-country partners like the MOH, RBC, UR, UGHE, USAID, Global Communities and the districts of Kayonza, Kirehe and Burera as well as all of the international partnerships we have built over the years. We will also be seeking new links and partnerships with bilateral and multilateral programs in Rwanda as well as a range of international universities and institutions.

We have put in place ambitious goals and targets for the period 2016-21 which we shall conscientiously measure and report on so that we can track our progress as an organization but also contribute to measuring how Rwanda continues to transform itself. We are also cognizant that we cannot achieve this ambitious plan if we do not invest in our own staff, in improving our systems, in engaging and empowering our beneficiaries and in working in a true partnership to collectively achieve goals that are higher than any individual organization.

Special thanks are also in order to members of the PIH-IMB Senior Leadership Team past and present for sparing no efforts in putting this strategic plan together; and for their vision and commitment to the work of PIH-IMB: Antoinette Habinshuti, Richard Musuhuke, Gilbert Rwigema, Neil Gupta, Joel Mubiligi, Christian Rusangwa, Paul Park, Alice Uwingabiye, Fred Katera, Nadine Karema, Emmanuel Kamanzi and Florence Akiiki.

We thank the people and government of Rwanda for the opportunity to partner and for the privilege to contribute to this once in a lifetime opportunity to rebuild a nation and take that nation to the status of a developed country in the space of two generations.

Murakoze Cyane!

Overview

Since 1994, Rwanda has been transformed from a nation defined by the Genocide against the Tutsi that resulted in a million deaths, to become a progressive nation that leads the world by the speed at which it's moving its people and society into a middle-income nation. The life expectancy has climbed from 28 years in 1994 to 62 years in 2015 and Rwanda is on pace to become the only country in sub-Saharan Africa to meet all of its health-related Millennium Development Goals. Rwanda has reported some of the world's most impressive health gains in the past decade, outpacing nations that spend far more per capita on healthcare.

A new course established by a new government set into motion multiple equity-oriented national policies focusing on social cohesion and people-centered development. The Rwandan government laid down ambitious plans to scale up access to health services in the years immediately after the genocide; Rwanda's Vision 2020 strategy for equitable social and economic development, produced in 2000, emphasized health as a pillar of the national cross-sector approach to reducing poverty.

As a result Rwanda has demonstrated significant gains in improving the health of its people. The estimated HIV prevalence decreased from a high of 6.2% to 2.9%, new HIV infections fell 60.3% and AIDS-related mortality fell 82.1% between 2000 and 2012; the single largest decline in the world during that time frame. At the same time, tuberculosis mortality has dropped 77%; the most significant decrease in Africa. There has been significant reduction in maternal mortality ratio from 1,071 maternal deaths per 100,000 live births in 2005 to 210 maternal deaths per 100,000 live births in 2014/2015. Delivery at health facility increased from 28% in 2005 to 91% in 2014/2015. The under-five mortality rate in 2005, when PIH first began working in Rwanda, was 152 per 1,000 live births. This declined to 76 per 1,000 live births in 2010 (decline of 50% since 2005) and down to 50 per 1,000 live births in 2014-2015 (decline of 67% since 2005). Nonetheless, neonatal mortality decreased less quickly. In 2005, neonatal mortality was 37 per 1,000 live births and this decreased to 27 in 2010 (27% decline from 2005) and to 20 in 2014-2015 (46% decline from 2005).[1] It is the efforts primarily lead by the Government of Rwanda supported by development partners — from foreign governments like PEPFAR and multilateral funders like the Global Fund, World Bank and European Union, to international academic consortia and non-governmental organizations such as the Human Resources for Health, Clinton Foundation, Buffett Foundation and PIH-IMB that have contributed to the unprecedented health outcomes witnessed and documented in Rwanda. PIH-IMB has been proud to play a part in these gains since 2005 when PIH-IMB were invited to come and work in Rwanda.

[1] Rwanda Demographic and Health Survey, 2005.
World Bank. World Development Indicators. http://data.worldbank.org/indicator; 2015;
Binagwaho, A, Farmer, PE, Nsanzimana, S et al. Rwanda 20 years on: investing in life. *Lancet*. 2014; 384: 371–375;
Farmer, PE, Nutt, CT, Wagner, CM et al. Reduced premature mortality in Rwanda: lessons from success. *BMJ*. 2013; 346: f65

The collective responsibility created by Rwanda's success, but also the greatest challenge faced by Rwanda's health sector is how to maintain and accelerate the progress achieved to date and then how to scale up the lessons learned beyond Rwanda's borders in order to contribute to the global health agenda and support the sustainable development goals. The second Strategic Plan for PIH-IMB 2016/21 will require that PIH-IMB support the Government of Rwanda in achieving its ambitious plans and in addition PIH-IMB's next frontier will involve scaling up success stories and lessons from its implementing districts to other areas of Rwanda to amplify our impact.

PIH-IMB's contribution in the coming years will involve among others:

- Supporting Rwanda to achieve Universal Health Coverage in particular through investing in communities and primary health care services.
- Supporting innovation and helping to kick-start approaches to deliver specialized care in oncology, neonatology, NCDs, maternal and child health and surgery.
- Committing to equity and ensure that everyone has access to quality healthcare and opportunities to improve the lives of their families.
- Pioneering the creation of the "Innovation learning and teaching centers", leveraging service delivery with training and medical education and generating knowledge to constantly improve.
- These efforts are also building the foundation for the new University of Global Health Equity, which will effectively institutionalize this model in training, research, and service delivery within an academic institution.
- Creating advocacy for a movement to drive systems for health that go beyond pure health systems and leverage all of the sustainable development goals to further human health and development. This will guide our investments into social and economic investment for the poorest of the poor.
- Building research capacity in Rwanda to drive research in areas that are of importance to Rwanda and that lead to policy action and an improvement in the health of the people of Rwanda.

As Rwanda moves closer to building a healthy nation and greater poverty alleviation through the goals for "Vision 2020", the next five years present an even greater opportunity for PIH-IMB to capitalize on the existing relationship with the Government of Rwanda, build on the gains in the health system and continue to support the Government of Rwanda in its aspiration for a thriving and healthier population. In addition, PIH-IMB will continue to pilot innovative interventions that raise standards of living and healthcare for the very poor.

Chapter 1: Introduction

I. 1 SUMMARY

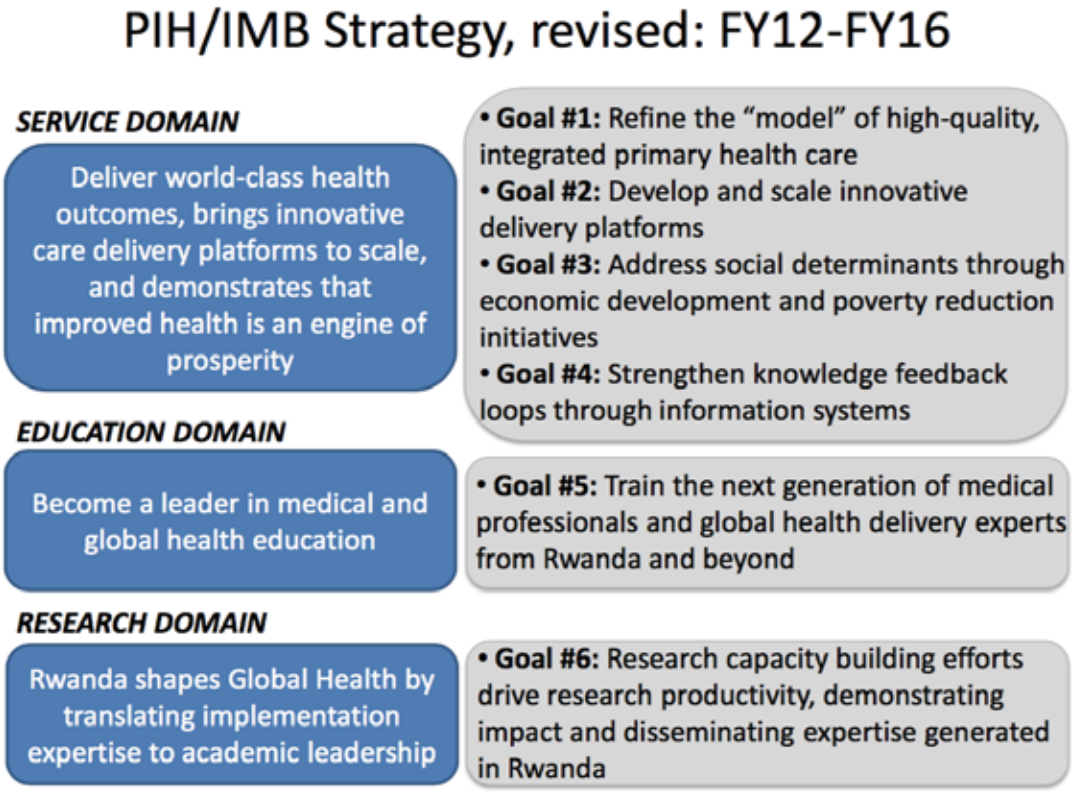
At the invitation of the Government of Rwanda (GOR), Partners in Health - Inshuti Mu Buzima (PIH-IMB) began operating in Rwanda in 2005 to strengthen the health systems in very rural areas of Rwanda. Starting at one hospital in Southern Kayonza District, Rwinkwavu Hospital, PIH-IMB now works in three districts (Kayonza, Kirehe, and Burera) at three hospitals and 42 health centers run by the Ministry of Health (MOH). Increasingly, PIH-IMB has also taken on advisory roles at the central MOH level and worked to support the national government in driving innovation within a decentralized health care system.

For 11 years, PIH-IMB has supported the GOR to design, implement, and strengthen health and community systems and translate the lessons learned for greater achievements in global health delivery. PIH-IMB has contributed to many gains in health in Rwanda, working with the MOH to achieve its vision; to strengthen primary healthcare as determined in Rwanda's Health Sector Strategic Plan framework.

In nearly 30 years of health care delivery around the world, PIH has learned that the provision of social and economic support, in addition to high-quality health care, is crucial to breaking the cycle of poverty and disease. Because poverty and poor health are inextricably entwined, PIH-IMB prescribe our patients food, housing support, economic assistance, education, and agricultural tools and training – just as if PIH-IMB were prescribing medicines. These investments in better health and social support allow people to lead safer, healthier, more productive lives. We work to address determinants of health from a systems perspective.

The first 5 year IMB Strategic plan ends in June 2016 and has focused on strengthening health systems, driving innovative programming, and generating knowledge through high-level training, education, and research activities (Figure1).

Figure 1:


PIH/IMB Strategy, revised: FY12-FY16
SERVICE DOMAIN
Deliver world-class health outcomes, brings innovative care delivery platforms to scale, and demonstrates that improved health is an engine of prosperity
• Goal #1: Refine the "model" of high-quality, integrated primary health care
• Goal #2: Develop and scale innovative delivery platforms
• Goal #3: Address social determinants through economic development and poverty reduction initiatives
• Goal #4: Strengthen knowledge feedback loops through information systems
EDUCATION DOMAIN
Become a leader in medical and global health education
• Goal #5: Train the next generation of medical professionals and global health delivery experts from Rwanda and beyond
RESEARCH DOMAIN
Rwanda shapes Global Health by translating implementation expertise to academic leadership
• Goal #6: Research capacity building efforts drive research productivity, demonstrating impact and disseminating expertise generated in Rwanda

Major Achievements During Previous Five Years

PIH-IMB's "Total District Strategy" – which refers to PIH-IMB's decision to support all health facilities, from the community, the health center and hospital, in its three districts. It was successfully implemented and PIH-IMB are now supporting quality care delivery in three hospitals, 42 health centers, and through a network of over 5,000 community health workers in three rural districts serving a population of close to 1,000,000 people.

Expanded services from 7 to 24 health centers in the Eastern province: With funding from the Doris Duke Charitable Foundation, PIH-IMB worked to strengthen health systems in Kayonza and Kirehe districts in Eastern Rwanda. The major accomplishments of this project include improved efficiency of nursing supervision, increased human resources and service delivery support at hospitals and health centers, an enhanced network of community health workers, and the implementation of a robust monitoring and evaluation system. By making these structural changes, PIH-IMB has created a model health care system and has put in place the monitoring, research, and training programs that will make it possible for other districts to scale up and replicate it.

Opened a state-of-the-art District hospital in rural Burera district: Butaro Hospital now brings high‐quality medical care to its catchment population and serves as a flagship center for medical education and innovation for Rwanda and the East Africa region.
The first of its kind, The Butaro Cancer Center of Excellence, opened its doors in July 2012, to bring comprehensive cancer care to rural East Africa. The Cancer Center benefits from a unique partnership with the Boston-based Dana Farber Cancer Institute, Brigham and Women's Hospital, and Harvard Medical School. Rwanda clinicians have been trained by expert oncologists to administer chemotherapy and care for patients.

Created a model for treatment of chronic disease: Even in places where health facilities exist, adults and children with non-communicable chronic diseases such as mental health issues, hypertension, asthma, epilepsy and heart disease are often left untreated. PIH-IMB has adapted the core elements of PIH-IMB's successful approach to HIV care to provide comprehensive, community-based care for patients with chronic diseases. Rather than debating whether treatment of diseases such as cancer is even possible in resource-poor settings, PIH-IMB is already caring for thousands of chronically ill patients and developing a best practice model. After hosting an international summit on non-communicable disease care in Rwinkwavu in 2005, PIH-IMB began working with the MOH to develop a training curriculum, clinical guidelines and policies for national and international scale-up.

Reached the most vulnerable children through neonatology services: In Rwanda, nearly one child in ten dies before his or her first birthday, often in the first hours or days of life. Although pediatric care has improved dramatically in the areas where PIH-IMB work, the need remains to strengthen services and to expand to the next frontier of neonatal care to save the lives of children. In partnership with the Children's Hospital Boston and the MOH, PIH-IMB has developed an ambitious program of training, infrastructure, staffing, and equipment that together will give hope to premature and other at-risk newborns that

currently struggle to survive. All three PIH-IMB supported district hospitals now have state of the art neonatal intensive care units.

The Mentorship and Enhanced Supervision for Healthcare and Quality Improvement (MESH-QI): Starting in 2010, with support from the Doris Duke Charitable Foundation's African Health Initiative, PIH-IMB with the Rwandan Ministry of Health to improve the quality of care delivery and systems through the Mentorship and Enhanced Supervision for Healthcare and Quality Improvement (MESH-QI) program. MESH-QI aimed to bridge the "know-do" gap and support healthcare workers to have the skills, knowledge, and opportunity to provide high quality healthcare in rural health centers through integrated clinical mentorship, systems-focused quality improvement, and data use. Since its launch, MESH-QI has connected experienced and well trained nurse mentors to nurses at rural health centers to support them improve the quality of care across a number of domains including HIV, non-communicable diseases, mental health, and maternal and child health. The mentors travel to the health centers to provide one-on-one clinical mentorship to nurse mentees, on-site education sessions for facility staff, quality improvement coaching, and to collect data used to inform program activities as well as continuous quality improvement.

Since MESH-QI's implementation, PIH-IMB has seen improved quality of care across the continuum of screening, diagnosis and treatment. The adaptation of MESH-QI to support district hospitals through quality improvement projects has also led to improvements in care processes and patient safety. The program, piloted by PIH-IMB has been well received by Rwanda's Ministry of Health and was used to inform a national model of HIV mentorship as well as national guidelines for mentorship in maternal and child health. Additionally, the MESH-QI model is being replicated in other PIH-supported programs with adaption to address the unique challenges facing their health systems.

All Babies Count: In order to address the slower decline in newborn deaths, premature births being a main contributor, PIH-IMB developed a program to specifically target improving the quality of maternal and newborn care to save newborn lives. While 91% of women give birth in health facilities, nearly half of neonatal deaths occur in the first 24 hours of life with most mothers and newborns still in a health facility. The All Babies Count (ABC) program was an 18-month intensive clinical mentorship and quality improvement intervention created with funding support from the Doris Duke Charitable Foundation and the World Bank. This program accelerated systemic change by intensely focusing on maternal and newborn health care processes and promoting data driven decisions. Through clinical mentorship and system improvements PIH-IMB employ techniques that have already been proven to build clinical skills and improve patient outcomes. We organize learning collaboratives that include clinicians such as doctors, nurses and midwives, as well as non-clinical staff such as data managers and administrative personnel, and also government officials. These learning collaboratives create a community of like-minded stakeholders to review recent data, develop quality improvement projects focused on improving key indicators, share success and challenges, and create new plans to improve newborn health.

ABC was first implemented in the catchment area of two district hospitals supported by PIH-IMB, Rwinkwavu and Kirehe, and their surrounding 25 health centers. Over the course of 18 months, providers from all health facilities were trained in key newborn care

protocols, received on-site mentorship and quality improvement coaching, participated in five learning collaborative sessions, and implemented over fifty quality improvement projects. These efforts combined to improve critical maternal and newborn care processes and ultimately reduced neonatal deaths by over one-third.

Rwanda Population Health Implementation & Training (PHIT) Partnership: Over the past seven years, funded by the Doris Duke Charitable Foundation (DDCF), the PHIT project has developed and supported population health programming, including programs such as MESH, ABC, and Race to the Top, as well as training and capacity building for health professionals. The PHIT project has also developed and emphasized the use of data and key metrics for rigorous research and evaluation of the impact of IMB's work in the Southern Kayonza and Kirehe districts.

The Social and Community Medicine (SOCOMED) Training:
Started in 2008, through collaboration with the Discipline of Primary Health Care, School of Medicine and Pharmacy, College of Medicine and Health Sciences, University of Rwanda (UOR), PIH-IMB's Department of Mentoring, Education and Training (DMET) developed an undergraduate training for medical student trainees to introduce them to the social determinants of health and the importance of health care provided in the community. The objective was to train family physicians capable of providing comprehensive, continuous health care of high quality, which is person centered, family oriented and community based, using the bio-psychosocial model of care at the district level.

Strengthened the public health system through creation of a district pharmacy: PIH-IMB established a District Pharmacy in Kayonza district in 2005 to be able to better support the supply chain in the districts PIH-IMB serve. In the following years, PIH-IMB worked to build the supply chain for the district and merged the MOH medical supply chain with the one established by PIH-IMB and together opened a new district pharmacy in Kayonza district. This joint effort reduced redundancies, saved money, and helped streamline and strengthen Rwanda's health care system. The district pharmacy supplies all the health centers with medicines, medical consumables, lab reagents and equipment, and is fully operated and staffed by the MOH. This effort was scaled up to Kirehe and Burera Districts as PIH-IMB accompanied the MOH in strengthening pharmaceutical supply chain management systems through the provision of start-up essential health commodities, provision of technical and operations support, building capacity in logistics and pharmaceutical supply chain. Over the years, PIH-IMB worked to strengthen capacity of public sector pharmacies and facility teams, strengthening hospital based Drug and Therapeutics Committees (DTCs), developing effective standard operating procedures and policies in pharmaceutical management, ensuring appropriate quantification, forecasting, requisition, reporting and monitoring medical commodities as well as advocated for the inclusion of a good number of NCDs health commodities on the updated National Essential Medicine List.
Supported our patients through the national health insurance system: Rwanda's national health insurance system (mutuelle) provides coverage for a small annual fee of approximately $2, plus out of pocket co-payments for services averaging 40 US cents. This fee, however, still serves as a barrier to care for many of Rwanda's poor people. To ensure access for the poorest, PIH-IMB covers the annual cost and visit fees for those who cannot afford to pay – based on comprehensive household surveys – the Ubudehe

categorization. Annually, PIH-IMB covers subscription fees for nearly 30,000 patients in Kayonza, Kirehe, and Burera districts. In addition to supporting those most in need, PIH-IMB also strengthens the mutuelle system by participation in mutuelle sensitization campaigns.

Provided social and economic support since 2008: In order to find sustainable solutions for the most vulnerable patients PIH-IMB initiated agricultural basic trainings that established kitchen gardens and microloans assistance to people living with HIV/AIDS. In 2012, PIH-IMB made a strategic decision to strengthen community interventions with an Integrated Food Security& Livelihoods Program (FSL) for long-term health and resilience at household and community level. The FSL comprehensively addresses the root causes of malnutrition through targeted, community-led agriculture, nutrition and income-generation initiatives. From 2008 up until close of last fiscal year (July 2014 –June 2015), 2,121 households were enrolled into the program. Given the average size of 5 members per household, the program has so far supported more than 10,000 individuals infected, affected, or at-risk by the end of the previous strategic plan.

Creation of the University of Global Health Equity (UGHE): Building on the Harvard Global Health Delivery Partnership, which established an outpost in Rwanda with the first Harvard-Rwanda GHD field course in 2012, and the GHD framework that was adopted by Rwanda's Ministry of Health, PIH is establishing the first rural based university and medical school in Africa. PIH has created a new type of university dedicated to the field of global health equity, a university that will improve health and health equity around the world by advancing the science of health care delivery in order to bring the fruits of scientific discovery to those who need it most. By training innovative and effective leaders with the skills and character to ease suffering at the bedside they will drive transformational change at the level of the health system and communities. UGHE trains the next generation of Rwandan and international leaders in biosocial approaches to health care delivery and creates a global intellectual hub for delivery science through education, research, clinical care, and implementation. The work that PIH-IMB has done over the past 11 years and the platforms created in districts and communities will serve as the living practical laboratories for these students to learn about health care delivery in an equitable way.

I. 2 KEY STRATEGIES AND PRINCIPLES APPLIED

In Rwanda, the approach that PIH-IMB took to support an ambitious government driven health and development strategy was as follows:

A. ADDRESSING THE BURDEN OF DISEASE

Over the years, Partners in Health's work has focused on the burden of disease especially among the poor and vulnerable living in rural areas, and the gaps that needed priority attention. In 2005, deaths from malaria reached their peak and the programs to respond to AIDS, tuberculosis, and malaria were still in their infancy. Building off PIH's approach in Haiti, the Rwanda program was designed as a comprehensive primary health care model within the public sector based on community health workers and a primary care approach. The approach used HIV/AIDS prevention and care as the entry point to build capacity to address the major health problems faced by the local population. In 2005 when PIH began working in Rwanda, there were more than 100 HIV/AIDS-related non-governmental organizations in Rwanda but only fewer than 150 patients on HIV/AIDS therapy outside the capital city Kigali. At that time the National AIDS Control Commission was estimating that more than 100,000 Rwandans needed such care. PIH then worked in collaboration with the MOH to scale up HIV/AIDS treatment and testing in two districts in rural Eastern province, a home for half million residents with no doctor before PIH arrival. PIH-IMB has moved quickly to rebuild the hospitals, capacitate health centers, provide essential medicines, supplies and equipment, recruit, train, and retain staff, establish a network of community health workers who are trained and supervised by the public health system, and develop a robust referral and transport network integrating these three levels of care as a comprehensive service delivery platform.

To achieve substantial outcomes in the fight against HIV/AIDS in the District of Kayonza in 2005 and then Kirehe in 2006, the services had to be integrated in a comprehensive primary health care system (with preventive, curative and rehabilitative services for maternal and child health, nutrition, surgery, to name a few) with supportive referral systems, and these services had to be connected to the community through community health workers. In sum, putting in place a comprehensive health system strengthening approach.

By 2011, PIH-IMB had expanded to support three district hospitals (adding Butaro in 2008) and 36 health centers. Through the years, consistent economic development, peace and security, progressive leadership with an equity agenda at the core of its vision, have allowed the government of Rwanda to build one of the best health systems in the continent. The government has fully taken responsibility of resource mobilization, implementation and evaluation of HIV and TB programs (180,000 patients on ART currently).

Based on the lessons learned in building comprehensive systems that are linked to the community for HIV/AIDS services, PIH-IMB built a long-term relationship of accompaniment with the Rwandan government in designing, implementing and evaluating its innovative total District Health System Strengthening framework. A framework that provides a system that can mitigate any emergency and can deliver care to any disease regardless of whether its etiology is communicable or non-communicable. The greatest

examples of such an approach is the collaboration with MOH in strengthening the District health system in Butaro with a platform that could integrate provision of cancer care since 2012 and mental health since 2013.

Dr. Paul Farmer, PIH Co-Founder and Chief Strategist, argues that successes from the world's response to tuberculosis and HIV/AIDS can be applied to improving care for chronic illnesses, which make up an increasing burden of disease in poor and wealthy countries. He said,

"PIH model is not focused on a single disease, but rather on working in partnership with national governments to build comprehensive systems of care. All of the work that PIH-IMB is able to do—administering a chemotherapy regimen, safely delivering a breech baby, and setting a broken bone—is dependent on infrastructure, training, and resources: what PIH-IMB call the "system of care. This model links community health workers, local clinics, and hospitals supported by a feedback loop of research, training, and service."

B. HEALTH SYSTEM STRENGTHENING

PIH-IMB made a strategic decision to work within the public sector and to strengthen the public health systems as the only way to achieve equity and impact. PIH-IMB's approach to strengthening the health system aligns both with the Rwanda national health strategic plan (HSSP) as well as with the World Health Organization's six health systems building blocks. HSSP activities focus across all levels of the health system — community, health center, hospital, and district leadership — to improve health care access, quality, delivery, and health outcomes. With a particular focus on a comprehensive and integrated district health systems strengthening, interventions are concentrated on three main areas: targeted support for health facilities: hospitals and health centers, quality improvement initiatives, and a strengthened network of community health workers.

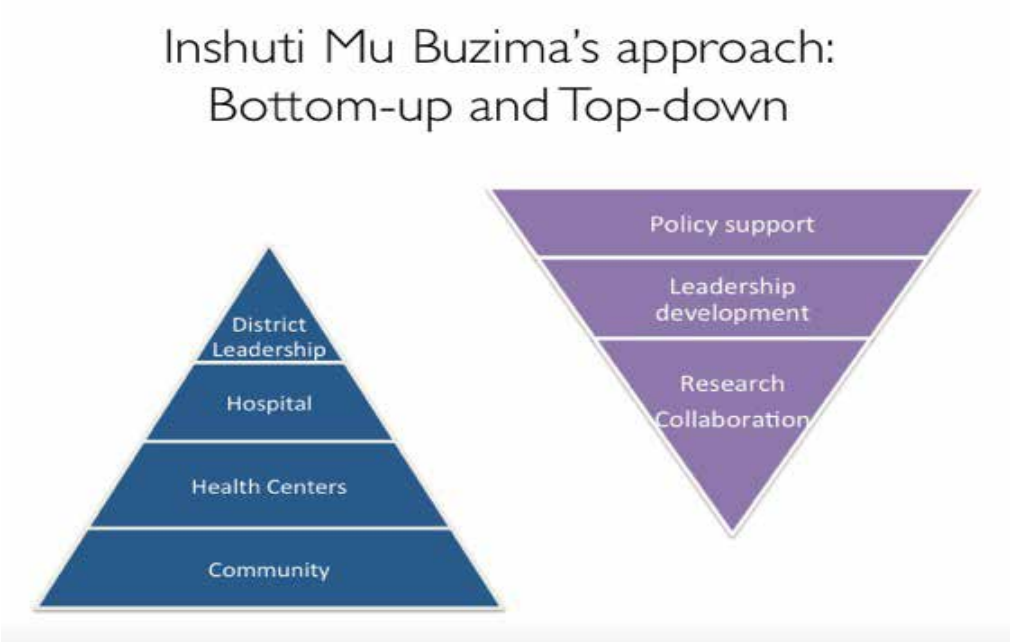
Our intervention deliberately emphasizes capacitation across all six WHO building blocks at the district, facility, and community levels of the health system, as PIH-IMB believe that narrowly focused HSS interventions may limit value by neglecting other gaps in the health system. For example, a robust initiative to recruit and train health workers is unlikely to succeed if those health workers are asked to perform in a setting of decrepit infrastructure, inadequate equipment, drug stock outs, and absent information systems. Success in health systems strengthening interventions should be reliant on its comprehensiveness.

C. A BOTTOM-UP APPROACH LINKED TO TOP-DOWN ACCOMPANIMENT

The bottom up approach refers to a comprehensive and integrated district health systems starting from community health, on to the first entry point for patients, health centers, to hospitals and district health unit as shown in Figure 2. Each district is served by a network of community health workers (CHWs) — three per village — offering health education, basic preventive and curative services, and family planning. CHWs are supported by local health centers, which serve approximately 20,000 people and are staffed by nurses. Health centers provide vaccinations, reproductive and child health services, acute care, and diagnosis and treatment of HIV, tuberculosis, and malaria. District hospitals, staffed in part by 10-15 generalist physicians, provide more advanced care, including basic surgical services, such as caesarean sections. District pharmacies procure essential medicines

and consumables from a central agency and distribute them to all health facilities within the district. District hospitals are responsible for clinical supervision and monitoring and evaluation of all district health facilities, while district health units are responsible for administrative management of the district health system.

Figure2



As a result of the bottom up approach, which allows us to work with and support a network of community health workers, strengthen systems for health at health centers and district hospitals in the districts PIH-IMB serve – looking at the healthcare level readiness to take on the management of medical condition like HIV/AIDS, Non-Communicable Diseases including mental health to name a few. We also take a system improvement thinking whereby PIH-IMB consider the 4 S's: Staff, Stuff, System and Space - that are required to deliver services and link this to a quality improvement model in order to achieve better patient outcomes.

In this way PIH-IMB believe that the PIH-IMB and MOH and District partnership has managed to create a model that leverages existing delivery platforms to tackle previously neglected diseases. For example, a non-communicable disease program has adapted the principles of HIV/AIDS care delivery—task shifting from doctors to nurses and community health workers, robust information systems, social and economic support—to complex chronic diseases including diabetes, heart disease, mental health and epilepsy.

The bottom up approach of the health system also refers to actions and implementation that are data driven from platforms like Health Management Information Systems (HMIS) and Electronic Medical Records (EMR) that produce large amounts of data about health service provision and population health from the community to the district hospital level, and provide opportunities for data-based decision-making in decentralized health systems.

A well-defined approach to district level decision-making and resource allocation using health data would help better meet the needs of the local population.

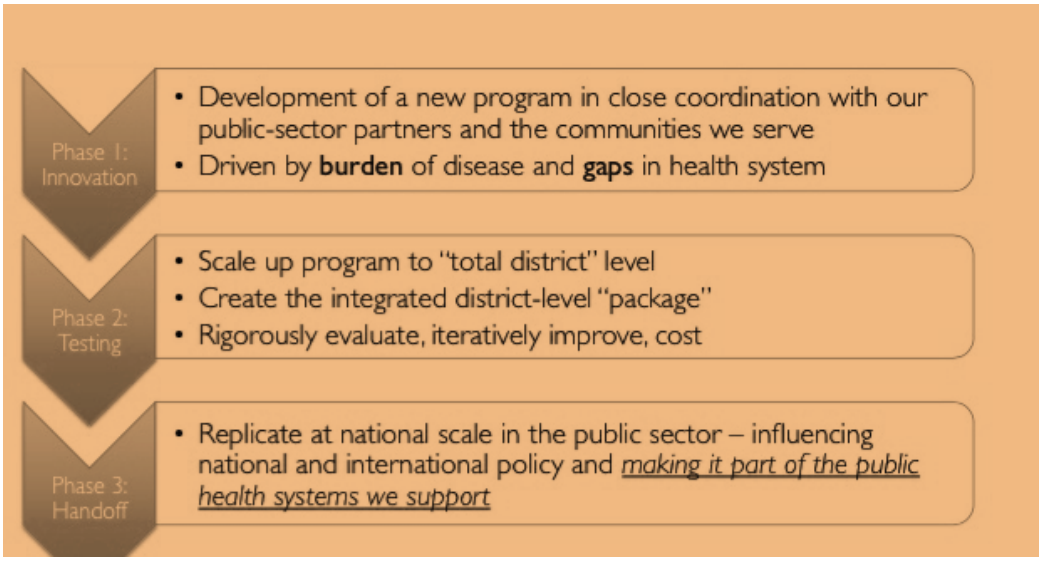
The top down approach reflects our accompaniment of the MOH and RBC to utilize PIH-IMB experience, our data and our research to influence policy development that is well grounded in the reality of Rwanda and in particular the rural population and its needs. In this process PIH-IMB also contribute to a visionary leadership for health.

D. DRIVING INNOVATION

As Rwanda has built up its primary health care system to the point where sustained improvements in health are being achieved, it has added the ambition of tackling new frontiers. The MOH has charged PIH to lead the way in the areas of oncology, mental health, neonatology and NCDs. PIH-IMB has invested in developing, integrating and scaling up innovative clinical programs within the public health care system, providing technical and logistical expertise in developing and adapting clinical protocols, curricula, and training materials, as well as ensuring adequate human resources, supplies, equipment, and medications needed to implement these new innovative programs.

The 3 districts in which PIH operate in are used as healthcare delivery innovation hubs using the three-pronged approach as detailed below in Figure3.

Figure3



E. INTEGRATED PREVENTION AND CARE WITH A SOCIO-CULTURAL-ECONOMIC LENSES

The fundamental need of integrating prevention and care is rooted in the believe that no single intervention will overcome the gaps in care; improving patient experience, population health, and reduced cost of care for patients with chronic or infectious diseases cannot be achieved by clinical intervention alone or stand-alone disease program. Shifting

the delivery of services from purely clinical settings to including the community has been at the core of PIH-IMB's work. We prioritize, as much as possible the integration of our interventions as part of an existing administrative and financial system, PIH-IMB design clinical care as part of a whole social system, with the aim to reach long lasting population health gains.

Social systems include both the clinical preventive services – screening tests, immunizations, health behavior counseling, and preventive medications –but also addressing the structural causes of ill-health since diseases are not health problems only, but also socio-cultural-economic and development problems. Without adequate income, people engage in behaviors that put them at risk for disease. Without adequate food, diseases progress more rapidly. Without education, social support and protection of human rights, people become increasingly isolated and vulnerable to disease and discrimination.

PIH-IMB's success in clinical care has been credited to the broader definition of healthcare, including: engagement of individuals in need of services, actual delivery of the service, and appropriate clinical follow-up. Integrated health care delivery systems improve the health of our members and the communities PIH-IMB serve as well as empower them to maximize their total health.

F. STRENGTHEN DATA COLLECTION, DATA SHARING, AND DATA USE

Understanding that data collection, analysis, and feedback support quality improvement of health care, PIH-IMB has invested in data systems that link to and support the MOH efforts to digitalize all patient records. Among others, our work has focused on the development of data collection mechanisms and reports in Electronic Medical Record (EMR) and patient billing systems.

The M&E activities of PIH-IMB support MOH priority areas, strengthening routine data collection and reporting, improving quality of data collected and promoting data use, in PIH-IMB supported districts regular data sharing meetings are held in the districts to promote data use and share data from across information systems with all stakeholders in the district.

G. INVESTMENT IN MENTORING, EDUCATING AND TRAINING OF HEALTH CARE WORKERS

To make a lasting impact on health care delivery and outcomes in Rwanda, PIH-IMB has invested in healthcare workers capacity building through in-service formal education as well as mentorship. PIH-IMB has offered certificate programs for nurses, physicians, and other healthcare providers, particularly in specialty areas that PIH-IMB have been focusing on such as oncology and neonatology. Such programs, developed in conjunction with the various PIH-IMB departments, have allowed participants to gain a specific set of skills and to advance professionally. Additionally, PIH-IMB has built partnerships with key institutions and stakeholders in medical education—such as the University of Rwanda, the Human Resources for Health program, and University of Global Health Equity.

H. RESEARCH, POLICY DEVELOPMENT, PROGRAM DEVELOPMENT AND SCALE UP

The Ministry of Health prioritize strengthening research and research capacity, as key strategies in the national plans for improving the quality and use of research information for building human resource capacity for research and fostering collaboration between research institutions. The strategies employed by PIH-IMB in meeting this strategic goal mirror those of the national plan. In order to achieve impact on a truly global scale, PIH-IMB conducted high-quality service work as well as produces original research demonstrating the effectiveness of our interventions. In the past, PIH-IMB has invited researchers and clinicians to pilot programs and analyze data in PIH-IMB-affiliated facilities. Emphasizing homegrown research, PIH-IMB and its partner institutions supported staff in building up research skills and set ambitious targets for publication and dissemination of research, using its demonstrated success as a platform for advocacy, policy development and scale up.

I. ADAPTING PIH-IMB'S STRATEGIC PLAN TO THE RWANDA AND GLOBAL ENVIRONMENT

(a) *CLINICAL PROGRAMS*

The five overall priorities of HSSP III (2012-2018), are as follows:

1. Achieve MDGs 1 (Nutrition), 4 (Child), 5 (Maternal and Child Health) and 6 (Disease Control) by 2015;

2. Improve accessibility to health services (financial, geographical, community health)

3. Improve quality of health provision (quality assurance, training, medical equipment, supervision)

4. Reinforce institutional strengthening (especially toward district health services, District Health Units)

5. Improve quantity and quality of human resources for health (planning, quality, management)

The PIH-IMB strategy 2016-2021 will help support the achievement of HSSP III and lay the groundwork for further ambition

The HSSP III mid-term review emphasized that to reach the goals set by Rwanda's Vision 2020 as well as the sustainable development goals and poverty reduction strategy, improvements in areas below will be critical.

- ✓ Continuous improvement in access and quality of Maternal and Child Health services
- ✓ Continuous improvement in access and quality to Family Planning services
- ✓ Reduction of all forms of malnutrition

- ✓ Improved Access to quality Malaria services
- ✓ Improve Access and quality of Tuberculosis services improved
- ✓ Mental health integration in all Health Centers and District Hospitals
- ✓ Integrate Neglected Tropical Diseases into general health services
- ✓ Improve Access and quality to Non-communicable Diseases services

While Rwanda has built a strong foundation for well-functioning health systems such as strong primary healthcare, there remain major gaps in the ability to respond to other areas like cancer, diabetes, hypertension, cardiovascular diseases, and mental health.

PIH-IMB's continuous role in the coming years will be to join the government of Rwanda to mobilize an effective response to prevent future epidemics, increased attention to strengthening health systems and enhancing the ability to respond to global health threats while simultaneously tackling emerging areas that are driven by increasing posterity and life expectancy of the population.

PIH-IMB will build from its strengths, in health system strengthening and its broader linkage to social justice to work with the Government of Rwanda and in particular the Ministry of Health to take Rwanda to the next level of meeting the health goals.

PIH-IMB expects some shifts in its programmatic stance and thematic focus keeping with the evolving knowledge and likely changes in the external environment.

(b) *RESEARCH AND MEDICAL INFORMATICS*

Research

In support of "The National Health Research Agenda 2014-2018" and beyond, PIH-IMB will need to generate scientific evidence that informs best clinical care practices, influences health care delivery, supports development of disease management policy and is used for national and global advocacy towards increasing equitable effective health care to the poorest populations.

In order to do this PIH-IMB will need to partner with local and international research partners for funding, expertise and joint efforts to:

1. Measure the impact of innovative health care delivery programs that are scalable countrywide. Further implementation research and scale up of PIH-IMB's flagship clinical programs of mental health, oncology, NCDs and neonatology. We will prospectively track quality, disease outcomes and cost-effectiveness of services delivered even as PIH-IMB support capacity building and programme monitoring.

2. Three areas highlighted in the NHRA as research priorities in community health strengthening include: 1. Assessment of determinants of access to health services in rural and sub-urban centres. 2. Assessment of the effects of immigration and emigration on the quality, the demand and the supply of health services. 3. Evaluation of the costs and cost-effectiveness of current strategies

used for health promotion. In line with these research priorities, PIH-IMB will establish a community-based health and demographic surveillance system intended to characterise population level health outcomes and determinants on prevalent diseases like HIV, tuberculosis and malnutrition. Population demographics and both individual and household determinants and other disease influencers will be studied longitudinally. Data from this work will further support disease prevention and effective management at community level.

3. Long-term effects of chronic illnesses are rarely studied. To more accurately measure disease burden and assess determinants of their outcomes, cohort studies will be initiated among oncology and paediatrics programs. Data collected here will inform provision of a more comprehensive care package and improve patient well-being.

4. Local and international research dissemination is a key pillar elaborated in both the HSRP and the MOH "Guidelines for Researchers Intending to Do Health Research in Rwanda" documents. Research data generated in Rwanda should be used to ensure maximum public benefit in Rwanda and influence health care in the broader international research community. To that end, dissemination of all research findings, both locally and internationally will be supported at PIH-IMB.

5. Supporting research capacity building for both human personnel and data management systems is enshrined in the MOH Guidelines for Researchers Intending to Do Health Research in Rwanda, 2012. Improving human resource capacity requires attracting, training, and retaining researchers. Both PIH-IMB staff and key collaborating (e.g. MOH/RBC, UOR and UGHE) personnel will be engaged in research related courses and mentorship.

Medical Informatics

Key to documenting the impact of health programs in Rwanda is ensuring appropriate data management and data dissemination. Rwanda has made many gains during the course of HSSP III in the area of information management. These have included achievements in terms of digitized systems that are operational at many levels of the health system (HMIS, SISCom, RapidSMS, LMIS, etc.) and incorporating an innovative mix of paper- based and technological solutions. The sector has improved reporting compliance for the HMIS to nearly 100 percent (thanks in part to PBF incentives) and addressed issues of data quality by introducing a standardized data quality assessment methodology at national and district levels. Over the past few years, private clinics and dispensaries in the Kigali urban districts have begun to report routinely.

The biggest task at hand is to expand this initiative to all the rural areas, and ensure inter-operability between all health sectors digitized systems in the interest of impactful action, effective care, and improved service. PIH-IMB will continue to collaborate with MOH/RBC on exchanging informatics skills (IT, M&E, and HIS), tools, and information. To achieve this goal, PIH-IMB will tap into previous experience in programs PIH-IMB innovated such as

EMR as well as initiatives PIH-IMB led for training MOH developers on EMR programming, teaching clinicians EMR usage for decision-making, supporting data managers with data quality, and advocating data utilization by health facilities leaders.

Among other efforts, the following areas will be tackled both within PIH-IMB and beyond:

- Strengthening the informatics platform at PIH-IMB
- Supporting innovative PIH-IMB programs with digitized systems
- Data literacy. Data Sharing, and Data Utilization in districts PIH-IMB support
- Sharing of informatics processes and tools with MOH/RBC

Capacity building of informatics staff on core competencies needed for informatics (IT, M&E, and HIS). In addition to EMR development needed for tracking patient outcome and identifying program improvement, PIH-IMB envision to use a digital approach for collecting vital demographic information that will enable us to see the need for and impact of PIH-IMB programs in the communities that PIH-IMB serve.

As PIH-IMB uses routinely collected data to guide programs, PIH-IMB will create a centralized repository for desktop metrics and for generating information from multiple electronic systems. This will be shared with MOH and lead to collaboration needed around improvements in data processing, data analysis, and a logical framework for strengthening programs.. The result will be a harmonized informatics platform for sharing information, which is crucial for measuring programmatic outcomes and quality improvement needed to guide our vision.

(c) MEDICAL EDUCATION, MENTORSHIP, AND TRAINING

Over the years, the Medical Education, Mentorship and Training Department's overarching goal has been to train the next generation of Rwandan and international leaders in health care delivery. They are training innovative and effective leaders with the skills and character to both ease suffering at bedside and drive transformational change at the level of health systems and community.

An important priority moving forward across PIH is to strengthen beacon primary, secondary and tertiary care facilities to provide excellent clinical care as well as to serve as a center of excellence for health care professionals' education. In-service training will continue to be the vehicle to translate on-going clinical innovations to a wide range of healthcare providers and PIH-IMB will work with MOH in providing national trainings in this effort. Accompaniment of district hospitals in quality improvement and accreditation processes, training of mentors at health centers and continued capacity building of Community Health workers is a an effort that PIH is committed to in the effort to impact quality health care delivery.

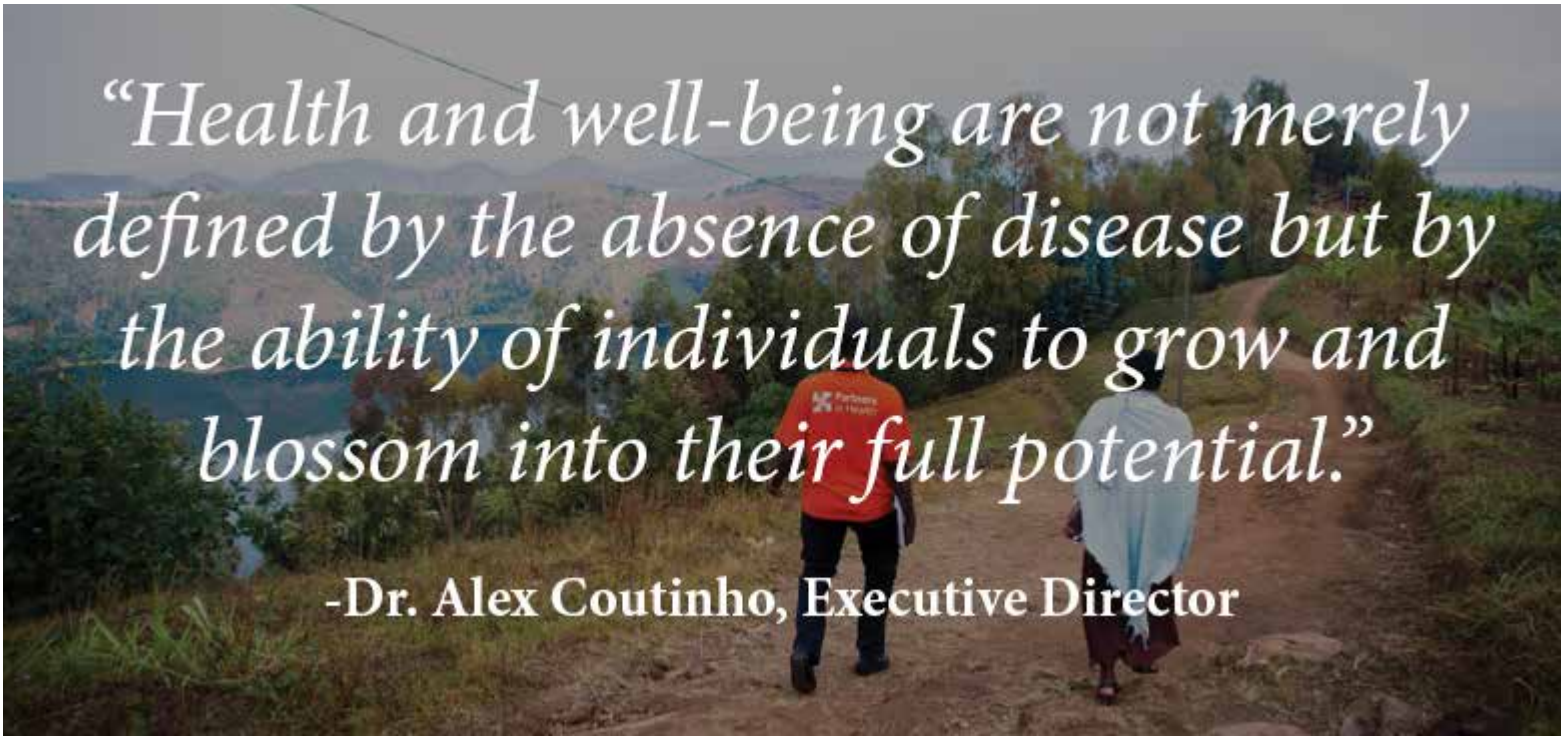
The University of Global Health Equity (UGHE) is now being formalized into a physical structure and teaching the practice of health care delivery in the health facilities and in the communities. UGHE will bring academic rigor to both pre-service and in-service training to the practice of global health that PIH has embodied over the last 20 years. The success of

UGHE is linked to the training experiences and training platforms that PIH-IMB has in its district and national programs.

(e) IMPACT, SCALABILITY AND SUSTAINABILITY

The first 11 years in Rwanda have required PIH-IMB to invest a large amount of funding and expertise in supporting health system strengthening in the 3 districts PIH-IMB work. At the same time PIH-IMB continuously launches new programs and approaches and it uses rigorous assessment and operational research to develop strategies for replication and scale-up of innovative packages of services under the guidance of central MOH authorities and national level technical working groups. An important mechanism to further support increased investment in innovation programs requires the gradual shift of our resources away from basic district health system operational costs and transition this support to the MOH and the districts over the next 2-5 years in an orderly and predictive fashion.

This will allow PIH-IMB to focus on its role as a technical advisor, an innovator and a translator of knowledge into capacity building. At the district level, PIH-IMB's clinical programs will emphasize mentorship and skills transfer to practitioners. At the national level, PIH-IMB will build relationships proactively with corresponding technical staff at the MOH in order to ensure the transfer of district-based knowledge and practice to the national level, while also supporting our vertical program-related advocacy efforts with the MOH.



Chapter 2: Strategic Framework

In December 2015, the PIH-IMB Executive Committee (EC) held a two days retreat to kick-start the process of crafting a new strategic plan for fiscal years 2016-2021, anticipating the ending of the first ever five year strategic plan FY12-FY16, by June 30th 2016. The EC started with assessing progress towards the impact of the previous five year strategic-plan. Starting with the review of the indicators for each goal, it became clear that PIH-IMB were on track or had exceeded expectations in several areas, but in other areas, PIH-IMB realized that a new approach would be necessary to achieve our ambitious goals.

We approached the strategic plan 2016-2021, starting with a review of our mission and values, as PIH-IMB wanted to think critically about what the next 5-10 years would look like. PIH-IMB will retain some of the critical principles and lessons learned over the last 10 years of front-line implementation and build on successful models initiated during the FY2012-FY2016 Strategy. Our plan is also informed by what else is working in the rest of Rwanda, the Africa region and from emerging successful Global Health Delivery models.

We agreed that while PIH-IMB will continue to align with the broader vision and mission of PIH, it was important to think about where Rwanda is right now and how our vision and mission would speak specifically to the Rwanda people. Therefore, PIH-IMB opted for a PIH-IMB specific vision and mission that complements the global PIH vision and mission.

II.1 VISION

Thriving communities of healthy, happy and productive people, where social justice and universal quality health services are available to all.

Each word chosen has a critical meaning:

Thriving communities comes from the fundamental truth that all people, regardless of income or social status, deserve healthy, enjoyable lives.

Healthy, happy and productive people: Addressing ill-health must go beyond curative care to ensure the people PIH-IMB serve achieve a social transformation by empowering them to get out of poverty and serve their communities in return. In doing so, they will be the force for the community to develop and live a happy and dignified life.

Social justice and universal quality health services to all: Because the core ethos of PIH-IMB is to ensure that no one is denied or delayed urgent primary care at health facilities and that PIH-IMB will help to address and correct other structural drivers of illness.

II.2 MISSION

Our mission is to support Rwanda in designing, building and implementing a world class health system that provides equitable, accessible and high quality services to all in need.

We will achieve our mission through innovative service delivery, through systemic strengthening of health system platforms, through building the knowledge and skills of the health workforce and through the systemic application of evidence obtained from research platforms based on the lives of the communities PIH-IMB serve.

Our voices will advocate for global health equity, for universal health care access, and for a comprehensive model of care in particular for vulnerable people and communities.

We shall work side by side with the Government of Rwanda and our global and national partners to transform the lives of Rwandans. We intend to influence positive change in the health of the region through scientific activism, innovative action driving towards the sustainable development goals and Universal Health Coverage.

II. 3 VALUES

Our values are embodied in Rwanda's culture as well as aligned with PIH organizational values across all PIH sites. These values are summarized below:

Chapter 3: Strategic Objectives, Goals and Targets for FY 2016 –2021

The PIH-IMB senior leadership team has through a series of internal and external consultations and workshops translated our Vision, Mission and Values into a set of measurable Strategic Objectives and Goals (Figure 4) which will guide our yearly planning as well as provide for an M& E framework to enable us measure our progress in achieving this ambitious strategy. The key guidance for setting our goals is based on several premises:

I) PIH-IMB primarily works through supporting the government of Rwanda's strategy and plans and this support comes through the MOH, RBC and the districts.

II) PIH-IMB is a health focused NGO that understands that health is dependent on other factors outside of the formal health system and therefore works in partnerships to address socio-economic and contextual factors that can impact health.

III) As an NGO that is born from an academic background PIH-IMB continue to invest in capacity building and in research so that lessons that accumulate from the work that PIH-IMB and our partners do can be evaluated and shared and also translated into policy and into capacity building programs.

IV) In order to support the work that PIH-IMB do PIH-IMB need strong internal systems and capacity so our strategy also seeks to strengthen PIH-IMB and provide the continuous learning and resilience needed to respond to the changes in the environment and emerging challenges and risks over the next 5 years.

We have an unrelenting commitment to improving the health of the vulnerable and sick, to transform lives, communities, health systems and policy by providing high quality care,

training the next generation of providers, researching best practices and advocating for change in global health policy. We integrate direct provision of service, academically rigorous and operationally focused research and analysis, and the education of current and future generations of health practitioners.

FY16 - FY22 Strategic Objectives

Figure4
People and patients, especially the poor and vulnerable, are at the center of all our work.

III. 1. 1

SO1: Strengthen and support comprehensive district health systems to provide high quality and fully accessible services for the people and communities PIH-IMB serve

Goal 1: Control and eliminate high burden infectious diseases

SUB-GOAL 1: Achieve >95% case detection, linkage to care, treatment coverage, and viral load suppression for all persons living with HIV, including key populations, in support of the 90/90/90 global targets

Since 2005, responding to the HIV epidemic has been the foundation of PIH-IMB's work in Rwanda. Now with over 10,000 patients in care and treatment at PIH-IMB-supported facilities, and over 200,000 in care and treatment across the country, Rwanda has firmly established HIV care as a pillar of the health system, and has achieved major successes nationwide which reduced new infections to 0.27% (Incidence survey 2015), with a treatment coverage of 78%, and estimated viral load suppression of patients in care at 88.1% (HIV report 2014-2015). PIH-IMB is poised to support district health systems to further consolidate these gains, and aims to exceed global targets in case detection, linkage to care, and treatment by 2021. This will require an intensified approach for the elimination of mother to child transmission of HIV, care and treatment for pediatric and adolescent groups, focus on vulnerable key populations, improved adherence and treatment support, and improved detection of drug-resistance and efficiency of second-line regimens. PIH-IMB will support the GOR to achieve the 90/90/90 targets through the roll out of a *Test and Treat* program nationally that was launched in July 2016.

SUB-GOAL 2: Achieve zero mortality from tuberculosis by 2021 in the 3 PIH-IMB supported districts

PIH has been central to the delivery of essential interventions for tuberculosis (TB) and multi-drug resistant TB (MDR-TB) for several decades. In Rwanda, a robust national TB control program and aggressive health system strengthening has resulted in a low overall prevalence of 114/100,000.

However mortality from TB, particularly among patients with HIV and other vulnerable groups, is still prevalent. IMB will target the PIH goal of eliminating deaths from TB by supporting the district implementation of community case finding, rapid diagnostics, sound treatment without interruptions, and aggressive detection and treatment of relapses or recurrent cases. PIH-IMB will work with the national program to identify and refer all cases of drug resistant TB for supervised treatment at the national referral facility. Through our work in the districts PIH-IMB will develop in concert with the MOH, approaches to ensure every case of TB is detected and receives the correct treatment with the aim of zero TB deaths. These lessons will be evaluated and used to inform a national scale up policy of and of best practices.

SUB-GOAL 3: Reduce new cases of malaria to achieve parasitemia prevalence <5% fin fever cases for women and children in the 3 PIH-IMB supported districts by 2018

After reaching the pre-elimination phase of malaria prevention and control in Rwanda due to comprehensive measures, there has been a recent resurgence in malaria, which continues to be a major driver of morbidity and premature mortality in Rwanda, particularly in pregnant women and children under five. PIH-IMB will support targeted malaria control efforts and innovations to reach Rwanda's goals of achieving national slide positivity rate less than 5% in fever cases by 2018 (Malaria NSP 2013-2018). We shall do this through supporting national programs especially in the Eastern districts of Kayonza and Kirehe and track the incidence of malaria through the number of positive cases detected by CHW and by the clinics and hospitals and utilizing the data to track and inform national programs including future approaches like widespread residual insecticide spraying programs.

Goal 2: Eliminate preventable maternal, newborn, and child mortality and morbidity and promote family health and wellness

SUB-GOAL 1: Continue the steep decline in maternal mortality to achieve zero preventable maternal deaths by 2021 in the 3 PIH-IMB supported districts

Rwanda has made unprecedented gains in the area of maternal mortality, decreasing from 750/100,000 in 2005 to 210/100,000 in 2014, representing one of the most dramatic decreases in maternal mortality ever recorded. However, accelerating this decline and averting all preventable maternal deaths remains a priority for Rwanda, as well as one of the four PIH strategic goals. PIH-IMB commits to supporting the health system with the necessary tools needed to avert these deaths, including infrastructure, transport systems, staffing, supplies, equipment, training, mentorship, and quality improvement measures required to achieve this ambitious target. We aim to reduce facility based maternal mortality in our 3 districts to less than 100 /100,000 by 2021, eliminating preventable causes.

SUB-GOAL 2: Accelerate decline in under-5 child mortality to < 10 / 1000 live-births by 2021

Despite major gains in childhood mortality, 3.2% and 5% of children still die before their first and fifth birthdays, respectively (DHS 2014-2015). Whereas major gains have been achieved through successful vaccination, bed-net, community IMCI programs, key measures are still required to continue this decline. PIH-IMB will make key investments in health system infrastructure, staffing, training, and the mentorship required providing high quality pediatric services, as well as technical support for innovative approaches to decrease childhood mortality. In particular PIH-IMB will target the neonatal mortality rate by putting in place interventions to dramatically improve neonatal health and survival.

SUB-GOAL 3: Accelerate decline in neonatal mortality to < 5/1000 live births by 2021

Despite reductions in under-five mortality, there has been minimal improvement in the number of deaths in the first 28 days of life, which still comprises 40% of all deaths under-five years old (DHS 2014-2015). PIH-IMB has been active in developing key high-impact interventions to improve neonatal survival, both during pregnancy and after birth. The All Babies Count project contributed to a 33% decline in neonatal mortality in 2 districts over an 18-month period. PIH-IMB plans to continue this contribution by strengthening the infrastructure, training, and supplies needed in the three PIH-IMB-supported districts. We aim that the 3 district neonatal high care units are used as a national resource to train all neonatal care providers in Rwanda and to carry out implementation research to improve the care and survival of neonates.
In addition PIH-IMB will expand these lessons to the rest of Rwanda initially through the Saving Lives at Birth (SLAB) grant and through support to the MOH for national scale up policy, guidelines, training and costing.

SUB-GOAL 4: Ensure that 80% of children under 5 years old in PIH-IMB districts have access to early childhood development programs or interventions, particularly those who are most medically at-risk for poor developmental outcomes

With improving neonatal and infant mortality, more children are in need of the early childhood services necessary for appropriate growth and development. Such services include nutrition status support, play and communication approaches to stimulate children, and involvement of care givers skills. Infants at particularly high risk include those living in extreme poverty, with malnutrition, chronic diseases, or other congenital or neonatal complications. PIH-IMB plans to develop programming and collaborations to address this critical need.

SUB-GOAL 5: Decrease the unmet need for family planning by achieving a contraception utilization rate of 70% and achieve a fertility rate of <3.0% by the year 2021

Rwanda has set ambitious targets to close the gap of the unmet need for family planning, which still remains at 19% (married women). PIH-IMB will support district-based efforts in family planning with financial, operational, and technical support for training, mentorship, supplies and equipment. The implementation of long-acting reversible contraception

methods and other innovative methods, as well as task shifting of administration of contraceptives, will be particularly emphasized.

SUB-GOAL 6: Expand coverage of sexual and reproductive health services for adolescents to reach 30% coverage in PIH-IMB catchment area by 2021

Adolescents remain a particularly vulnerable and important segment of the Rwandan population, and are at particular risk for teenage pregnancy, sexually transmitted infections, and poor detection and management of chronic illnesses (HIV, NCDs, mental health) that can adversely affect their growth, development, school-based learning, and eligibility for the workforce. To ensure that adolescents may achieve their maximum potential, PIH-IMB will seek opportunities to directly support district health activities targeting adolescent and sexual-reproductive health services.

Goal 3: Contribute to the goal of achieving zero deaths from U5 malnutrition in the PIH-IMB catchment areas

SUB-GOAL 1: To promote community knowledge and good practice on nutrition, hygiene and sanitation within PIH-IMB catchment areas in order to reach zero deaths from U5 malnutrition

In Rwanda, nationally, 38 percent (35%) of children under age 5 are stunted, and 14 percent (14%) are severely stunted. Analysis by age group indicates that stunting is apparent even among children less than age 6 months (11%) (RDHS 2014-2015). Yet, nutrition has become the most important lens for looking at poverty reduction and to assess prosperity of a nation in the future. About one-third of children under five suffer from stunting. Among PIH-IMB supported districts, stunting is higher than the national level in two districts—Kayonza 42 percent and Burera 43 percent—while Kirehe district's prevalence of stunting is 29 percent, which although lower than the national average is still unacceptably high.

When children are plagued by problems such as stunting, they are at risk to not grow to their full potential, therefore condemned to be unproductive adults as they are less physically and mentally capable and less educated. Thus, making sure the world's children have access to good nutrition will help break the cycle of poverty and malnutrition as these children would have the ability to develop into healthy adults.

The same RDHS revealed that the disparity in stunting prevalence between rural and urban children is substantial: 41% of rural children are stunted, as compared with 24% of urban children. PIH-IMB must join hands with Rwanda's leadership to answer the call to improve nutrition, starting with the rural areas of PIH-IMB interventions, and scaling successful models nationally. Approaches to be used include:

Two main approaches clinical based interventions and community based interventions:

Clinical Nutrition: PIH-IMB will work closely with hospitals and health centers to provide urgent appropriate treatment to malnourished children as well as to pregnant and breastfeeding mother with malnutrition or at high risk of malnutrition. This will involve procurement and distribution of food supplementation for a specific intervention period. PIH-IMB will support screening, treatment and referral of cases for proper treatment. Proper monitoring systems will be established to develop a system to ensure malnutrition cases are identified early, treated and followed up to ensure the zero death goal is achieved. PIH will visit all families of index malnutrition cases to unearth any other borderline malnutrition cases in the family and home.

Community based intervention: The Government of Rwanda created and implemented a 3-year (2010-2013) National multi-sectorial Strategy to Eliminate Malnutrition (NSEM). The objectives included reducing all of malnutrition in Rwanda by 2013, to protect nutrition of young children and pregnant/lactating women. Ever since, all districts in Rwanda adapted and are working to forms implement their own District Plan to Eliminate Malnutrition (DPEM) with involvement of all stakeholders. To not reinvent the wheel, PIH-IMB will collaborate with local leaders and district in ensuring effective implementation of DPEM as well as other initiatives. PIH-IMB will engage with government institutions, community based organization, local leaders and the communities to create a functional movement against malnutrition in the district of its operations. Targeted and focused intervention models will be put in place and existing experience from other clinical programs like pediatric, PDC and others will be well leveraged to ensure that PIH-IMB approaches this issue in a more holistic and integrated way.

Interventions to reduce stunting will be targeted to women of reproductive age, pregnant and lactating women, and children less than 24 months of age, as these are all vulnerable periods at which development of malnutrition can cause lifelong negative effects. Expansion of programs and activities, which have already been successful, including training on acute malnutrition management and integration of nutrition into MESH should continue, in order to build on lessons learned and knowledge gained. Other areas, including pediatric oncology nutrition interventions, will be enhanced. And new programs will be formed, particularly in the area of maternal nutrition, with addition of trainings, new program components to improve attendance at ANC visits, integration of maternal nutrition messages into all components of women's health, and treatment of maternal malnutrition. WASH interventions will be integrated into all nutrition program components to tackle underlying causes of malnutrition.

SUB-GOAL 2: Improved local knowledge and practices on basic health including nutrition, hygiene and life skills for youth reproductive health:

Through DPEM, which is jointly implemented in collaboration with PIS-IMB, District and other stakeholders, the focus will mainly be put on activities targeting the behavior change and mindset changes. Malnutrition vulnerability and poor hygiene in some extend are depended on level of knowledge and community attitudes toward the issue. PIH IMB will continue supporting production of more nutrients crops, its consumption and best practices in terms of preparation. District based teams will work closely with health facilities to

identify and conduct community trainings and other campaigns that aim at promoting behavior change. With respect to treatment of water prior to drinking, 44 percent of households use an appropriate treatment method prior to drinking, while the other 56 percent do not treat their water prior to drinking (RDHS 2015). Hygiene promotion interventions will be carried out including community sensitizations, training of change agents, and equipment like hand washing stations and ventilated improved latrines will be established especially in public places like markets, schools and health facilities to serve as demonstration site for the best practice.

As Rwanda's population is predominately young (more than 60%); the strategy will make a deliberate choice to involving youth in the 3 PIH- IMB supported district as change agent to spearhead the program. Targeted intervention and training of youth on sensitive topics like leadership, life skills and youth reproductive health will be promoted to ensure they are fully achieving their potentials and hence increase the hope of families for tomorrow. Through POSER programs, awareness will be created among them by more participation in all levels of program life cycle. Once well prepared and engaged, they can play a very significant role in monitoring nutrition status in the community to ensure preparedness of community and other players to intervene in cases of acute reduced nutritional status of the community.

SUB-GOAL 3: Improved household capacity to ensure food security and capacity to generate household's income to afford available health services.

Food security exists when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security is divided into three components;

- *Food availability* which is the quantity of food that is physically present in a country or area through all forms of domestic production, commercial imports and food aid;
- *Food access* represents the households' ability to regularly acquire adequate amounts of food through a combination of their own stock and home production, purchases etc; and
- *Food utilization* which refers to households' use of the food to which they have access, intra-household food distribution, and individuals' ability to absorb nutrients – the conversion efficiency of food by the body.

PIH-IMB's work will aim to make an impact on food security and overall nutrition security and status. *Nutritional status* is the balance between the intake of nutrients by an organism and their expenditure in the processes of growth, reproduction and health maintenance. Consequently, malnutrition is any condition caused by excess or deficient nutrient intake.
Nutritional security is achieved when a household has secure physical, economic and environmental access to a balanced diet and safe drinking water, a sanitary environment, adequate health services and knowledgeable care to ensure adequate nutritional status for an active and healthy life at all time.

PIH –IMB effort will be directed to interventions that contribute to improving these pre-conditions for a community of zero death from U5 malnutrition and building a resilient

community for sustainable food security and nutrition. Through POSER, PIH-IMB will continue to support agriculture production for sufficient food availability and nutrition education for better food utilization and consumption. Agribusinesses based on agriculture value chain will be encouraged by adding values on agriculture production by introducing new processing techniques and new cash crop varieties to boost household income. However, as most of the targeted beneficiaries have relatively small land, diversified off-farm income generating activities and other small businesses will be developed to complete the food production. Employment for most active people including youth will be also promoted through vocational skills development, education support and linkage to locally available access to finance opportunities. The program will leverage the existence of GOR programs and platforms to ensure there is proper advocacy and collaboration in community interventions.

SUB-GOAL 4: Establish an active community, district and national level network to advocate for health access and other human rights for the patients and other vulnerable people

To address socio determinant of poor health through targeted support to the most vulnerable and through advocacy and engagement with the communities PIH-IMB serve, PIH-IMB will work through collaboration and contribution from different key players. The patient or any poor beneficiary should be the most key player of his own development effort. PIH-IMB intervention model for the next 5 years will put beneficiary (patient and other vulnerable people) at the center of the program. Beneficiaries will at the individual level or at households, family or community level effectively participate through consultation and contribution to all program life cycles. Program team together with local leaders and districts will assess areas of collaboration according to available community asset that can be utilized to leverage this indigenous capabilities and community livelihood assets.

Community platforms, system and networks will be established or capacitated where they exist to play their role in activity planning, implementation and monitoring, as well as evaluation. Learning and reflections events will be jointly organized to assess progress, celebrate achievement and challenge the gaps. These platforms will also serve as forum to study progress toward development individual like collective target set for graduation purpose. At all levels, PIH-IMB will use its presence and expertise to advocate and influence policy through participation and advocacy and also learn from other on going programs like VUP, Ubudehe and best practices from other development partners.

Goal 4: Provide high-quality chronic care services integrated into the primary health care system of the PIH-IMB supported districts

SUB-GOAL 1: Achieve 80% reduction in NCD related deaths among people under 40 by the year 2020

Non-communicable diseases, including cardiovascular disease, diabetes, cancer, and chronic respiratory diseases have been increasingly recognized as a major driver of premature morbidity and mortality in Rwanda. Since 2008, 80% of NCDi deaths were in developing countries. Population Reference Bureau estimates that by 2030, low-income

countries will have eight times more deaths attributed to NCDs than high-income countries. Using the lessons learned from the response to the HIV epidemic, and building health systems to address the chronic needs of individual patients over time, PIH-IMB has developed a unique and integrated approach to the screening, diagnosis, care and treatment for this group of diseases. Recognizing the need for expanded coverage and access, PIH-IMB will refine and expand the model for NCDi care in the districts, achieving 100% coverage at the district hospital and health center levels by 2021 in the three PIH-IMB-supported districts.

SUB-GOAL 2: Provide 80% treatment coverage for people with severe depression, post-traumatic stress disorder, schizophrenia, and bipolar disorder in PIH-IMB districts by 2021

The burden of mental health disease in Rwanda is immense, but remains largely un-quantified, under-recognized, and under-diagnosed, leading to significant morbidity in the overall population. Traditionally, mental health services have been concentrated in referral centers, particularly for acute and inpatient care, and chronic longitudinal services have not been available for a variety of conditions, including but not limited to, depression, post-traumatic stress disorders, schizophrenia, and bipolar disorders. A high level of stigma, and low level of community awareness, compounds the lack of service utilization for those patients that need it most. PIH-IMB has developed a comprehensive model of mental health services, from the community to facility levels, to improve the access and quality of mental health services. This model relies on the decentralization of services to the health center level and task-shifting of care responsibilities to general health center nurses, who are in turn trained and mentored to provide high-quality services. PIH-IMB plans to strengthen and refine this model to raise the standard of mental health services for the Rwandan population. By 2021 PIH-IMB intend to have fully district coverage in Burera, Kayonza and Kirehe and to use emerging lessons to support the government in a national scale-up plan.

SUB-GOAL 3: Implement fully functional surgical capacity at all three PIH-IMB-supported district hospitals by 2021

There exists a dramatic need for surgical services at the district hospital level. Over 70% of referrals to the central level are due to surgical emergencies and busy referral centers often lack the capacity or efficiency to complete required surgical procedures in the optimal time period. Through construction, renovation, staffing, and equipping of modern surgical theaters, PIH-IMB plans to support implementation of high-quality global surgery services capable of surgical standard of care in key areas, including trauma, orthopedics, abdominal emergencies, essential obstetric surgeries, and minor procedures, including wound management and burn care. This capacity will also include appropriate anesthesia, intensive care capacity, post-operative care, and rehabilitation services appropriate to the level of surgery provided.

SUB-GOAL 4: Ensure availability of some specialty services, primarily those for oral health and hearing & vision, at the District Hospital level for all PIH-IMB-supported facilities, by 2021

Specialty services, such as those for oral health, hearing and vision, are a vital aspect of the health care system, and are essential to improving the quality of life for patients along the entire age spectrum. PIH-IMB will promote partnerships and collaborations to build capacity and improve services in the district health systems in these specialty areas.

Goal 5: Achieve Universal Health Care Coverage at the community and facility levels

SUB-GOAL 1: Provide complete and equitable access to care at primary and referral level for all populations, including achieving >95% utilization of key service indicators based on disease prevalence at primary health facilities and referral for those in need

PIH-IMB is committed to achieving universal health coverage for the Rwandan population, ensuring both availability and access to services at the primary and referral levels. This includes not only planning for the infrastructure, staffing, and supplies necessary to fulfill universal health coverage, but also ensuring the financial and logistical access to those services. PIH-IMB will look to lead the way in demonstrating the successes and challenges of providing universal health coverage and advocating for its implementation more broadly.

SUB-GOAL 2: Eliminate financial barriers to care by ensuring 100 % insurance coverage for identified vulnerable people by 2021.

Rwanda has made major strides in implementing a community-based health insurance, which provides health coverage for over 91% of the population, including the vast majority of the rural poor. However, certain challenges still remain, including subsidization of premiums for disadvantaged groups, subscription coverage, and co-payments for essential and referral services. PIH-IMB will continue to support the mutuelle system and supplement where necessary in order to ensure 100% of identified vulnerable people have access to care by individuals in PIH-IMB-supported districts. PIH-IMB will also track and document ongoing challenges in the availability and utilization of mutuelle and provide this information to the MOH to guide further improvements in the system.

SUB-GOAL 3: Ensure robust and effective community health care delivery for preventative, curative, and chronic services at the community level by supporting community health worker cooperatives and health post expansion

Since its inception in 2005, PIH-IMB has provided financial and technical support to ensure the presence of well-trained, effective, and motivated community health workers in the three PIH-IMB-supported districts. This work has ranged from supporting case-finding and treatment for HIV, TB, and other chronic diseases, support for maternal health and early presentation to antenatal care services, treatment for acute childhood diseases, as well as general preventive and educational services. Now, with a robust national model for community health worker cooperatives, PIH-IMB has a unique opportunity to support

community health worker compensation through income generating activities, related to health delivery at health posts or other innovative means. PIH-IMB will continue to place community health and community health workers as the central pillar for all effective health programs.

Goal 6: Strengthen district health care systems as model platforms for care delivery, training, and research

SUB-GOAL 1: Achieve national staffing standards for health care professionals in all PIH-IMB-supported health facilities by 2021

It has been proved beyond reasonable doubt that the density of the health workforce is directly correlated with positive health outcomes. In other words, health professionals save lives, improve health and contribute to the general wellbeing. The health workforce is the backbone of each health system, the lubricant that facilitates the smooth implementation of health action for sustainable socio- economic development. Yet, Rwanda continues to suffer from a lack of health care professionals, with only one physician per 16,046 inhabitants, one pharmacist per 20,000 inhabitants, one midwife per 18,790 inhabitants and one nurse per 1,227 inhabitants. WHO estimates that 57 countries worldwide have a critical shortage of health professionals and thirty-six of these countries are in sub-Saharan Africa. There is need to increase the health workforce by about 400% to achieve enough coverage for essential health interventions to make a positive difference in the health and life expectancy of the populations of these countries.

Furthermore, these staffing shortages are most acutely seen in rural districts, where attracting and retaining highly-skilled staff remains a challenge. Through financial and technical support, as well as through offering unique capacity building opportunities and optimal conditions for employment and professional development, PIH-IMB is committed to supporting health facilities in achieving optimal staffing ratios and staff training for the provision of high-quality services. This will be primarily through advocacy with MOH and district leadership and also some direct support for key HR required for innovative services.

SUB-GOAL 2: Ensure zero stock outs of essential consumables required for high quality care delivery by 2021

PIH-IMB has supported the procurement and provision of essential consumables for health facilities in PIH-IMB-supported districts, as well as technical support to improve public supply chain processes. PIH-IMB will continue to provide medications and supplies for innovative care delivery systems, and serve as a backup for emergency need of essential items as needed. PIH-IMB staff will support the district staff to improve their pharmaceutical supply chain and maximize the amounts and types of drugs obtained from the central supply chain as well as maximize mutuelle refunds for drugs dispensed.

SUB-GOAL 3: Build health management and administrative capacity among health facility leadership

The government of Rwanda has committed to improving the training and capacity of health care leaders and administrators.
PIH-IMB has supported these efforts with training and mentorship for health sector leadership. PIH-IMB will continue to search for innovative opportunities to provide academic and in-service capacity building for health care leaders within the public sector in order to improve the efficiency and effectiveness of the health system and in particular to meet all national accreditation standards.

SUB-GOAL 4: All PIH-IMB-supported hospitals and health centers to achieve national and international accreditation norms and standards by 2018.

The government of Rwanda has established an ambitious and well-organized system for accreditation of health facilities based on international norms and standards. This accreditation system provides a roadmap and standard by which facilities can be evaluated and compared, and ensures the essential building blocks for the delivery of adequate health services to the population. PIH-IMB commits to supporting all health facilities in its catchment area to achieve these standards, whether with overall management and planning or targeted financial or technical support.

SUB-GOAL 5: Assist all PIH-IMB-supported hospitals to achieve national and international laboratory accreditation by 2021.

Laboratory services are an essential aspect to the diagnostic capacity of health facilities. PIH-IMB has supported the strengthening of basic laboratory functions and introduced innovative technologies in order to raise the diagnostic standards of laboratories at PIH-IMB-supported facilities. PIH-IMB will continue to respond to the needs of the facilities in this regard, and will test and introduce new technologies to meet SLIMTA and SLAMTA WHO standards for laboratories

SUB-GOAL 6: Develop health information system capacity at all IMB-supported hospitals for patient registration, follow-up, reporting and billing by 2021.

Rwanda has set the ambitious aim to develop and implement electronic health information systems for all health system functions, both clinical and administrative. PIH-IMB has been active in developing an open source electronic platform to register and monitor patients with chronic diseases, including HIV, cancer, and NCDs, as well as creating a patient registration and diagnosis capture system. These efforts have been closely coordinated with the national roadmap for “E-health.” PIH-IMB will continue to implement innovative electronic data collection, data utilization, and administrative systems in order to respond to the needs of the health system.

III. 1. 2

SO2: Support the MOH and RBC to innovate, design, develop, and scale evidence-based programs and strategies to raise the national standard of health services in Rwanda.

Goal 1: Support the development of a national policy and platform of care for Non Communicable Diseases and injuries (NCDi)

SUB-GOAL 1: Support MOH achieve 80% reduction in NCDi related death among people under 40 by the year 2021 OR reduce premature mortality from NCDs by 33% by 2021;

NCDi contribute to 1,158 deaths every year in Rwanda. PIH-IMB has committed to supporting MOH in developing systems for the screening, diagnosis, and treatment of NCDi's in Rwanda, providing improved access and quality of decentralized NCDi services, building on the lessons learned from the HIV treatment response.

SUB-GOAL 2: Ensure every health facility in Rwanda has specific NCDi services integrated into primary care by 2021, including those to prevent and manage hypertension, diabetes, respiratory diseases, and heart failure

PIH-IMB has developed and implemented an integrated model of care for NCDs at the health center and district hospital level, including equipment packages, training modules, and information systems. PIH-IMB plans to support the MOH in spreading this model of care to all district hospitals and health centers in Rwanda to maximize the coverage and accessibility of NCDi services in Rwanda.

SUB-GOAL 3: 90% availability of emergency surgery to patients at the district hospital in Rwanda by 2021

A dramatic need for surgical services at the district hospital level exists. Over 70% of referrals to the central level are due to surgical emergencies, and busy referral centers often lack the capacity or efficiency to complete required surgical procedures in the optimal time period. In addition to developing comprehensive surgical capacity within PIH-IMB-supported district hospitals, PIH-IMB plans to support the replication to other district hospitals in the country through supporting MOH/RBC develop a comprehensive country Global Surgery strategy.

Goal 2: Lead the establishment of national capacity for oncology services

SUB-GOAL 1: Enroll and treat 7,000 patients with cancer in oncology care at the Butaro Cancer Center of Excellence by 2020 and support provision of services to another 3,000 patients at other facilities in Rwanda

Cancer currently comprises 7% of the burden of disease in Rwanda. Cancer services have traditionally been underdeveloped and largely inaccessible to the general population of Rwanda. With the establishment and operation of the Butaro Cancer Center of Excellence (BCCOE) since 2011, PIH-IMB has provided a preferential option for patients with cancer, and has treated over 4000 patients since BCCOE inauguration. PIH-IMB will continue to advance and improve cancer services provided at the BCCOE, and will scale the expertise and capacities generated at BCCOE to support other oncology centers in Rwanda starting with Kanombe Military Hospital, CHUK and Butare teaching hospital.

SUB-GOAL 2: Ensure successful radiation therapy referral and treatment of 500 patients in Rwanda by 2021

Given the current unavailability of radiotherapy services in Rwanda, PIH-IMB has supported access to radiotherapy referral services for hundreds of patients with cancer. PIH-IMB will support the MOH to continue providing financial and logistical support for patients with cancer to access radiotherapy referral services, but also support plans and partnerships to develop radiotherapy capacity in Rwanda currently planned for Kanombe Military Hospital. This essential service will be required to provide full-scale cancer therapy to the Rwandan population for years to come.

SUB-GOAL 3: Advance a fully functional and MOH supported national pathology network to process samples for over 5,000 patients per year by 2021

PIH-IMB has made major advances in implementing full-spectrum pathology capacity at the Butaro Cancer Center of Excellence, which is now supporting pathology diagnosis for oncology from across the country. PIH-IMB will seek to improve the efficiency and capacity of this service, as well as support the development and training of other pathology centers in Rwanda.

SUB-GOAL 4: Develop national strategy, policy, and implementation of early detection programs for breast cancer and cervical cancer and achieve early detection through screening for at risk women by 2020.

Women's malignancies currently comprise 70% of oncologic disease in Rwanda, and are a major driver of potentially preventable premature morbidity and mortality. Apart from a national program for HPV vaccination of all adolescent and young women in Rwanda that has been highly successful, there is a lack of full spectrum cancer prevention, early detection, and secondary prevention mechanisms, including HPV vaccine. These is also a lack of pap-smear or cervical visual inspection techniques, HPV testing, colposcopy, clinical breast exam, and mammography, which are not systematically accessible to women in Rwanda and are not integrated into the basic package of care. PIH-IMB will

support the MOH/RBC in developing systems to promote early detection and management of women's malignancies, most notably cervical and breast cancer.

SUB-GOAL 5: All patients with cancer have access to palliative care and pain management services at the community and facility level by 2021

Palliative care and pain management of advanced or terminal illness remains a major gap in the health care services of Rwanda and largely limited to referral centers. Recognizing the need for such services, PIH-IMB will seek to develop partnerships and programming to raise the standard of palliative care at the district and community level. Such programming will build on programs and curricula developed by the MOH to address the needs of patients with chronic disease and cancer at the facility and community levels.

Goal 3: Demonstrate and scale decentralized mental health services to address the burden of mental disease in Rwanda

SUB-GOAL 1: Support MOH with planning for expansion of decentralized mental health services to all health facilities in Rwanda by 2021

PIH-IMB is developing a decentralized model of mental health care services in Burera District. This will be extended to the districts of Kayonza and Kirehe in the strategic period and the tools, training, and outcomes of gained from this program will inform broader replication and scale up of decentralized mental health services to improve the access and quality of mental health care in Rwanda.

SUB-GOAL 2: Provide 100% treatment coverage for people with severe depression, post-traumatic stress disorder, schizophrenia, and bipolar disorder in PIH-IMB districts by 2021

The burden of mental health disease in Rwanda is immense, but remains largely un-quantified, under-recognized, and under-diagnosed, leading to significant morbidity in the overall population. Traditionally, mental health services have been concentrated in referral centers, particularly for acute and inpatient care, and chronic longitudinal services have not been available for a variety of conditions, including but not limited to, depression, post-traumatic stress disorders, schizophrenia, and bipolar disorders. A high level of stigma, and low level of community awareness, compounds the lack of service utilization for those patients that need it most. PIH-IMB has developed a comprehensive model of mental health services, from the community to facility levels, to improve the access and quality of mental health services. This model relies on the decentralization of services to the health center level and task-shifting of care responsibilities to general health center nurses, who are in turn trained and mentored to provide high-quality services. PIH-IMB plans to strengthen and refine this model to raise the standard of mental health services for the Rwandan population. By 2021 PIH-IMB intend to have fully district coverage in Burera,

Kayonza and Kirehe and to use emerging lessons to support the government in a national scale-up plan.

SUB-GOAL 3: Integration of psychotherapy interventions into primary mental health care district package.

The primary mental health care package in Burera district has primarily focused on pharmacotherapy with a secondary focus on psycho-therapy. To provide more comprehensive care and produce healthier outcomes, an advanced and proven psychotherapy intervention supported by the WHO will be implemented at rural health centers throughout the district. This will be done in conjunction with the MOH mental health division and the lessons thereof inform further national scale up.

Goal 4: Accelerate the national reduction of neonatal and child mortality

SUB-GOAL 1: Define an essential package of newborn services for replication by all districts in Rwanda by 2021

PIH-IMB has been instrumental in developing a clinical package of care for newborns at the health center and district hospital level, codifying this into a set of neonatal clinical guidelines, and training practitioners on its use at district hospitals around the country. Through the All Babies Count program, now being replicated and scaled in eight district hospital catchment areas in Rwanda, basic equipment, supplies, and training are combined with a mentorship and quality improvement approach to address the basic quality indicators affecting newborn survival in the country. From this experience, PIH-IMB will seek opportunities to improve neonatal survival throughout the country with a well-tested and well-proven care package.

SUB-GOAL 2: Scale a model nationally for chronic care and early childhood development for medically at-risk infants by 2021.

While the Pediatric Development Clinic and other early childhood development interventions are piloted and implemented at a district level, PIH-IMB will seek opportunities to scale these interventions to benefit children around Rwanda. These interventions will complement and synergize with other ECD activities and focus on bringing valuable clinical and non-clinical services to the most vulnerable, marginalized, and at-risk for adverse developmental outcomes.

SUB-GOAL 3: Scale district-proven strategies for the reduction of maternal, neonatal, and child mortality

As PIH-IMB continues to develop innovative programming and interventions to improve the accessibility and quality of maternal, neonatal, and child health services at the district level, program outcomes will be rigorously measured and successful interventions will be replicated and scaled at the national level. Such interventions may include basic packages of equipment and supplies, innovative service delivery techniques, advances in training or

mentorship practices, quality improvement or measurement practices, or novel technologies or e-health strategies.

Goal 5: Support the MOH to pioneer innovative approaches for epidemic surveillance and control

SUB-GOAL 1: Serve as an incubator for at least three innovations to improve surveillance and care delivery for major infectious diseases, including HIV, tuberculosis, and malaria by 2021

Although major strides have been made in the response to major infectious diseases, such as HIV, tuberculosis, and malaria, further innovations, technologies, and programs are required to fully address these diseases in the years to come. PIH-IMB is committed to developing partnerships and collaborations to test and scale "game-changing" innovations that may contribute to this effort. As an incubator for such ideas and innovations, PIH-IMB provides a fertile ground for the MOH and other partners to introduce and measure new clinical products and care pathways in Rwanda.

SUB-GOAL 2: Support the MOH to develop a public health approach to the diagnosis and treatment of Hepatitis B and C with the goal of universal screening and treatment access by 2021

The government of Rwanda has set an ambitious aim to eradicate viral hepatitis by 2030 through aggressive prevention and treatment efforts. With the advent of new medications for the treatment of viral hepatitis, Rwanda is well poised to develop and scale a robust public health infrastructure to address both Hepatitis B and Hepatitis C. PIH-IMB will support these efforts with technical, financial, and operational support, leveraging its programmatic and academic experience with infectious diseases and collaboration with international partners in the academic and private sectors.

SUB-GOAL 3: Support MOH in the surveillance and control of neglected, emerging, or emergent epidemics or disease outbreaks

PIH-IMB has been responsive to the needs of the national surveillance and epidemic control program from local epidemics, such as typhoid and cholera, to larger scale global threats, such as Ebola, Marburg, and Yellow fever. Whereas these contributions have been modest in the past, PIH-IMB commits to continue supporting the MOH in the data collection, reporting, diagnosis, management, and training that may be required to prepare and respond to local or generalized epidemics.

Goal 6: Strengthen partnership with MOH/RBC for exchanging knowledge and Technologies

SUB-GOAL 1: **By 2021, train >90% of PIH-IMB and MOH/RBC informatics peers, within 6 months of being hired, on agreed upon core competences needed for their collaborative role in M&E, EMR, and IT**

The government of Rwanda has chosen to have a strong eHealth system, including using OpenMRS as a national EMR used at all health facilities, as part of the country's Vision 2020. Such nationwide rollout requires strong informatics capacity of IT, data experts, and programmers to manage the system and maximize on EMR data utilization. To help achieve this goal, PIH-IMB will tap into previous experience in the program PIH-IMB led for training local OpenMRS programmers in 2008 in Rwanda and continue to build capacity in the MOH/RBC.

Sub-Goal 2: By 2019, conduct quarterly MOH/RBC meetings covering the sharing of national healthcare systems data pertaining to PIH-IMB clinical and social support programs

As PIH-IMB uses routinely collected data to guide our programs, PIH-IMB will collaborate with MOH/RBC partners on systematic data quality control, data cleaning, management, and analysis.
This will ensure a harmonized platform for sharing reports and data crucial for research, M&E, and publications with the aim of not only sharing research findings but also measuring programmatic outcomes and quality improvement needs towards supporting MOH/RBC.

SUB-GOAL 3: **By 2020, ensure 100% sharing of informatics processes and tools needed by MOH/RBC as PIH-IMB innovative clinical programs are scaled up nationally**

The Rwandan MoH and PIH-IMB have been collaborating on strengthening eHealth since 2008. As such, PIH-IMB will collaborate on developing scalable tools modeling the services provided in Rwandan health facilities and the data-driven decision-making needed for a strong eHealth system. And as PIH-IMB innovative programs such as NCDi, Oncology, PDC, and Mental Health are scaled up at a national level, PIH-IMB will share with MOH/RBC the tools, technology, training, and features implemented to support those programs.

III. 1. 3

SO3: Provide essential knowledge, skills and attitudes for frontline health workers to tackle global health priorities.

Goal 1: Partner with leading national and global universities to enhance undergraduate and post-graduate education relevant to global health priorities.

SUB-GOAL 1: Train 500 doctors in biopsychosocial approaches by 2021

Through its Social and Community Medicine program, PIH-IMB works in close collaboration with the University of Rwanda (UOR) to provide a required Community Medicine training for its medical students. This four-week course, hosted in Rwinkwavu, prepares medical students to understand the unique issues and challenges of medical care at the level of the community, community health center, and district hospital, and to function more effectively in the health system of Rwanda.

This program aims to train the future generation of medical doctors and other health care providers to practice bio-psycho-social medicine, meeting the needs of University of Rwanda students to become more socially accountable medical doctors using patient-centered and community-oriented practices. It puts more emphasis on disease prevention and control, at the same time addressing social and community health factors affecting people's health. The same course will be incorporated into the curriculum of the medical school of the UGHE and will be offered regionally to undergraduate and graduate students from regional countries and as a summer school to USA and Europe based students.

SUB-GOAL 2: Train 500 midwives by 2021

Accelerating the decline in maternal mortality and averting all maternal deaths remains a priority for Rwanda, as well as one of the four global PIH strategic goals. PIH-IMB commits to developing a Schools of Midwifery at Kirehe and Rwinkwavu equipped with the staffing, curriculum and equipment needed to provide high quality, patient-centered midwifery education by 2021. The Schools of Midwifery will be part of PIH's beacon training facilities, training highly skilled midwives who will play an integral role in reducing all preventable maternal deaths to zero. In order to reach this goal, the same patient-centered and community-oriented approaches will be used to train midwives on women's health, diseases prevention and control, and social and community health factors that affect their health. This will be achieved in partnership with U.S. and European schools of nursing as well as the UOR and the Rwanda association of nurses and midwives. In addition PIH-IMB will work in partnership with UNFPRA to increase the output and the quality of training at the 7 existing schools of midwifery in Rwanda.

SUB-GOAL 3: Train 25 doctors and 60 nurses on oncology practice by 2021.

Cancer is a rapidly emerging condition in Rwanda driven by both infectious diseases and environmental drivers as well as an aging population. Cancer services have historically been underdeveloped and largely inaccessible to the general population of Rwanda. Additionally, there is a lack of physicians specialized in oncology. As a result of this gap,

this training program aims to equip doctors and nurses with knowledge and skills to diagnose and manage with particular emphasis on primary prevention and control.

With the establishment and operation of the Butaro Cancer Center of Excellence (BCCOE), PIH-IMB is well placed to host a high-quality residency program in order to build the workforce of specialized clinicians, thus increasing access to cancer care around the country. This residency program will be initially based in the UOR, expanding with time to the UGHE. We will also look for hosting residents from the neighboring countries.

In addition to training physicians specialized in oncology, PIH-IMB will also develop and deliver an accredited training program for nurses to become specialized in oncology in partnership with the National Council of Nurses and Midwives. The program will be hosted at the Butaro Cancer Center of Excellence and will link with the UOR Master's program in Oncology Nursing

SUB-GOAL 4: Train 60 lab technicians by 2021 through experiential hosting at PIH-IMB supported laboratories.

Laboratory services are an essential aspect of the diagnostic capacity of health facilities. PIH-IMB has supported the strengthening of basic laboratory functions and introduced innovative technologies in order to raise the diagnostic standards of laboratories at PIH-IMB-supported facilities. In order to further strengthen these services and the capacity of the health workforce, PIH-IMB will partner with the University of Rwanda, Allied Health Sciences Councils and District Hospital leadership to develop standards, national accreditation and an experiential curriculum for a lab technician course that will be hosted at PIH-IMB-supported district hospital laboratories. These labs will then host students and interns that are enrolled and graduating in laboratory science.

SUB-GOAL 5: Train 30 post-graduate residents in Global Health through experiential attachments in PIH-IMB supported Districts.

In order to increase the number of global health experts and leaders working in Rwanda, PIH-IMB commits to training and hosting residents at PIH-IMB supported districts in the coming five years. Through partnerships with local and international academic institutions, PIH-IMB staff and leadership commit to hosting and mentoring these postgraduate residents through experiential attachments with our health programs and our POSER programs with the goal of creating a cadre of global health-focused individuals committed to working in Global Health.

SUB-GOAL 6: Train 40 postgraduate students in research methodology and implementation research by 2021.

One of the priorities for the PIH-IMB Research Department is to provide hands□on training for Operations and Implementation Research. For a period of 8 months, Intermediate Operational Research Training participants receive training and mentorship on the entire research process from research idea/question to publication. Over the past two years, PIH-IMB has conducted two Operational Research Trainings where 22 district-based Ministry of Health (MOH) and PIH-IMB colleagues have received substantial research skills

resulting in 12 manuscripts – 4 published, 3 under review and 5 in late stage drafts. Trainees have also presented their work at local and international conferences and apply the analysis and writing skills directly to their work. In the coming five years, PIH-IMB will continue with these trainings in order to build a cadre of researchers in the field and to increase the evidence base for solving global health problems and informing the practice of frontline health workers. Additionally, the training will equip the trainees with knowledge and skills on grant writing for research project implementation through collaborative approach, as earlier-mentioned.

Goal 2: Develop and deliver accredited and innovative in-service continuous education to the district health workforce.

SUB-GOAL 1: Provide in-service training, coaching and mentorship in quality clinical care standards to 300 district health workers by 2021.

The government of Rwanda has committed to improving the training and capacity of health care providers, leaders and administrators. In line with this and to improve the quality of care delivery and systems delivery, PIH-IMB commits to providing various in-service didactic trainings to district health workers in its supported districts.

Healthcare providers from districts hospitals and health centers will receive didactic trainings in key clinical areas complemented by in-service clinical mentorship to ensure that the acquired clinical knowledge and skills are translated effectively into clinical best practices.

In order to support our facilities contribute to this strategy, jointly with the MOH, RBC and DH, PIH-IMB will develop and deliver innovative training courses focused on the advanced management of HIV, TB, MCH and malnutrition for doctors, nurses, and community health workers across the 3 districts that PIH-IMB support.

To continuously improve the quality of care and adherence to district hospitals and health centers accreditation standards and to institutionalize a culture of continuous quality improvement, healthcare workers (clinical and non-clinical) will be trained in quality improvement and patient safety methods. This will be supplemented by in-service coaching for supporting trainees to become more skillful and confident in applying quality improvement and patient safety methods in their clinical settings.

It is in our belief that with these interventions together with the provision of other technical support coupled with a continued and enhanced collaboration with partner districts leadership, quality standards will be improved and PIH- IMB supported district hospitals and health centers to achieve > 80% of accreditation scores by 2018.

SUB-GOAL 2: Train 4000 community health workers in 3 districts on TB, HIV, MCH and malnutrition by 2021.

Since 2005, responding to the HIV epidemic has been the foundation of PIH-IMB's work in Rwanda; and PIH has been central to the delivery of essential interventions for tuberculosis and multi-drug resistant TB for several decades. PIH-IMB has declared a

global strategy of Zero HIV transmission of MTC HIV infections, Zero deaths due to TB and Zero deaths from malnutrition and zero preventable maternal deaths. To achieve these goals PIH-IMB will provide refresher trainings in these subjects to 4000 community health workers in support of achieving 90/90/90 and the 4 Zeros.

SUB-GOAL 3: Train 60 interns in the 3 districts on emergency medicine and surgical/obstetric care by 2021.

Since medical students receive training at referral hospitals, there exists a gap between what they learned in medical school and their ability to provide safe and high quality care when they become interns at the district hospital level. They are not provided with any formal introduction, nor equipped with the skills necessary to working in the relatively resource-limited setting of the district hospital. In addition, there is an urgent need for surgical/obstetric and emergency medicine services at the district hospital level. Under strategic objective #1, PIH-IMB plans to support the implementation of high-quality global surgery services capable of surgical standard of care in key areas, especially obstetrics and emergency surgery.

Under this sub-goal, PIH-IMB plans to deliver induction courses to all interns working at PIH-IMB-supported district hospitals ensuring they are equipped with the basic knowledge and skills in emergency medicine and surgical/obstetric skills necessary for providing high quality, culturally and safe healthcare. Basic emergency medicine and surgical obstetrics skills will be identified and prioritized in order to develop a comprehensive curriculum and training materials. A mentorship plan will also be put in place in order to ensure interns are supported and supervised throughout their internship year.

SUB-GOAL 4: Train 1600 nurses and midwives in 3 districts on maternal health by 2021.

Averting all maternal deaths remains a priority for Rwanda, as well as one of the four PIH Global strategic goals. In order to reduce preventable maternal death to Zero, PIH-IMB commits to providing targeted on-job training and support to district nurses and midwives through specialized and accredited maternal health courses. The patient-centered and community-oriented approaches will be used to train these health care providers who are well equipped in diseases prevention and control. By updating or adapting training curricula and materials (BEMONC, CEMONC) and identifying qualified facilitators, there will be an increased number of district nurses and midwives with knowledge and skills to provide high quality care. This objective will be achieved with support and funding from the PWRDF/All Mothers and Children Count initiative.

SUB-GOAL 5: Train 4000 CHWs from 3 districts on management of childhood illness and Non-Communicable Diseases by 2021.

Together with the Ministry of Health (MOH) and RBC's Community Health Unit and Non-communicable Diseases Division (NCDs), PIH-IMB commits to supporting training initiatives targeting community health workers in priority areas of management of childhood illnesses and the NCDs of childhood. The increased number of community health workers able to identify and manage childhood illnesses will lead to an increase in malnutrition

detection at community-level, improved management of childhood illness at community-level, NCDs prevention and control at community level including community sensitization on wellness, early detection, basic management and palliative care.

SUB-GOAL 6: Train physicians, primary care nurses, mental health practitioners and community health workers in mental health screening, detection, care and follow up across all three PIH supported districts by 2021

The mental health program has successfully trained all level of care providers from the district to the community levels across Burera. This total district model requires extensive training and mentorship at each level of care. Replicating this model in South Kayonza and Kirehe will be the next step to full national scale up by the MOH/RBC.

Goal 3: Support MOH/RBC to develop and deliver nationwide training in line with the national health sector strategic plan.

SUB-GOAL 1: Work with MOH/RBC to implement a national health care training curriculum covering 6 areas by 2021.

PIH-IMB has collaborated closely with the MOH/RBC to develop and implement national health care training curriculum in specific clinical areas, including oncology and neonatology. By continuing with this collaboration to implement national health care training curriculum, PIH-IMB commits to working with the MOH/RBC to deliver high quality nationwide training initiatives in line with health sector strategic plan (prioritizing neonatology, oncology, integrated NCDs, palliative care and mental health). PIH-IMB will provide the resources and technical knowledge to drive the production of up to date curriculum of a global standard. The 6 areas include 5 listed in the health sector plan as well as 1 Environmental & Occupational Health.

Goal 4: Provide PIH workforce with the knowledge and skills required to support the PIH strategic plan.

SUB-GOAL 1: Ensure 50% of PIH-IMB staff can demonstrate basic knowledge of monitoring and evaluation skills by 2021.

Monitoring and evaluation (M &E) are indispensable components of effective program management. M&E are used for decision-making, to assess and improve the care that patients receive, to share effective practices, and to advocate for unmet needs in the target population. To that end, PIH-IMB commits to increasing the number of staff skilled in M&E concepts and able to implement M&E plans.

SUB-GOAL 2: Ensure 50% of PIH-IMB staff can demonstrate basic project management skills by 2021.

Program management in global health involves overseeing the day-to-day operations of a program, such as managing staff, managing government relations, and tracking budgets and finances. Program managers write reports and may make technical decisions. By

2021, an increased number of PIH-IMB staff will be able to implement project management approaches in order to deliver effective programs and achieve PIH-IMB's strategic plan.

SUB-GOAL 3: Ensure 50% of PIH-IMB staff can demonstrate basic financial management skills by 2021.

Basic financial management skills are often lacking in the portfolios of PIH-IMB's program managers. There is a pressing need to strengthen financial management skills and confidence among PIH-IMB staff that are in charge of implementing programs. Basic financial management skills include keeping financial records, internal controls, budgeting, and financial reporting. Having these skills will prepare the PIH-IMB workforce to implement effective programs that are a part of the PIH-IMB strategic plan. By 2021, an increased number of PIH-IMB staff will be skilled in financial management concepts

SUB-GOAL 4: Ensure 50% of PIH-IMB staff can demonstrate basic HR management skills by 2021.

Human resources management is a critical skill needed for effective program implementation. The bulk of HR management takes place at the unit level and driven by junior manager/employee interfaces. By 2021, an increased number of PIH staff will be able to appropriately manage human resources on their teams and have full knowledge of PIH-IMB HHR policies and guidelines..

SUB-GOAL 5: Ensure 80% of PIH-IMB staff can demonstrate knowledge of social and economic rights approaches by 2021.

As an organization whose mission is to provide a preferential option for the poor in healthcare, it is imperative that PIH-IMB staff is familiar with social and economic rights approaches. Regardless of program or clinical area, staff will be required to complete an introductory course that explores economic, social and cultural rights and how they intersect in the Rwandan context. By 2021, 80% PIH-IMB staff will be familiar with these concepts.

SUB-GOAL 6: Ensure 100% of PIH-IMB staff has knowledge of PIH history, values, vision, mission and goals and approaches by 2021.

By 2021, all PIH-IMB staff members will be fully aware and familiar with PIH-IMB history, values, and approach and understand why these are important and how to apply them in our day-to-day work. We will also have developed and implemented a 3-day induction course for all new PIH-IMB staff and volunteers that is compulsory.

SUB-GOAL 7: Ensure 50% of PIH-IMB managers can demonstrate knowledge of basic leadership principles by 2021.

The Leading at PIH training aims to develop the leadership and management skills and abilities of people managers who work at PIH-IMB sponsored sites. Our mission at PIH-IMB, to provide a preferential option to the poor in health care, relies upon a strong, well-

trained workforce. This training builds the leadership capacity of a range of employees from emerging leaders and new managers to experienced managers and site leadership. By 2021, an increased number of PIH-IMB staff will be trained as leaders through Leading at PIH course.

SUB-GOAL 8: Build a cadre of 20 trainers of trainers in PIH-IMB by 2021 that are able to plan and deliver quality trainings relevant to the needs of PIH-IMB stakeholders and PIH-IMB strategic objectives.

PIH-IMB is committed to support the government of Rwanda to strengthen its health system. Therefore, trainings are used not only as one of the key strategies to equip health workforce with essential knowledge, skills and attitudes to address the determinants of health that make people sick, but also to increase the availability of health services to many people. To achieve this goal, PIH-IMB will build capacity of its program leaders involved in preparing and delivering training.
Annual TOT sessions will provide opportunity for program leaders to plan participation so they can build capacity in their unit. These training sessions will include: Training Needs Analysis, Training Design, Training Resource Development, and Training Evaluation.

SUB-GOAL 9: To develop a curriculum and a course in Environmental and Occupational Health and Safety to serve the needs of PIH-IMB and its partners in the healthcare field.

The healthcare field continues grow exponentially, while clinical techniques have improved significantly, Environmental and Occupational Health and Safety (EOHS) continues to lag behind creating a serious gap. There is a general lack of understanding of EOHS by clinicians, it is not viewed as a priority and implementation and accountability are weak. PIH-IMB aims to provide courses equipping leaders to understand the impact of EOHS on staff, patients, the environment of care and on accreditation. This training builds the capacity of employees in the healthcare arena from emerging leaders and new managers to experienced managers and site leadership.

Goal 5: Utilize the district programs as a platform for hosting global health scholars in experiential learning and research.

SUB-GOAL 1: Ensure 50% of PIH-Linked Global Health Equity residents select Rwanda as their research site.

The Division of Global Health Equity at Harvard and Brigham and Women's Hospital is committed to training, research, and service in healthcare to reduce disparities in disease burden and to improve treatment outcomes both domestically and abroad. The Division works in close collaboration with PIH-IMB and the Harvard Medical School Department of Global Health and Social Medicine to create an integrated Global Health Delivery Partnership. In addition the UGHE is producing 25 graduates annually in the Masters of Global Health Delivery course who should also learn from the practical Global health programs running in PIH-IMB. Global Health Residents visit PIH sites all over the world in order to select where they would like to spend their time at different time points throughout

their residency and to conduct research. In an attempt to utilize district programs as a platform for hosting global health scholars, PIH-IMB commits to increasing the number of Global Health Equity residents who select Rwanda as the site where they'd like to do their practicum attachment.

SUB-GOAL 2: By 2021, increase number of external partners and organizations working with PIH-IMB in Training, Capacity building and Mentoring programs in Rwanda.

In order to increase the number of global health scholars utilizing district programs for experiential learning and research, more partnerships need to be created with external partners and organizations to drive our portfolio of training, mentoring and capacity building programs. These may include: locally - the University of Rwanda, the Catholic University of Kabagayi, the Adventist University of Central Africa (AUCA); regionally - the East African Health Research Commission (EAHRC), Inter-University Council of East Africa, One Million Community Health Workers for Africa as well as internationally - the Consortium of Universities for Global Health (CUGH), The College of St Rose, Albany, New York.

III. 1. 5

SO5: To generate and disseminate research to improve health care delivery and advocate for evidence-based policy change with local and global impact

Goal 1: Generate and disseminate new knowledge to influence policy and practice in global health delivery.

SUB-GOAL 1: Design, develop, implement, measure and report on high-quality operational research based on PIH-IMB strategic objectives 1&2, resulting in > 75 strong peer-reviewed publications from 2016-2021

The core mission of PIH-IMB is to provide high quality health care to the poorest populations by removing poverty-related barriers and promoting health equity. To Rwanda's MOH, PIH-IMB's strategic commitment is to design, implement and measure impact of innovative health care delivery programs that are scalable countrywide. This calls for strategic thinking and methodological implementation with measurement of impact of introduced interventions. Starting with key PIH-IMB flagship clinical programs of mental health, oncology, NCDs and neonatology, PIH-IMB will prospectively track quality of health care, disease outcomes, impact of interventions and cost-effectiveness of services delivered. We will also support capacity building and monitoring of these services where they are scaled up.

PIH-IMB will set-up both community (health and demographic surveillance system) and hospital (cohort studies in programs including oncology, early childhood development and mental health) based research platforms to prospectively monitor disease trends, accurately measure disease outcomes and public health impact of deployed interventions, report new scientific knowledge learned and use the generated information for advocacy of our work through publications and other data dissemination channels.

SUB-GOAL 2: Drive change in local, national and global policy and practice via evidence-based activism and results of PIH-IMB research, with 5 concert examples of policy and practice changes from 2016-2021.

Research at PIH-IMB is driven by the needs of the communities PIH-IMB serve and the districts PIH-IMB support whilst remaining aligned with health priorities and goals of the MOH. Research is conducted for multiple purposes, including but not limited to: closing gaps between mechanisms of prevention, diagnosis and treatment of disease and delivery of these services to vulnerable groups, improving access to and quality of health care, assessing the impact of care delivery models on patient outcomes, developing strategies to scale up innovative models and programs, and evaluating the effectiveness of interventions. PIH-IMB's research propels innovation, demonstrates impact and disseminates the expertise cultivated over our ten years of operation in Rwanda. It influences clinical and programmatic practices in other low- and middle-income countries and provides a platform to advocate for social justice and equity in health care delivery.

PIH-IMB has played an active role in policy discussions at the national level in the past and will continue to do in supporting MOH towards establishment of priority programs, participating in Technical working groups and in disseminating findings from our work. PIH-IMB will also continue demonstrating achieved success and capacity to drive change in local, national and global policy and practice. Our large body of research results provides an evidence-base that can be used to inform policy and practice. We will strengthen our capacity to produce policy briefs to the MOH involving our research and share recommendations for policy changes and advocacy of increased access to quality care in equitable ways. Through scientific activism, PIH-IMB aim to influence policies of health care delivery on a global scale.

SUB-GOAL 3: Establish a health and demographic surveillance site in Southern Kayonza to track and measure progress towards the four Zero's by 2021.

A health and demographic surveillance site (HDSS) is a community-based health care delivery and research platform that allows for collection of routine health and population-level data on a defined geographical limited population. While there are other sources of health data, for example, census data, these have inherent flaws and disadvantages. Although census data are comprehensive in the areas enumerated, they are infrequently being conducted once every ten years making it difficult to track key demographic, vital event and health indicators in a detailed actionable manner. Census data also only cover a sample of all individuals and that may not be robust enough to answer questions on infrequent diseases. Health Medical Information Systems (HMIS) report aggregated data, making it difficult to determine specifics such as which sub-groups have the highest incidence/prevalence rates of disease or are at risk of developing disease. HMIS only represent health facility visiting populations. Similar to birth and death registries, disease notification and surveillance systems have not yet been established in many sub-Saharan African countries. An HDSS provides in-depth insight into a population, producing data that can be used to inform practice and policy, evaluate the impact of programs and interventions and offer evidence for decision making and planning.

While setting up an HDSS is a big under-taking, PIH-IMB is in a very favorable position to establish this site within one of the three supported districts. Key to success isstakeholder and community buy-in and that PIH-IMB has relationships with the GOR, MOH, RBC, NISR, local Universities like UOR and UGHE and local government of the districts PIH-IMB support.

As part of PIH-IMB's mission to serve the most vulnerable and poor individuals, the HDSS will allow us have a palpable community footprint in rural communities to increase access to basic health care, reduce time to diagnosis for key diseases but also study key vital statistics including death, births and pregnancy outcomes. All sick individuals identified during implementation of HDSS activities will either be treated in the field for non-complicated diseases or be referred to higher-level health facilities for care and follow-up. The HDSS will facilitate the conduction of multiple activities: The most important is to provide a platform to achieve the 4 Zero's. First, it will allow us to conduct a baseline assessment of the incidence and prevalence of the 4 Zero's to provide a complete measurement of burden of disease and characterization of disease determinants. This data will inform strategic planning and designing of programs and interventions to achieve

the 4 zero's. The follow-up rounds to be done in the future will provide consistent in-depth data to allow us track achievement of the zero's. In addition, the HDSS will provide a platform to conduct special studies in areas important to the MOH, RBC and PIH-IMB. An HDSS will provide job opportunities for the local community to support activities such as event reporting and confirmation. HDSS also provides opportunities for community engagement through holding of regular meetings with the village and local council members to keep them updated on HDSS activities and to provide feedback to community members. Overall, HDSS establishment will support PIH-IMB to prevent disease, address social determinants of health through economic development opportunities, reduce poverty and demonstrate how improved health is a driver of prosperity.

SUB-GOAL 4: Conduct prospective clinical research studies in pediatric populations starting by 2018.

Care for pediatric populations is a flagship PIH-IMB innovative clinical program. The MOH-PIH-IMB collaboration has achieved dramatic improvements in child health. For example, neonatal care units have been established in all three PIH-IMB-supported MOH-run district Hospitals. A neonatal care protocol has been developed and rolled out nationally, interventions and delivery systems targeting infants requiring intensive inpatient care or long-term care for neonatal disorders have been implemented, diagnosis and treatment of severe malnutrition in children has been improved, and services for early childhood development and provision of pediatric chronic care have been enhanced. PIH-IMB has conducted research to demonstrate our experiences in accompanying the MOH to serve pediatric populations. Data collected as part of routine clinical care has been retrospectively reviewed to report patient outcomes. The impact of the "All Babies Count" and "Pediatric Development Clinic" interventions has been assessed. Operational research studies have identified strategies to scale-up these care delivery models.

To continue to achieve improvements in child health and influence delivery of pediatric care on the global scale, PIH-IMB proposes conduct of robust prospective research studies. To better understand our impact, identify any gaps and remove all barriers to optimal pediatric care, PIH-IMB plan to establish prospective cohort studies which will allow us better: 1) understand the etiology of common pediatric infections, 2) measure impact of our introduced interventions, 3) elucidate long term complications of conditions like preterm birth and 4) assess contribution of household related determinants of children's health, early childhood growth and developmental issues. Regarding achievement of the zero's target of no death to malnutrition, PIH-IMB will track all births in a defined community and prospectively seek to understand other determinants of under-nutrition and in particular stunting. Prospective research will allow PIH-IMB to continue to drive innovative services to improve the quality of existing care, introduce new technologies, improve access to care for key vulnerable pediatric populations and influence models of care delivery at local, national and global levels.

SUB-GOAL 5: Conduct prospective clinical research studies in oncology with five major prospective studies starting by 2018.

PIH-IMB's first of its kind in the region oncology program; a comprehensive integrated model of care delivery in resource-limited settings, based on standardized and nationally

endorsed protocols, is now established at Butaro District Hospital with a small program at Rwinkwavu Hospital. In the past, research in oncology has described the epidemiology of cancers seen, and described the feasibility of delivering quality cancer care in low-resource settings. The existing research portfolio consists mostly of retrospective descriptive studies that report demographic, clinical and outcomes data for patients with specific types of cancer. These studies are designed around the data collected as part of routine clinical care delivery. However, these data are largely lacking in availability and quality, as they were not collected to answer specific research aims or systematically measure pre-determined outcomes. The existing oncology data are therefore sub-optimal for use in research and systematic clinical evaluations. These gaps and weaknesses compromise traditional measures of data quality (accuracy, completeness, usability, privacy/protection), limiting what PIH-IMB are able to report, how well PIH-IMB can contextualize our findings within larger bodies of oncology research, and the impact PIH-IMB can have on policy and future program implementation.

Research in oncology will transition from retrospective, routine clinician focused care to prospective management of patients by setting up prospective cohort studies. Establishing patient care around cohorts will employ research priority thinking to promote data quality improvements, clarity on patient outcome assessments, consistent protocol driven patient enrollments, compliance to patient management protocols and effective planning. To set up these cohorts, PIH-IMB plan to focus first on 5 cancers (choice based on frequency of presentation at RDH and BDH, cancers treated predominantly as in-patient vs. outpatient and the presence of physicians with experience treating the selected cancer to lead a team). The selected cancers are cervical, breast, nephroblastoma, Hodgkins lymphoma and CML. Teams of experts have been set-up to identify research priorities for their cancer type and outlining research questions to be answered through the prospective cohort study design. Over the next five years, the cohorts will be established and data consistently collected to generate new and accurate findings that can influence practice and policy around the delivery of oncology care in low- and middle-income countries.

SUB-GOAL 6: Be a leading institution in conducting NCDi research in low- and middle-income countries

Until recently, Non-communicable diseases (NCDs) were a neglected component in much of the developing countries. There remains limited investment in and priority of clinical care and research in NCDs compared to infectious diseases. However, following the significant control of infectious diseases in the past and growing burden of NCDs, there is an urgency and need to design programs to management NCDs. PIH-IMB has been mandated by GOR/MOH to design innovative integrated NCDi care programs that are cost-effective and ensure optimal impact. To achieve impact on a local, national and global scale, PIH-IMB must deliver high-quality NCDi care but also produce research that demonstrates the delivery, implementation and effectiveness of this care. The integrated NCDi program that has been established in the three PIH-IMB supported districts is extremely innovative and demonstrates that NCDs can be effectively managed in low- and middle-income countries. Locally, PIH-IMB has gained significant experience in setting up and run integrated NCDi clinics in our catchment districts.

The next phase will involve use of these clinics and the data collect to answer key implementation research questions that influence policy and practice. Being an expert in NCDi care, PIH-IMB will use this credibility, field experience and clinical expertise to identify and apply for pertinent implementation research grants. Funding to conduct NCDi research studies will allow us to further hone our expertise and continue innovating. Producing high-quality NCDi research, disseminating our work and using our evidence-base for scientific activism will result in our recognition as a leading research institution.

Goal 2: Develop local and national capacity to produce high-quality research in Rwanda

SUB-GOAL 1&2: Provide research platforms for Masters and PhD students and host over 20 student research projects by 2021; train and mentor 50 in-country researchers with the skills and experience to generate high quality and practical research by 2021

The GOR and MOH have made commitments to strengthen research by improving the quality and use of research information, investing in research capacity building efforts and fostering collaboration between academic, public and private institutions. PIH-IMB will invest in research capacity building to drive research productivity, demonstrate impact and disseminate expertise generated in Rwanda.

Since 2010, PIH-IMB's research department has made research capacity building and professional development of staff, local and international students and in-country health professional a priority. This had been done by hosting young researchers and pairing them with local and foreign collaborating mentors in trainings in basic research and intermediate operational research. We will continue to invest in capacity building by providing a strong platform that supports masters and PhD students' research. We will work more closely with UGHE and UOR to give students opportunities to support ongoing PIH-IMB research studies and also to conduct their own original research. The research department staff will provide technical expertise and senior researchers will be paired with junior researchers to provide mentorship and support. We will also provide training for in-country researchers to further develop their skills in themes such as biostatics, conducting implementation and translational research, health systems strengthening and good clinical practice. Seed funds to support PhD students and to evolve student projects into grant funding opportunities will be provided if we can source them through our partnerships. These platforms will generate new knowledge and the dissemination of new and innovative research can influence health policy and change implementation and outcomes.

Goal 3: Build a world-class strategic and sustainable research institute

Currently, most research conducted is retrospective review of records for health facility treated patients. While these data are important baseline descriptive results that can inform planning and disease management, they are not able to point to causal factors of diseases or determinants of health care output. We need interventional and prospective level studies that provide robust findings to inform optimal patient care and disease prevention work.

SUB-GOAL 1: Develop a unified and robust system for data collection, management and analysis for research to be utilized across studies by 2018

Most data used for research analysis are drawn from either patient charts or the national electronic medical records (EMR) or other multiple sources including nested additional capture processes. These data are limited by incompleteness and inaccuracies. To ensure accuracy, consistency and completeness, clear guidelines for data collection and variable measurements and data quality improvement process are needed. Also needed, is a functional, integrated data management system that ensures privacy, confidentiality and security of patient level data as well as platforms for on-going data entry, cleaning, analysis and archiving in a well-coordinated manner. A data center with well-trained data managers and analysts will provide expert support for capacity building, optimal data analysis and good data management for research and other functions like monitoring and evaluation.

SUB-GOAL 2: Expand research partnerships and collaborations to involve at least 10 high-caliber academic, public/private institutions as collaborations in research studies by 2021 with specific emphasis on institutionalizing long-term partnerships and collaborations

To pioneer in innovative health service delivery, a team of multi-thematic scientific research leaders is needed to both identify, implement, measure and scale up health services in resource limited settings. Through PIH's Harvard affiliation and the budding partnerships with institutions like the London school of Hygiene and Tropical medicine as well as local institutions like the University of Rwanda and the University of Global Health Equity, PIH-IMB will establish strong academic and research partnerships that leverage financial, technical capacities, training opportunities and shared interests to advance health care quality and equity in Rwanda.

SUB-GOAL 3: Develop capacity for translational and laboratory based research and publish first study by 2021

PIH-IMB leads in providing high quality innovative clinical care services in the poorest places in resource limited settings. Key to provide excellent clinical care is high quality cost effective reliable diagnostic services. However, there has been little laboratory-based research to inform clinical care. PIH-IMB in partnership with UGHE plans to establish a world-class clinical, pathology and microbiology labs in Butaro Hospital with capacity to conduct bio-molecular research that improves clinical care and patient outcomes.

Goal 4: Improve capacity to obtain high-level grants.

SUB-GOAL 1: Build a self-funded research institute based on research grants to cover >80% of all research-related costs at PIH-IMB by 2019.

PIH-IMB's research department is currently being restructured, and the final result will be a well-organized, high-functioning, productive department in a position to grow into a self-funded research institute within two years. Hitherto, PIH-IMB's research department

running costs have been covered largely by PIH-IMB unrestricted funding apart from the notable exception of the Population Health Implementation & Training Partnerships initiative funded by the Doris Duke Charitable Foundation. This multi-year grant focused on strengthening and studying community-based, integrated primary health care systems in Rwanda. This funding ended June 2016. While this leaves a gap in funding, the research department, in collaboration with other IMB programs and international collaborators (e.g. The London School of Hygiene and Tropical Medicine) will continue to build capacity to apply for and win grants from international funders include the National Institutes of Health. Historically, prompts to apply for grants come from our collaborators at HMS, BWH and DFCI with grant applications written and assembled primarily by PIH Boston with our role in this process being minimal and largely supportive. While this is essential and will continue to be supported, a full time involvement of PIH-IMB research office will be required in planning for and management of grants to build greater capacity and ownership.

The department will intentional build local capacity of research scientists to identify, write and apply for high-caliber grants that cover research-related costs and allow the research department to transform to a self-funded research institute. Building this self-funded research institute is a way to ensure that PIH-IMB's research is not dependent upon PIH as a whole or thwarted by the financial constraints of PIH-IMB. A cycle can be started where high-quality research is conducted and disseminated, and this experience and data is built upon to bring in more grants. Forming collaborations with other Rwandan and international national institutions will also support the sustainability of this institution, as will provide platforms for Moutasters and PhD students and visiting researchers to conduct research studies. Evolving the research department into a self-funded institute will allow us to make a lasting impact on health care delivery and our comes at the local, national and global level.

SUB-GOAL 2: Build in-house capacity to apply for and win grants

PIH-IMB will continue to identify and engage with highly skilled leading scientists to appraise out capacities and partner with us to conduct of better research starting with setting up of an HDSS, establishment of disease specific cohort groups and establishment of clinical trial units. An area where capacity is lacking is in applying for grants. Writing competitive grants for leading funding agencies is a special skill set that is not often taught in university. Building our in-house capacity in the areas of grant writing and management will be beneficial. Firstly, it serves as another avenue to building research capacity in the country. Secondly, it will allow us to achieve the previous goal of covering all research-related expenses with grants. Third, PIH-IMB will have more control over which funding opportunities PIH-IMB apply for and can ensure they align with PIH-IMB/MOH priorities.

III. 1. 5

SO5: Address the social determinants of health through targeted support to the most vulnerable, and through advocacy and engagement with the communities PIH-IMB serve and those who provide them with services

Health care must go beyond simply providing medicine, and include addressing a patient's total environment and access to resources. Will they have safe water to swallow their medicine with? Will they have transportation money for their follow-up visits? Do they have food to feed their children? It is with this lens that PIH-IMB promotes the preferential option for the poor and the most vulnerable in society. Rooted in our belief that poverty and ill-health are strongly intertwined, and associated to the social context in which our patients live, PIH-IMB creates opportunities to provide social and economic development to patients through its Programs on Social and Economic Rights (POSER), which prioritizes services for beneficiaries who have initially presented a medical need at a PIH-supported medical facility.

In the next 5 years, the POSER program will focus mostly on building community capacity for self-reliance and improved health access. This ambitious goal seeks to improve economic capacity and build household resilience and sustainability. Investment in POSER will strategically shift from a predominant patient focus to household, community and environment focus with the aim of creating an enabling environment for health promotion.

The POSER program will aim to achieve economic development and livelihood through agriculture production, income generating activities, small business promotions and financial literacy. It will address social protection through health promotion and education, nutrition and hygiene promotion, social support and life skills education for youth; as well as advocacy through community engagement and participation with local leaders, community based organizations and beneficiaries engagement. It will also support government programs like the establishment and promotion of co-operatives.

Goal 1: Improved economic development and livelihood through agriculture production, income generating activities, small business development and financial literacy

SUB GOAL 1: Ensure social protection for patients and the most vulnerable people as a bridge to sustainable development interventions, by reaching 2,400 households (12,000 individuals) by 2021

Guided by the national Economic Development and Poverty Reduction Strategic plans (EDPRS 1&2) and the Health Sector Strategic Plan 3 (HSSP III, PIH-IMB will focus on facilitating rural development, one of the four goals of the EDPRS. PIH-IMB will strive to ensure that all four elements of the social protection cycle proposed by the Rwandan EDPRS will be achieved through POSER activities and services, including: provide protection to the most destitute, support prevention for those at risk of disease; improve

the support of those in the middle of their struggle to addresses social challenges to a healthier livelihood, and ensure that beneficiaries from the communities where PIH-IMB work achieve a social transformation by empowering them sufficiently to get out of poverty traps.

Social protection will be critical to enabling the vulnerable ill and some of the poorest households to enjoy universal health care as their human right. This effort will also allow them to graduate out of extreme poverty in a sustainable way. PIH-IMB in collaboration with district leadership and clinicians will continue to provide direct social support to needy patients and other most vulnerable people in the community. Social support packages will be defined and provided to those living in very critical and poor health conditions and those living in extreme poverty hence exposed to a high risk of illness. In this area, interventions like mutuelle de sante subsidies, food supplementation package, solidarity funds and other interventions will be provided to targeted beneficiaries to improve their social status and build their capabilities to embark on more sustainable development interventions.

PIH-IMB intervention model for the next 5 years will put the beneficiary (patient and other vulnerable people) at the center of the program. Beneficiaries will at the individual level or at households, family or community level effectively participate through consultation and contribution to the effort. Program teams together with local leaders and districts will assess areas of collaboration according to available community assets that can be utilized to leverage indigenous capabilities. Community platforms, systems and networks will be established or capacitated where they exist to play their role in activity planning, implementation and monitoring, as well as evaluation. Learning and reflection events will be jointly organized to assess progress, celebrate achievement and challenge the gaps.

The new POSER model will shift from being an isolated intervention to a full program life cycle model that identifies different phases, expected results for each phase, required activity set, timelines and transition plan. Interventions will be more community and family focused to build their capacity to understand and support their patients, raise the awareness on their roles and participation and in particular to prevent any kind of stigma. The model will also define entry and exit points and requirements. At the activity level, a key shift will be introduced through focusing more on community empowerment rather that service delivery and handouts. The model recognizes that the patient or any poor beneficiary is the most important and key player of their own development effort. Unless they are capacitated to play that role, there will be no sustainable and continuous resilience as stated, “Even in extreme poverty, a person has ideas. If these ideas aren’t recognized, people fall even deeper into poverty”

Our goal is to define a reasonable balance in terms of investment, social support package and the timelines, which will allow us to quickly save lives at risk but on other hand, which does not create dependency. In this regard, POSER Team with the leadership of the district teams and technical guidance from PIH-IMB M&E function will work closely to define realistic indicators that will guide the timely transition of beneficiaries and define graduation criteria.

The expected outcome of this intervention would include harmonization and coordination of intervention approaches to effectively create community resilience and capacity to meet

the need of the poor, patients and other vulnerable persons. As a result, PIH-IMB will expect:

- Revised and integrated program structure to ensure harmony and right staff are placed in right place to effectively drive POSER interventions.
- Conduct staff capacity building to ensure that staff understand drivers of community and rural development.
- Review implementation model and transition from activity intervention model to program cycle management model.
- Developed an integrated development program model/ strategy to guide implementation and drive expected results.

SUB-GOAL 2: Collaborate with district leadership and other district stakeholders to transition 60% of the current POSER beneficiaries from Ubudehe category 1 and 2 to category 3 by the year 2021.

Ubudehe refers to poverty level categorizations. The first category includes people living in abject poverty; people who own no property and cannot pay rent, live by begging and wholly dependent on others, resulting in poor diet and cannot get basic household tools and clothes. The second category includes those who own a small portion of land that has low production capacity and cannot afford secondary education for their children. This level of population is often malnourished. The 3rd category includes people who own some land, cattle, a bicycle and have average production capacity. Their children can afford secondary education and have fewer difficulties accessing health care. The fourth category includes people that own large portions of land, fertile lands, have access to sufficient food and can afford a balanced diet. They employ others, own cattle, have money in banks, can receive bank loans, own an above average house, a car and have permanent employment. They can afford university education for their children. They are also known as people who can afford a luxurious lifestyle.

De facto the population in the first and second category are the target of PIH-IMB. FSLP impact evaluation showed that 89% of POSER beneficiaries possess less than 0.2 ha of cultivable land. The same evaluation showed that 79% of them are food insecure (FSLP Evaluation Report, February 2016) consequently, children living in these households are at higher risk of malnutrition.

Sustainable support to these groups means empowering them to earn a continuous living and afford them decent living conditions, therefore truly reversing the course of poverty and diseases, and gain sustainable resilience within their households. Over the next 5 years, through POSER interventions, PIH-IMB will ensure 60% of its POSER beneficiaries are transitioned to Ubudehe category 3. This will be achieved by working with our communities to improved economic development and livelihood through agriculture production, income generating activities, small business promotions and financial literacy.

The agricultural sector remains the sector with the greatest potential to reduce poverty in Rwanda and ensure that growth is inclusive in EDPRS2. Improved productivity of agriculture land is paramount for income generation and rural transformation. Nonetheless, since the scope to expand cultivable land area is limited, PIH-IMB will need to work with our communities to go beyond agriculture and find revenue-generating activities throughout the agriculture value chain. Value chain in agriculture is defined as a range of activities and set of actors that bring agriculture products from production in the field to final consumption, wherein at each stage value is added to the product. The production stages entail a combination of physical transformation and the participation of various producers and services up to final product used by consumer. For example: Farmers could be accompanied to cultivate tomatoes; instead of selling raw fruit-tomatoes, they could engage in transformation to make tomato paste, canned diced tomatoes, ketchup etc. This will allow them to grow their market, and gain more revenue. As households are able to generate enough revenues, they will move into the 3rd category, but also they will be able to buy nutritious and quality food. De facto, income generation and household food security are intertwined.

The strategic intervention areas to integrate into the agriculture value chain and raise revenues, PIH-IMB will focus on:

- **Farmer Field Schools** (FFS) and farmer learning platforms will be established and technically supported. PIH-IMB Livelihood Team across all the 3 district will provide daily technical support as well as materials, seeds and other inputs to ensure FFS serve as learning platforms, demonstration sites and production base for a well selected crop. The program will be scaled up to reach at least 2,400 farmers to utilize locally- driven ways to improve productivity and income generation. FFS trainers and facilitators, particularly women, will be trained to work with farmers. Additional crops will be added to broaden the supply of what is available to farmers. Inputs and better farming practices will increase productivity as their correct application and use becomes more widely known. Fee collection for FFS will be examined to increase the sustainability of the approach.

- **Community Development Accompagnateur**: the concept is based on the model of community health workers that has been successful in the health sector, with model farmers facilitating improved farming skills at the village level. Collaboration with government extension agents, local leaders and district agronomists and vets, will be enhanced.

- **Targeted livelihood development model**: The provision of targeted services requires an array of methods and tools for training. It should be market-oriented, district contextualized and leverage each districts comparative advantage. Priority value chains and commodity sub-sectors require continually updated reference materials. Additionally, inter-district cooperative platforms can be initiated to facilitate information exchange, market linkage and easy access to finance (A2F) opportunities.

- **Farming Models scaled up to link to Agro-processing**: Making the transition to commercial farming and creation of more agribusinesses will boost economic resilience of the patients and their households. A market oriented agriculture and its value chain will play a significant role to ensure incomes of smallholder farmers. For this, it is essential to connect them to value chains and investment opportunities, to generate value, agricultural products will need to have quality, quantity and reliability. Post- harvest management skills are also vital for farmers to become market-orientated. PIH will work closely with the district leadership to ensure availability of communal farms for the patients' cooperatives and groups. In addition, a technical advisory service will be provided to district teams as well as the cooperative to ensure there is viable market, technology and the entire selected value chain is well established and leveraged. Ultimately PIH-IMB would wish to see the farmers produce and process food supplements that can be bought and used by PIH-IMB in combating malnutrition in children.

As a result, PIH-IMB will expect to see improved access to health care and other safety net opportunity for poor patients and other vulnerable people to build their readiness to embark on sustainable development. Specifically, PIH-IMB will aim for achievements such as:

- Poor patients and other vulnerable households supported to get improved shelter.
- Reduced financial and technical barriers to access to quality health care services for poor patients and other vulnerable people.
- Reduced food and other nutrients gaps for patient to enable them maintain their medication and treatment plan.
- Improved capacity of POSER beneficiaries to embark on development activities.

SUB GOAL 3: Establish an M&E and research framework to inform evidence based decisions and future programming

A robust M&E system and research must be established to complement community efforts to show case the progress of the strategy and serve as evidence for future programing or scale up. The goals cover a vast range of issues spanning human activity on earth: food and agriculture, health, sustainable consumption and production, education, inequality, poverty, and gender issues. This scope will require collection of large amounts of different types of data involving a host of metrics from across several disciplines such as economics, social sciences, natural sciences, medicine and environmental science. The development and testing of indicator sets can require a considerable amount of time and technical work but will be undertaken with other stakeholders in the districts. Research opportunities can be generated and carried out by internal as well as external PIH-IMB researchers to showcase the suitability and impact of the model, exchange experience, and scalability to other PIH sites.

With support of the M&E tools, PIH-IMB will be able to establish POSER enrollment & graduation criteria and implementation schedules, develop, test and implement POSER monitoring tools to inform reporting, conduct learning and reflection events with POSER stakeholders, establish POSER indicators and reporting system as well as knowledge management through research, documentation, dissemination, and partnerships with the academia.

III. 1. 6

SO6: Invest in our staff and build strong PIH-IMB organizational systems and processes that optimize efficiency and effectiveness in carrying out the PIH-IMB mission.

Over the past 11 years PIH-IMB has been in a continuous growth phase as PIH-IMB have expanded geographically as well as grown the focal areas in health that PIH-IMB support including innovative areas like oncology, neonatology, mental health, NCDs and maternal and child health. The ambitious strategic plan FY12-FY16, which brought in additional growth in programs, did not specifically set up a goal to improve our systems and staff. For this next 5 year strategy 2016 - 2021, PIH-IMB will be purposeful in its strategic approach and (a) develop strong and comprehensive information systems to increase data driven decision-making by individuals and programs; (b) invest in staff capacity and growth to lead this ambitious strategy; (c) build financial systems, grant management systems and processes to optimize efficiency and effectiveness to carrying out the PIH-IMB mission, (d) put in place operational systems and processes that optimize our fleet management, infrastructure units, supply chain, co-operatives and general operational support to the organization. (e) critically, PIH-IMB will need to play a pivotal role in developing strategic partnerships nationally and internationally to grow and diversify partners that will join us in addressing the burden of disease as well as participate in approaches towards health system strengthening, particularly through providing expertise and funding. This will be achieved through a new department called External Affairs.

Historically PIH Boston has provided most of the back stopping for these functions and has instituted systems and policies to guide a number of these areas. This support from Boston will continue to be invaluable but PIH-IMB will seek to transition some of this expertise to Rwanda so that our systems will be managed on a day-to-day basis from Rwanda while linking to the organization wide systems hosted in Boston. We shall also seek to be the country site that has solid and innovative systems that other sites will learn from and emulate.

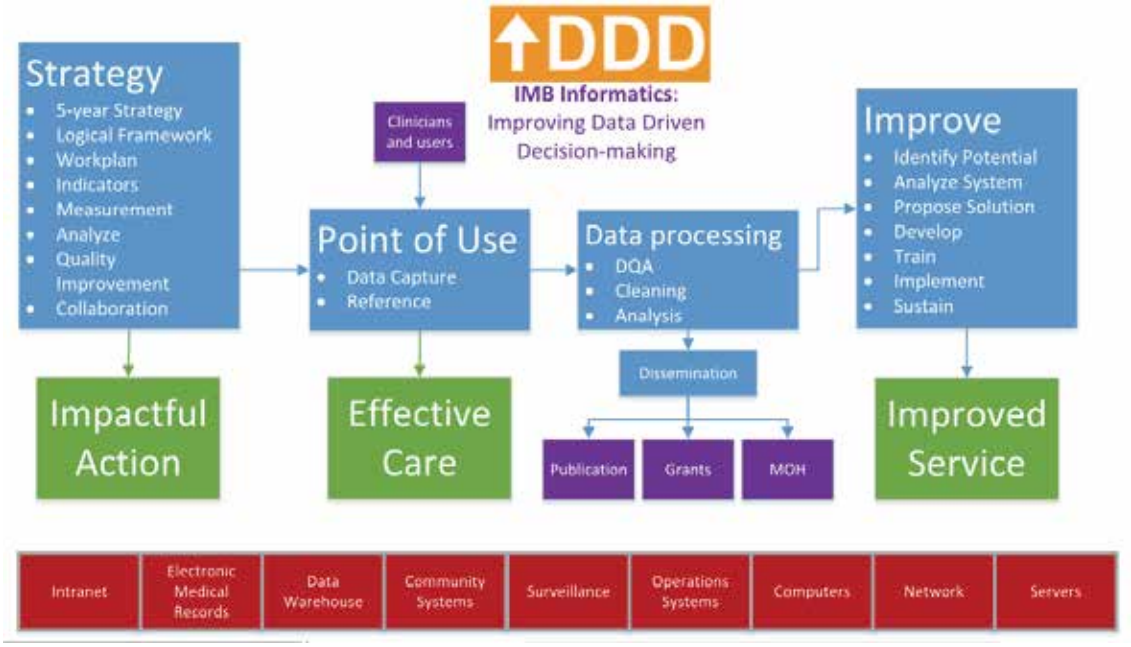
Goal 1: Consolidate and strengthen our information systems to optimize them and support our vision for a fully-fledged Health Informatics department

PIH-IMB has been collecting large amounts of data on behalf of health facilities and the MOH. In addition PIH-IMB also collect specific data from specific PIH-IMB driven programs including large amounts of community-based data. Separately PIH-IMB also collect data on finance, on HR and on operations. While some of this data has been used for research, for program monitoring and for proposal generation, PIH-IMB have not systematically driven the value chain from raw data to clean data to information to knowledge and to decisions and implementation. Neither have PIH-IMB linked our programmatic data to our operational data in order to evaluate the unit costs and cost-benefit of our investments. In addition to expanding availability of digitized data for all IMB goals and operation needs,

PIH-IMB envision to serve as a champion for data-driven decision-making and provide the support and resources to act in the same manner.

From Data to Information, Knowledge, Decisions, and Implementation

Figure5



SUB-GOAL 1: Achieve >99% network uptime at all PIH-IMB-supported sites by 2021

Over the years, PIH-IMB has supported sites by providing them with robust operation systems, computers, network, and servers. At sites with inadequate infrastructure, PIH-IMB extended support to include satellite communication systems (VSAT), solar power, and cellular network connectivity. Currently, the network uptime at sites PIH-IMB support is at 95%.

In accordance with our plans to expand data collection, analysis, and systems supporting data-driven decision-making, PIH-IMB need an integration of Intranet, Electronic Medical Records, Data Warehouse, Community and Surveillance systems. That integrated structure, along with a PIH-IMB Operations Systems, requires an IT system that is properly managed. It also requires enhancements in technology and IT practices, which PIH-IMB intend to support at the health facilities where PIH-IMB work. This will be done by increasing network bandwidth to fit usage and by having regular equipment maintenance. Given that a system cannot be sustainable without efficient processes and competent human resources, PIH-IMB will set up an IT support system, along with policies, adequate tools, and training for IT staff. Such support will enable us and the health facilities to have a dependable IT infrastructure and trained staff needed for a strong and reliable health data system.

SUB-GOAL 2: By 2021, ensure that 100% of PIH-IMB departments have a digitized system for collecting data, with the aim of measuring their programmatic outcomes

PIH-IMB currently uses a digitized multi-user system for collecting data and generating information for the HIV, NCDi, Oncology, PDC, Finance, and HR programs at PIH-IMB. The efficiency gained by using such systems has yet to reach the whole organization, especially PIH-IMB operations functions. As a result, PIH-IMB will build systems that capture PIH-IMB operations data and support all PIH-IMB functions, with the end-goal of improved services and real-time tracking of the organization metrics. This will be accomplished by first identifying potential for improving PIH-IMB systems through a needs assessment and analyzing the systems. We will then develop and implement new applications meeting those needs. In addition to systems tracking PIH-IMB operations, PIH-IMB will implement a Community System and a Surveillance system to longitudinally track vital information needed for assessing population health and PIH-IMB programs effectiveness at the household level. Finally PIH-IMB will set up a Data Warehouse as a local repository for centralized management, sharing and collaboration around data extracted from our various systems.

PIH-IMB will continue improving and sustaining our existing digitized systems so as to enable efficient data collection and data informed decisions driving strategy and programs innovations across PIH-IMB. We will also provide continuous training to users, especially on use of the newly-implemented digitized systems. In order to have adequate information for assessing our progress, promoting our work, and for strategic decisions driving programs innovations, data captured and referenced have to be clean. As a result we will develop Standard Operating Procedures for meaningful data collection and improved data processing that encompasses data quality assessments, data cleaning, and data analysis. Subsequent implementation will occur after capacity building of users in data quality and of the informatics team in data processing. As staff are capacitated in those core informatics skills, PIH-IMB will be able to conduct regular Data Quality Assessments (DQA) on all data sources, clean the data that PIH-IMB collect, and conduct in-depth data analysis.

With clean data and improved data management processes, PIH-IMB will be more consistent in conducting meaningful analysis and synthesis to support PIH-IMB objectives. The end-result will be dissemination of high-quality data to our stakeholders through publications, MOH reports, and grants reports. For comprehensive dissemination to occur, PIH-IMB will need access to all data about health areas that PIH-IMB support, including data that are not captured in our system of Electronic Medical Records, community data, PIH-IMB operations data, Intranet, and data warehouse. Such access will occur through a data sharing agreement signed with MOH for stronger partnership in terms of exchanging skills, information, and tools between PIH-IMB and MOH/RBC.

SUB-GOAL 3: By 2021, achieve >95% usage of all electronic systems implemented by PIH-IMB at the sites PIH-IMB support

As an implementer of EMR at the sites PIH-IMB support, PIH-IMB will continue improving system functionality to match new clinical protocols and PIH-IMB clinical innovations. We will also keep training clinicians until they use the system effectively. In addition, PIH-IMB will work with health facility leadership to ensure full ownership of EMR for point of use,

from data entry by clinicians to reliable usage for reference. This will guarantee clinicians' reliability on EMR for patients' information and empower health facilities to use the system for improved care and effective clinical decision-making. We will follow the same process of implementation and continuous improvement when mandated to implement additional MOH-approved electronic systems.

SUB-GOAL 4: Ensure >99% M&E impact evaluation support and M&E knowledge among PIH-IMB program staff by 2021

PIH-IMB has embarked on revamping its M&E functions. This will be achieved by strengthening PIH-IMB M&E culture with the aim of continuous improvement, increased advocacy, and added ability to drive change. The new culture of M&E and data-driven decision-making will be imparted through training and follow-up on the newly created logical framework and indicator definition tools. Follow-up will also ensure that programs know what data to collect for decision-making and impact evaluation. For successful impact evaluation, PIH-IMB will supplement the logical framework with plans for work, indicators, measurement, and analysis. As a stronger M&E culture is instilled within PIH-IMB, PIH-IMB foresee that an improved culture of effective data usage for decision-making by individuals and programs will lead to targeted interventions for impactful actions while increasing collaboration towards quality improvement. This will in turn lead us to efficiently generate evidence that can be reported to our stakeholders, inform decision-making, and prompt additional reflection about the organization impact.

Goal 2: Ensuring Human Resources Management systems and policies are supportive of the PIH-IMB strategic plan

PIH-IMB is a knowledge organization that uses its people, its knowledge and experience to drive innovation and clinical practice both in the districts as well as in our support to the MOH. Our biggest asset is our human resources who need to have the knowledge, the skills and the right attitudes to be able to fully contribute to our mission and strategy.

The single largest expense by far in our budget is our human resources and PIH-IMB have an obligation to put in place systems and policies that build commitment, passion, expertise, efficiency and innovation to be able to achieve our ambitious goals. We are cognizant that PIH-IMB are a young organization with predominantly a young workforce that is at an early stage of their careers and so our approach is to both build individual capabilities and leverage them towards a common PIH-IMB organizational strategy.

Our priorities are:

A) To attract and retain a skilled, motivated and talented workforce.
B) To put in place HR systems, policies and practice that reflects our ethos and exceeds legal and global benchmarks for HR management.
C) Provide a continuous learning environment for all our employees to drive their competence, their career trajectories and create an internal pool of talent.

D) To create an organizational culture that reflects our ethos, our principles and our passion where both performance and exemplary character are recognized and rewarded.
E) To be respectful of our staff, engaging and involving them in organizational decision-making and put in place measures to protect their rights and their dignity.

SUB-GOAL 1: By 1 July 2018, develop a total reward and compensation strategy that stimulates attainment of strategic and operational goals

Competition for talent is ever increasing and organizations need to have well-defined tools to help them achieve high employee staff motivation. We shall rethink how PIH-IMB reward and compensate our staff. Moving away from the conventional monetary benefits to a mixed approach of reward management comprising of both cash and non-cash benefits. We hope that, in addition to market driven compensation studies that inform market driven compensation for our staff PIH-IMB will be able to retain over the coming period most of our staff that are critical to mission accomplishment.

Streamlined processes for acting appointments, promotional appointments, extra-responsibilities and staff recognition for exemplary work should all help PIH-IMB to continuously motivate and increase staff commitment towards our mission. Ensuring that our staff are supported, possess necessary tools, motivated, engaged, and compensated fairly and *growing their careers internally as opposed to leaving* will without a doubt make PIH-IMB stronger and more resilient for the next decade to come.

SUB-GOAL 2: Review our Human Resources processes and policies to increase staff engagement and commitment by 1 July 2017

We commit towards refining human resources policies that are dedicated towards improving the employee-employer relationship. With HR policy changes and improvements PIH-IMB will achieve better staff motivation. This should result into heightened interest in developing their careers within and not out of PIH-IMB. Family and employee friendly policies should equally improve the general quality of work-life of our people. Our rural work settings mandate us to think doubly harder and creatively on how best PIH-IMB can improve both the work environment but also the continuous commitment of our people towards the mission every other day. These policy improvements shall also focus on internal staff communication and engagement. We commit to ensuring that our organizational values and ethos are lived, rewarded and are modeled within our organization; and that they're communicated consistently. More so, that there is continuous engagement on what it takes for staff to be continuously responsive to what it takes to increase their commitment towards PIH-IMB.

Human Resources Process and Policy improvements will cover automation of processes to avail quicker HR services to our staff. Ensuring that our staff have access to HR services and resources through automated platforms will stem time wastage which in turn can help us concentrate more on our core business. Efficient people centered HR organization processes and systems are without a doubt a catalyst for a first-rate HR

function capable of meeting and exceeding the PIH-IMB's organization expectations and objectives.

SUB-GOAL 3: Boost PIH-IMB's values and performance through improved staff performance management by 1 July 2018

We envisage that a staff performance management system that is centered on corrective, constructive and reward tenets is one that will build a *collective hunger* in us to yearn for better individual and team performance. We have set out to sharpen both the performance management skills of our managers and the attitude of staff towards not just the process of performance management but the wide array of benefits from a high performance culture. We will refine the performance management tools and the skills our staff have on performance management.

The intelligence PIH-IMB will achieve from this shall help us to deploy more development resources towards closing performance gaps where PIH-IMB fall short; reward and celebrate those areas where PIH-IMB have achieved resoundingly. We also anticipate with a better performance management culture, career and staff promotion decisions should be clearly linked to evidently deserving staff performance.

This will chiefly involve:

- Ensuring all staff have clear performance objectives that are aligned to PIH-IMB strategic objectives.
- Ensuring all staff complete annual performance reviews timely.
- Using performance management reviews to support employee learning and development decisions to close performance gaps, and to reward high-performers.
- Ensuring all staff has access to professional development opportunities to support their performance and career growth.

SUB-GOAL 4: Talent Management & Succession Planning:
Ensure that by 1 July 2018 80% of our staff have an *individual development plan* that addresses both their current growth and future learning and development needs.

A deliberate plan for talent and succession management is vital in order to ensure the growth attained over the last 10 years since 2005 is sustained and perhaps surpassed. This will be achieved by creating a pipeline of future leaders capable of steering forward PIH-IMB. By creating and developing successors for our key leadership and programmatic positions that are so core towards our business PIH-IMB foresee continued organizational success.

Over the next 5 years, PIH-IMB will continue to identify key mission critical roles within our organization and potential staff that can be groomed, coached and developed into these roles. We will apply the intelligence from performance management to deploy the right level of resources, experiences and tools to grow future PIH-IMB leaders. Talent Management will also cover investment in maintaining the currency of the knowledge and skill sets of our staff. We will deliberately develop the knowledge and skills of our staff but

in a manner that is both beneficial to the organization and to their own career aspirations.

Goal 3: By July 2017 have in place financial and grants management systems that optimize efficiency and effectiveness in carrying out the PIH-IMB mission

During this new strategy the finance department will cover the financial and accounting unit, the grants management unit and the procurement unit. All of these units will work together in concert and transparently so as to efficiently utilize the resources at hand, be able to generate additional revenue and to provide full accountability to all of our stakeholders.

At its core, the finance strategy will focus on maximizing value for our beneficiaries: that is, achieving the best quality outcomes at the lowest cost. To achieve this, the finance function will transform from a purely transactional operation management role to having a cost-efficient and effective strategic role in the next five years.

Finance department will lead the process of translating strategy into financial plans and budgets that will guide the way funds are used and monitor resulting unit costs. The department will establish unit costs, conduct cost benefit analysis and perform other financial analytics to inform management decision. The finance function will also ensure PIH-IMB comply with government of Rwanda, donors and PIH Boston rules and regulations through utilization of proper systems, good planning, reporting and regular audits. This will provide data, insight, and analysis, to assist leadership make financial decisions that will lead to fulfillment of the goals and priorities of the strategy while maintaining a position of financial strength. Policies, SOPs and computerized systems will be developed for the grants and procurement functions and all staff involved in these processes receive regular training and feedback on performance.

SUB-GOAL 1: Commit to excellence within the Finance department by ensuring all processes and operations are clearly defined, and efficiently designed to align people, systems, and policies to maximize productivity, improve efficiency and achieve higher quality and value.

In order to be a valuable resource to the organization, the Finance Department must commit itself to excellence. The finance department will demonstrate excellence through participating in decision-making, implementing process improvements, adhering to the highest work and support standards. The department has the responsibility to steward the resources, manage risk and financial planning of the organization. By identifying and recommending cost-saving mechanisms and revenue-generating ideas, the division will strengthen the financial position of PIH-IMB and allow for continued excellence in our execution.

The future role of the finance function is anticipated to be:

- Put in place world class systems and policies for finance, grants and procurement.
- Standardize processes across PIH-IMB catchment area.
- Control costs and manage risk.

- Provide real time and reliable information that will guide management decisions;
- Make reasonable forecasts that will facilitate financial planning.
- Conduct sensitivity & scenario planning.
- Link program activities to available resources.
- Conduct financial analytics.
- Eliminate duplication of processes.
- Automate financial management and procurement processes.
- Account for the utilization of resources through providing timely reports.
- Accelerate sourcing and supply management initiatives to recognize greater savings and quality products and services.
- Efficient contract management that will improve supplier relations and mitigate risks that result from poor contract management.
- Leverage savings that result from organization wide purchasing.
- Be audit ready within a short time frame.

Excellence also means providing support to operating departments and provide timely and accurate financial statements (internal and external) to assist in decision-making. These include:

- Preparation of timely and accurate monthly financial statements.
- Preparation of annual financial statements and undergo an external audit with an audit opinion.
- Provide accounts payable, accounts receivable, payroll, taxation, risk management, purchasing services and budgeting in a timely and effective manner.
- Preparation of timely and accurate operating and capital budget to actual variance analysis reports.
- Maintain the current donor through compliance with donor requirement supported by full accountability of donor resources.
- Build the capacity of existing staff to be able to source raise funds.
- Monitor market trends to inform purchasing good, services and works.
- Develop supply options to enable to facilitate sourcing of goods, services and works.
- Maximize efficiency of transaction flow.

SUB-GOAL 2: Establish financial management tools that will guide efficient financial management at PIH-IMB

Finance's responsibilities include providing the organization necessary financial tools guiding the management of resources. The following priorities will guide the department's strategic plan for the next 5 years:

- Evaluate current systems; policies and processes to identify opportunities to best optimize the organization's resources by eliminating redundancies and by increasing automation and system functionality.

- Streamline and improve the procurement process to maximize its value to the patients and community PIH-IMB serve and realize cost saving opportunities at both the unit and organization's level. Procurement process must be automated for efficiencies.
- Grant management manuals that will enable management of grants enabling proper grant management that will lead to maintain donors.
- Automate grants and procurement management processes.

As PIH-IMB continues to grow and as the volume of transactions increases, it is imperative to continually evaluate processes and procedures to ensure that the level and quality of support services provided is both adequate and sustainable.

SUB-GOAL 3: Increase PIH-IMB financial sustainability through better grant management and diversifying funding sources

Resource mobilization in PIH has historically been done by PIH Boston by the Development department. PIH-IMB is devising a strategy for a more aggressive grant management approach to jointly meet grant accountability and aggressively find new donors that are willing to contribute to the strategic objectives of PIH-IMB. To ensure sustainable income flows, PIH-IMB will seek for funding from diverse sources including: foundations, public sector funding, research grants and self-generated income. PIH-IMB will seek funding not only from the United States of America but also in other parts of the world including Rwanda in order to spread and reduce the risk of interrupted income flow.

To achieve this, PIH-IMB will:

- Acquire support and systems to ensure high quality grant proposals, sound contracts, and well-executed projects which maximize cost recovery and fixed overheads.
- Ensure effective coordination of the grants, and development functions with efficient flow of institutional information.
- Work closely with the PIH Boston Development and Grants management unit.

SUB-GOAL 4: Strengthen the capacity of the financial management team to improve delivery of PIH-IMB services

The Finance Department’s primary responsibilities include: (1) manage the organization's financial assets and liabilities prudently and professionally in accordance with PIH-IMB and government of Rwanda financial policies; (2) develop the organization's accounting and budgetary policies, and design, implement, and maintain financial and budgetary management systems; (3) facilitate sound fiscal and budgetary planning and decisions by providing prudent and timely financial analysis and advice to leadership.

Additionally, the finance department requires a reasonable understanding of health services delivery in order to spearhead the stewardship of resources entrusted to PIH-IMB for this purpose. The personnel in the finance function will be partners in reducing the

burden of diseases.

To accomplish these, the finance department will require to:

- Attract, develop and engage talented people to continue to provide high quality financial services to the organization and partners.
- Master the use of the financial management tools as well as integrate advances in information and systems technology to enhance the structuring, and analysis of data for decision-making and change management.
- Commitment to continuous learning, career planning and succession planning.

Goal 4: To ensure the availability of quality operations support services to PIH-IMB programs and partners in an equitable, efficient and sustainable manner

Delivering the PIH-IMB mission and achieving its programs goals as well as meeting its partner's expectations will require a strong, quality and consistent operations platform. Over the next 5 years, PIH-IMB operation will mainly focus on building and sustaining systems that allow efficient delivery of enabling services to daily organizational operations, building and strengthening districts as PIH-IMB implementation sites and building and maintaining health infrastructure that contribute to quality health care delivery. The Operations function will achieve its overall goal through the following sub goals:

- To Strengthen PIH-IMB District accompaniment through active participation in different district forums (DHMT, JADF,) for stimulating close collaboration and joint advocacy for Universal Health Care Access for needy people and patients as well as POSER programs.
- To streamline operations systems, policies and structures to improve effectiveness and efficiency in managing PIH-IMB resources and providing proper support to PIH-IMB programs in achieving the organization goals.
- To improve the availability of quality health infrastructure as per MOH standards at PIH-IMB supported health facilities by the year 2021.

SUB-GOAL 1: To Strengthen PIH-IMB District accompaniment through active participation in district forums to stimulating collaboration and for advocacy for needy people and patients.

PIH-IMB District teams will continue to provide adequate accompaniment to the district leadership and other district-based stakeholders to mobilize all available efforts around the cause of quality health care access for all. PIH-IMB district platforms will serve as a channel of knowledge sharing, demonstration of experience acquired through clinical programs and other research initiatives with the aim of creating community and leadership awareness on universal health care delivery. PIH-IMB team will continue to be present in all district forums from the district to the community level and ensure the implementation of the district total support strategy while creating an ally of community based stakeholders and community involvement and capacity which lead to sustainability of interventions.

PIH-IMB district leadership will play an active role either in participating or leading district forums including DHMT district health management team, JADF Joint Action development forum, health district steering committee and when possible be present in other leadership councils at district and sector level.

PIH-IMB presence in those forums will facilitate a two ways learning opportunity for both PIH-IMB and the district in such a way that PIH-IMB gets information on changes on existing policies and new government initiatives that potentially have a significant impact on the health of the people and on PIH-IMB general health programs. Contrarily the government will also learn from PIH-IMB global knowledge and experience in health care delivery and national/local experience and the results of different operational research conducted by PIH-IMB innovative programs. Regular annual planning and budgeting events will continue to be organized and bring together all key players in the health sector at the district level to discuss health priorities and agree on shared responsibilities in the joint effort of addressing identified gaps. In addition, learning opportunities like data sharing events, RTT initiative and normal joint supervision and evaluation will be regularly conducted in collaboration with PIH-IMB district leadership, hospital and the local Government.

SUB-GOAL 2: To streamline operations systems, policies and structures to improve effectiveness and efficiency in managing PIH-IMB resources and providing proper support to PIH-IMB programs in achieving the organization goals and better service to our beneficiaries

PIH-IMB through the operations function will continue its strategic investment in improving its support services to enable smooth implementation and achievement of programs. In this effort, operation systems and structures will be re-organized in a way to drive efficiency and consistent provision of quality support. In this effort, the function will leverage the existence of new technology, new software applications and new systems to improve the quality of operations support and rationale allocation of organization resources as well as an efficient utilization for a greater impact. Areas like fleet-management, warehousing, assets management, general administration, IT and infrastructure will be the main focus as operations supporting platforms to enable the rest of PIH-IMB program achieving their goals. For the next 5 years, the following are our aspirations in these areas:

1. **Fleet Management**

Transport services are one of the most commonly needed operations service from both internal PIH-IMB programs and external partners. For the last 10 years, PIH-IMB has experienced a tremendous growth both in programs, operational size and staff, and this growth has not been always tied to growth in logistics needed to support the smooth running of the organizational programs. Currently the PIH-IMB Fleet is getting old with 20% of them registering more than 10 years in service, 50% between 5 and 10 years and only 30% serving for a period of 2 to 5 years. These indicators have direct implications on the fuel consumption rate and number of down time days and need for service provision.

However, the function has always lacked the suitable monitoring and tracking system for its entire fleet relying instead on manual source of data or reports.

For the next 5 years, PIH-IMB will invest in acquiring a modern fleet management system that will ensure the reduction of risks and will provide accurate fleet reports such as fuel consumption, vehicle location and maintenance records. Collaboration with other departments like Finance and IT will be critical to achieve this ambitious goal. In addition, a depreciation plan followed by a disposal policy will guide the organization leadership on decisions such as disposal options, replacement or fleet replacement.

2. Warehouse and Asset management

Warehouse and assets constitute the main location of PIH-IMB non-financial resources including non-medical goods and equipment as well as medical equipment and drugs. Close to 30% of PIH-IMB funds passes through the supply chain and transition for some days before delivery to the last beneficiary. Much as PIH-IMB is committed to achieve the maximization of value for patients through keeping efficient, effectiveness and economic transactions at the procurement level, the operations function is also committed to be driven by the same principles as far as storage, transport and distribution is concerned. Reliable electronic systems, and IT applications will be researched, acquired and utilized to maintain a high level of quality and efficiency. Stock and assets management software will aid the management team in the daily management of these resources, reporting and provision of management data to guide any leadership decision. Collaboration with the PIH-IMB IT department and medical informatics, will be critical to achieve efficiency and high quality of warehouse and asset management at PIH-IMB. To maximize the benefit of good systems put in place, the function will also focus on capacity building of the logistics support team and the development of guiding policies and procedures. In the next 12 months, a logistic policy will be developed, discussed, approved and passed to guide the general management of the warehouse and assets and serve as the basis for the internal control environment.

3. General Administration

The PIH-IMB mission of providing health care delivery to the poor and it strategic choice to be community based in rural settings implies the involvement of a diversity of health care professionals from the different corners of the world. Through its administration unit, the operation function will continue to provide administrative and legal service to PIH-IMB staff both expatriate and local as well as interns. The unit will ensure it monitors all changes in laws and regulations, serves as the advisor to ensure PIH-IMB staff are legally and administratively compliant thus mitigating related risks. Another area of focus for the unit will be the coordination and administration of external service providers like cleaning and security.

4. Community Cooperatives

Through its vision, PIH-IMB took responsibility and committed itself to improving economic empowerment of the community where it operates as a strategy of tackling root causes of poor health. These communities include associations and cooperatives of former patients,

whose lives were saved thanks to PIH-IMB clinical programs but whose lives remain exposed to dangers and risks of diseases because of various factors such as poverty, hunger, and ignorance. PIH-IMB conviction and sensibility to poverty as a root cause of disease and its effort to eradicate poverty in all its forms, calls for a deliberate and strategic action that provide these cooperatives with preferential options in economic empowerment.

Across the 3 PIH-IMB supported districts, there are more than 200 people in different cooperatives providing a range of services to PIH-IMB, such as cleaning, cooking, security, tailoring, carpentry and welding. Their health conditions and vulnerability requires a preferential option for them in building their economic capacity and employability. For the next 5 years, PIH-IMB will continue to build their capacity and seek opportunities for them especially in their area of expertise, providing them with an opportunity to execute some small tenders and engage them in other community activities that are supported by PIH-IMB but also advocating for them with other stakeholders to grow their businesses.

5. Patient welfare

A patient centered approach will continue to guide PIH-IMB interventions to ensure that patients visiting PIH-IMB supported hospitals are receiving holistic support including medical treatment, social and psychological support, as well as nutrition. For the last five years, PIH-IMB has supported hospitals in providing 3 daily meals to an average of 350 admitted patients. This practice has improved health outcome of these patients especially those under NCDi treatment and HIV.. Most of the patients are generally coming from the poorest families, which have been already burdened by disease thus in need of special feeding that will improve their health and body readiness to respond to their treatment. PIH-IMB will support hospital efforts to put in place systems and finance capacity to meet this need and operations will continue supporting in facilitating its related logistics, including food distribution.

SUB-GOAL 3: To improve the availability of quality health infrastructure that comply with MOH and international standards and norms at PIH-IMB supported health facilities by the year 2021.

Health infrastructure is one of the priority areas of the GOR through MOH . The health sector strategic plan (HSSP III: 2013-2018) set goals of achieving adequate infrastructure in health facilities based on norms and standards and establishing an effective maintenance workshop at district hospitals. The GOR has made a tremendous progress in achieving the target of ensuring health center availability at each sector and a district hospital for each district of Rwanda. In 3 PIH-IMB supported districts, the logical distribution of health facilities has been nearly achieved thanks to the collaboration of PIH-IMB, GOR and other stakeholders. For the last 5 years, PIH-IMB has significantly contributed to the construction of new health centers and health posts, extension and rehabilitation of district hospitals, and maintenance of these health infrastructure. Like in other parts of the country, the remaining challenge is ensuring geographical equity and distribution of health facilities to ensure no people are walking more than 1 hour to reach the nearest health facility.

For the next 5 years, PIH-IMB will continue collaborating with MOH, district leadership and hospital leadership to improve access and availability of quality health infrastructure. Efforts will be put in place to ensure all health facilities in PIH-IMB catchment areas have the basic required infrastructure to provide quality health care in priority services like maternal and child health, emergency surgery etc. PIH-IMB will continue to mobilize and provide support to ensure comprehensive facilities are available including IT infrastructure, medical equipment, referral infrastructure networks and availability of maintenance services and will also support needed trainings for the technical team. For efficiency purpose, PIH-IMB will always balance the need to use its internal human resources and technical capacity, and outsource the external services to ensure the projects are delivered at a high quality. There is need to build the internal technical capacity of the infrastructure team, expanding the number and technical expertise and provision of needed technological equipment and software. Through its operational function, PIH-IMB will strive to ensure quality health infrastructure are developed and well maintained to serve as the back bone of the provision of quality health care to patients.

SUB-GOAL 4: To improve the operations team and provide continuous skills development

Achieving the above mentioned goals and related interventions requires a highly competent and committed work force. The operations program being relatively new will require continuous development to build, grow and retain the team. Operations will work closely with HR and entire PIH-IMB leadership to commit the needed budget and undertake capacity building initiatives. Existing programs like staff development in HR, DMET and external opportunities of training, workshops will be fully utilized. On the job training done by fellow colleagues from other PIH-IMB departments like M&E, Finance, HR and Grants will also serve as a source of knowledge.

All these efforts will complement personal and individual self-training through available resources through internet and other open public training resources that the team can easily tap into. Operations leadership will also play a key role in providing a day-to-day mentorship, coaching and technical guidance to the team. Performance management systems especially the planning and coaching part will also significantly contribute to the overall skills development and ensure there is a desired alignment between staff personal objectives and organizational objectives. The overall PIH-IMB leadership will play a significant role in ensuring the PIH-IMB staff in general and operations team in particular have a conducive working environment needed for staff retention, stability and productivity.

Goal 5: Establishment and strengthening of the External Affairs Department

The realization of our vision – “thriving communities of healthy, happy and productive people, where social justice and universal quality health services are available to all” in a sustainable manner, is the work of many people and partners. Achieving this vision depends on sound partnerships with the government of Rwanda first and foremost, but also with supporters at all levels as well as international and national organizations, like-minded non-governmental organizations, civil society and the private sector. Key players include our own staff and our beneficiaries. All of these stakeholders need to understand and buy into the vision of the organization and their role in contributing to its

accomplishment. The external affairs function will ensure that there is proper engagement of partners, that there is appropriate sharing of information and that there is a good communication strategy and tools to enable us function from a common understanding of PIH-IMB.

The sub-goals below will allow us to broaden our partnership base and increase our fundraising ability locally:

SUB-GOAL 1: Engage, partner, and collaborate within Rwanda, across the region and globally by building frequent, targeted, and transparent communication tools to build an effective partnership to accomplish this strategic plan including efficiently generating resources to support growing programs;

This ambitious strategy will require that PIH-IMB brings together a solid national and international partnership that is committed to the ideals and goals expressed in this strategic plan. The strategy will require partnerships with strong technical skills and cutting edge knowledge and technologies. It will also require significant amounts of funding. In order to ensure that these are in place the external affairs department will work across the organization to collect and project all of the work and ambitions that PIH-IMB has expressed in this strategy and the ongoing work that PIH-IMB do.

Over the next years, PIH-IMB will work to develop a comprehensive communication strategy with will serve the external audience as well as the internal audience. We will work in collaboration with Rwandan and regional media houses to strengthen our relationships and ensure maximum visibility of our programs and beneficiaries. Specifically PIH-IMB will aim to do the following:-

- Promotion of an ongoing positive image and brand of the organization to external and internal stakeholders, and by so doing, increase opportunities for funding and partnership with like-minded organization.
- Creation of platforms to improve internal and external communication (Website, Social Media, newsletters) visibility in local and international media in order to strengthen our relationship with existing Rwandan and global partners;.
- Development of communication materials for all stakeholders, including program one-page descriptions and briefing documents describing our work as well as blogs of patients stories.
- Develop policy briefs to the various ministries in the GOR based on our experience and evidence.
- Increase accountability to donors through provision of annual and quarterly organizational reports.

SUB-GOAL 2: Identification and development of partnerships with like-minded organization engaging in similar mission as well as the private sector.

PIH-IMB has demonstrated that it can engage with international organizations, corporations, foundations and individuals to generate cash and non-cash resources for its programs and contribute to the budget. PIH-IMB will continue to join development partners in Rwanda and abroad towards the consolidation of funding streams to raise money together.

The untapped resources in Rwanda relates mainly to private-sector partnership and to individual fundraising. Given the changes in the global context, including the economic situation, and the increasing role of the private sector in achieving sustainable development, our strategy seeks to establish and expand the support received from the private sector with a view to raising resources and developing capacity, in line with PIH-IMB's goals and priorities.

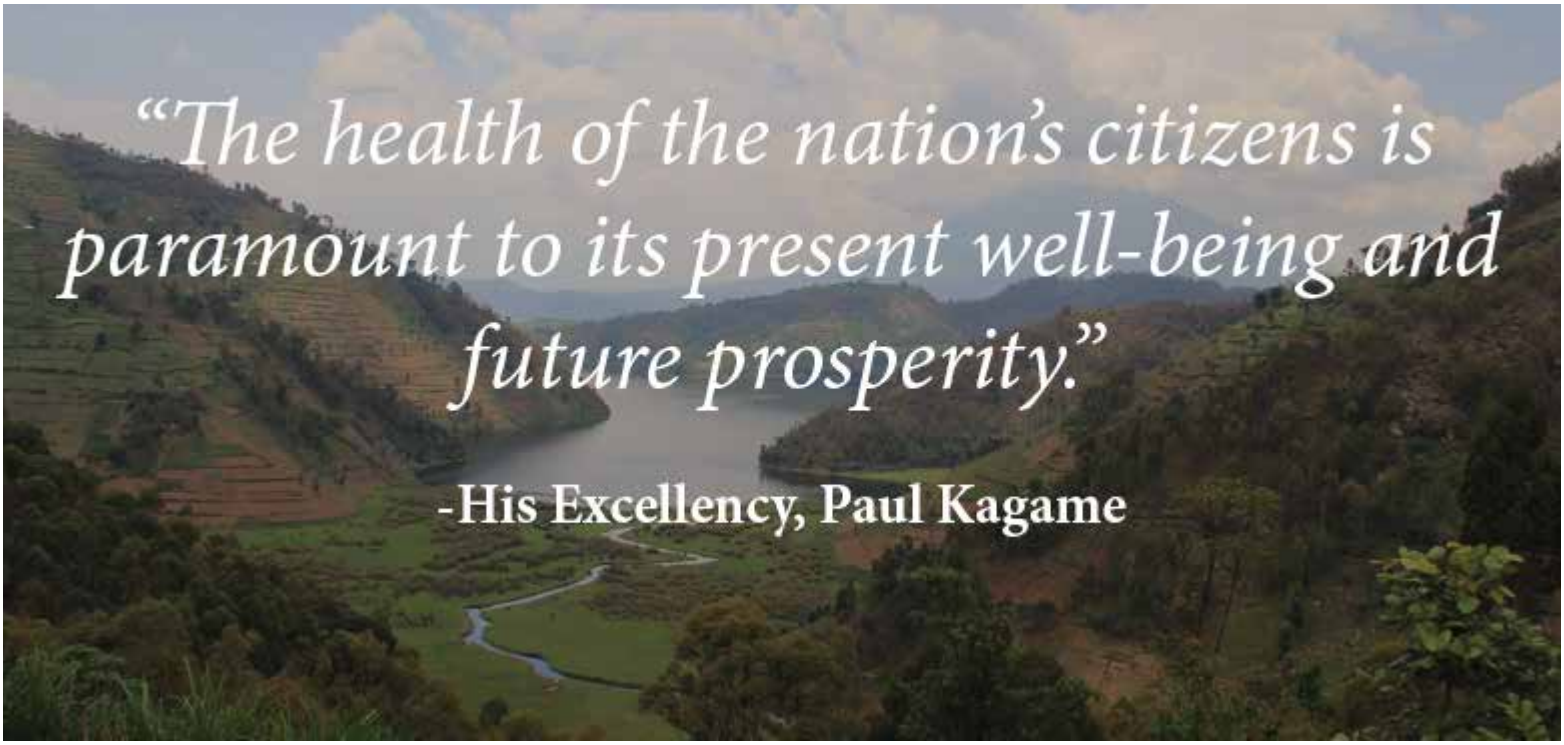
SUB-GOAL 3: Identification and development of partnerships that deliver knowledge and skills that enhance PIH-IMB's ability to achieve its strategic objectives.

PIH-IMB is appreciated in Rwanda for pioneering innovation in healthcare in Rwanda. PIH-IMB will seek to identify and develop partnerships that deliver complementary knowledge, skills and capacities to enhance PIH-IMB's ability to maintain momentum in the innovations.

Historically, the Global Health Development Partnership has provided the platform for partnership on knowledge and skills; PIH-IMB will continue to grow this platform and engage other institutions and universities to gain, but also to share knowledge of the organization's experience over the years.

SUB-GOAL 4 : Stewardship of visitors, partners and current and potential donors.

PIH-IMB is an important global site to showcase PIH-IMB's work to visitors and donors as well as to share strategic priorities for future funding and cultivation of new donors. PIH-IMB sites are also important sites for visitors around the world to see PIH-IMB programs in action especially innovative programs like oncology and mental health. PIH-IMB will reinvigorate its stewardship strategy to ensure all visitors, current donors, and potential donors are inspired and leave PIH-IMB sites with a desire to become a partner in solving the challenges that Rwanda faces.



Conclusion

This strategic plan is ambitious but achievable and reflects the common objectives of the people of Rwanda, the Government of Rwanda and the strategic aspirations of PIH-IMB. We have articulated in great detail how we will work with the Government of Rwanda and all of our partners to achieve these ambitions over the next 5 years. A key tool to tracking our achievements and correcting course as we progress will be the utilization of a Logical Framework or log-frame found in in Annex --- to this strategic plan This provides for a detailed SMART planning and monitoring tool for all programs and projects, and will be periodically updated throughout implementation as we receive feedback from the measured results and the changing context of the environment.

PIH-IMB continues to work with the Government of Rwanda and all its partners in the spirit of a true humble partnership centered on serving the people and patients of Rwanda while helping to build the systems that will ensure sustainability of all that we do and the full empowerment of the Government of Rwanda and its citizens to take full ownership and guidance of this strategy.

Annex:

Logical Framework