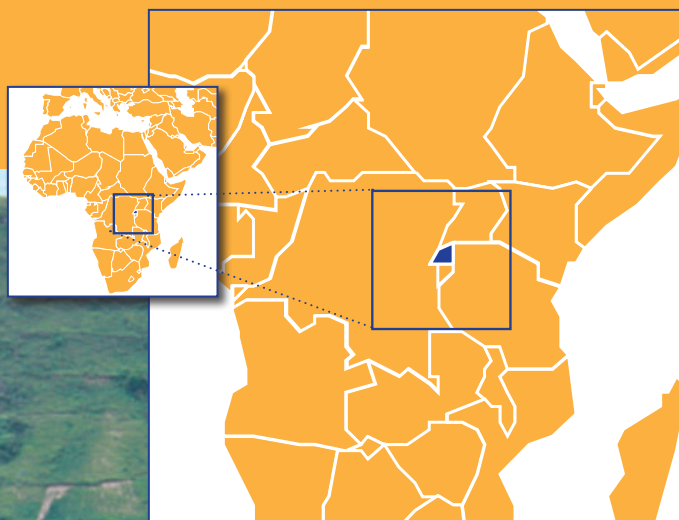


IPIHD
Case Study
#101



One Family Health Rwanda: Achievements and Challenges 2012



International Partnership *for* Innovative Healthcare Delivery

©2013 IPIHD. All rights reserved worldwide.

Liz Charles, Jeffrey Moe, and Richard Bartlett

Published by the International Partnership for Innovative Healthcare Delivery
Durham, NC (USA)

Cover image courtesy Duke Global Health Institute, www.globalhealth.duke.edu.

Executive Summary

One Family Health (OFH) operates a franchise network of health posts in urban, peri-urban, and rural Rwanda. The health posts operate as entry-level clinics in the formal public healthcare sector and provide care for common conditions such as malaria and diarrhea. The result is an increase in access to basic healthcare and a concomitant reduction in cases referred to the comprehensive community health centers, increasing their capacity to treat more acute cases. The vision is to establish 500 posts by 2018 supported through a partnership between OFH and the Rwandan Ministry of Health, with GlaxoSmithKline providing loan financing to OFH to establish and manage the OFH network and Ecobank providing loan financing to the franchisees.

Each post is run by an experienced nurse given access to financing and training in business, post operations, and clinical skills. The franchise approach allows the nurse operator to earn a living operating a small business while increasing access to essential medicines and basic healthcare for underserved communities. After a short grace period, the posts begin paying back the loans and operating on a self-sustaining basis. The physical structures for the health posts are provided by the local communities. OFH posts can accept cash and reimbursements through Rwanda's community-based health insurance scheme, the Mutuelle de Sante, which covers approximately 90% of the population.

OFH is deploying a hub-and-spoke management system and expanding its supply chain to service a growing network of posts. The posts have electronic record keeping, inventory/supply chain, and performance monitoring capabilities provided through an Internet-based data management system. This system also links into Rwanda's national electronic health record system, which allows the Ministry of Health to monitor disease states of particular national interest (e.g., malaria) and areas of national focus (Vision 2020 goals) that are related to Millennium Development Goals 4 (reduce child mortality), 5 (improve maternal health), and 6 (combat HIV/AIDS, malaria, and other diseases). As an innovator in the International Partnership for Innovative Healthcare Delivery (IPIHD) Network, OFH is capturing evidence that will increase in sophistication along a developmental pathway, allowing a future evaluation of the performance of the OFH post network, including an assessment of health status outcomes for the populations they serve.



OFH faces broad challenges as it works to meet its aggressive scale up plan. These include increasing consistency in quality of services and reaching “break even” between revenue and expenses for a quickly expanding network of posts operated by nurses with widely varying aptitudes for business operations. Creating and maintaining a reliable distribution supply chain as the number and geographical dispersion of the posts increase is also a formidable hurdle. The challenges can be organized into five categories:

1. Human capital, education, and training
2. Supply chain management
3. Revenue management
4. Performance and evaluation
5. Public-private partnership collaboration and local expectations

OFH builds upon the growing experience of franchise drug shop networks in Africa and represents a unique combination of public-private partnership with formal linkages to the Ministry of Health, as well as a rapidly expanding franchise network. Fully realized, a national network of OFH health posts will benefit communities, patients, and franchisee-nurses and realize Rwanda’s vision to create a coordinated entry point to the health care system.

Acronyms

ADDOs	Accredited Drug Dispensing Outlets
CAMERWA	Consumables and Equipment Central Procurement Agency
CFW	Child and Family Wellness
GSK	GlaxoSmithKline
HRH	Human Resources for Health Program
HSH	HealthStore Holdings
HSSP	Health Sector Strategic Plan
IFC	International Finance Corporation
IPIHD	International Partnership for Innovative Healthcare Delivery
MOH	Ministry of Health
NGO	Non-governmental organization
OFH	One Family Health
PPP	Public-private partnership

Background

Healthcare Delivery Innovations in Africa

The health systems across Sub-Saharan Africa face significant challenges. In 2006, The International Finance Corporation (IFC) starkly described health care in Africa as “the worst in the world” and suggested that “\$25 to 30 billion in new investment will be needed in health care assets” over the decade from 2006 to 2015¹. Such a dire assessment and daunting forecast requires innovative health care financing and delivery solutions. Innovation is occurring through novel private sector approaches, which according to one study included “social marketing, cross-subsidization, high volume/low cost models and process re-engineering.”²

One particularly robust innovation over the past two decades is the creation of drug shops in both urban and hard-to-reach rural locations, frequently through franchising schemes. These models often draw upon financing approaches that bring together the public and private sectors through public-private partnerships (PPPs). Public-private investment partnerships are a special form of PPPs that “leverage private sector expertise and investment to serve public policy goals - specifically the provision of high quality, affordable preventive and curative care to all citizens.”³ Much work has been done through statutory and regulatory reforms in African countries, including Kenya and Rwanda, to allow and encourage such partnerships.

Medical consultations, diagnoses, and associated medications for common health concerns are sold through small shops, often under a franchise ownership arrangement, in many areas of East and West Africa. Such chains currently operate in Cameroon, Eritrea, Ghana, Kenya, Nigeria, Tanzania, and Uganda. Formal pharmacies are limited in number even in population centers and are especially scarce in rural locations. Drug shops, which frequently also sell other household goods, serve as an alternative and fill the gap created by the lack of formal pharmacies. The Accredited Drug Dispensing Outlets (ADDOs) initiative in Tanzania has demonstrated that a network of individually owned drug shops can grow in number, penetrate hard-to-reach regions, and displace shops with lower quality services and products. However, the franchise drug shop approach, while growing in low-income and emerging markets, has raised concerns among observers regarding uneven quality of product and service offerings, poor training of franchise owners, non-compliance with pharmaceutical regulations, and overall concern that profit motivations overpower commitments to quality. Studies have suggested that policies and practices can be developed to address these concerns, including a call for public-private collaborations.⁴

1 “The Business of Health in Africa: Partnering with the Private Sector to Improve People’s Lives,” International Finance Corporation, accessed March 23, 2013, http://www.unido.org/fileadmin/user_media/Services/PSD/BEP/IFC_HealthinAfrica_Final.pdf.

2 Onil Bhattacharyya, Sara Khor, Anita McGahan, David Dunne, Abdalla S. Daar, Peter A. Singer, “Innovative Health Service Delivery Models in Low and Middle Income Countries - What Can We Learn from the Private Sector?” *Health Research Policy and Systems* 8, no. 1 (2010): 24-34.

3 “Public Private Investment Partnerships,” The Global Health Group, UCSF, last modified August 2009, <http://globalhealthsciences.ucsf.edu/sites/default/files/content/ghg/hsi-ppip-overview.pdf>.

4 Catherine Goodman, S. Patrick Kachur, Salim Abdulla, Peter Bloland, and Anne Mills, “Drug Shop Regulation and Malaria Treatment in Tanzania - Why Do Shops Break the Rules, and Does It Matter?” *Health Policy and*

Like many comprehensive reforms or even smaller scale innovations, drug franchise shops face the “iron triangle” of competing health care objectives: balancing cost, quality, and access. It is difficult to achieve any two outcomes among the three in the triangle; meeting all three has proven to be difficult across a variety of innovations. For example, ADDO is a replacement for the severe shortcomings of the duka la dawa baridi drug shops found in urban and peri-urban Tanzania. Creating a network of shops offering affordable medicines in urban and hard-to-reach locations has dramatically improved outcomes on two of the iron triangle axes: cost and access. While the initiative also hopes to improve quality as compared with its predecessor, this has proven more difficult to accomplish while maintaining cost and access achievements. Evaluation reports continue to find gaps: staff without proper certifications and training, stocking of unapproved medicines, and overall lack of regulatory compliance.⁵

Recent Political and Health Care History in Rwanda

Since taking control in 1994, President Paul Kagame began shaping Rwanda's future, which included addressing significant healthcare gaps, historically endemic to the country and exacerbated by the civil turmoil in the early 1990s leading to Kagame's takeover. Kagame sponsored a national consultative process (1997-2000) that resulted in a comprehensive national development plan titled “Rwanda Vision 2020,”⁶ a document that serves as a framework “to transform [Rwanda] into a middle-income nation in which Rwandans are healthier, educated and generally more prosperous.”⁷

Over the past decade, Rwanda has made progress towards fulfilling this vision while working to meet the Millennium Development Goals, which are incorporated into two key health planning documents: the Health Sector Strategic Plan (HSSP) and its 2008 revision, HSSP-II. The HSSP guides the action of the Rwandan Ministry of Health (MOH) and acts as a framework for reforms and intervention. The 2008 revision (HSSP-II) places increased emphasis on family planning, non-communicable diseases, prevention, and human capital improvements.

Administratively, Rwanda's five provinces are divided into 30 districts, and each district is in turn divided into sectors (416 total sectors across the country). Each sector is further divided into local units called cells (roughly equivalent to villages). Overall

The State of Health in Rwanda

Drawing from the World Bank's 2011 data, Rwanda's population is 11.6 million, the majority of whom (81%) live in rural areas. Four percent of rural homes have electricity, compared to 45% of urban residences. The GNI per capita is \$570, the average life expectancy at birth is 58 years, the child mortality rate is 92 per 1,000 live births, HIV prevalence is nearly 3%, and 50% of the population has access to sanitation facilities. (Compare with the US, where the GNI per capita is \$48,620, life expectancy is 78 years, the child mortality rate is 8 per 1,000, HIV prevalence is 0.6%, and 100% of the population has access to sanitization facilities.) The total Rwandan expenditure on health as a percentage of total public expenditure is 10% (compared with 18% in the US, using 2010 data), and the total expenditure on health per capita is \$56 (compared with \$8,362 in the US, 2010 data).

5 “Increasing Access to Essential Medicines through the Private Sector: The ADDO Program,” Management Sciences for Health, accessed March 23, 2013, <http://www.msh.org/projects/rpplus/WhereWeWork/Africa/ADDOS.cfm>.

6 “Rwanda Vision 2020,” Republic of Rwanda, accessed March 23, 2013, http://www.minecofin.gov.rw/webfm_send/1700.

7 “Turning Vision 2020 Into Reality, From Recovery to Sustainable Development, National Human Development Project, Rwanda, 2007,” United Nations Development Programme, accessed March 23, 2013, http://hdr.undp.org/en/reports/national/africa/rwanda/RWANDA_2007_en.pdf.

coordination of public services is provided at the district level, and sectors are responsible for delivery. Rwanda is currently implementing a national decentralization process designed to increase engagement in and authority of local governments.

Human Resources for Health

The World Health Organization considers Rwanda to be one of 57 countries worldwide with a critical shortage of health workers. In 2011, 625 physicians and 8,513 nurses and midwives served the entire country. While the number of health workers has been increasing in recent years, the 2011 ratio of 1 doctor per 17,150 people (5.8 per 100,000) is still well below the WHO suggested minimum and the Vision 2020 goal of 10 medical doctors per 100,000.^a

Rwanda's Human Resources for Health (HRH) Program aims to address these concerns by improving "the quality, skills, and capacity of the Rwandan health workforce so it is positioned to sustainably and comprehensively meet the country's healthcare needs. The HRH Program will train over 550 medical specialists, upgrade the skills of over 5000 nurses and introduce formalized training in health management and dentistry."^b This substantial scale-up will be achieved through an unprecedented collaboration between 19 of the top US educational institutions and the Rwandan MOH, with funding supplied by the US government and the Clinton Health Access Initiative.

Through the HRH Program, the government of Rwanda aims to upgrade infrastructure and equipment and improve teaching, research, and curriculum development. Each US university will contribute full-time faculty to help build internal capacity and self-sufficiency within an eight-year time frame, at the end of which US faculty and financial assistance will be phased out. The Rwandan government will directly oversee the HRH program with the goal of minimizing inefficiency, improving accountability, and streamlining coordination.

The hope is that central oversight will reduce overhead costs, standardize contracts, and curtail paperwork. The Rwandan government is to supply medical licensure, malpractice insurance, and a housing allowance, while the US university partners recruit and employ professionals for a minimum one-year residency in Rwanda.

a Human Resources for Health" text box is not provided. At the end of the first paragraph in that text box, there should be a footnote with the following reference: "Rwanda Health Statistics Booklet 2011," Rwanda Ministry of Health, last modified August 2012, http://moh.gov.rw/english/wp-content/uploads/2012/05/MOH_Annual_booklet-2011.pdf.

b Human Resources for Health Program, Republic of Rwanda: Program Overview," accessed March 23, 2013, <http://hrhconsortium.moh.gov.rw/welcome-for-the-minister/program-overview/>.

A recent assessment of Rwanda's progress on HSSP-II⁸ highlighted the need to build decentralized resources, especially in under-served areas, as a continuing need of the health system. Like many low-income countries, health system resources are centralized in urban areas. Where clinics and services are available in peri-urban and rural areas, there is high patient demand. As HSSP-III is initiated in 2013, priority has been placed on relieving some of the high demand on the existing health system clinics and expanding services in heretofore underserved areas. Rwanda also suffers from a shortage of healthcare workers. There are 0.2 physicians and 4.5 nurses and midwives per 10,000 people in Rwanda, far below the regional average.⁹ The vast majority of health workers, including physicians, nurses, and midwives, are concentrated in and around Kigali, leading to significant inequality in access between rural and urban populations.¹⁰ Over 80% of the population lives in rural areas, many of which are beyond a three-hour walk to a basic healthcare facility.

8 "Health in Rwanda Is Improving! Mid Term Review (MTR) of the Rwanda Second Health Sector Strategic Plan (HSSPII, July 2009 - June 2012)," International Health Partnership, accessed March 23, 2013, http://www.internationalhealthpartnership.net/fileadmin/uploads/ihp/Documents/Key_Issues/NHP___JANS/Rwanda_MTR_JANS-2011_FINAL.pdf.

9 "Rwanda: Country Profile," World Health Organization, last modified May 2012, <http://www.who.int/gho/countries/rwa.pdf>.

10 Pieter Serneels, Jose G. Montalvo, Gunilla Pettersson, Tomas Lievens, Jean Damascene Butera, and Akilu Kidanu, "Who Wants to Work in a Rural Health Post? The Role of Intrinsic Motivation, Rural Background and Faith-Based Institutions in Ethiopia and Rwanda," *Bulletin of the World Health Organization* 88, no. 5 (2010): 342-349. doi: 10.2471/BLT.09.072728.

The One Family Health Model

In 1997, Scott Hillstrom founded The HealthStore Foundation as a non-profit organization with the mission to “improve access to essential drugs, basic healthcare, and prevention services for children and families in the developing world using business models that maintain standards, are geometrically scalable, and achieve economies of scale.”¹¹ Under the auspices of HealthStore, Hillstrom developed the Child and Family Wellness Shops (CFW) brand in Kenya, a network of for-profit, franchise-owned health clinics and drug outlets. In 2008, Gunther Faber joined as the CEO of the HealthStore Foundation and the CFW brand. After partnering with a Kenyan non-profit, the Sustainable Healthcare Foundation (SHF), this hybrid profit/non-profit model prospered, empowering women and communities and delivering basic life-saving care in Kenya.

In April 2012, Faber and Dr. Agnes Binagwaho, the new Rwandan Minister of Health, concluded discussions to develop a franchise network of nurse-run clinics in Rwanda, based on the HealthStores model but integrated into the government’s public health strategy to achieve their Vision 2020 goals. The franchise model was launched in Rwanda under the management of One Family Health and led by Faber, though each individual clinic is branded as a CFW health post.

Similar to CFW Shops in Kenya, the OFH CFW health posts in Rwanda operate as a franchise network. Each post is run by an experienced nurse and provides an entry point into the Rwandan public health system. The franchise model gives nurse-operators access to financing and training in financial management, operations, and logistics, allowing the franchisee to earn a living while increasing access to essential medicines and basic healthcare in local communities. The MOH accepts national health insurance (Mutuelle de Sante) claims made by patients through the health posts.

The approach is organized as a PPP bringing together the OFH Foundation, GlaxoSmith Kline (GSK), Ecobank, HealthStore Holdings (HSH) and the Rwandan MOH. In a press release, the partner members jointly committed to establishing 240 health posts over the next three years (2012-2015) reaching a total of 500 by 2018. In the release, GSK committed £900,000 (\$1.4 million) to HSH to finance an initial 60 health posts. Under the terms of the partnership, GSK will provide £1.8 million (\$2.8 million) in new funding as an interest-free loan to finance an additional 180 health posts. The MOH committed to working with local communities to provide the physical structures for OFH health posts. Ecobank committed to providing loans at affordable rates to finance local franchisee start-up costs. Both GSK and Ecobank will fund continued nurse training and development. HSH has agreed to provide ongoing training, mentoring, and expertise to support the nurse franchisees.



11 “Child and Family Wellness Shops,” The Healthstore Foundation, accessed March 23, 2013, <http://www.cfwsshops.org>.

Nurse Franchisees

OFH local delivery of products and services begins with the recruitment and training of a nurse franchisee. Rwanda, like much of Africa, suffers from a healthcare worker shortage. To avoid draining the public health system of its most experienced and well-trained nurses, OFH agreed in the PPP agreement to restrict their franchisee hiring to “A2” (entry-level) nurses. With three years of specialized secondary school training, these nurses are taught a broad spectrum of skills, including wound suturing and insertion of family planning devices (such as IUDs and implants), and are given prescribing authority over a variety of medications. However, OFH has discovered a broad spectrum of clinical abilities among A2 nurses.

Variability in diagnosis, assessment, and treatment was partly overcome by limiting services and products to address only the most common, preventable, and treatable diseases. The lean design ensures ease of clinical diagnosis, streamlines the use of protocols, simplifies drug regulation, and leads to more consistent quality. Standardization of clinical practice is supported through the use of an electronic data management platform, which guides the nurse through the patient visit and also provides tools for clinic management.

Nurses are recruited through local newspaper ads, word of mouth, postings on job boards at district offices, and local administrator referrals. The application process includes submission of a CV and letter of intent. Because the postal system is not developed, most applications are hand delivered to the main office or arrive via a representative with regular OFH contact (e.g., current franchisees or government representatives). Applications are screened according to educational background, exam scores, personal references, and work history. As discussed earlier, only the lowest-level nurses are eligible to become franchisees, and applications of A1 or A0 level nurses are rejected, per the PPP agreement. Screened applicants are kept in a potential pool of candidates. As sites are identified, the pre-screened nurses are notified through SMS text messages. They are invited to visit the sites and send notification of interest to the training and development manager.

Interested nurses are interviewed and given both oral and written examinations to assess clinical knowledge as well as inter-personal aptitude. Nurses must also show proof of down payment (bank slip indicating a \$500 deposit to an OFH account) in order to secure a CFW health post site. Orientation for new franchisees is held once a cohort of 5 to 10 is established. The nurses attend two weeks of orientation. The first week includes one day of business and financial training, one day of technical and logistical training, and three days of nursing and compliance training from the corresponding managing director. Franchisees are trained in record keeping, diagnosing target conditions, and accurately prescribing medicines. In the second week, nurses are placed in existing clinics to shadow and learn from current franchisees. Nurses also receive three manuals:

Operations Manual: OFH policies and procedures for health services, operations, drug management, financial business management, staff management, training and education, marketing, and leveraging the advantages of a franchise system.

Treatment Guidelines: Reference guide for diagnosing and treating the most common ailments seen at CFW health posts in Rwanda.

Essential Medications: Approved drugs and instructions for use, drug descriptions, indications, common dosages, side effects, prohibitions (e.g., non-combination artemisinin monotherapy), and other relevant notes.

The franchise agreement, signed during the orientation process, includes an obligation to protect the CFW health post brand through strict compliance with the operating standards, to use only OFH-approved products, to ensure employees are properly trained and clinics are appropriately staffed, and to promote the clinic according to HSH guidelines.

Franchisee Continuing Education and Quality Control

Standardized continuing education and quality checks are critical to OFH's effort to ensure consistent and high quality care across the network of health posts. OFH distributes a regular newsletter to franchisees with training help on issues such as proper medication use, disease treatment protocols, and business management and inventory tips.

Each franchisee is also expected to attend a minimum of five days of OFH-sponsored training each year. These events, usually two-day workshops, are held quarterly. Using the conference facilities of local hotels, nurses gather for presentations by the management team or external trainers on topics including policy updates, review of problem areas, electronic data system changes, the reimbursement process, rapid malaria quality control testing, and financial skills (how to correctly build the profit and loss statement, manage inventory, keep a business bank account, etc.). In addition to the training content, the nurses get the opportunity to get to know each other and enjoy the company of other franchisees.

In addition to formal continuing education events, OFH hosts an annual conference, mainly for the opportunity to build collegiality and recognize excellence among franchisees. At this event, the nurse franchisees elect one of their peers to serve as the representative to management (a one-year term). All concerns, complaints, or questions are filed through this representative, who acts as the gatekeeper and mouthpiece, delivering information to and disseminating information from management.

Once settled in their clinic, the franchisee can expect regular visits from the training and development manager, who visits new clinics every month for the first three months and then quarterly thereafter. The visits, which may be announced or unannounced, are an opportunity for the manager to assess compliance with a list of pre-selected policies taken from the Operations Manual: correct documentation, proper handling of dirtied equipment, and general appearance and cleanliness of the clinic. After walking through the clinic together, the training and development manager sits down with each nurse, allowing the franchisee to self-grade his or her performance, answering questions, and pointing out areas of concern. Areas that are not up to standard are noted and checked during the next compliance review. Continued failure to meet standards triggers a corrective action plan to raise performance to the standard. This obligation to maintain standards and corrective intervention is agreed upon by the nurse/owner in the franchise agreement.

Services Offered

By offering a limited choice of services and products (aimed at the most common, preventable, and treatable diseases), OFH creates a lean design that promotes ease of clinical diagnosis, streamlines the use of protocols, simplifies drug regulation, and leads to more consistent quality across providers and clinics. CFW health posts treat 70% of the most common conditions that cause 40% of preventable deaths in the local communities. For example, malaria, diarrhea in infants and children, and malnutrition are among the common conditions that can be diagnosed and treated at the posts. Maintaining tight bounds on the scope of practice also aids in the monitoring of operations and processes.

Clinics are required (per the franchise agreement) to be open a minimum of six days a week from 8 a.m. to 5 p.m. Because electricity is not available in many locations and because the sun sets around 6 p.m., evening clinic hours are rarely implemented. Most franchisees employ a second nurse to allow for days off.

In the first year of operation, OFH has not asked the MOH for permission to provide laboratory services at the posts because of the additional compliance and regulatory burden. Only rapid screenings are performed (e.g., rapid malaria, rapid chlamydia, and rapid pregnancy diagnostics). This maintains a focus on providing the most basic and essential care and limits the knowledge necessary for provision of care by franchisees.

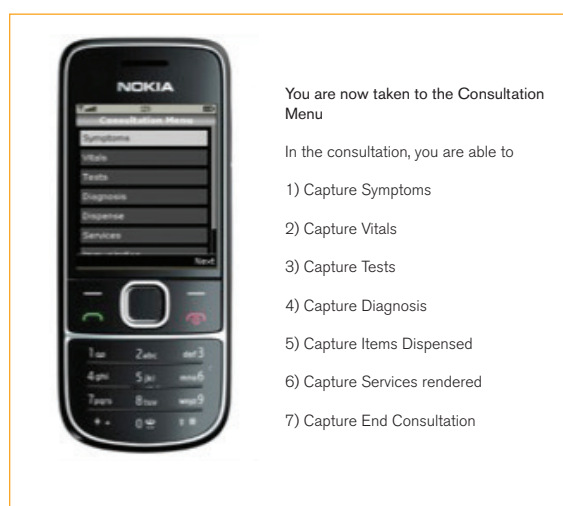
Electronic Health Record

OFH contracted with International Partnership for Innovative Healthcare Delivery (IPIHD) Network Innovator LifeQube, a South African software design firm (and division of the LifeSense Group), to design a disease

management and data collection platform that could be easily used by CFW post staff similar to projects they had designed in Namibia, Swaziland, and South Africa and modeled on Kaiser Permanente's integrated health system. This platform enables OFH franchisees to gather and send data to and from their clinics using simple and inexpensive mobile phones. The data management system is lightweight with cross-mobile program capabilities currently available on low-cost Nokia series 40 and android phones. The system is Internet-based and thereby eliminates the dependence on and costs associated with mobile operators SMS and USSD infrastructure.

The platform, which launched in 2011, assembles data entered by nurses into an electronic health record for each patient. Patients visiting the clinic for the first time present their Mutuelle insurance

cards. Their name and ID number are typed into the phone, and a picture is taken; vital signs, symptoms, and tests are entered, as are the diagnosis, batch numbers, and expiration dates of any medical items used or dispensed. Patients are assigned a health record number that, when entered during subsequent visits, retrieves their medical history and helps bypass the initial intake steps.



The system also allows real-time monitoring of each clinic's financial dynamics, drug utilization, stock control, and disease management and supports health insurance claims processing, with access to the national health care system (which is still under development). The system also generates detailed reports for government and donor use, includes medical savings account mechanisms and is flexible enough to interact with other systems to conduct pricing studies or trials in a closed network. To ensure data security, patient and user information is stored at a secure data center, not on the phones.

Rwanda's public sector is moving from a paper to an electronic medical record system. OFH's data platform feeds into the national system and allows continuity of care and sharing of health records at all levels of the health system.

Inventory and Logistics Management

At the end of each month, franchisees are required to complete a thorough stock count, which is reconciled with the electronic record. New orders are placed via phone using the electronic data platform and are based on average monthly usage and maintenance of an ideal safety stock equal to one month's supply. From headquarters, the logistics and technical managers are able to monitor clinics in real time. OFH uses the government's Consumables and Equipment Central Procurement Agency (CAMERWA) for customs clearance, storage and



distribution of supplies. If CAMERWA is unable to complete an order or if OFH obtains better pricing through the outside market, OFH can enter into a contract with an outside supplier, as long as that organization makes the item available to the government on similar terms.

When CAMERWA acts as the distributor, they dedicate a portion of their warehouse space to OFH clinics and oversee customs clearance of the supplies. CAMERWA will continue to distribute the supplies to its regional hubs where, once sufficient scale is reached, OFH technical representatives will complete the dissemination.

For items unavailable through CAMERWA, the company (at the time of this case report) uses two local suppliers. Supply chain integrity is an issue for pharmaceutical users across Africa, where regulatory and enforcement agencies are weak. The prevalence of substandard

and counterfeit drugs is a public health concern and results in treatment failures, increased resistance, and death. OFH is conferring with multi-national pharmaceutical companies to test their interest and capacity to tender for supply and distribution of medical drugs.

Currently, the logistics manager reviews the franchisees' orders, making sure the orders match demand planning forecasts to ensure in-stock availability and to prevent overstocking. It is anticipated that technical representatives will take over some of the inventory responsibilities currently handled by the logistics manager and be responsible for ensuring stock-outs do not occur. Once approved, the orders are combined and sourced from distributors. Lead time from the two private suppliers is a couple of days, while CAMERWA lead times are closer to two weeks. After

receipt, medication batch numbers, expiration dates, and costs are entered into the electronic data system. Invoices are created, and the manager sorts the medications by clinic before they are delivered (using a branded 4x4 pick-up truck with covered bed). Delivery to the clinics in and around Kigali is completed over a three-day period. Upon delivery, the nurse franchisee re-counts each medication, double checks batch numbers and expiration dates, and certifies receipt from the delivering agent. The order costs includes a 5% mark-up that goes to OFH and are deducted from the franchisee's next health insurance reimbursement payment.

Revenue and Financial Sustainability

CFW health post franchises operate on a for-profit basis and use a fee-for-service revenue model. Clinic revenue is primarily generated through claims processing by the national health insurance system Mutuelle de Sante, which covers approximately 90% of the population. For each visit, patients with Mutuelle de Sante insurance pay a small co-pay (200 RWF, or \$0.31 USD). Those without insurance pay the entire service fee (\$3 to \$6 USD) out

of pocket. Reimbursement rates for clinical services are based on the provider's skill level and are pre-determined by the MOH for different procedures, medications, and supplies. The OFH patient intake and service documentation procedure captures the needed claims information and organizes it by clinic and cell location. Each month, the claims, which consist of line-item accounts of each patient visit (name, health insurance number, diagnosis, treatment received, and reimbursement fee according to the pre-determined Mutuelle price list), are hand delivered in hard copy by the OFH central office accountant to the district offices.

District administrators distribute the claims to the appropriate sector, where Mutuelle representatives review each visit for accuracy of enrollment, treatment, and reimbursement prices. Disputations (less than 5% of claims) are directed to the OFH accountant, who investigates the challenged claims with the appropriate nurse franchisee or manager. Once claims are approved, notice is given to the district office and money is credited to the OFH account from each sector's bursar account. OFH then distributes the revenue to each franchisee. To simplify the procedure, LifeSense is currently creating a portal whereby the

National Health Insurance: Mutuelle de Sante

Instituted in 1999, Rwanda's community-based insurance program, the Mutuelle de Sante, reaches approximately 90% of the population. Autonomous organizations at the village and district levels pool financial risk (needs greater than \$5,000 USD are covered by the central government). Each citizen, depending on income level, is required to contribute between 2000 and 7000 RWF (\$3 to \$12 USD) per year and pay a 200 RWF (\$0.35 USD) co-pay upfront for each hospital or health center visit. Decisions, including those regarding who is too poor to contribute, are made through an elected village committee. Donor subsidies cover the yearly dues of those nominated for an exemption. Estimates suggest that 10 to 30% of the population have their fee waived and that administrative costs represent 5 to 8% of the total expenditure.

Though modest, the annual Mutuelle minimum insurance fee of \$3 USD is beyond the reach of many of the rural poor and is insufficient to fund the basic services (actual costs range from \$14-\$20 per person). Substantial government funding and donor contributions (about a 50/50 split) are necessary. The government's recent supplementation of Mutuelle with contributions from other insurance programs has helped improve the program's stability.



Mutuelle claims representatives can access the needed information directly through the electronic system in view-only mode.

Each month, the OFH accountant prepares a report of the previous month's expenses and creates a cash projection for the upcoming month. The in-country manager and finance director review this report before submitting it to the OFH Board of Directors for final approval.

OFH's model is designed to create financial sustainability, both for the franchise businesses and for the OFH management organization. OFH collects ongoing fees and product margins from each CFW health post. A 5% mark-up on drugs covers the cost incurred in ordering, sorting, and delivering the medications to each clinic. Franchisees pay royalty and marketing fees (as a percentage applied to clinic revenue) to support central office services for the network. OFH expects to break even at 300 health posts.

With a down payment of \$500, franchisees can seek additional financing from EcoBank for remaining start-up costs (typically \$5,500 to \$6,000) such as remodeling, furnishings, inventory, licenses, staff wages, and utilities. Monthly loan repayments range between \$85 and \$140 and are deducted directly from the insurance claim revenue distributed by OFH, along with the cost of drug and supply orders, OFH fees, and any cash advances made (a practice that is strongly discouraged). Failure to repay the loans results in a series of remedial actions that may result in loss of the franchisee's right to clinic ownership. All terms are stipulated in the loan agreement. The loan period is three years, which is projected to be an adequate period for the post to achieve financial stability. To reach profitability, clinics need to see approximately 15 patients per day, assuming average operating expenses and a typical distribution of patient needs and treatments provided.

OFH Management and Organizational Structure

In-country activities are overseen by a UK/USA-based board of directors (separately organized and recognized in each national jurisdiction), which includes the chief executive officer and chief operating officer, a consultant financial director, and an administrative assistant. OFH has also assembled a small in-country management team led by the in-country manager. Reporting to the manager are the accountant, technical manager, logistics manager, and training and development manager. The team also includes a consultant who reports to the accountant and technical representatives who report to the technical manager.

The health posts are managed through a hub-and-spoke design, whereby technical representatives form a layer of management between the central office and the franchisee, each overseeing approximately 20 health posts. The franchisees and technical representatives face the daunting challenges of inadequate roads and infrastructure, seasonal storms that can drastically affect the ease of delivery, and maintaining the stability of temperature-sensitive medical supplies. To help overcome these challenges, technical representatives distribute drugs and

supplies from the regional offices using motorbikes (with attached fiberglass box for medications) that can traverse hilly, undeveloped roads. Technical representatives direct the franchisee and assist him/her to complete compliance checks.

OFH is incorporated in the US as a non-profit with 501(c)(3) status, but in-market operations are under the auspices of low-profit limited liability (L3C) designation, a hybrid structure designed for low-profit social enterprises.

Community Engagement and Marketing

Marketing of the clinics is facilitated through integration with the public health system, affordable pricing, and a culture of community engagement in local political and social activities. Mandates from the highest levels of the MOH encourage local leaders to support the health posts as official entry points into the health system. Community health workers and the community health centers are both instructed to refer patients with less acute concerns to the OFH posts, while more critical cases are directed to the comprehensive clinics.

The arrival of a new CFW health post is welcomed as it increases proximity and affordability of care through acceptance of Mutuelle insurance. A patient co-pay of 200 RWF provides a nurse consultation and treatment if indicated. To access the same health services in, say, Butare or Gisenyi (larger cities in Southern and Western provinces respectively) would require a minimum of 500 RWF and many hours of walking from a rural location or the additional cost of a moto-taxi.

Rwanda is largely a walking culture. Outside the city centers, few cars or public transportation options are available. The limits on mobility create tight-knit communities where word travels quickly, and OFH has found that word-of-mouth referrals are a strong marketing tool. Communities across Rwanda meet on a weekly basis in traditional village meetings, the main forum for information sharing from government leaders. Additionally, on the last Saturday of the month, the larger sectors gather for a day of service called "Umuganda." After clearing bush, picking up litter, and digging trenches for several hours, the community gathers (one representative from each household by law must be present) to discuss issues affecting the larger population. Through both weekly village meetings and the larger monthly gatherings, people can access authorities to articulate their needs and voice opinions on various issues. Both of these events provide an opportunity for OFH franchisees to engage local leaders and stakeholders in the community, promote their services, build rapport, and provide health education.



Competition

Throughout Sub-Saharan Africa, including Rwanda, health care is provided through both public and private, not-for-profit, and for-profit organizations. In fact, the IFC has estimated that 50% of health care services are paid out-of-pocket by patients to non-government providers.¹²

Most for-profit health care providers in Rwanda target middle- to upper-income patients and therefore do not pose a threat to the OFH model. However, there are non-profit health care providers working in some communities. These providers must meet government regulations regarding the size and type of services offered and can offer highly subsidized or free care for some services making them a formidable competitor to OFH's offering. OFH does not place CFW health posts in communities that already have a similar provider to prevent duplication of services. As the distance from main urban centers increases, the availability of non-governmental organization (NGO) providers typically diminishes.

Traditional healers still have a moderately strong presence in Rwanda. Historically high costs of healthcare drove patients to those healers in the recent past. A social health insurance scheme and increasing experience with Western medicine, however, are leading to gains in patient demand for affordable clinic care rather than or in addition to traditional healers.

The PPP agreement enabled the government to stop expansion of their own health posts program as part of Vision 2020, thus allowing the MOH to divert scarce resources to other areas of need. The MOH is actively encouraging use of CFW health posts as the first point of care.

The next level of care after the CFW health post is a community health center. Nurses in the health post are expected to refer cases beyond their scope to these community centers. Community centers are managed by A1 nurses (three years of post-secondary training) and staffed with eight to ten A2 nurses, midwives, and several adjunct health workers. A doctor typically visits the community clinic on a weekly basis. The centers house a laboratory for more in-depth diagnosis and a refrigerator for storing cold chain medications (e.g., vaccines). The centers have a labor and delivery ward, as well as inpatient beds and the ability to monitor patients overnight. Community centers, which are overburdened and chronically understaffed, have welcomed OFH posts as the initial entry point for patients. The addition of health posts leads to a reported reduction in patient visits at community health centers, resulting in more manageable levels of patient demand.

Through partnership with the Global Fund, the community clinics offer family planning and vaccination services free of charge. The needed materials are donated, and the nurses administering the services are given financial incentives for their implementation and use. These bonuses help retain and motivate nurses working in the public health service. OFH health posts are not authorized to receive the same benefits. To ensure that family planning services are not compromised in the areas served by CFW posts, OFH has entered into an agreement with Population Services International (PSI) whereby franchisees are trained in the management of family planning products. OFH purchases the family planning products from PSI and provides the services at cost to women in the OFH catchment areas, eliminating the prohibitively long distance women would otherwise have to walk to reach a community health center. CFW health posts are unable to offer immunizations.

¹² "The Business of Health in Africa: Partnering with the Private Sector to Improve People's Lives," International Finance Corporation, accessed March 23, 2013, http://www.unido.org/fileadmin/user_media/Services/PSD/BEP/IFC_HealthinAfrica_Final.pdf.

Expansion

The positioning of new health posts is based on a simple formula of how long a person has to walk to get to a healthcare facility. The goal of OFH is to start in districts with a three-hour (or longer) walk to reach a healthcare clinic. Once this has been achieved, OFH will expand to districts where individuals have to walk for more than two hours, and then one hour, and so on until full coverage is achieved and nearly all Rwandans are within a half-hour walk of a basic healthcare facility.

However, as part of the PPP agreement, each district must request the establishment of CFW health posts in their area. This request indicates the prioritization of healthcare within the district and an associated willingness to direct resources to this aim. The district locates potential buildings for use by the health post. Structures must include a waiting area, consultation room, procedure room, pharmacy storage area with locked door, and toilets. Electricity is desirable but can be circumvented through use of a pressure cooker to sterilize equipment. Clean water access is also important, and at clinics where this has been a concern, OFH has helped create storm water collection systems. Use of laptops and cell phones is valuable but not required for operation; a post can operate without the use of a laptop and can endure periods when cell service is unavailable.

Once a district identifies several possible site locations, members of the management team visit the sites accompanied by a district representative. Determination of site suitability is made on-location. Any remodeling costs (e.g., creation of room partitions, laying a cement floor) are assumed by OFH and are added to the loan amount associated with that clinic. Site selection is also influenced by population catchment (a minimum of 5,000) and presence of a competing NGO drug shop/clinic operating in the same area.

Most sites selected to date have not required significant up-fitting and are often part of existing government offices or school buildings. During a recent exploratory visit to the Eastern District of Gatsibo, 19 sites were visited. Ten were ready for immediate use, four needed minor remodeling, one was too close to another site, and four were unsuitable or required extensive remodeling. After sites are finalized, a memorandum of agreement is drawn and OFH officially enters into a partnership agreement with the local district administration. OFH contracts local tradesman to remodel the health posts as necessary and sources the necessary furnishing (tables, chairs, examination tables, autoclave, water basins, etc.) using local craftsman when possible, following a standard design.

Monitoring Performance

Rwanda enjoys a culture of candor and honest responses to sincere inquiries regarding performance, thus making community discussions a reliable venue for feedback to OFH franchisees. Franchise operators who use the community forums have a low-cost and reliable mechanism to gather patient satisfaction and performance improvement information.

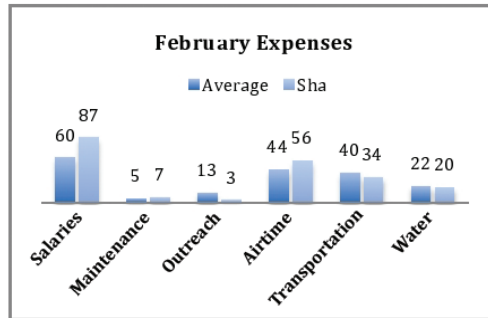
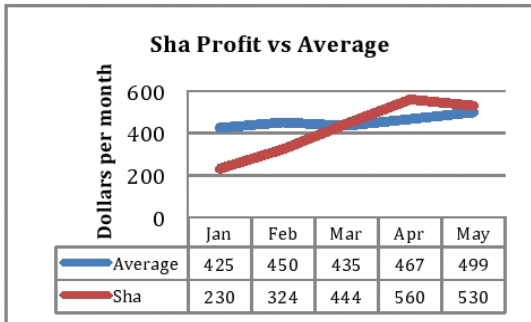
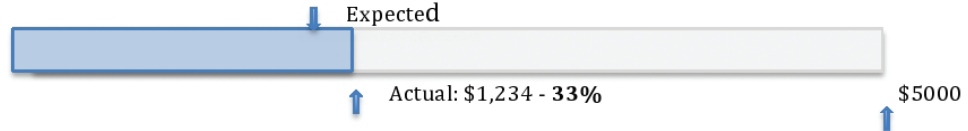
Additionally, OFH's monitoring program leverages performance information using the electronic data management platform. Once a franchisee is logged on, the post's "dashboard" appears on screen, providing a snapshot of current clinic activity including number of patients seen (daily, weekly, monthly), length of consultation, receipts,

SHA

Clinic #6: Est. June 2012: Catchment area: 5,346 patients

February 2012

Loan Repayment



Patient Management

	Avg	Sha	Trend	
Patients seen this month	567	426	↓	⊖
Avg. time per pt visit (min)	22	35	↑	⊖
Avg. patient visits per day	35	23	↑	⊖
Repeat customers	210	210	↔	⊖
Mutuelle patients	92%	93%	↑	⊕

Clinic Management

	A	B	C
Nurse			
Hours in clinic	80	70	50
Time with patients	23	24	40
Errors			

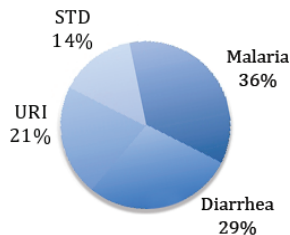
Ratings



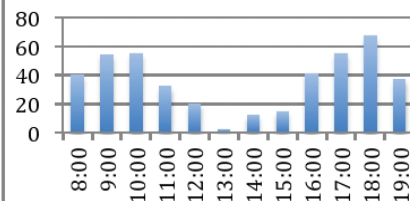
Inventory Management

Stock level, 30-day avg.	82%	⊖
Essential meds out of stock	23%	⊖
Avg. # days out of stock	12	⊖
On-time orders, YTD	73%	○

Patient Visits By Disease



Time of Patient Visits



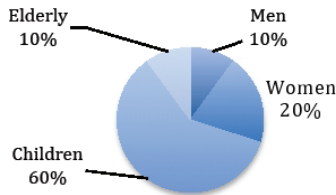
Top 3 Diseases District:

- 1.
- 2.
- 3.

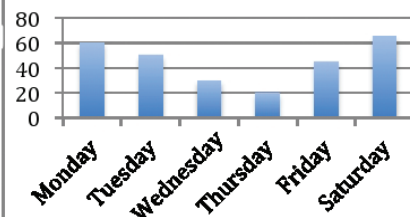
Top 3 Diseases Clinic:

- 1.
- 2.
- 3.

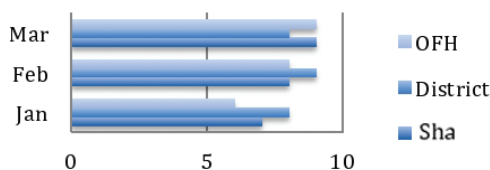
Patient Visits By Demographic



Visits Per Day of Week



Compliance Scores



Accuracy of Diagnosis

	Goal	Clinic
Right diagnosis for symptoms	95%	89%
Right medication for diagnosis	93%	87%
Right charge	97%	99%
Right paper trail	90%	92%

and staff hours worked. Additional information, such as historical reports by gender and rank order of diseases diagnosed, is available at the “next click” level. A malaria-specific report is provided to the MOH, which tracks malaria diagnoses, medications provided, malaria medicines in stock, etc. The data management system has the capability to initiate an email to the franchisee and the OFH management team if pre-specified critical levels are reached: low stock alerts, inventory levels, or unusual events, such as significant change in the number of patients seen.

A balanced scorecard approach is in development to provide a comprehensive weekly snapshot of financial and non-financial performance indicators for use by the franchisee and OFH management. The balanced scorecard approach, popularized by Robert Kaplan and David Norton in the 1990s, implements measures of financial and non-financial performance to improve alignment of activities and performance with strategic goals. The method is widely used and has been applied to health care in other low-resource settings.

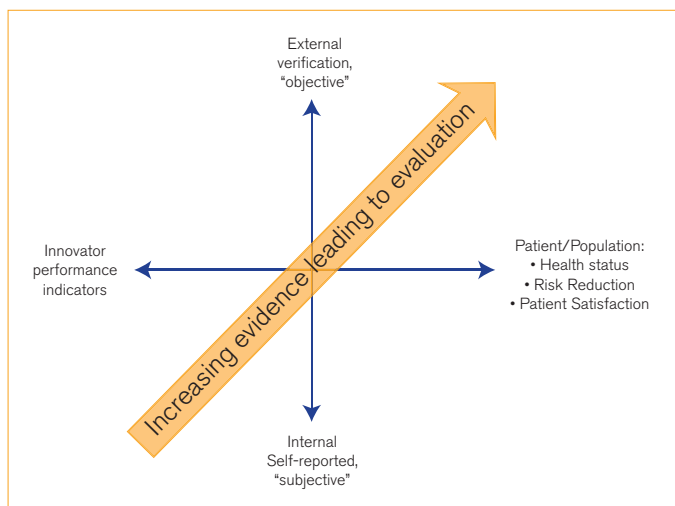
Traditionally, medical records are paper based in Rwanda, although the country is moving to electronic records, as noted above. Acceptance of electronic information capture using phones and other non-paper devices requires time and facilities with the equipment. Internet connectivity, provided through cellular data networks, can be slow or fail for short periods of time. The operational intermittency of the data and communication infrastructure creates a barrier to full adoption of electronic record keeping and the resulting electronic monitoring system.

IPIHD and OFH have been collaborating on a streamlined and updated electronic dashboard, which will give the nurse franchisee a broader profile of key performance indicators. The illustration at left depicts indicators and their visualization that is currently under development (for illustrative purposes only).

The IPIHD Approach to Evidence Development and Evaluation

Innovation is occurring in the private and public health sectors. The majority of these innovations in the delivery of health care services have not reached full scale and rarely cross borders for replication in other national settings. Unfortunately, accounts of these new approaches are largely anecdotal and rely heavily on self-reported data. IPIHD assumes that one significant barrier to full scaling and replication of innovation in health care is the lack of evidence and objective evaluation.

Innovators find themselves at varying levels of evidence development. This is due in part to the maturity of the innovation, the type of innovation (e.g., in-patient versus out-patient), and the resources available for capturing and analyzing evidence or evaluation data. IPIHD works with the innovators in its network to establish a developmental path starting with basic measures of evidence to assist in performance management and communication to internal and external audiences. From performance management data, there is a continuum moving toward more robust evidence that can support an objective evaluation of health outcomes for individuals and populations. While there is no one developmental path or evaluation formula applicable to all innovators, it is expected that similar



innovations will likely follow similar paths of evidence development. IPIHD works with innovators to pursue increasing evidence development so the innovation can realize its full potential and support replication in other settings.

Early evidence may suggest causal linkages, for example how and to what degree making a health post available to underserved patients changes access, costs, and quality of care. These outcomes suggest how resulting changes in the health status of the populations served, changes in risk reduction, and/or patient satisfaction with the services provided occur. Increasing evidence helps to clarify and, ideally, ultimately demonstrate the

relationship between the innovation's unique constellation of products and services and health outcome effects. A full-blown impact evaluation with robust data that can identify statistically significant causal linkages typically requires years of effort and significant financial investment. Short of these full evaluation methods, there are evidentiary approaches that can approximate and give guidance to innovators, funders, and partners on the efficacy of the model and the health outcomes which result.

OFH, like many early innovators, is fully engaged in the challenges of finding new locations for health posts, selecting and training nurse franchisees, operating the posts through effective interaction with patients, summarizing daily/weekly activity, supplying medicines, and paying back start-up loans. Added to that weighty demand on scarce resources is a commitment to gather initial evidence of performance.

NOTE: IPIHD is currently developing a white paper describing its approach to the evidence to evaluation developmental pathway.

Challenges Facing One Family Health

OFH faces a variety of challenges as an innovator combining a novel service delivery model with an innovative financing scheme, bringing together the public and private sectors through the PPP. The challenges can be grouped into five broad categories.

1. Human capital, education, and training
2. Supply chain management
3. Revenue management
4. Performance and evaluation
5. PPP collaboration and local expectations

Human Capital, Education, and Training

Challenge: Bring all franchisees to a proficient level across the three core competencies, despite a wide range of abilities at hire.

Overall, franchisees vary widely in the three core competencies required for successful franchise operation: clinical skills, business knowledge, and ease of engagement with technology, including the electronic data platform. As front-line managers and business owners, these nurses must have management, accounting, and marketing skills in addition to their clinical abilities. OFH has found that among the nurse franchisees, there is a general lack of business understanding, including money management, marketing, and customer service, and minimal understanding of legal obligations and consequences, such as taxes and cash management. It has been challenging to teach the necessary skills in the limited time available. This challenge will likely be exacerbated in the future by turnover, new hires leaving or being replaced, the daily demands of successfully operating the franchise, and some nurses' interest in clinic ownership while continuing other jobs in hospitals. OFH plans to be more discriminating in the selection of franchisees, requiring proficiency in areas other than nursing. Additionally, the continuing in-service training may become more individualized to close the gaps unique to each franchisee.

Challenge: Maximize the value of continuing education efforts

Continuing education training sessions vary by the skill level of the trainer and are sometimes paced too slowly, resulting in an inefficient use of time. In addition to quarterly trainings, OFH offers continuing education newsletters, but it is unclear who the intended reader is, how didactic the content should be, and whether materials should be translated into multiple languages (English, French, Kinyarwanda). Beyond skills training, there is a perceived need to continue encouraging entrepreneurial attitudes and collaboration. The newsletters and continuing education resources are provided to the main nurse franchisee; however, it is unclear if she in

turn makes the resources available to other workers or if she uses the newsletter information to do on the job training for others in the post. There is no systematic evaluation process to determine which skills transfer from the classroom training and/or newsletters to new knowledge, skills, and abilities in the post.

Challenge: Find qualified candidates for the technical representative role

The technical representative is a critical role that has been slow to garner significant interest from applicants. New applicants have expressed interest in the requisite motor biking skills and working outside of Kigali. The ideal technical representative has a pharmacy or nursing background; is able to teach and communicate well; is honest, organized, physically fit; is able to ride a motorcycle; and has an interest in living in rural areas.

Supply Chain Management

Challenge: Increase efficiency in the ordering process

The process of stock ordering and delivery is time consuming for the manager. Franchisees place orders electronically, which the logistics manager then checks line-by-line. Medications received are entered line by line, with invoices created in the same fashion. Each process requires two to three days of data entry. The training and logistics manager has suggested it would be more efficient if she placed orders for each clinic. However, this may distance the franchisee from monitoring and participating in the mission critical task of re-supply and invoicing. While franchisees continue to do their own auditing and ordering, the efficiency of the overall re-stocking system is limited by franchisees who perform the task inaccurately and/or in an untimely fashion.

Challenge: Source enough medication and disseminate it to rural outposts in a timely fashion



Securing a continual supply of drugs, even on a small scale of 30 clinics, has at times been challenging for OFH. Maintaining smooth inventory management with consistent ordering practices and efficient dissemination of supplies will become an increasing challenge as the organization grows in size. OFH places high priority on avoiding stock outs of the most popular medications. However, using three drug distributors may not be sufficient, particularly as the number of franchise clinics increases. Additional, reliable suppliers should be identified and added to the supply chain.

Revenue Management

Challenge: Reduce delay in reimbursement process

Reimbursement through the national health insurance program, Mutuelle de Sante, has been slow. This is in part due to turnover in the financial accountant role (three changes) in OFH's central office in the past year, delaying claims document production. However, this problem is compounded by the fact that Mutuelle representatives in many locations also act as community center receptionists, checking patients in and out, handling the medical records, and collecting fees. These competing tasks delay claims processing, and there is little or no incentive for claims processing to be completed in a timely fashion. Delayed claims processing is also a problem for other public health institutions in Rwanda and is not unique to the OFH posts.



Performance and Evaluation

Challenge: Maintain robust and high quality data through the electronic monitoring system

The automated data reporting system requires franchisees to gain a proficiency to exploit the full features and efficiencies of the system. In addition to a wide variation in the level of comfort with the technology, some users may not understand the range of purposes for which the electronic monitoring can be used to spot problems, identify solutions, and create inter-post compliance improvement strategies.

Challenge: Develop a compliance and assessment process

The compliance process is in its earliest phases of adoption so there are few consequences when franchisees are out of compliance and lacks rigor as the same assessment from a previous assessment may be used in a follow-up. There is a lack of fidelity between the compliance site review and the Quality Service Checklists found in the Operations Manual. Self-grading is biased, and results cannot be compared between and among franchisees.

PPP Collaboration and Local Expectations

Challenge: Restrictions on delivery of priority maternal and children's health services

Priorities and special incentives have been placed on maternal health (e.g., family planning) and children's health services (e.g., immunizations) by the MOH and Global Fund. The delivery of these priority services often do not meet targets or demand due to restrictions in service provision to community health centers. In rural areas, patients cannot travel to distant community centers, and outreach vehicles may not connect with patients frequently enough to meet needs. OFH is more accessible and well positioned to reach rural populations but at present cannot provide these maternal and child services per the terms of the PPP agreement.

Challenge: Growth hampered by local health priorities, remodeling requirements, and expectations

OFH would like to expand into selected areas, following their strategic plan to begin in areas with the longest walks to healthcare facilities and continuing until all areas are within a 30-minute walk of a health post. However, they must await a district invitation to establish a new post, and thus, growth is dictated by the priority given to health care by the local communities and their district leadership. Once invited and a site selected, mobilizing the local administration to remodel the clinics can be slow. In some areas, the community partnership role has been misunderstood; communities were expecting nurses to rent the space (i.e., they expected to receive income) and were not expecting to incur costs to provide the space.

The Way Forward



OFH faces the challenge of scaling to full capacity of 500 operational health posts by 2018 while bringing all the health posts into compliance and creating a culture of continuous improvement. These are formidable challenges that will require sustained and significant effort by franchisees and OFH leadership. OFH will also need continued support from the PPP partners, a stable government with continuing commitment to health goals, and technical support from IPIHD and other actors with specialized expertise.

With the full support and collaboration

of the MOH, OFH may have greater potential to reach full scale than other franchise drug shop innovations. Yet, these same potentiators for success can create barriers.

For example, the MOH may be more sensitive to public scrutiny with regard to OFH performance indicators and patient or community criticisms. Human capital in health care is at a crisis level in many African countries, including Rwanda. Recruiting, training, and retaining nurse franchisees while quickly growing the number of posts is a significant challenge. Establishing and expanding the hub-and-spoke management structure while growing a reliable supply chain will also be critical to support the expanding number of posts.

Technical Support for OFH Management

OFH can benefit from the management experience of other health clinic franchise models operating in under-served and resource poor settings. Other organizations have experience in achieving three competing goals: 1) establishing supply chains, 2) quickly building new outlets while expanding supply chains that support them, and 3) achieving inter-post compliance to quality standards.

Technical Support for Nurse/Franchisees

OFH can benefit from the experience of seasoned local health franchise operators and trainers. First-line nurse operators have operational, financial, and clinical skills to quickly learn. Finding the right combination of performance metrics, motivation, and training has no simple or single recipe. The experience of other franchise operators who can directly assist nurse franchisees with honing their business operations acumen is welcomed.

Evidence and Evaluation Technical Support

OFH can benefit from the expertise of public and private, not-for-profit, and for-profit development organizations in evidence gathering. OFH faces the technical and operational challenge of efficiently collecting performance evidence while building upon the initial evidentiary basis toward evaluating individual and population health outcomes. OFH welcomes support as it moves along the evidence-to-evaluation continuum.

Advice and Counsel to PPP Partners

Over the last two decades, PPPs have grown in number and sophistication for healthcare delivery in resource-poor settings. A well-functioning PPP acknowledges the divergent interests of each actor in the partnership. Others who have participated in such partnerships or advised their formation and maintenance can assist the PPP that links the public and private interests in Rwanda for OFH.

Conclusion

OFH builds upon the growing experience of franchise drug shop networks in Africa and represents a unique combination of PPP, with formal linkages to the MOH, and a rapidly expanding franchise network. Fully realized, a national network of OFH health posts will benefit communities, patients, and franchisee-nurses and realize Rwanda's vision to create a coordinated entry point to the health care system.

IPIHD will continue to provide technical support to OFH and periodically update this case report. If resources and circumstances support it, IPIHD may write an update to this case study on the progress being made toward the scaling goals and development of evidence leading to evaluation. Ideally, OFH will be replicated in another region or country and will occasion an update on this innovative approach to providing first-line care to patients in underserved areas.



The Authors – IPIHD Case Study #101

Liz Charles

Jeffrey Moe

Richard Bartlett



Liz Charles is a nurse and 2013 candidate for the Masters in Business Administration, Fuqua School of Business, Duke University (Health Sector Management concentration). As an IPIHD intern, she spent three weeks on site with various OFH franchisees and leadership staff in July 2012. A desk audit of materials provided by OFH before her on-site engagement and her observations and interviews while in Rwanda provide the basis for this case study. Ms. Charles received her nursing degree from Brigham Young University and has served as a registered nurse with Kaiser Permanente in Denver, Colorado, as well as health systems in Charleston, South Carolina and Scottsdale, Arizona. She was the Executive Director of Green Planet in Fountain Hills, Arizona prior to beginning graduate studies at Duke University.

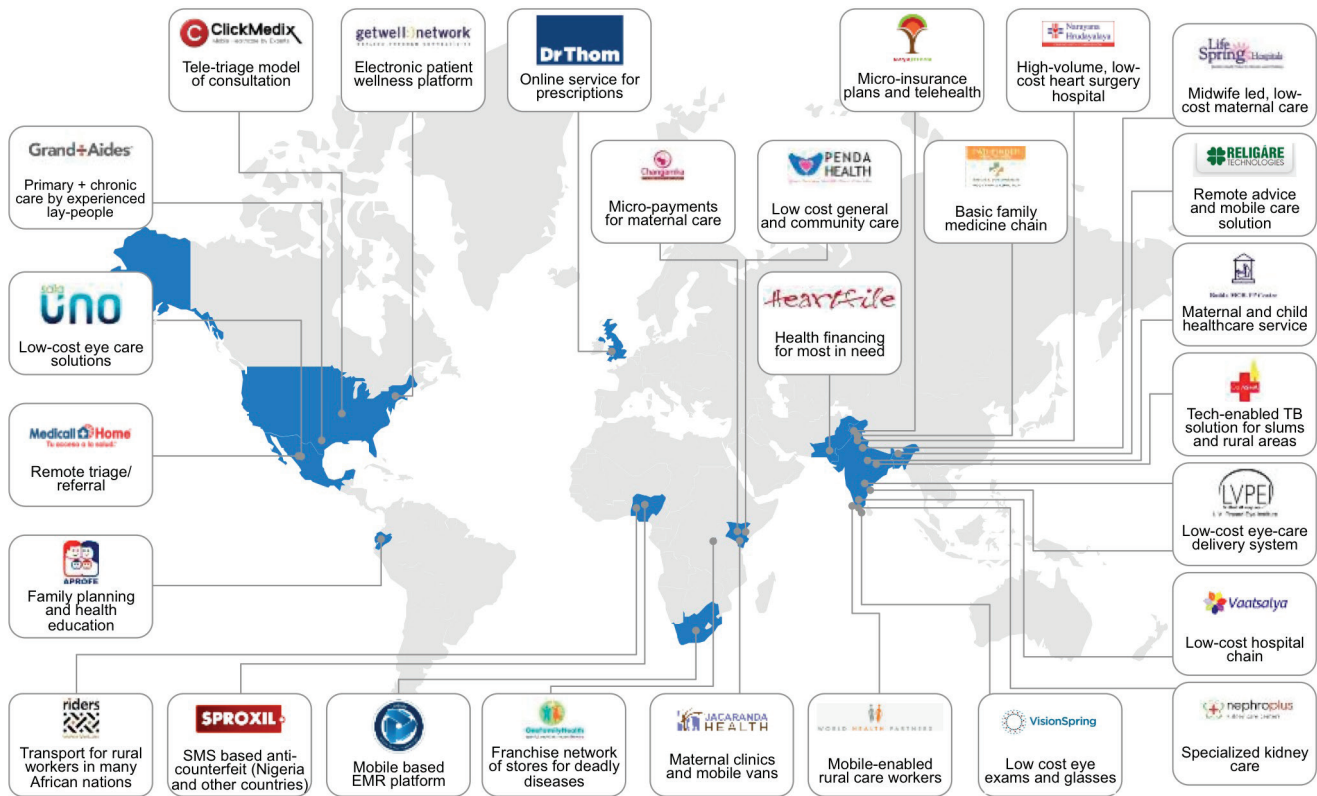
Jeffrey Moe is an Executive in Residence and Adjunct Associate Professor in the Health Sector Management program, Fuqua School of Business, Duke University; Adjunct Faculty with Duke's Global Health Institute; and a lecturer at the University of Witwatersrand, Johannesburg, South Africa. Dr. Moe is the faculty lead for the Health Sector Advisory Council and the Collaborative on Health Care for Aging Populations and Advanced Illnesses, two external advisory boards to the Fuqua School of Business.

Professor Moe served as the Director of the Private Sector Task Force, which operated under the aegis of the Global Health Workforce Alliance. The Private Sector Task Force report describing 31 "health workforce innovators" is available on the Global Health Workforce Alliance website in the knowledge center. Dr. Moe has authored case studies on innovative global health care approaches and health care leaders. Moe received his Ph.D. in Organization Development and Institutional Studies from the University of North Carolina at Chapel Hill in 1981. He graduated from the Northwestern University Kellogg School of Management Executive Development Program in 1997.

Richard Bartlett is the Associate Director of the IPIHD, which is hosted at Duke University and was launched through the World Economic Forum. IPIHD actively supports healthcare innovators and entrepreneurs to scale and replicate their business models. In his role, Mr. Bartlett oversees all functions of IPIHD, with a specific focus on facilitating all projects and pilots.

Mr. Bartlett is formerly from McKinsey & Company, where he worked within the Global Healthcare Practice, serving clients around the world on different topics of health systems reform. While at McKinsey, he was heavily involved in innovative healthcare delivery and led all the work with the World Economic Forum on the topic. Mr. Bartlett received first-class honors from the University of Warwick, where he studied Industrial Economics.

IPIHD in 2013: A Global Network of Innovators



Global Reach, Local Impact

IPIHD was founded to support the growth of healthcare innovation through scaling and replicating successful delivery solutions around the world that improve access to quality care at affordable costs. This growth is achieved by addressing the four primary gaps facing healthcare delivery innovators:

- Access to networks, expertise, and best practices
- Capabilities and capacity required to develop their business
- Financing and investment to grow
- Knowledge of and change in regulations and policies that challenge their growth

IPIHD provides targeted support for selected innovators, articulating a clear value proposition for all stakeholders, and creating a platform to collaborate, rather than compete, with other organizations in the space and to share knowledge and expertise.

The IPIHD Network facilitates linkages between innovators for peer-to-peer guidance and also between innovators and industry leaders in the field, enabling the innovators to benefit from seasoned advice and expertise. Industry leaders, in turn, gain the opportunity to better understand innovations unfolding at the cutting edge of healthcare delivery. The IPIHD Network also drives the exchange of information between innovators, other health practitioners, health system leaders, and policy makers.

Learn more at www.ipihd.org, find us on facebook at www.facebook.com/ipihd, and follow us on twitter @ipihd.

From the Executive Director



The International Partnership for Innovative Healthcare Delivery (IPIHD) works to positively impact and scale innovation in care delivery in order to increase access to high quality care for all populations. Health systems across the globe, in both developed and emerging economies, struggle with challenges related to cost, quality, and access. While the specifics of these challenges differ by context, themes such as rising costs, overburdened facilities, workforce shortages, and quality measurement cut across countries, regions, and stages of economic and social development.

The IPIHD Innovator Network showcases opportunities to achieve step-change improvements in healthcare delivery. We have a great deal to learn from these innovations and believe that their experience and impact can benefit health systems everywhere. Innovation is both possible and necessary, even for the most recalcitrant challenges in healthcare.

The One Family Health franchise model in Rwanda, featured in this case study, is an excellent example of how innovation can concomitantly improve cost, quality, and access to care. This model also highlights the importance of scaling what works: with scale in mind from the beginning, the model is designed to first work out the kinks and get the blueprint exactly right and then rapidly scale to provide full national coverage. Rather than languishing in a planning or piloting phase for years, as some health projects do, the One Family Health network has already established basic healthcare infrastructure in more than 30 Rwandan communities and is growing fast. In addition, this case study includes lessons for other health systems struggling to provide cost-effective care in rural areas.

We are grateful to our supporters who provide the financial support, time, and expertise that make possible the work and achievements of IPIHD. Please visit www.ipihd.org to learn more about how you can participate with us and contribute your knowledge and expertise as an innovator, supporter, or member of our wider community.

A handwritten signature in black ink, appearing to read 'Krishna Udayakumar'.

Krishna Udayakumar, MD, MBA

Executive Director

IPIHD Supporters

Founding Members



McKinsey & Company

Gold Supporters



Silver Supporters



Bronze Supporters



In-kind Supporters



One Family Health Rwanda: Achievements and Challenges 2012



International Partnership *for* Innovative Healthcare Delivery

Founded by
The World Economic Forum
Duke Medicine
McKinsey & Company