HEALTH INSURANCE FUND EVALUATION REPORT

The Boston Consulting Group

April 2015

Please note: This evaluation, commissioned by the Dutch Ministry of Foreign Affairs, was completed on April 17, 2015. The information collected was relevant for that time.

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CONTENT

1 Executive Summary

From February through March 2015, The Boston Consulting Group (BCG) conducted an independent assessment of the Health Insurance Fund (Hifund) and its executing partner; the PharmAccess group (PharmAccess). The overarching question for the evaluation was: Is the Ministry of Foreign Affairs' grant to the Health Insurance Fund well invested? We addressed this question in four parts: 1) mission relevance; 2) introduction of a paradigm shift; 3) achievement of original objectives, and 4) activities, organizational governance, and partnerships.

The assessment was focused on the fund's eight years of operation since its inception in 2006. The geographical scope was limited to Kenya, Nigeria, and Tanzania—the three countries where 97% of the in-country Hifund budget is spent. Forward-looking recommendations were not in the scope of the evaluation. The Hifund/PharmAccess management team was actively involved in the assessment. The major findings are as follows:

Mission relevance. Hifund/PharmAccess's mission of reorienting the development of the healthcare market towards effective and sustainable access to affordable, high-quality care for low-income populations is relevant and compelling, particularly when framed in the context of failing sub-Saharan African public healthcare systems in the mid-2000s, which were typically addressed by the donor community with top-down, vertically oriented, supply-focused measures, often channeled through weak public structures. In this setup, the paradigm introduced by Hifund/PharmAccess looked to address the root causes of the market failure by stimulating demand for primary and preventative care through the introduction of voluntary health insurance/health plans, creating incentives for private investment and emphasizing the need for quality standards.

We find that the mission of Hifund/PharmAccess was both timely and relevant: It attempted to address the right problem in the right way—even ahead of its time. This is evidenced by the fact that the broader thinking, actions, and investment of the global community have moved in the direction set by Hifund/PharmAccess.

Introduction of a paradigm shift. Hifund/PharmAccess introduced and demonstrated the viability of the paradigm championed in the targeted local communities (small settings with a large degree of control), as well as in one larger state setting (Kwara, Nigeria). Across different geographies, all interviewed stakeholders indicated a shift in their way of thinking and showed changes in the way they acted. Insurance companies changed their focus from formal to informal sectors, governments began to acknowledge private health insurance as a sustainable solution and started contributing to its implementation, and banks expressed an ambition to set up revolving funds targeted at the health care sector. We also observed changes in the way stakeholders acted, e.g., insurance companies entering the low-income insurance market, beneficiaries enrolling, and clinics increasing quality.

All the changes in the smaller, local ecosystems were demonstrated by extensive and rigorous impact evaluation research carried out by a partnership of African and Dutch researchers and published in well-known journals. This, in turn, has helped shape the global agenda, as evidenced by recognitions by the UN, the G20, the World Economic Forum, the International Finance Corporation, and the OECD. Furthermore, Hifund/PharmAccess have also permeated national systems. For example, the national governments in both Kenya and Tanzania have committed to rolling out and enforcing SafeCare quality standards across all public and private facilities in their respective country.

The challenge ahead is now to demonstrate changes in the way key actors think and act in increasingly wider settings—first in sub-national regions (e.g., states and districts), then in national countries. We refer to this challenge as moving to "Phase 2" of the paradigm shift. In this phase, local actors should drive towards a new paradigm which is funded sustainably through a combination of payments from beneficiaries and public entities.

Achievement of original objectives. Hifund/PharmAccess's introduction of a paradigm shift in the target communities is reflected in their largely successful achievement of all of its five original objectives. Access to quality health care was increased in the target groups (160,000 enrollees in 2014), a large number of health care delivery models were tested (across 10 dimensions), medical and financial capacity was built to a large degree (1,434 SafeCare assessments, and 1,134 MCF business plans and expert opinions), public and private capital from well-renowned institutions was attracted (including risk-taking capital of €50M in the IFHA fund), out-of-pocket health expenses were reduced (by 32%), and extensive MDG 6-related activities were performed (e.g., malaria tests and diagnoses, HIV tests, and immunizations).

Despite these achievements, significant challenges remain. First, the (re-)enrolment rates for most programs are still relatively low, reducing benefits to scale and increasing the possibility of adverse selection. Second, partners reported the need for substantial technical assistance in the coming years, which raises the question of whether the local resource capacity to develop medical and financial skills is sufficient yet. Third, admin-to-cost ratios of the health plans are still high, including in some of the more mature programs. However, we should note that Hifund/PharmAccess predict that relative admin costs will decrease in the future due to economies of scale, automation (e.g., mobile solutions for payments), and the reduction of some one-off costs associated with the initial phase of introduction. These challenges are all recognized by Hifund/PharmAccess and are currently being addressed to ensure success in increasingly wider settings.

Activities, organizational governance, and partnerships. Over the last eight years, Hifund/PharmAccess have adjusted their demand-financing models in response to new insights from the market in an attempt to increase the affordability of the programs. Furthermore, it has substantially expanded its supply-side offerings with interventions such as MCF, SafeCare, IFHA, and AHIF. All interventions are designed-for-purpose and currently address serious challenges in the health care market (mainly low provider quality and lack of provider bankability to afford quality improvements). The internal organization and partnerships have also been adjusted to reflect these new activities, with one additional board added (MCF), a five-fold increase in the size of the organization over the last eight years, and the formation of 20 successful strategic partnerships.

This robust and effective, solution-oriented partnerships could still be further improved in terms of efficiency; for example, by simplifying the governance structure, continuing the formalization of the organization, and making strategic and implementation choices more explicit in terms of program focus and partnerships.

Overall, our evaluation showed that the grant to Hifund was well invested for two reasons:

First, the setup of the grant: It was focused on a good and clear objective, with sufficient scale and time to do it well, and without too many milestones that would prescribe the way to work in difficult places, thereby limiting the level of adaptability. Not many NGOs have focused on this system-level objective as intensively and as early as Hifund/PharmAccess.

Second, the execution of the grant: It continuously focused on the right objective, combined with sufficient adaptability to address the issues required to get there. The funds allowed the flexibility to adapt to changing environments and market insights and to generate valuable insights. In the process, Hifund/PharmAccess successfully introduced (if not completed) a paradigm shift, accomplished their original objectives, and helped the internal organization and partners to grow—critical factors in ensuring that investments are sustainable and impactful.

As in the past, long-term financial certainty will be critical to further enable local governments to initiate and scale up programs, and to create operational excellence for the implementation of the Hifund/PharmAccess initiatives. Revising the original objectives is also important to deliver on Phase 2 of the paradigm shift. This new phase has implications for the strategy, organization/governance, activities, and partnerships. We urge the Hifund/PharmAccess architecture to start addressing them immediately.

2 OBJECTIVES OF THE EVALUATION

In February 2015, the Dutch Ministry of Foreign Affairs (the Ministry) commissioned The Boston Consulting Group (BCG) to assess the progress and achievements of the Health Insurance Fund (Hifund) and its executing partner PharmAccess (Hifund/PharmAccess) over the eight years since inception.

The Terms of Reference (ToR) for this assessment detailed the topics the Ministry wanted addressed during the evaluation (*full list in Annex*). This report fully and systematically covers these topics. Taken together they stand for one over-arching question: Is the grant to Hifund/PharmAccess by the Dutch Ministry of Foreign Affairs well-invested?

In order to structure the evaluation, we separated this question into two parts: Is Hifund/PharmAccess doing the right things, and is it doing them in the right way? *(See Figure 1)* Each part, in turn, is addressed in chapters 4 through 7 of this report.

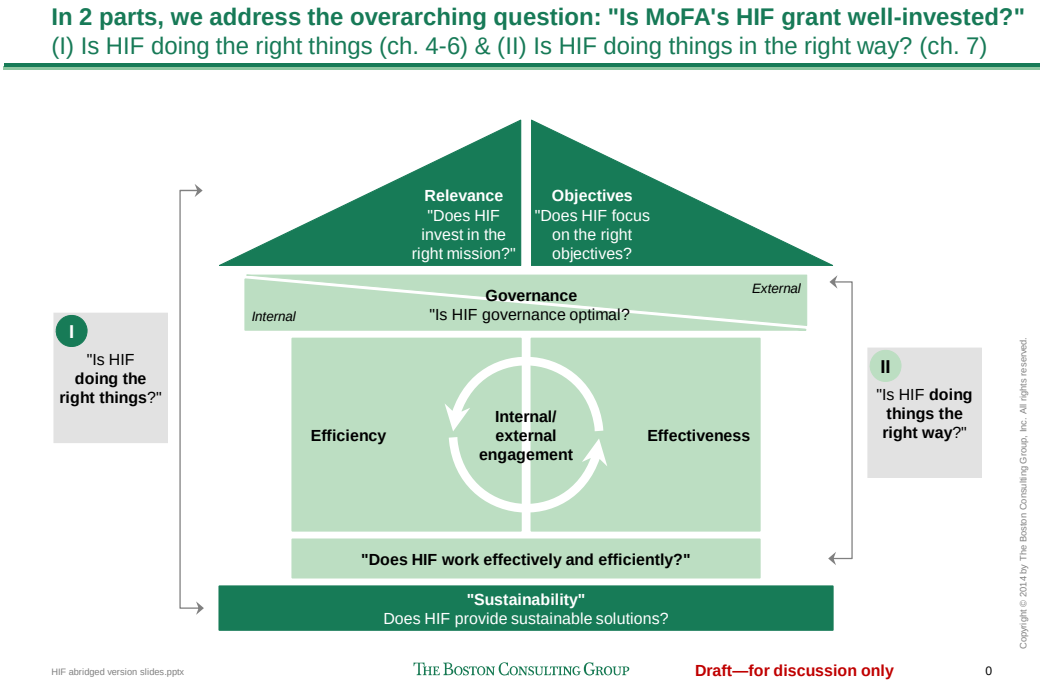


Figure 1: Evaluation frameworks: Is Hifund doing the right things and are doing things the right way?

Chapters 4 through 6 address the question of whether Hifund/PharmAccess is doing the right things. Chapter 4 evaluates whether their mission was relevant and compelling to contribute to achieving a new paradigm for healthcare markets and their development in Sub-Saharan Africa (SSA). Chapter 5 assesses the extent to which this new paradigm was successfully introduced in the communities where Hifund/PharmAccess operated. Chapter 6 evaluates whether the five original objectives were achieved.

Chapter 7 exclusively focuses on the question: Is Hifund/PharmAccess doing the right things in the right way? Specifically, it assesses the evolution of their activities, governance and organizational engagement along efficiency and effectiveness axes.

Finally, Chapter 8 concludes the evaluation, gives a response to the overarching question of whether the grant to the Hifund/PharmAccess was well invested and provides some key considerations for the future.

3 Approach and Methodology

The BCG team included deep experience in global health, health systems development, healthcare markets in Africa, public-private partnerships (PPP) and organizational design. Building on our extensive work on these areas, together with BCG's expertise in evaluating organizational effectiveness and efficiency, we developed a tailored approach for this evaluation.

During the course of the review, BCG conducted 40+ interviews and consultations with more than 75+ people from the Hifund/PharmAccess Board; their staff in Amsterdam, Kenya, Tanzania and Nigeria; strategic and implementation partners; and other relevant stakeholder groups (i.e., patients, investors, providers, and government officials). These interviews[1], together with the written record of Hifund/PharmAccess operations since its inception in 2006 (founding documents, budget data, annual reports, program proposals, external and research publications, advocacy and marketing documents, etc.) as well as with financial and operational data for Health Plans, the Medical Credit Fund (MCF) and Safe Care (*full overview in Annex*[2]) enabled the BCG team to construct a robust fact base on Hifund/PharmAccess's mission, strategy, activities, organization and partnerships. Additionally, we augmented the information from interviews and written documentation with data from BCG's Sustainable Economic Development Assessment (SEDA)[3] tool.

Per request of the Ministry, we de-emphasized comparative analyses (e.g., benchmarks to other organizations). The request was to focus the evaluation on progress and achievements of Hifund against its objectives and evolution. Hifund's model is ostensibly *unique enough* to make benchmark comparisons limited in insights at this stage of its progress.

We focused, per the Ministry's request, on the three major countries of engagement for Hifund/PharmAccess: Kenya, Tanzania and Nigeria. These three indeed account for 97% of the Hifund budget spent outside of the Netherlands and for 78% of the total budget[4].

Figure 2 explains our unit of analysis for this evaluation. Consistent with Hifund/PharmAccess' system change approach, we looked specifically at ecosystems, i.e. communities anchored in geographical regions for whom health is organized (rows in Figure 2) where both demand and supply interventions (columns in Figure 2) were rolled out.

As the ecosystems we focused on included the demand side and since Hifund/PharmAccess touch the demand side through Health Plans, our analyses include, by definition, a health insurance program. On the supply side, we assess both MCF and / or SafeCare interventions. Ecosystems without Health Plans ("[Country] – Other" in Figure 2) are also assessed, although fewer examples are explicitly called out throughout the report.

[1] Quotes from the interviews are included throughout the text "*between quotes and in italics*".

[2] For ease of readability, we do not report the source of each figure in the report. Source documents are listed in the annex, and all numbers were fact-checked by PharmAccess. Similarly, we do not aim to replicate the extensive contextual documentation that exists for each one of the Hifund/PharmAccess activities. For figure-related questions and additional details on specific programs, the reader is encouraged to refer directly to the PharmAccess group.

[3] SEDA is an approach to assess and compare each country's level of socio–economic development across a broad range of dimensions, including health.

[4] Additional countries where Hifund/PharmAccess operates include Mozambique and Namibia.

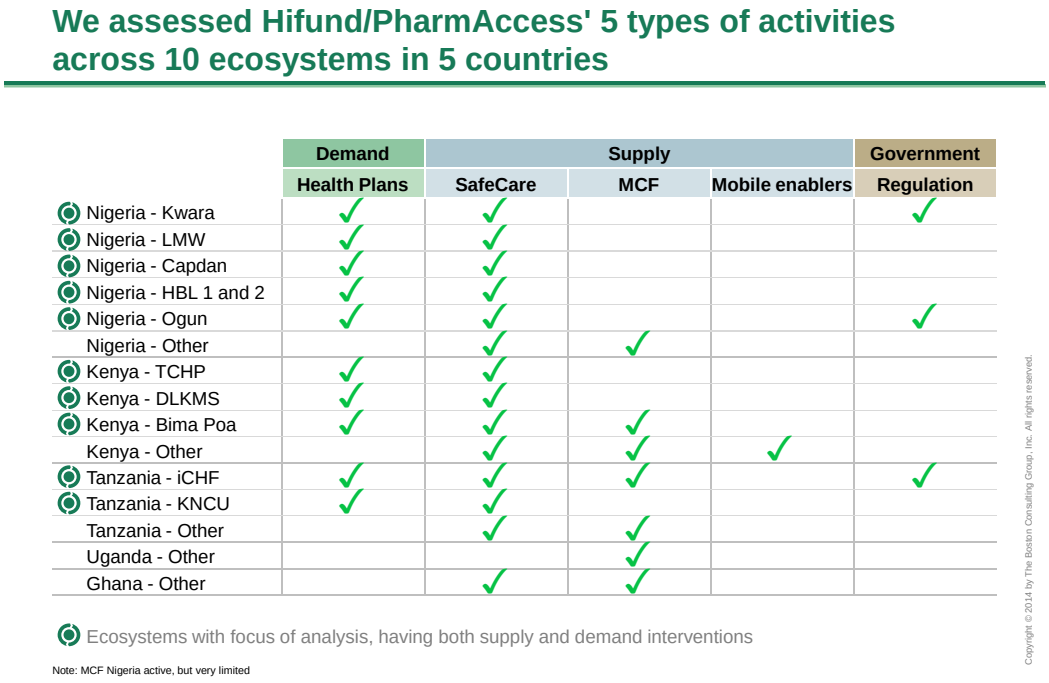


Figure 2: Hifund/PharmAccess' activity types and ecosystems

For each chapter we used the interviews, documentation and data described above in a specific, purpose-tailored, approach to consolidate our assessment.

3.1 CHAPTER 4: RATIONALE AND MISSION OF THE HIFUND

In chapter 4, we contrast the new paradigm for healthcare markets in Sub-Saharan Africa championed by Hifund/PharmAccess vs. the prevailing paradigm extant at the time of inception, and examine the rationale to introduce a new paradigm in the context of resilient challenges and limited effective, long-term solutions for sustainable development.

3.2 CHAPTER 5: ASSESSMENT OF ACHIEVING THE PARADIGM SHIFT

For chapter 5, where we assess the progress and achievements of the last eight years, we needed to develop a specific framework to contextualize the different development phases we would expect to see towards achieving the new paradigm. Per BCG experience with development in SSA healthcare systems, and based on insights from the interviews conducted for this assessment, we conceived a framework to understand such a paradigm shift. The framework is explained in Figure 3.

Three development phases constitute the shift towards the new paradigm

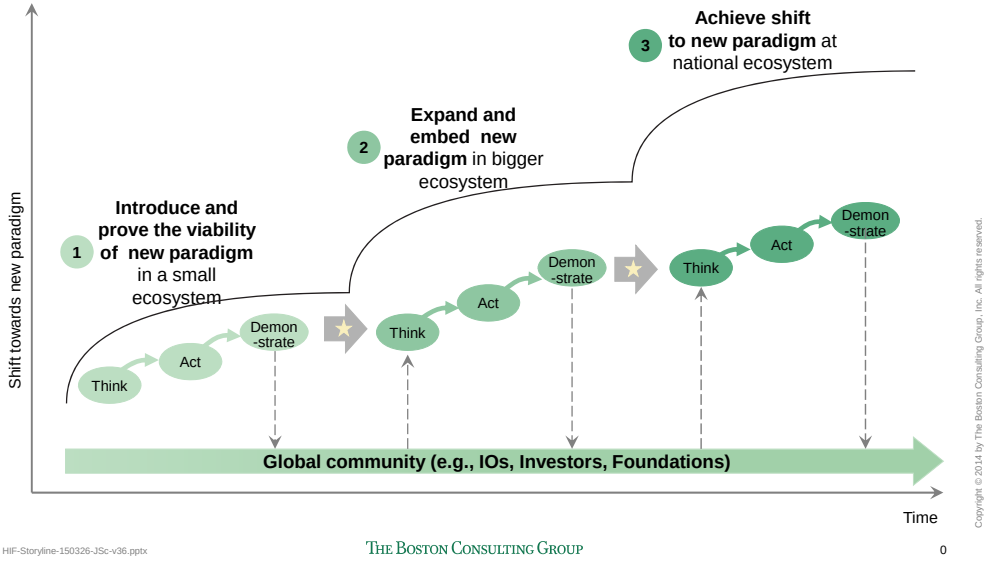


Figure 3: Three phases of shift towards a new paradigm

According to this framework, the paradigm shift is achieved in three phases. Each phase has a specific focus on a set of activities, executed within a well-defined geographical scope by a set of parties.

In Phase 1, targeted supply and demand interventions to increase access and improve quality are deployed in small ecosystems (e.g. counties, districts, communities) with large ability to control. During Phase 1, Hifund/PharmAccess is expected to be in the driver's seat in terms of coordination and implementation (including managing subsidies leveraging the donor funds) in collaboration with mainly private and some public sector partners. During Phase 1, sustainability of interventions is defined as attracting interest of local stakeholders for required support for change.

In Phase 2, the supply and demand interventions increase its comprehensiveness and become embedded in wider ecosystems (e.g. states) with large opportunity to partner with local government. During Phase 2 Hifund/PharmAccess is but one key partner for the local implementer, with specific focus on technical assistance (TA), advocacy support and system orchestration, working towards the reduction in foreign subsidies. During Phase 2, sustainable interventions are defined as those which are committed by local parties with substantial support from Hifund/PharmAcces.

In Phase 3, supply and demand interventions are scaled up through replication and system integration into full-scale ecosystems (e.g. countries). During Phase 3, full ownership resides in national entities (government, national banks), which act as the steward of ecosystem interventions and funding (either directly running or enabling). National entities may still rely on TA and advocacy support, but should no longer receive foreign subsidies. During Phase 3, sustainable programs are defined as those owned by national entities without financial support from Hifund/PharmAccess (although they may still play a TA role).

Within this framework, there is a toll gate between the phases (*illustrated with a yellow star in Figure 2*): the need for *demonstrated impact* and *viability* of the new paradigm in the relevant ecosystem. *Demonstrating impact* requires collecting and disseminating relevant evidence through impact studies and operational research.

Key pre-requisites for this demonstration lay in changing the way relevant stakeholders *think* and then *act* according to the new paradigm. First, relevant stakeholders need to start *thinking* differently, recognizing the attractiveness and viability of the new paradigm and expressing their willingness to own it. Next, relevant stakeholders need to *act* differently, changing behavior to be more in line with the new paradigm. The nature of the behavioral change required will depend on the phase in question.

As an illustration, while in Phase 1 local players need to enter the low-income health (insurance, credit and quality[5]) market, in Phase 2 local stakeholders need to be pro-actively engaged in program design at a larger scale (i.e. state governments involved, national banks targeting the healthcare sector). And in Phase 3, behavioral success may be defined as national players paying for the interventions out of their own budgets (i.e. subsidizing health plans, co-funding loans, paying for quality assessments). For each ecosystem and phase, specific success indicators for behavioral change need to be defined. Additionally, in order to achieve behavioral change in each phase, specific organizational skills and partnerships may be required (discussed in chapter 7).

To close the *think*, *act*, *demonstrate* loop, successful demonstration in each phase should influence the thinking and design of the following phase. At the same time, and across all three phases, the global community of donors, multilaterals and private institutions can be influenced by how Hifund/PharmAccess *acts* and what they *demonstrate* as a result. In that sense, the global agenda can be altered. If that happens, they can, in turn, impact the way in which local stakeholders *think* about the different supply and demand interventions.

This framework of paradigm shift is heavily leveraged for our approach to chapter 5 where we assess in which phase of the paradigm shift Hifund/PharmAccess currently sits[6]. In chapter 5, we compare the key achievements across specific ecosystems with the required changes in *thinking, acting, and demonstrating* of the paradigm shift.

3.3 CHAPTER 6: ASSESSMENT OF MEETING THE FIVE ORIGINAL OBJECTIVES

In chapter 6 we evaluate the extent to which Hifund/PharmAccess achieved their 5 key objectives:

1. Increase access to quality basic health care for currently uninsured groups, mainly through private health facilities
2. Evaluate different private healthcare delivery models based on a demand-driven and results-oriented approach
3. Build sustainable medical and financial-administrative capacity in the health sector.
4. Lower the threshold for investment in private healthcare infrastructure
5. Directly support Millennium Development Goals (MDG) 1 and 6: reducing poverty and halting the spread of HIV/AIDS, tuberculosis, malaria and other major diseases

To assess each of those 5 objectives, we evaluated their components: 2-5 mutually exclusive elements that allow us to fully capture and assess the activities. The list of components for each objective is detailed in Figure 4.

[5] During Phase 1 market for quality will most likely not exist.

[6] In chapter 5 we do not position that Hifund/PharmAccess needs to bring all ecosystems to completion of Phase 3; we simply take a snapshot of the current situation and assess how far they have come.

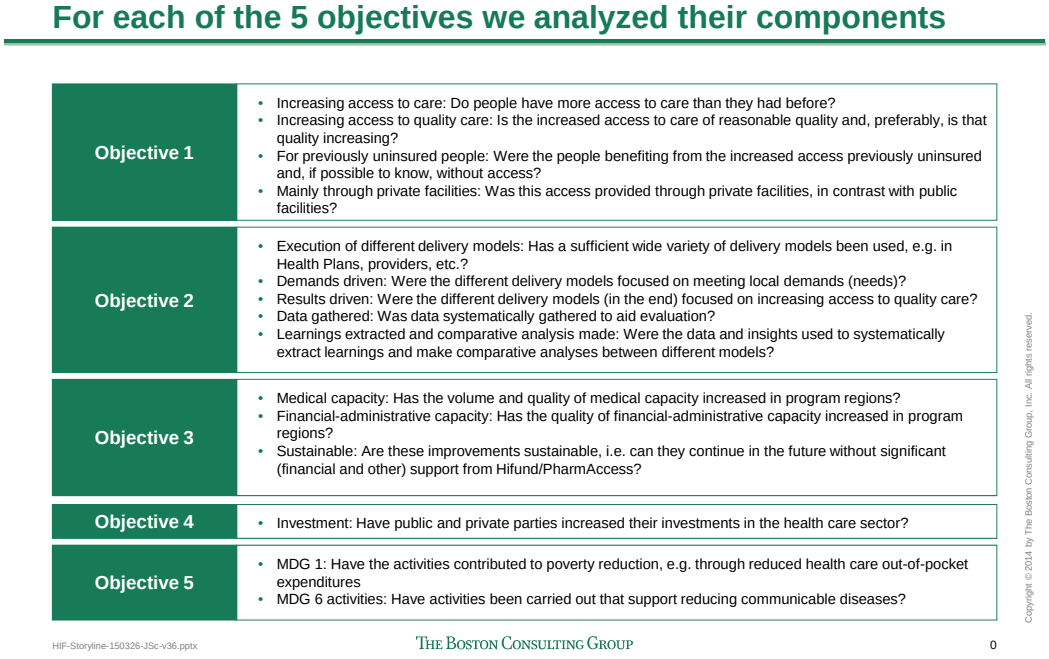


Figure 4: Components assessed for each objective

For all objectives, we used a comparison of what could have been reasonably expected based on available resources, the local and the global context. Such a comparison was based on quantitative observations (internal and external data) and qualitative observations (interviews, country visits, focus groups). For this evaluation this was both the most achievable (given the timeframe) and most comprehensive (combining different perspectives) method for assessing whether Hifund/PharmAccess has met its objectives.

Where possible and relevant (i.e., in objectives 1 and 3), our rationale to define whether an objective has been achieved also relies on comparisons with comparable regions without interventions. Specifically for the ecosystem of Kwara state, Hifund/PharmAccess collected substantial data and executed impact evaluations to make such comparisons.

As stated before, per request of the Ministry we did not compare Hifund/PharmAccess explicitly to other organizations due to the unique nature of the organization and its mission. Furthermore, we also de-emphasized the number of comparisons to explicit targets set before the start of the program as these were limited in nature. The target most frequently mentioned -to enrol 230.000 yearly beneficiaries by 2015- was, according to interviewees, dismissed early on based on insights from the field.

3.4 CHAPTER 7: ASSESSMENT OF EVOLUTION OF PHARMACCESS

In chapter 7, we examine the evolution of Hifund/PharmAccess activities, organization, governance and partnerships since inception. To assess effectiveness, we took into account the fitness of the solutions found over the years in response to internal and external challenges. To assess efficiency, we analyzed whether there was any 'waste' involved while carrying out these solutions and what areas could be improved to eliminate that waste.

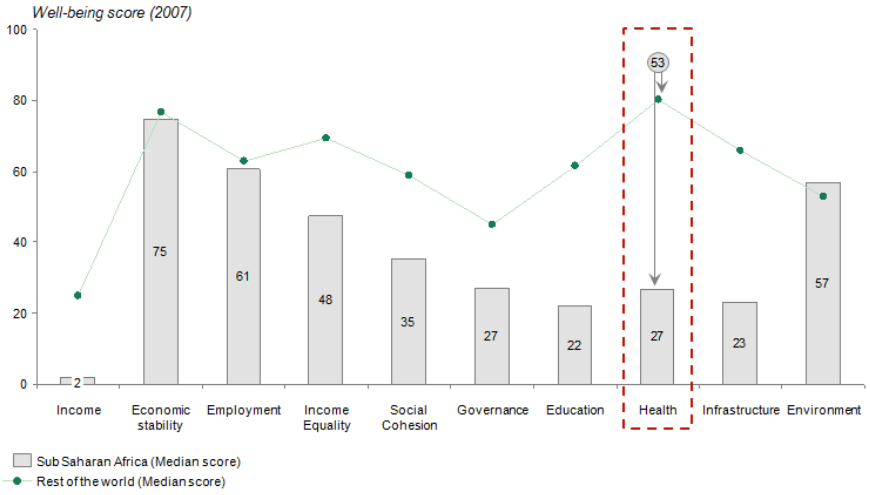
4 RATIONALE AND MISSION OF THE HIFUND

Evaluating the relevance of the mission of Hifund requires understanding the context in which it was founded and the prevailing paradigm it aimed to overcome. This section proceeds in three parts: Part I describes this context and the limitations of the traditional paradigm. Part II explains Hifund's mission to introduce a new paradigm, and its value proposition to achieve it. Part III evaluates the extent to which the mission was timely and relevant in view of the external factors that set it up for success.

4.1 LIMITATIONS OF THE PREVAILING PARADIGM

Public health and healthcare market development in SSA were in deep crisis during the mid-2000s. According to the BCG Sustainable Economic Development Assessment, in 2007, the health dimension (among 10 dimensions of sustainable development such as employment, education) in Sub-Saharan Africa had the biggest gap with the Rest of the World (see figure 5). Average life-expectancy hovered around low-50s with 10+ year gap to developing economies in Latin America or South East Asia and 20+ year gap to developed economies.[7]

Health in SSA had the largest gap with the Rest of World among 10 dimensions of SEDA



Source: BCG analysis, SEDA

Figure 5: Results in health between SSA and Rest of the World

Existing systems and resources were not adequate to address the challenge. In 2010, SSA had 28% of the global disease burden compared to 14% of the world's population. But it only had 1.6% of the global healthcare expenditure and 3% of the world's health workforce.[8] The disease burden – compounded by rapid population growth - was increasing and resilient. Especially prevalence of HIV/AIDS was more than an immediate health crisis. It undermined potential of many countries for economic development by affecting the most productive parts of the populations.

The challenges to dealing with this crisis were many and daunting. First, supply of health in general and healthcare services in rural and low-income areas were limited due to a lack of resources, infrastructure, workforce, and effective and quality delivery systems. Where resources existed they were sub-optimally invested in sophisticated, specific areas (e.g.,

[7] BCG analysis, World Bank / World Health Organization data, 2006.

[8] BCG analysis, World Bank / World Health Organization data, 2010.

hospitals and care interventions) rather than in foundations of sustainable effective health systems, such as primary healthcare and prevention.

Second, demand was nascent. This was mostly due to poverty, which pushed much of the healthcare costs to catastrophic levels for individuals. Out-of-pocket expenditure was on average around 65% in SSA. The private insurance market was embryonic and available to wealthy and urban populations. Populations were largely disempowered. Lack of awareness about health in general and adverse experience with low-quality services were impediments to demand (physical access to clinics was an issue; where clinics existed, they did not have the appropriate workforce; where that was not an issue, drugs were not reliably available).

Third, health was low in the agenda of governments, perceived as a major cost-item from their own budgets and a matter of foreign aid. Where "government will" existed, states had limited capacity to deliver. Institutions were lacking to translate that will into planning and action.

The limitations of this prevailing paradigm manifested itself, for instance, in three areas:

Strategy: Large-scale investments achieved rapid results through vertical programs but did so without comprehensive systems-thinking. They created some path dependencies that have been costly to reverse (e.g., sunk costs by building clinics or training workforce with narrow-expertise). Also, development funding was often perceived as "humanitarian aid" which created a sense of dependence in receiving countries and an obligation in donor countries limiting the vision to invest in sustainable development.

Activities: Lessons learnt on pitfalls of health systems development from other parts of the world were not sufficiently shared and heeded. Focus on complicated and expensive investments (e.g., territory care) came at the expense of fundamentals (e.g., primary health care and prevention). Separate tracks for healthcare were inadvertently formed across different income groups (i.e. formal vs. informal sector) which resulted, for example, in limited or fragmented risk-pooling and overlaps in service delivery. Supply-focused investments primarily went mostly into creating higher quantity (not quality) of health services which was not matched by initiatives to create and sustain demand for services.

Actors: Direct support to governments ignored the fact that some states were not fully ready to deal with funding; creating leakage of funds out of the system, and not triggering more public spend on health. Meanwhile, the private sector became an afterthought; in some instances, even perceived as a threat to the success of public structures. Despite its importance and existing (significant) share in healthcare delivery, it had to fight for its role.

Overall, funding the supply of top-down-driven health services delivered exclusively by public channels crowded-out embryonic private sector investments and innovation. Governments were often in the uncomfortable situation of regulating the quality of care they struggled to provide in the first place.

On one hand, this paradigm achieved major results in controlling the spread of infectious diseases and addressing its catastrophic consequences. Indeed, the progress of health scores (as measured by SEDA) in SSA between 2007 and 2013 has been overall positive but heterogeneous. The progress does not correlate with the amount of health care spent per capita nor the proportional external funding the countries have received (see figure 6).

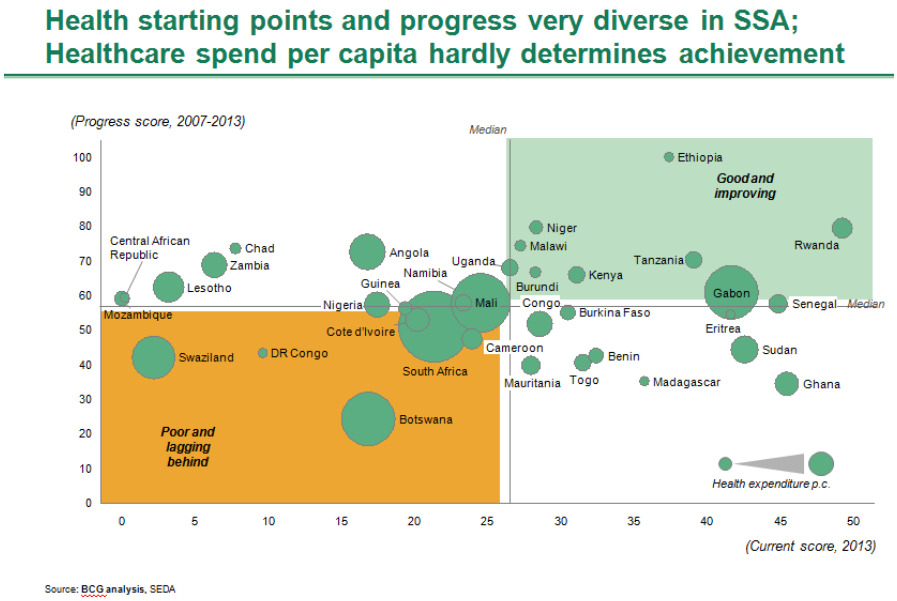


Figure 6: Current and progress in health score, SSA countries

On the other hand, it highlighted the need to invest in developing sustainable health systems that could address some of the historical bottlenecks in achieving that development: lack of transparency and trust among stakeholders (e.g., patient vs. payer, investor vs. provider), conflicting interests, high transaction costs, and unmitigated risks.

4.2 RATIONALE FOR HIFUND: MISSION TO INTRODUCE A NEW PARADIGM

In this context, the Hifund was founded to re-orient the healthcare market development towards effectiveness and sustainability, especially for low-income populations' access to affordable and high-quality care. The mission was to overcome the limitations of the prevailing paradigm and help replace it with a new one (that is transformative, long-term, locally owned, and private-sector inclusive) for sustainable healthcare system development.

As key constituents of what it considered to be the new paradigm, Hifund focused on three areas:

First, it wanted to understand and address the root-causes hindering system transformation. This included reducing risks for (private) investments, empowering patients, increasing trust, and decreasing transaction costs. This objective required reorienting stakeholders' perspectives by fundamentally changing their incentives, constraints and interactions with other stakeholders through partnerships. As one interviewee aptly put it: *"Hifund tackled the hardest task: Rewiring and aligning stakeholders thinking towards cooperation."* This was probably most apparent in the inclusion of the private sector. For example, private providers (which provided a big part of care at any case) received recognition and support from other stakeholders. This was important to make their enterprises more bankable which in turn increased their incentives and collaterals to invest in quality and patient satisfaction.

Second, in contrast to the prevailing paradigm's focus on supply, Hifund/Pharmaccess invested in stimulating demand by trying to create empowered patients with the ability to cover services through insurance schemes and pooled risks. Also, it channeled this demand to the foundational part of health systems: primary care. This was critical to achieve highest return on investments areas (e.g., vaccines, prevention and early diagnostics), change behavior early on, re-build the system from the bottom-up, help local economy development, and foster a sense of community and ownership.

Third, Hifund/Pharmaccess focused on the enablers of health systems development such as quality measurement, assurance and standards which, among other things, facilitate transparency among stakeholders. In the same vein, it invested in contributing to research and learning by investing into independent (where possible local research) impact evaluations, testing different models and capturing/disseminating lessons. Such investments into enablers may not immediately translate into concrete target figures but they are indispensable to building sustainable health systems.

The ability to introduce this new paradigm and demonstrate its viability to stakeholders required Hifund/Pharmaccess to develop its value proposition around five features:

- System-thinking: Simultaneously address demand and supply issues through comprehensive, integrated programs that are problem-driven, context-tailored and locally owned.
- System-orchestration: Create virtuous circle for system and market development. Achieve positive externalities and serendipity in the system by influencing the right stakeholders and watching out for the interdependencies.
- Partnership-building: Enable private sector, engage public sector and create partnerships locally, regionally and globally.
- Market-enabling: Help local markets and private enterprises develop through lowering the barriers to investments and access to capital and building local capacity, expertise and management skills. This is consistent with and supportive of the Dutch government's Aid & Trade approach to sustainable development.
- Diversity and adaptability: Diversify intervention sets to be able to address weakest links in healthcare systems as these systems will only function at the level of the weakest link. Implement available solutions, or develop them if they do not exist

4.3 HIFUND'S MISSION: RELEVANT AND TIMELY

With this context and rationale to its foundation, the mission of Hifund/Pharmaccess was relevant (i.e., address the right problem), effective (i.e. address it in the right way) and timely (i.e., address it at a time when a critical number of stakeholders were becoming aware of limitations of the prevailing paradigm and perceptive to new ideas). While the Hifund/PharmAccess's Theory of Change was explicitly elaborated only recently, all the main ingredients were present at the start.

As one of the former senior executive of an international organization aptly put it "*Hifund was the trailblazer of healthcare development in Africa. It showed the way and mobilized several stakeholder actors to it.*" Indeed, the Hifund/PharmAccess filled an important gap at the time of its foundation. Since then, the broader thinking, actions and investment of the global community have moved in the direction of the new paradigm.

With hindsight, one has to acknowledge the risks and leap of faith taken by the Dutch government to support such a mission by an organization that was relatively new and modest in size.[9] Especially the funding mechanism and conditions by the Dutch Ministry of Foreign Affairs is worth noting. At a time where major donors started earmarking funds per program, setting up strict conditions and expecting concrete targets, the Dutch Ministry followed a different route. They followed an approach appropriate for the ambition to change health systems: based on a clear target, they provided significant and long-term funding with sufficient flexibility to leave room to maneuver and deal with issues that may arise. Through this, they prepared Hifund/PharmAccess well for this mission.

[9] Hifund had the advantage of building on PharmAccess's existing HIV/AIDS workplace programs and contacts/reputation in several countries with private and public sector institutions. This provided them a good entry point to expand work into other areas.

Paradigm shifting mission, as we will discuss at length in the next chapter, requires a long-term investment horizon (e.g., creating a viable health insurance market), interventions in areas that do not immediately lend themselves to concrete targets (e.g., sustainability and ownership), and the ability to maneuver (e.g., focus on advocacy for government, create quality standards and funding to strengthen the provider side). The original funding ensured appropriate arrangements to embark on this mission.

The next chapter evaluates the extent to which Hifund has hitherto accomplished this mission of paradigm shift.

5 ASSESSMENT OF ACHIEVING THE PARADIGM SHIFT

To assess whether Hifund/PharmaAccess achieved an impact and provided sustainable solutions through the introduction of the new paradigm, we assessed the extent to which they completed one or more phases of the paradigm shift (as described in chapter 3). To this aim, we described changes to how stakeholders *think*, *act* and whether they *demonstrated impact*.

We detailed the changes to *think*, *act* and *demonstrate* per phase and per relevant ecosystem[10]. For ecosystems where the new paradigm was less successfully introduced (as for example shown through lower uptake), we detailed what drove the limitations.

5.1 HIFUND/PHARMACCESS PERFORMANCE IN PHASE 1 OF THE PARADIGM SHIFT

Hifund/PharmAccess activities changed how key stakeholders *think* and *act* according to the new paradigm and *demonstrated impact* in the Phase 1 ecosystems. We focused here specifically on Kwara counties (Nigeria), Nandi and Kisumu districts (Kenya) and the Kilimanjaro region (Tanzania). Hifund/PharmAccess activities also impacted the thinking of the global community.

Specific Kwara counties are limited ecosystems, implying Phase 1 of paradigm shift. The activities started in the Edu district, in which the Tsonga rural community of 75.000 inhabitants (at that time) lived. According to the program proposal documents, health quality was hampered by average per capita annual income of $115, large income disparity, low and deteriorating quality of health system and infrastructure, high prevalence of malaria and child mortality, and traditional healthcare beliefs.

During our interviews, Hygeia (the HMO partner executing the Health Plans) and clinics associated with the program indicated a significant change to their *thinking* as evidenced by the move to Phase 2 discussed in section 5.2.

Hifund/PharmAccess also changed how Hygeia, target populations and clinics *act*. According to interviewees, Hygeia has significantly invested in a health insurance scheme aimed at the non-formally employed and in the quality of associated clinics. Target populations enrolled and started receiving care through this scheme. All clinics associated to this scheme are in SafeCare quality programs.

Hifund/PharmAccess activities also *demonstrated the impact* of the new paradigm through impact evaluation and operational research. Impact evaluations showed effect on health outcomes, expenditures and utilization two years after the introduction of the program relative to control areas. Health outcomes were shown to improve by a 5.5mmHg systolic blood pressure decrease and a 6%pt increase in respondents reporting a chronic disease (indicating increased disease awareness and not increased disease prevalence). Health expenses were shown to improve by a 32% reduction in out-of-pocket expenditures. Utilization was shown to improve by a 25%pt[11] increase of provider use, a 19%pt increase of modern provider use and a 39%pt increase in women delivering in a hospital.

Nandi, Kisumu (Kenya) and Kilimanjaro (Tanzania) districts are limited ecosystems, implying Phase 1 of paradigm shift. According to the program proposal documents, health quality across all three geographies was hampered by low and variable income, low quality of facilities, and high prevalence of both infectious and chronic diseases.

[10] For Kenya and Tanzania, we have combined several smaller ecosystems to improve readability. Ecosystems investigated are detailed in Chapter 3.

[11] %pt stands for `percentual point'.

During our interviews, clinics, non-profit partners and district governments in these ecosystems indicated a significant change in their *thinking*. During country visits in Tanzania, interviewees reported that the local government was for the first time acknowledging better quality and service in private and faith-based organizations than in public facilities, that non-targeted neighboring regions were requesting iCHF to be implemented, and that while the regional NHIF office "*initially was very reluctant to sponsor the scheme, now everyone is excited by what has been achieved*". Similarly, in Kenya, K-REP bank representatives reported the ambition to set-up a revolving, non-subsidized fund exclusively for health care credit lines, and all providers and district officials interviewed stated the desire to "*become the next successful health financing program and stop hearing about Kwara*".

Hifund/PharmAccess also changed how beneficiaries, providers, partner banks and local governments in these Phase 1 ecosystems of Kenya and Tanzania *act*. According to interviewees, some beneficiaries actively joined cooperatives (i.e. KNCU) because of health plans. Health care providers topped up MCF loans for additional improvements, and SafeCare scores increased 4% from first to second visit and 15% from second to third visit in Kilamanjaro region (where data was available). Partner banks developed their own financial products catered to the health care sector (i.e. Tabibu for K-REP). County and district governments designed universal coverage packages in collaboration with Hifund/PharmAccess. Local governments also committed to subsidize health plans (25% in Kenya; 50% matching grant in Tanzania).

5.2 HIFUND/PHARMACCESS PERFORMANCE IN PHASE 2 OF THE PARADIGM SHIFT

Based on the demonstrated impact in Phase 1 ecosystems, Hifund/PharmAccess activities changed how key stakeholders *think* and *act* according to the new paradigm in the ecosystem of Kwara State. Kwara State is a wider ecosystem, implying Phase 2 of the paradigm shift. It faces the same dynamics of the specific Kwara local government areas, but on larger scale.

During our interviews, Hygeia, clinics, Kwara State government, the National Health Insurance Scheme (NHIS) and the national government indicated a significant change to their *thinking*. During our visits, Hygeia representatives indicated how Hifund/PharmAccess had influenced them to change focus from the formally employed to the non-formally employed. Hygeia also recognized the catalytic effect Hifund/PharmAccess has had on themselves and on other stakeholders, creating an enabling environment where Hygeia could *act* according to its new-found focus on low-income beneficiaries.

The Kwara State government indicated the effectiveness of Hifund/PharmAccess and Hygeia in teaching the contents of the scheme and thereby getting key stakeholders (especially the communities) to *act* and participate in the scheme. Interviewees reported that the governor "*only talks about health insurance when discussing health care*" and that the state government will open an institution to teach the new paradigm to other states and countries. The impact on the national government is also reflected in the recognition Hifund/PharmAccess received during the presidential summit on health care, where the new paradigm was hailed as the model for health insurance for the non-formally employed in Nigeria.

Hifund/PharmAccess also changed how Hygeia, target populations, clinics and Kwara State government *act*. According to interviewees, Hygeia significantly invested in a health insurance scheme (aimed at non-formally employed) and in the quality of associated clinics in the wider state of Kwara as well. Eighteen percent of the target populations enrolled (over 85.000 people in 2014) and started using care through the Kwara state scheme (well over 100.000 visits YTD September 2014). The 31 clinics associated with this scheme are all in SafeCare quality programs and started to improve quality (30% median improvement in score from first to second visit where data was available[12]). Kwara State government has started to significantly contribute to premium subsidies, paying 60% of premium subsidies in 2014 and

[12] For 6 clinics with two or more assessments using the SafeCare Advanced assessment tool

aiming to take over the full premium subsidy by 2018. The state government has also significantly invested in clinic quality, with over $24M contributed to renovate five general hospitals and build 20 new primary care centers (15 completed).

5.3 HIFUND/PHARMACCESS PERFORMANCE IN THE SUPPLY SIDE[13]

Hifund/PharmAccess activities have changed how key supply-side stakeholders *think* and *act* according to the new paradigm in the national ecosystems of Kenya and Tanzania (associated with Phase 3 of the paradigm shift). Hifund/PharmAccess activities specifically focused on introducing SafeCare on a national level.

Hifund/PharmAccess' SafeCare activities changed supply side *thinking* of the national government, allowing for institutionalization of SafeCare quality approach. In Kenya, a representative from the government indicated they believed in SafeCare "*comprehensive, constructive approach, allowing them to avoid conflict of interest between the regulator and provider roles*".

Hifund/PharmAccess' SafeCare activities also changed supply side *acting* of the national government. In Kenya, the National Health Insurance Scheme is implementing a national accreditation system based on the SafeCare methodology. In Tanzania, the Ministry of Health and Social Welfare integrated SafeCare standards in the national quality policy.

5.4 HIFUND/PHARMACCESS PERFORMANCE IN THE GLOBAL COMMUNITY *THINKING*

The global community was a key enabler for the paradigm shift both for the Phase 1 as well as for the Phase 2 ecosystems. Hifund/PharmAccess impacted how key stakeholders *think* as recognized by UN Secretary General Ban Ki-Moon, UNAIDS, the G20, the World Economic Forum (WEF), the International Finance Corporation (IFC) and the OECD. UN Secretary General Ban Ki-moon described Kwara Program as groundbreaking and unique[14]. UNAIDS described the health insurance schemes as an example of innovations to achieve sustainability[15].

The G20 awarded the Medical Credit Fund with Innovative Financing Award in 2010. WEF and IFC recognized the Kwara Program as a model for leapfrogging health systems in Nigeria. The OECD made the Kwara State Health Insurance Program a finalist in its DAC Prize for Taking Development Innovation to Scale. Interviewees from numerous international organizations also described how the global community moved away from the "one-size-fits-all" public-structure focus towards a new paradigm focused on Public-Private Partnerships. Some interviewees, however, did express reservation on the extent to which some multilaterals (e.g., the World Health Organization) accepted the new paradigm, and pointed to the complexity of these changes together with the impossibility of attributing the impetus and vision for change to a single actor.

5.5 HIFUND/PHARMACCESS DISCONTINUED PARADIGM INTRODUCTIONS

The introduction of the new paradigm was not successful in all ecosystems where it was piloted. The dynamics in these ecosystems, however, did not indicate fundamental limitations to the concept. Key examples are presented below.

The Lagos programs, Capdan and Lagos Market Women (LMW), were schemes in Lagos aimed at the urban population of computer dealers and market women, respectively. These programs were limited by and discontinued because of limited financial sustainability, with an average yearly claims ratio (actual medical costs divided by premium) of at least 123% (up

[13] Supply-side performance in the Kwara ecosystem is discussed in Section 5.3.

[14] During his visit to Nigeria in 2011 with the Governors' Forum.

[15] 23rd meeting of UNAIDS Programme Coordinating Board.

to 160% in 2011) for LMW. Also, local governments were not willing to take over the premium subsidy. This prompted Hifund/PharmAccess to as much as possible "*graciously shut down*" the programs (i.e. making sure to honor existing commitments). The limit to financial sustainability was driven by "urban and poor" target populations. These populations complicated the creation of a viable risk pool given high adverse selection, moral hazard and "shopping behavior" across providers.

The DLKMS program was a scheme in Kenya aimed at tea producers and suppliers. According to interviewees, this scheme was limited by and discontinued because of limited financial sustainability and limited financial capacity of the private payer (i.e. the program was fully subsidized by a private employer, who decided that the model was not fully sustainable in the long-term).

The KNCU program was a scheme in Tanzania aimed at coffee farmers. This scheme was limited by low enrolment rates and by limited administrative capacity of the partner. While the program targeted 100% of KNCU members, only 38% enrolled in the best year (2011, also the first year). Additionally, KNCU had no capacity to enforce payments (premium was linked to coffee sales, but farmers did not exclusively sell through KNCU). The KNCU program provided insights that facilitated the redesigning of the CHF scheme.

5.6 INTRODUCTION OF THE NEW PARADIGM FROM PORTFOLIO PERSPECTIVE

We assessed the introduction of the new paradigm from a portfolio perspective, taking all ecosystems into account. We conclude that the new paradigm was successfully introduced by intervening on both supply and demand side. We believe that the less successful introductions indicate, rather than limitations to the concept, the precarious process involved in introducing such a paradigm in these complex and high risk environments.

The new paradigm was successfully introduced and demonstrated in several limited ecosystems. The introduction affected how key stakeholders *think* and *act*, and *demonstrated* the impact of the interventions. We conclude that in these limited ecosystems, Phase 1 of the paradigm shift has been largely achieved.

The new paradigm was also introduced in the wider ecosystem of Kwara State. Here the successful introduction affected the way in which key stakeholders *think.* We conclude that in this wider ecosystem Phase 2 of the paradigm shift is under way.

SafeCare (intervening on the supply side) was introduced in the national ecosystems of Kenya and Tanzania. We conclude that these activities in some way 'lead the way' as a starter for Phase 3, so that ecosystems are now set up to develop quickly when demand side interventions (Health Plans) are introduced.

The new paradigm was also introduced in the global community. Here, recognition indicates that changes in the way key stakeholders *think* are under way. This is in line with significant Hifund/PharmAccess activities in advocacy towards the global community. Going forward, local advocacy is critical to future successful introductions of the new paradigm in wider ecosystems, moving towards Phase 2. This may require additional efforts as some interviewees indicated that in Phase 1 "*local advocacy took more effort than expected, and Hifund/PharmAccess could have had a better plan for overcoming the negativity*".

These achievements are an unprecedented improvement to health care delivery in SSA and are at or above what could have been reasonably expected, in light of the complex context and the available resources and timelines.

6 ASSESSMENT OF MEETING THE FIVE ORIGINAL OBJECTIVES

To further assess whether Hifund/PharmAccess made an impact and provided sustainable solutions next to successfully completing the first phase of paradigm shift, we evaluate whether they achieved their five objectives:

1. To increase access to quality basic health care for currently uninsured groups, mainly through private health facilities
2. To evaluate different health care delivery models based on a demand-driven and results oriented approach
3. To build sustainable medical and financial-administrative capacity in the health sector
4. To lower the threshold for investment in health infrastructure
5. To directly support MDG 1 and 6: reducing poverty and halting the spread of HIV/AIDS, tuberculosis, malaria and other major diseases

We evaluated the extent to which each objective was achieved at above or below what could have been reasonably expected in light of difficult and evolving contexts, resources and timelines. To this aim, we first broke each objective down in its components and analyzed achievements component by component. We also per objective identified key areas with improvement potential. We give our assessment of whether the Hifund has met their objectives across the portfolio of ecosystems, and indicate country- and program-specific nuances where needed.

6.1 OBJECTIVE 1: TO INCREASE ACCESS TO QUALITY BASIC HEALTH CARE FOR CURRENTLY UNINSURED GROUPS, MAINLY THROUGH PRIVATE HEALTH FACILITIES

We broke down the first objective in four components: (1) increase access, (2) increase quality, (3) for currently uninsured groups and (4) through private facilities.

1. Increase access: Access was increased through Health Plans, as shown by the number of enrollees, utilization (number of visits, percentage of enrollees using care, visits per enrollee) and total group targeted. In total, 160.000 people enrolled in 2014. Thirty-eight percent of the enrollees used care in 2013 (on a total 114.000 enrollees in that year), and made over 305.000 visits in that year (over 158.000 visits as of YtD September 2014). Enrollees made on average 2,5 visits to health facilities in 2013 (a 5% increase compared to the year before). Going forward there is potential to increase access, as the *potential* size of the total target groups in the ecosystems Hifund/Pharmaccess is active in through Health Plans is around 3,5 million.

2. Increase quality: Quality was increased in 1.200 clinics in SafeCare programs, as shown by 31% improvement in median SafeCare scores from first to second assessment. Eighty percent of clinics demonstrated improving scores, where data was available (shown in Figure 7). This quality improvement was supported by 1.434 SafeCare assessments by the end of 2014. Quality was also increased specifically for clinics associated with Health Plans. All Health Plan clinics (118) participated in SafeCare assessments and most often demonstrated improving scores. The quality improvement was also supported by institutional changes, of which the anchoring of SafeCare in the national quality programs of Kenya and Tanzania is especially noteworthy.

SafeCare participating clinics associated with programs have increased in quality over time

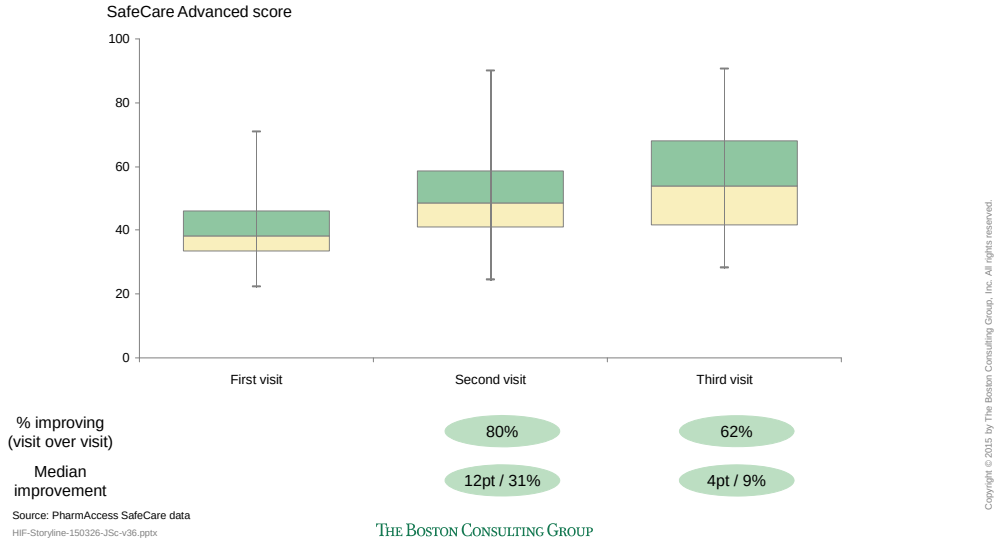


Figure 7: SafeCare clinics in program regions increase in quality

3. Uninsured before: People benefiting from increased access were mostly uninsured and lacking access before the start of the programs, (at most 23% of target group was enrolled before start) and had high poverty levels (in all programs except Bima Poa at least 50% had LSM[16] level 3 or lower).

4. Private facilities: Access was mainly provided through private facilities (78%), with the exception of some public (12%) and faith based (10%) organization across programs.

Key area for improvement is the scale of the programs (discussed in more detail for objective 3). This is indicated by the low percentage of target groups enrolling in most programs (below 30% in 2013)[17]. It is also indicated by the absolute number of enrollees across programs being relatively low, below 40.000 for most programs and 80.000 for Kwara (2014). A second area of improvement is the consistency of quality increases, with Kwara SafeCare clinics showing a decrease of 24% in median scores from the second to the third visit (where data was available. Kwara was the only region with a decrease in SafeCare scores over time.

To summarize: Despite the areas for improvement, the achievement of Objective 1 was at or above what could have been reasonably expected. Access was created for poor / non-formally employed groups, which were the target of the Hifund/PharmAccess programs. The quality improvement was significant as indicated by the median SafeCare score for first visits of 38 among clinics with a second assessment (out of a maximum total score of 100). Finally, the institutionalization of the SafeCare quality approach in Kenya and Tanzania is noteworthy.

[16] Living Standards Measurement metric, with level 3 and lower interpreted as indicating poverty.

[17] Except Kwara and DLKMS.

6.2 OBJECTIVE 2: TO EVALUATE DIFFERENT HEALTH CARE DELIVERY MODELS BASED ON A DEMAND-DRIVEN AND RESULTS ORIENTED APPROACH

We broke down the second objective in three components: (1) Execute a variety of delivery models, (2) be demand and results driven, (3) evaluate those delivery models.

1. Variety of models: A variety of delivery models was executed, with variation in Health Plan models (e.g. in choice of implementation partners, target groups, products, etc.), quality improvement approaches, provider organizations, provider location; credit supply models, and enablers (e.g. mHealth). The variation, based on interviews and documentation review, is shown in Figure 8.

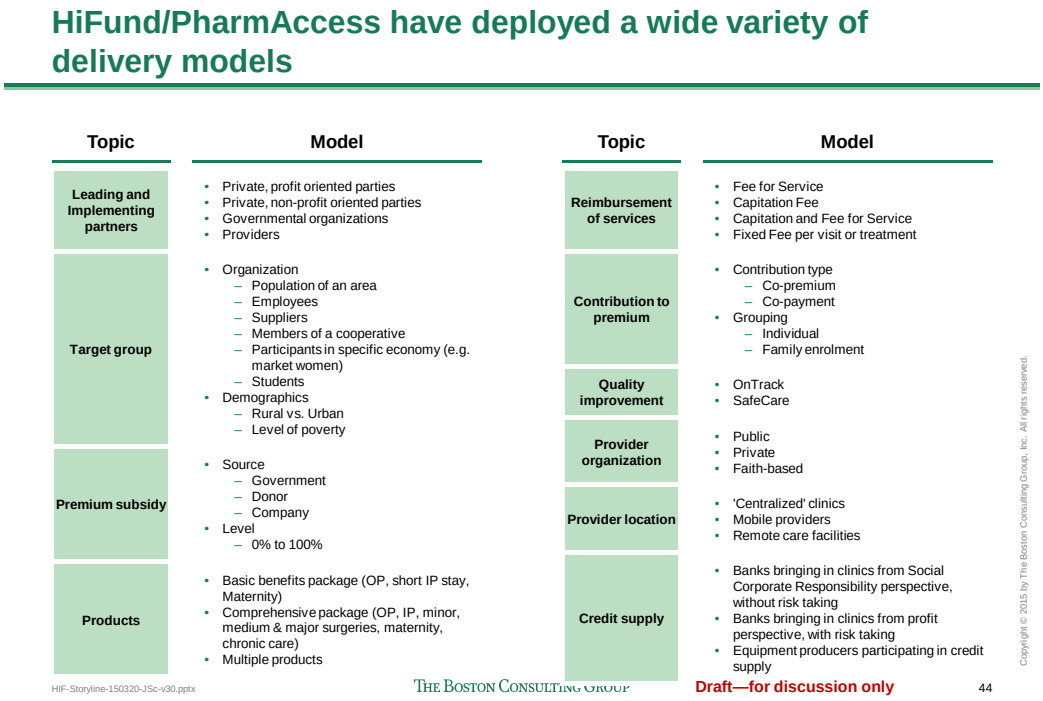


Figure 8: Variation in healthcare delivery models

Specifically for target group selection, a structured and varied set of poor vs. middle class groups were used to test the Health Plan models. The poor groups allowed testing in challenging contexts, while middle class groups allowed testing models with lower levels of premium subsidy.

2. Demand and results driven: These models were *demand* and *results* driven, as shown by uptake rates (44% for Kwara, 39% for DLKMS and 28% for KNCU in 2013)[18]. In the complex circumstances described in chapter 4, convincing over a quarter of the target population to sign up and pay for a concept they are unfamiliar with and that costs an estimated month's wages (while earning less than $1 per day) is a substantial achievement. The demand and result focus was also confirmed by interviewees explicitly expressing the need for these types of programs (i.e. "*without this program there would be no access to care*", or "*with this program I was able to make required investments in my facilities which I could not do before*").

Even programs with limited uptake still fulfilled a latent demand. For example, while interviewees expressed satisfaction with the Bima Poa program, its limited uptake was partly due to the introduction of free maternal services in public clinics crowding patients away (according to one interviewee: "*free is free, even if the quality is low*").

[18] Programs in existence for longer than a year and which were not discontinued after 2013.

3. Evaluate: In executing this wide variety of models, Hifund/PharmAccess rigorously gathered data, as indicated by their ability to meet almost all of our data requests in the short timeframe of this evaluation (also detailed in the Annex).

On top of the continuously gathering of data, Hifund/PharmAccess in collaboration with AIGHD and AIID also systematically collected information to support impact evaluations. In total, more than 14 peer-reviewed publications were published based on data gathered through Hifund/PharmAccess activities. The impact evaluations are especially extensive for the program in Kwara (Nigeria). Interviewees indicated that results from other regions are delayed because of changing program set ups, requiring evaluation redesigns and longer waiting times for impact to be measurable.

Both operational research and impact evaluations are crucial for contributing to the paradigm shift through demonstrating impact and viability.

Key area for improvement in evaluating these delivery models is the lack of systematic and explicit extracting of lessons-learned. Although, based on interviews, cross-program comparative analyses on success factors for program design were carried-out informally, we did not come across explicit lessons-learned supported by documentation. On program design, we identified only limited documentation on best practices (i.e. the lessons learned from Nigeria and Tanzania used to inform the new program set up in Kenya). This was confirmed by interviewees ("*they definitely used our experience from earlier programs in designing new programs, but did not explicitly write that down*"). On program execution, we did not find any documentation on best practices. Some interviewees also expressed reservations on documentation in general ("*documentation has improved a lot, but they are still not there – they need to realize they are a learning organization*").

To summarize: Despite the area for improvement, the achievement on this dimension was at or above what could have been reasonably expected. The variation in models tested is exceptional for any NGO of this size. The models followed rigorous methodologies and received impact assessments. Furthermore, being demand- and results-driven (focused on beneficiary and provider needs) is challenging when donors (in addition to the Dutch Ministry of Foreign Affairs) may express other needs and preferences as well.

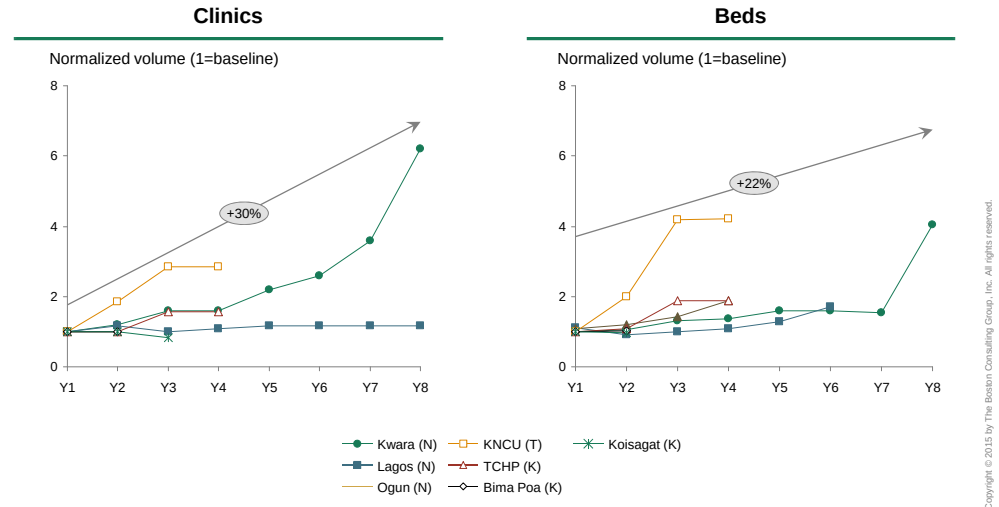
6.3 Objective 3: To build sustainable medical and financial-administrative capacity in the health sector

We broke down the third objective in three components: build (1) medical capacity, (2) financial-administrative capacity, (3) in a sustainable way.

1. Medical capacity: Significant medical capacity was built, as shown by the volume of local clinics participating in medical capacity building and by measured quality improvements. Approximately 1.200 clinics built capacity through SafeCare, taking part in 1.434 assessments in 2011-2014. Of those, 118 clinics with a combined 2.902 beds (in 2014) built capacity through participating in Health Plans. Approximately 490 clinics built capacity by receiving MCF partner bank loans. The building of medical capacity is also shown by the average yearly growth in both Health Plan-associated clinics (30%) and beds (22%), as shown in Figure 9[19]. Capacity building led to quality improvements, as shown by the 31% increase in median SafeCare score from first to second visit. Medical capacity was also built through the institutionalization of the SafeCare quality approach in Kenya and Tanzania.

[19] Noteworthy exception to the growth in clinics and beds in Figure 9 were the programs in Lagos, Nigeria. This may be due to relatively high level of infrastructure development in Lagos.

Volume of clinics, beds have increased over time across programs



Source: PharmAccess Health Plan data

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THE BOSTON CONSULTING GROUP

Figure 9: Volume of clinics, beds

2. Financial-administrative capacity was built to some extent, as indicated by the amount of capacity-building activities (e.g. 1.134 business plans and expert opinions approved by MCF by Q3 '14, and 432 business trainings for providers in MCF program) and by quantitative evidence for activities that resulted in claims being paid on time and accurately (shown in Figure 10). Interviewees confirmed that financial-administrative capacity was built. For example, providers indicated that business training led to more transparency in keeping track of revenues, expenses and debt, reaching in some cases three-fold increases in tracked profitability. Also, insurers indicated that support form Hifund/PharmAccess led to increased skills in the areas of actuarial calculations, marketing and quality improvement ("*without them, we could not have done this*").

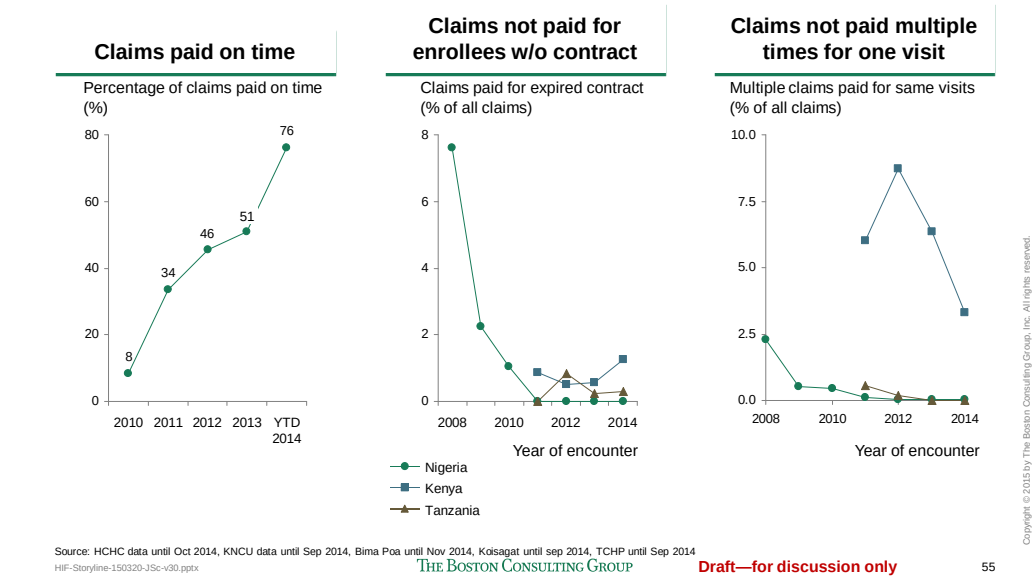

Figure 10: Increased financial-administrative capacity

3. Sustainability is a key area for improvement. In chapter 3, we defined sustainable achievements for Phase 1 as those that attract engagement of local parties (e.g. government) for the required support (e.g. funding, policy change) for change. These local partners should have a view of taking ownership. The achievements should remain functional in the future with only limited support by Hifund/PharmAccess.

The achievements of Hifund/PharmAcess attracted engagement of local parties for the required support, in some cases with a view of taking ownership. This applied to Health Plans (Kwara government taking over part of premium subsidy), SafeCare (Tanzania government using SafeCare as national quality system) and MCF (local banks taking risk, discussed in more detail for Objective 4).

Some partners expect Hifund/PharmAccess to still provide substantial *operational support* during Phase 2. During interviews, representatives from administrators, clinics and governments indicated requiring continued, substantial support from Hifund/PharmAccess on topics such as management, advocacy, quality improvement and administration. For example, interviewees indicated "*they are crucial for our continued success, if I had one wish it would be to increase their involvement*". Progress towards sustainability is being made, as local parties are currently engaged and receiving required training to take over the support role in the future. Progress is also being made in reducing the high costs and effort required to increase bankability. For instance, the CarePay platform (see more details in chapter 7) will contribute to the creation of automatic records of transaction histories for small clinics at lower costs.

Based on data analysis and our observations during country visits, Hifund/PharmAcess will also still need to provide substantial *financial support for Health Plans* during Phase 2. Reducing financial support for Health Plans requires those plans to be affordable to local stakeholders (e.g. governments) and requires those stakeholders to be willing to field the premium subsidy costs in the future (premiums will need continued subsidies as it is unlikely that the low-income target groups will be able to afford large enough self-funding premiums for the foreseeable future).

The *affordability* of Health Plans is currently still limited by the substantial portion of actual admin and marketing costs[20] (out of total actual costs). For the four Health Plans with available relevant financial info, the admin-to-total cost ratios were in the 29% (Kwara) - 84%[21] (TCHP basic package) range[22] in 2014. This range substantially exceeds typical maximum target admin costs of at most ~25% in insurance programs (based on BCG experience and confirmed by interviewees). TCHPs admin ratios in particular are substantial for a program four years in existence (55% for the comprehensive package and 84% for the basic). Affordability is also limited by medical costs that are higher than expected, as indicated by a claims ratio[23] of over 90% in 3 out of 8 programs[24] in 2014.

In the future, the portion of actual admin and marketing costs could go down, as some of these are one-off costs associated with program introduction. Economies of scale (Figure 11) and automation (i.e. leveraging mobile payment platform) should help drive unit costs down. The realized lower admin and marketing costs for the Kwara program (eight years in existence) compared to the TCHP program (four years in existence) are in line with this assumption. By 2018, Hifund/PharmAccess project admin and marketing costs to be 21% of total costs for the Kwara program and 32% for the iCHF program[25].

Increasing scale (enrollment) drives lower costs per enrollee

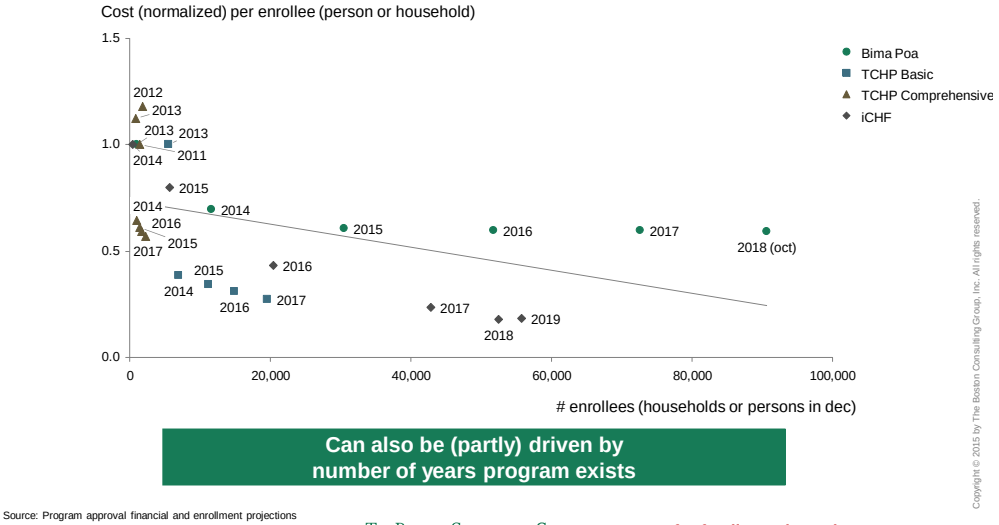

Figure 11: Association between scale and costs per enrollee

For the moment, scale issues are reflected by absolute enrolment numbers of below 40.000 for all programs in 2014 except Kwara State. The limited penetration is shown by the enrolment rate as a percentage of target group size below 30% for all programs except DLKMS. Re-enrolment rates are also limited. (Details per program can be found in Figure 12).

[20] Including program management.

[21] While 10% admin costs was assumed in for premium calculations.

[22] 40% for KNCU, 55% for TCHP comprehensive.

[23] Actual medical costs divided by premium.

[24] With data available.

[25] Admin costs out of total costs are 11% in 2018 for Kwara and 20% for iCHF (formerly KNCU).

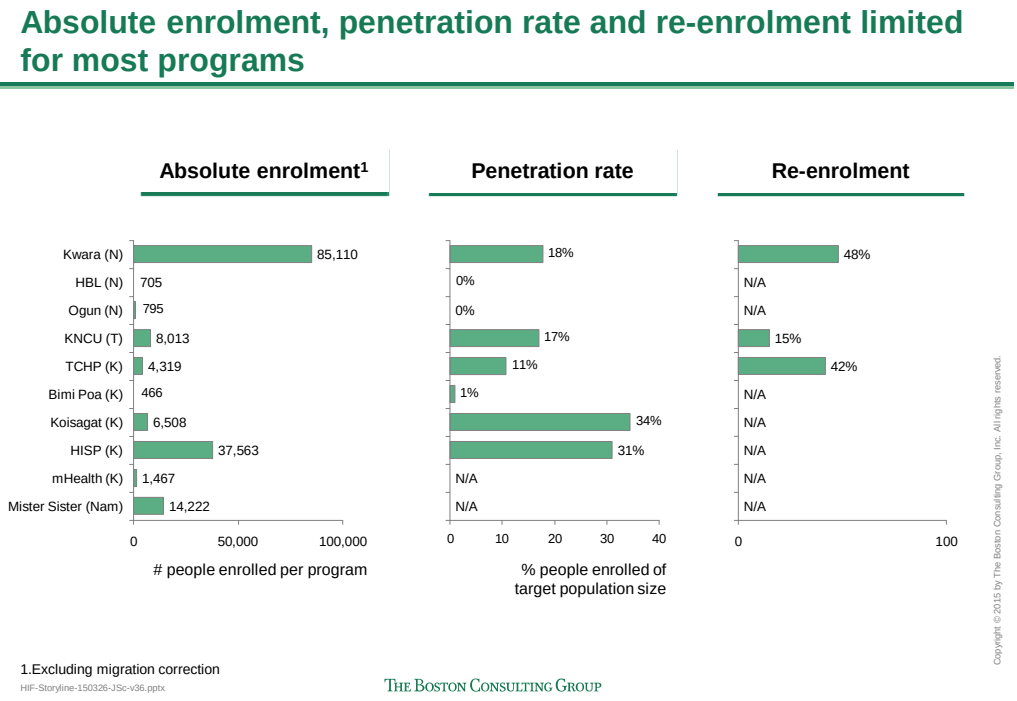

Figure 12: Enrolment, penetration and re-enrolment

Before entering the next phase of the paradigm shift, it is crucial to show that these programs can become affordable to local stakeholders by increasing volumes and further reducing admin, marketing and medical costs.

To summarize, the extent of capacity building was a significant achievement, even though substantial challenges remain. Medical and financial-administrative capacity in comparable regions without intervention remains low according to interviewees, an observation that is supported by impact studies (detailed for Objective 1).

6.4 OBJECTIVE 4: TO LOWER THE THRESHOLD FOR INVESTMENT IN HEALTH INFRASTRUCTURE

The fourth objective is "*To lower the threshold for investment in health infrastructure*". We did not break this objective down.

The threshold for both public and private investments were lowered, as shown by the total leverage of the €100M Hifund grant towards €441M committed capital in 2012. Globally, the lower threshold is especially shown by the risk taking of €25.3M by private investors such as Goldan Sachs, APG and Pfizer in the €50M IFHA fund. Nationally, this is reflected, for instance, in the Kwara State government $24M contribution to hospital renovation.

Locally, the lower threshold can be shown by the risk-taking of over €1,7 million by local banks in MCF loans (shared 34% of risk in total loan portfolio) and – more importantly for sustainable impact – by the development of health care specific loan products by local banks[26]. The lower threshold is also shown by private providers taking risk through topping up MCF loans with their own money or through applying for loans elsewhere. Providers are moving away from a cash-based economy towards being 'bankable'.

[26] Note that MCF activities from the perspective of this objective is about increasing bankability of health care providers and the associated lowering of the threshold for investment, not necessarily about the direct investments based on Hifund funds.

Hifund/PharmAccess were able to reduce the threshold for local investments by guaranteeing / co-funding the first part of the loans and by clearly linking the loans to the medical and administrative quality of the providers. The reduced risk is shown by the repayment rate of 97.5% for the 617 loans disbursed.

To summarize, this is at or above what could have reasonably been expected. In the ecosystems where Hifund/PharmAccess operates, risk is high and trust is low, hampering investments. In this complicated environment, Hifund/PharmAccess enabled substantial investment.

6.5 Objective 5: To directly support MDGs 1 and 6

We broke down the fourth objective in two components: (1) reduce poverty (MDG 1), (2) reduce communicable diseases (MDG 6).

MDG 1: Poverty was shown to be reduced by the lowering of health care out-of-pocket expenditures. In the Kwara region there was a 32% decrease in out-of-pocket expenditures relative to control areas. Prior to having an insurance scheme, these out-of-pocket payments were often catastrophic expenses for the poor (i.e. having to sell their means of income to pay for treatment). As such, the program helped prevent people to fall into a poverty trap. In other regions, health care insurance likely led to reduced health care out-of-pocket expenditures as well. This can be indicated by over €1.2 million health care costs in the Kwara and KNCU health plans that were claimed by enrollees, but subsidized by Hifund/PharmAccess and the local government (2014).

MDG 6: Communicable diseases were likely reduced based on the extensive related activities that Hifund/PharmAccess carried out. For instance, in the Nigeria Health Plans, over the past eight years, almost 400.000 Malaria diagnoses and treatments were provided (YtD September 2014). In Hifund/PharmAccess associated clinics, over 90.000 visits per month were related to HIV and almost 100.000 visits per month were related to immunization. Forty-six percent of providers reported an increase in HIV tests and 41% of providers reported an increase in malaria tests. In addition, strengthening primary care across the board is certainly an effective way of addressing communicable diseases.

However, although quality of health was likely to be affected, we found no data to substantiate the impact of the activities for *communicable diseases*. The impact evaluations which were executed based on Hifund/PharmAccess activities were directed at Non-Communicable Diseases, such as cardiovascular disease. Interviewees indicated that this was due to low prevalence of HIV/AIDS in the targeted ecosystems and the complicated methodology to track health impact of, for instance, malaria.

Note that MDG 4 (reducing child mortality) and MDG 5 (improving maternal health) are likely to have benefited from the Hifund/PharmAccess activities as well (e.g. over 70.000 visits per month related to family planning in program clinics in 2014). In the Kwara impact study, it was reported a 39%pt increase in women delivering in a hospital, compared to the control area. An overall impact on utilization was shown by 39% of providers reporting an increase in the number of family planning sessions.

No specific areas for improvement are noted for this objective.

To summarize, the magnitude of this achievement was what could have been reasonably expected, as this objective intends for the activities to at least support MDG 1 and 6, not fully address those (that would be an unreasonable demand).

6.6 Conclusion

Hifund has, by and large, successfully met all of their five objectives. Access was increased, diverse models were introduced and evaluated, capacity was built, the threshold for investment was lowered and the MDGs 1 and 6 were supported. Specific areas for targeted improvement during Phase 2 of the paradigm shift should include: increasing (re)enrolment and coverage rates towards lowering the admin and claim costs for affordable premiums, continuing and increasing local funding of subsidies, and increasing explicit cross-system assessment to extrapolate lessons.

7 ASSESSMENT OF THE EVOLUTION OF PHARMACCESS

While Chapters 5 and 6 evaluated whether Hifund has done the right things to achieve paradigm shift in several ecosystems, this Chapter assesses whether Hifund/PharmAccess operated in an effective and efficient manner. For this, we examine the evolution of their activities, governance, internal organization, and partnerships.

7.1 EVOLUTION OF ACTIVITIES

We analyzed the developments over the past eight years across the different programs. The evolution in activities is contrasted against Hifund/PharmAccess initial two programs, namely demand financing of health care, and the initial quality-monitoring program On Track.

7.1.1. Demand-side financing

Core Health Plan activities received customized interventions across markets. These were mainly in response to new insights on behavior and incentives of providers and patients. According to program design documents, Hifund/PharmAccess increased, among others, copayments or reimbursement fees, made product catalogues more explicit, introduced family pricing and redesigned benefit packages. While most of these interventions were undertaken to make the health plans more affordable for the payers, it must be noted that, in some cases, price increases and longer waiting times may have contributed to lower (re)enrolment rates, increasing the adverse selection of the risk pools.

7.1.2. Supply-side financing and quality improvements

Over the years, Hifund/PharmAccess has substantially increased its focus on supply-side issues ("*beneficiaries will not pay a premium for the same low-quality services they receive for free in the public sector*"). With this motivation, the MCF (2009), Safe Care (2010/11) and the Africa Health Infrastructure Fund (AHIF, 2015) were created.

The Medical Credit Fund was created in response to the realization that poor quality from the provider side was due to limited bankability for lower-tier health care providers. With 617 loans totaling $7,5m disbursed to small scale healthcare facilities for the purchase of medical equipment, pharmacy supplies, computers, admin software and general infrastructure, MCF has certainly contributed to the ambition of quality health care provision. Furthermore, MCF has contributed to providers' bankability. Many interviewees reported having moved from a 100% cash-based business to a 100% banking business, and to now also `shop' for the first time for credit lines in the market (i.e. "*last time I made an expansion I had to sell my house, now, after SafeCare / MCF, I am confident I can approach a bank*").

The success of MCF gave rise to the realization that there is demand for larger and more flexible loans across the full health care supply value chain (provider networks, companies providing services to the health sector, etc.) that MCF cannot cater to. To this effect, PharmAccess is setting up the Africa Health Infrastructure Fund, for which it already has a number of interested large investors lined-up. It has a total of $60 million ambition. The first loans extended through AHIF are expected to take place in 2016.

A second intervention to improve health care supply took the form of SafeCare (2010/11). Since the onset, Hifund/PharmAccess had an in-house developed quality monitoring tool, OnTrack. Towards mid-2010 it became clear that this in-house, heavily customized, tool would not be fit for the increasing geographical reach and the demand for institutionalization and local ownership of quality standards. The methodology needed to be standardized and internationally-recognized. SafeCare was a successful introduction, allowing cross-national benchmarking of quality and step-wise progress towards formal, international-recognized accreditation of providers (JCI, COHSASA, ISQua), that was fit for resource-constrained settings. The success of SafeCare can be illustrated by the response of one strategic partner:

"*SafeCare is driving the patient safety agenda in all three countries. We should take it to South Sudan, Uganda, Congo, anywhere where it is demanded*".

7.1.1. Mobile enablers

Finally, Hifund/PharmAccess most recent innovation is the development of a mobile health exchange platform (*CarePay*). Its rationale is manifold: (1) create commitment mechanisms for beneficiaries to pay monthly instead of yearly, increasing enrolment rates; (2) create automated payments records that could in turn be used as collateral / proof of cash-flow for improved bankability; (3) development of an in-house payments platform for transactions between providers and payers to increase efficiency and transparency in Health Plan administration and reduce the transaction costs thereof (up to 80% cost reduction and simplification of claim processing time from months to 24 hours, according to interviewees).

These mobile enablers are currently in a pilot phase, and it is too soon to assess whether they will be successful or not. They are especially promising for the case of Kenya, where the market conditions are favorable for mobile transactions. Whether the adaptations to other countries with lower penetrations of mobile technology and more fragmented mobile markets will be successful remains to be seen.

7.2 EVOLUTION OF GOVERNANCE AND ORGANIZATION

With the creation of MCF and SafeCare activities, the Hifund/PharmAccess governance was adjusted accordingly. Per request of its private funders, the MCF was added as a separate legal entity on top of the original PharmAccess architecture (independent PAI, HIF and IFHA boards). The MCF currently has two board members and five supervisory board members, and nine employees across all geographies.

Conversely, SafeCare has not been set-up as a separate entity, even if it currently employs the largest number of employees (73 expected in 2015), and it is one of Hifund/PharmAccess fastest growing programs (60% cumulative annual growth rate of Hifund budget allocated to SafeCare vs. 5% growth on average of Hifund expenses).

With the addition of new activities to the PharmAccess ecosystems, the number of employees across all offices has increased fivefold since 2006. In particular, PharmAccess has opened branch offices in all Hifund countries: Nigeria, Kenya and Tanzania. In these offices staff size has grown at a rate of 38% (from 2 to 26 employees), 69% (from 5[27] to 24 employees) and 22% (from 8 to 39 employees) per year respectively. These annual rates stand in clear contrast to those in Amsterdam, growing at 8% per year (from 36 to 66 employees).

Despite rapid organizational growth, PharmAccess has stayed true to its entrepreneurial roots. The organization remains focused on the big-picture, system- and innovation thinking. Limited internal bureaucratic processes allow the organization to be fast and flexible decision makers and to adjust their role in partnerships as/when required. A flat hierarchy and consensus-seeking approach allow every employee to provide their perspective and ensure that problems are solved from a multi-disciplinary point of view.

Some interviewees expressed concerns with the availability of in-country skills and the ability of country offices to lead independent, autonomous operations. Our own observations from country visits indicate that country offices are well-staffed, with both expats and senior local managers well-positioned within the senior local stakeholder communities. In regional offices, however, teams are smaller, there are (e.g. in Kwara) no project managers, experts are scarce (interviewees specifically referred to banking expertise in Tanzania) and cost of living is extremely expensive (i.e., especially in Nigeria, due to security).

[27] In 2011.

Lack of sociological know-how within the permanent roaster of employees was also indicated as a concern by interviewees. Even though, as part of the rigorous impact evaluations, PhD. students have conducted sociological studies and CHAT sessions take place, a consistent, systematic approach to understanding the behavioral drivers of communities influenced by Hifund/PharmAccess programs does not yet exist. A larger sociological component in program design may increase the program fit for specific communities, freeing-up time and resources better spent elsewhere.

7.3 EVOLUTION OF SOLUTION-ORIENTED PARTNERSHIPS

As the activities of Hifund/PharmAccess evolved over the last eight years, so did the strategic partnerships needed to support these programs. In this section, we assess whether the partners chosen for SafeCare, MCF and CarePay were fit for that purpose.

7.3.1 Evolution of quality- and credit-related partnerships

Increasing the recruitment of providers assessed for quality and bankability was a key priority at the onset of MCF and SafeCare. Hifund/PharmAccess benefited from economies of scale by looking into provider *networks* rather than individual clinics. On top of networks participating in the schemes of long-established partnerships (i.e. AAR, Hygeia, APHFTA), partnerships with KMET, NHIF and PSI (through the Tunza clinics), increased the potential number of providers to be assessed for quality and bankability by approximately 1.500.

A telling counterfactual to the value-proposition of these types of partnerships is the situation in the Siha region of Tanzania. In this district, there are no APHFTA-associated clinics and PharmAccess needs to engage providers on an individual basis. As a result, there are no MCF loans disbursed and PharmAccess still subsidizes most quality improvements.

Identifying partner banks willing to mobilize the private sector and contribute to the creation of a market for health care financial products was challenging. As an MCF board member aptly put it: "*over the last years we had to deal with banks declaring bankruptcy, being taken-over, changing their strategic directions, not fulfilling their commitments, the full spectrum*". But by end of 2014 Hifund/PharmAccess had seven bank partners, many of them with their own credit lines catering to the health care sector (i.e. Tabibu for K-REP; Mediloan for Diamond).

7.3.2 Evolution of mobile health partnerships

According to many interviewees, the main rationale for the partnership between Hifund/PharmAccess and Safaricom was that "*it is better to try something out in a real market and `fail quickly' if it does not work"*. To this extent, Safaricom has been a good partner choice. With its strong position in the market, it has given Hifund/PharmAccess the possibility to test mHealth prototypes with real consumers (odds that an adult uses M-Pesa are six to one).

Long-lasting insurance partner AAR also joined the initiative, providing clinical patient data as input for mobile healthcare products. This leg of the triad cannot yet be assessed as the products developed in collaboration with AAR (i.e. loyalty schemes, preventive messages) are not yet particularly innovative, especially as compared to other developments in the market (i.e. apps such as HelloDoctor, MomConnect, MedAfrica among others).

7.3.3. Evolution of advocacy partnerships

We take note here of the many public-private partnerships built by PharmAccess over the last eight years with the objective of driving policy change in the geographies of influence. Of particular relevance are the collaborations targeted to advocate for private sector development, such as that with the IFC/Health in Africa Initiative of the World Bank. This partnership provides stronger ties to governments and parastatal agencies that PharmAccess, given its size and geographic influence, cannot achieve on its own. Besides their influence with local authorities, this partnership has led to additional collaborations, such as the engagement in Uganda.

On the public sector side, Hifund/PharmAccess has been successful in establishing partnerships with district, state and national governments to help promote health care PPPs. From the state of Kwara supporting 60% of the premium subsidies, to the Tanzanian districts and NHIF currently contributing 30% of the total program costs, all the ecosystems with Health Plans today are showing government involvement. On the supply side, institutionalization of quality is being achieved through the partnership with the Kenyan NHIF and the Tanzanian Ministry of Health. The later, for instance, intends to roll-out SafeCare quality standards nationally as of 2015.

At a strategic partnership level, the role of the Dutch Ministry of Foreign Affairs needs to be noted. The set up of the grant was focused on a clear objective, with sufficient scale and duration to do it well and without too many milestones which would prescribe the way to work in difficult places. This set-up allowed flexibility to adapt to changing environment and market insights and generate valuable lessons-learned.

While these PPPs have been successful, two areas of concern remain, especially in relationship with the public partners. On the one hand, achievements may b at risk if governments are unstable or cannot honour their commitments. At the time of writing, for example, the State of Kwara owed Hifund/PharmAccess €850.000 in concept of advanced payments. On the other, if parastatal agencies take the administrator role for the health plans in Phase 2, additional mitigation strategies will need to be put in place to minimize deterrence of providers to participate in those schemes, given reported concerns from providers on delays of up to 90 days for claims reimbursement.

7.3.4 Overall evolution of partnerships

Over the last eight years, the quality of Hifund/PharmAccess partners has been a crucial success factor in increasing scope and depth while maintaining flexibility and an outside-looking perspective.

Furthermore, having found good partners, Hifund/PharmAccess have nurtured those relationships, sometimes leading to almost symbiotic collaborations. Across the board, we heard partners say that they are highly satisfied with Hifund/PharmAccess level of expertise on health insurance design, international benchmarking and their ability to take risks and experiment (i.e. "*I do not think anybody else would have done anything in Kwara*"), as opposed to focusing on short-term projects. Partners uniformly reported they `*could not have done it without PhA*', and stated general consensus that "*there is no NGO like PharmAccess in Africa*".

7.4 Remaining areas for efficiency improvement

While Hifund/PharmAccess has been effective in adapting their activities and organization to external constraints and managing their partnerships with a robust, reflexive and solution-oriented approach, there is still some improvement potential for efficiency. Particularly, in terms of simplifying the governance structure, continuing formalization of the organization and making strategic and implementation partnership choices more explicit.

7.4.1 Complex governance structure

While the current set-up (independent PAI, HIF, MCF and IFHA boards) was mandated top-down by donors and investors under the principle of separation between not-for-profit activities and private investments, several interviewees reported the need for simpler and more transparent governance within the current architecture.

Complex governance is reflected in the 12 or more board meetings a year (there were three within a month of each other while we were conducting the evaluation), compared to an

average of 7.4 per year at other European non-profit organizations. Complex governance is also reflected in comments from interviewees, such as "*you can't see what they do until you visit Amsterdam*", or "*sometimes even us [board members] do not understand how the entities relate to each other*".

The potential addition of AHIF as a new separate legal entity, as well as the potential inclusion of local offices on the board architecture will add to this complexity, and it may also magnify current concerns in the area of communication. Many board members reported a lack of formal updates from other governance bodies (i.e. no access to written minutes) and a reliance on individual members sitting in overlapping boards for cross-pollination.

7.4.2 Internal organization not fully formalized

While PharmAccess size has grown almost five-fold between 2006 and 2015 (from 45 to 203 employees), "*several aspects of the organization still run as an innovation start-up rather than a medium-size enterprise*". Lack of org. charts, a pipeline of top-down innovations, lack of systematic documentation, and limited granularity in financial data are some of the aspects we observed during the evaluation.

Many interviewees, including board members, have pointed to the need for more clarity in roles and accountabilities. This can be evidenced by the lack of org charts, "*as they are not needed when everything is going well, but clearly needed when things get tough*". Based on BCG experience, almost all firms with over 100 FTE have some kind of an org. chart. Lack of clearly defined and communicated organizational structure may lead, as the organization grows and matures, to multiple owners for the same product, inefficient consensus building (if staff believes they can/should chime in multiple activities), management involved in detailed, line-related discussions or lack of transparency in career opportunities.

Several interviewees also reported that the continuous stream of top-down ideas may hinder the ability of the management team to challenge or allocate thinking time to the innovations ("*every couple of months a new idea comes up, but I am still working on three ideas ago*"). Additionally, while this may keep the organization action-oriented, it could also deter it from keeping track of its environment. For instance, interviewees specifically raised concerns on CarePay moving faster than the other activities ("*technology moves faster than people*") and cautioned the mobile organization to keep pace with its more labor-intensive counterparts.

Limited systematic documentation continues to be a soft spot even if, according to interviewee reports, it has substantially improved over the last two years. Based on our systematic review of the documentation, cross-model comparative analyses are not standard in the organization (according to one interviewee: "*for every situation you can have a different solution… but what is the conclusion?*"). While due diligence is performed and lessons-learnt are incorporated in program (re)design (Kwara's for Kenya and Tanzania; KNCU for iCHF; Bima Poa for UHC), these insights are typically shared verbally or discussed based on need in isolated documents. According to several PharmAccess employees, the reliance on individual knowledge owners is significant, putting at risk activities with a single knowledge owner and limiting the dissemination of results across partners, programs and countries (according to one partner: "*they reinvent the wheel a lot*", and other "*I was in Uganda and found that there are other strategic partners doing great things I want to do... but it was by pure luck*").

Finally, consolidation of non-audited financial data[28] could be automated and made available off-the-shelf at a more granular level. Based on the responses to our data requests, funding and expenses are not systematically tracked at sufficient detail for effective management and oversight. For example, overviews of employee counts, or of program-level Hifund budget

[28] Based on external audit reports, no significant recommendations in terms of audited Financial reporting noted.

and expenses within countries over the years are readily available for Nigeria, but had to be manually customized for the other countries. We believe this may be in part due to the fact that different programs and partners report on different formats, leading to inefficiencies in the way data is collected and processed.

7.4.3. Trial-and-error approach for partnerships

Although PharmAccess was able to enter in a large number of solution-oriented partnerships, according to multiple interviewees, these partnerships were not always explicitly designed for. Interviewees reported that the lack of explicit design in some cases resulted in PharmAccess selecting partnerships that required substantial time or financial investment to get off the ground (KMET, MicroEnsure), or did not work, even after significant investment (Strategis, Kiva, DL Koisagat, Merchant Bank, among others). Several PharmAccess interviewees reported binding relationships (especially with large, conservative partners that are "*not motivated, forcing PharmAccess to `do everything'*"), and risk-aversion to let the partnerships fail as potential reasons. While we did not investigate this point in detail, it does raise the question of whether different partners could have been selected, or whether specific partnerships could have been terminated earlier.

Transitioning most ecosystems to Phase 2 and 3 of the paradigm shift will probably require Hifund/PharmAccess to develop a new strategy, learn new skills and create new partnerships. These are complex questions without ready-made answers. The areas for development listed above should be taken as no-regret moves which, although not straightforward, are within reach and can be the stepping stone towards the new organization needed to succeed in Phase 2.

8 Conclusion

In this report we evaluated the progress and achievements of the Health Insurance Fund over the past eight years. The evaluation revolved around an overarching question: Is the grant to the Health Insurance Fund by the Ministry of Foreign Affairs well-invested?

Our response proceeded in four parts:

First, the Hifund's mission to introduce and champion a new paradigm for development of healthcare markets and provide access to affordable and high-quality care in Sub-Saharan Africa is unique, timely and relevant. It has a compelling theory of change in line with its value proposition and the purpose of the Dutch government's "Aid & Trade" policy.

Second, Hifund/PharmAccess have come a long way in successfully introducing this paradigm in the three countries where it operated with comprehensive programs. It has accomplished the first phase of the paradigm shift, changing how key stakeholders act and think and demonstrated the effect of the new paradigm within local ecosystems: local banks have entered the health care sector, clinics have increased quality, local insurance companies entered the low-income insurance market and beneficiaries have enrolled in the insurance programs. Additionally, international public and private capital from well-respected institutions was attracted.

Hifund/PharmAccess is also on track (albeit with remaining challenges and risks) to accomplish the second phase of this paradigm shift, with the Kwara program as a notable example of a program with an expanding role and ownership by the state government, interest from federal government for partnership, extensive proof through impact studies.

Third, Hifund/PharmAccess have, by and large, successfully met all of their five objectives. Access was increased, diverse models were introduced, capacity was built, the threshold for investment was lowered and MDGs 1 and 6 were supported. Specific areas for targeted improvement during Phase 2 of paradigm shift include: increase (re)enrolment and coverage rates towards making the programs more affordable, increase capacity to develop medical and financial skills, continue and increase local funding of premium subsidies, and increase explicit cross-system assessment to extrapolate lessons.

Finally, Hifund/PharmAccess have been effective in adapting their activities and organization to external constraints and managing their partnerships with a robust, reflexive and solution-oriented approach. There is still improvement potential for efficiency – particularly in terms of simplifying the governance structure, formalizing the organization and making their strategic and implementation choices more explicit in terms of program focus and partnerships.

Overall, we judge that the grant to the Hifund was well-invested. It allowed PharmAccess to intervene in an area where not many NGOs delve into: the complex public-private healthcare system, where it is close to impossible to create short-term successes and where long-term results are uncertain by default. It also provided flexibility to adapt to emerging market insights on barriers towards success and hence generated valuable lessons-learned. In the process they successfully introduced the targeted paradigm shift (if not completed), accomplished their key objectives and bettered the internal organization and its partners.

Long-term financial certainty will be critical to evolve these capabilities, provide opportunities to enable local governments to own and scale-up programs (e.g., replicate, system-integrate), and create operational excellence for health plans administration. Revising the original objectives is also important to prepare Hifund to deliver on Phase 2 of the paradigm shift and prepare for Phase 3. While doing so, adapting the Hifund Architecture and PharmAccess organization is required to ensure governance and strategy mutually reinforce each other.

APPENDIX

OVERVIEW OF INTERVIEWS, FIELD VISITS, DOCUMENTS AND DATA

Amsterdam-based interviews

Organization	Interviewee	Function
Hifund/PharmAccess	Kees Storm	Hifund board chair
	Peter van Rooijen	Hifund board
	Willem van Duin	Hifund board
	Prof. Pauline Meurs	Hifund board
	Onno Schellekens	PharmAccess board
	Max Coppoolse	PharmAccess supervisory board
	Wilfred Griekspoor	PharmAccess supervisory board
	Nicole Spieker	PharmAccess board and Director SafeCare
	Kwasi Boahene	Director for advocacy and program development
	Alexander Kohnstamm	Director for external affairs
	Sicco van Gelder	Director Health Plans
	Fleur Henderson	Health Plans
	Julia Teerling	Health Plans
	Ben Christiaanse	MCF supervisory board
	Monique Dolfing-Vogelenzang	Board Member, Managing Director MCF
Dutch government	Aaltje de Roos	Senior policy officer
	Selwyn Moons	Deputy Director, Sutainable Economic Development Dept.
	Paul Menkveld	Ambassador to Korea
External parties, global	Sweder van Wijnbergen	University of Amsterdam
	Steven Chapman	CIFF, WWF
	Michiel Heidenrijk	AIGHD
	Marleen Hendrinks	AIGHD
	Scott Featherston	Formerly at World Bank Group
	John Simon	Total Impact Advisors
	Guy Stallworthy	Grounds for health
	Dr. Falunke	Shell
	Jacques van der Gaag	AIID / Brookings Institution
External parties, local (outside of field visits)	Ola Soyinka	Commissioner of health for Ogun State, Nigeria
	Wala Adedeji	COO AHME
	Prof. Osibogun	Public health consultant, Lagos
	Jagi Gakunju	CEO AAR

Field Visits

Country	Organization	Person	Function
Nigeria	PharmAccess Nigeria	Ayodeji Ajiboye	Health Plans Program Director
Nigeria	PharmAccess Nigeria	Modupe Oludipe	Safecare Program Director
Nigeria	PharmAccess Nigeria	Uzodinma Osisiogu	MCF Program Director
Nigeria	PharmAccess Nigeria	Ngozi Onyia	Board of trustees
Nigeria	Hygeia	Fola Laoye	Chairman
Nigeria	Hygeia	Peju Adenusi	Managing Director for Hygeia Community Health Care and Hygeia
Nigeria	Netherlands Embassy in Nigeria	Taco Westerhuis	Economic Counselor Netherlands Embassy in Nigeria
Nigeria	Lagos State ministry for health	Dr. Taiwo	Director HealthCare Planning Research and Statistics
Nigeria	Lagos State ministry for health	Dr. Ijimakinwa	Insurance Officer, Directorate of HealthCare Planning Research and Statistics
Nigeria	Subol Hospital	Dr Bello	Medical Director
Nigeria	Subol Hospital	Dr. Ijimakin	Quality Manager Hygeia Community Health Care
Nigeria	Crystal Hospital	Dr. Adeyemi	Medical Director
Nigeria	IFC	Olumide Okunola	Senior Health Specialist
Nigeria	Kwara State government	Alhaji Muri Gold	Secretary to State Government
Nigeria	Kwara State government	Adeyemi	Senior Special Assistant, Government House
Nigeria	Kwara State government	Kayode Abdul Issa	Commissioner for Health
Nigeria	Kwara State government	Ayinla	Permanent Secretary MOH
Nigeria	Kwara State government	Dr Gambari	Senior Special Assistant, Secondary Health
Nigeria	Kwara State government	Dr Oba Sulamon	Special Adviser, Community Health Insurance Scheme
Nigeria	Kwara State government	Alhaji AbdulRasaq AbdulSalam	Executive Secretary, Kwara State Health Insurance Scheme
Nigeria	First lady Kwara State government (2002 – 2010)	Toyin Saraki	Founder, Wellbeing Foundation Africa
Nigeria	Illorin Teaching Hospital	Prof. Akande	Prof. of Public Health
Nigeria	Emir of Shonga		
Nigeria	Oga Oluwa clinic	Dr Agbede	Founder & CEO Ogo Oluwa Clinic
Nigeria	Kusumunu health post		
Kenya	PharmAccess Kenya	Mechtild van den Homberghm	Country Representative Kenya/Nigeria
Kenya	PharmAccess Kenya	Millicent Olulo	SafeCare Program Director Kenya
Kenya	PharmAccess Kenya	Marceline Obuya	MCF Program Director East Africa
Kenya	PharmAccess Kenya	Evelyn Gitonga	Senior Business Analyst
Kenya	PharmAccess Kenya	Hielko Bartlema	Senior Project Manager
Kenya	PharmAccess Kenya	Doriane Nzorubara	Senior Project Manager
Kenya	PharmAccess Kenya	Kees van Lede	Director mHealth
Kenya	Safaricom	Sanda Ojiambo	Head of Corporate Responsibility
Kenya	M-PESA Foundation	Les Baillie	Executive Director
Kenya	Ministry of Health	Dr. Kandie	Health Standards and Quality Assurance
Kenya	Ministry of Health	Patrick Amoth	
Kenya	Ministry of Health	Dr. Pacifica Onyancha	Head of director of Standards
Kenya	NHIF	Dr. Simeon Ole Kirgotty	Chief Executive Officer
Kenya	KREP Bank	Albert Ruturi	Managing Director
Kenya	IFC/WB	Khama Rogo	Lead Health Sector Specialist with the World Bank and Head of the

			World Bank Group's Health in Africa Initiative
Kenya	IFC/WB	Bernard Olayo	Policy Officer IFC
Kenya	IFC/WB	Njeri Mwaura	Health in Africa Lead and Kenya program lead
Kenya	The Community Health Plan		
Kenya	Kaiboi clinic		
Kenya	Tanymed clinic		
Kenya	Tanykina dairy	TerryAnn	
Kenya	Eldoret county health management team		
Kenya	KMET	Monica Oguttu	CEO
Kenya	Ahero Medical Center		
Kenya	Nightingale Medical Center		
Kenya	St. Patricks Health Center	Rita	PSKenya Senior business manager
Kenya	MSI	Matt Boxshall	Director of Health Markets
Tanzania	PharmAccess Tanzania	Ewout Irrgang	Technical Director Tanzania
Tanzania	PharmAccess Tanzania	Heri Marwa	Senior Program Officer
Tanzania	PharmAccess Tanzania	Geert Haverkamp	Program Director PharmAccess Tanzania
Tanzania	PharmAccess Tanzania	Majani Rwambali	Senior Project Manager PharmAccess Tanzania
Tanzania	PharmAccess Tanzania	Johnson Yokoyana	Quality Improvement Officer
Tanzania	Association of Private Health Facilities in Tanzania	Dr. Samuel Ogillo	Chief Executive Officer APHFTA
Tanzania	Association of Private Health Facilities in Tanzania	Deodata Kilumile	Quality Officer Northern Zone
Tanzania	Tumaini Health Centre	Dr Goodluck Kessy	Owner
Tanzania	Tumaini Health Centre	Dr Ndonde	Medical Officer In-charge
Tanzania	Sanya Juu RC dispensary	Macky Mtui	
Tanzania	Sanya Juu RC dispensary	John Lyimo	Treasure
Tanzania	Levishi dispensary	Peter Msela and staff	
Tanzania	NHIF	Fidelis Stephen Shauritanga	Regional Manager
Tanzania	NHIF	Rosemiria Msigwa	CHF Coordinator
Tanzania	District Executive Directors (DEDs) and District Medical Officers (DMOs)	Melkzedek Humbe	DED Hai
Tanzania	DEDs & DMOs	Mr Kitambulilo	DED Siha
Tanzania	DEDs & DMOs	Dr Vivian Wonanji	DMO Moshi Rural
Tanzania	DEDs & DMOs	Dr Best Magoma	DMO Siha
Tanzania	DEDs & DMOs	Dr Paul Chaote	DMO Hai
Tanzania	KNCU	Maynard Swai	Chairman
Tanzania	KNCU Board	Board Members	

Documents

Category	Document
Inception documents	Stichting HIF. Alleviating poverty through increasing access to health care and AIDS treatment in Africa. Positioning paper (2005)
Inception documents	HIF Plan of Action (2006)
Inception documents	Beschikking
Inception documents	Budgetneutrale verlenging
Inception documents	HIF governance 2006
Inception documents	Discussion paper - governance & Annex, October 2014
Inception documents	Nigeria Proposal: Community Scheme Program Nigeria (2006)
Inception documents	Health Care Coverage Program Tanzania, Proposal for the Health Insurance Fund (2007)
Inception documents	Kenya Health Insurance Fund Program, Program Proposal (2010)
Documents on HIF approach	"HIFstory, Building a business case to provide affordable, quality healthcare for low-income populations in sub-Saharan Africa
Documents on HIF approach	Context and founding of the Health Insurance Fund (INTERNAL USE ONLY)"
Documents on HIF approach	Schellekens, O., Wijnbergen, S. (2006). Over hulp en aids in Afrika. In Preadvices 2006: New forms of development cooperation, Royal Association of Macroeconomics
Documents on HIF approach	Schellekens, O.P., Lindner, M.E., van Esch, J.P.L., van Vugt, M. and Rinke de Wit, T.F. (2007) Een ziektekostenverzekering voor Afrika. In Nederlands Tijdschrift voor Geneeskunde 2007;151:2680
Documents on HIF approach	Schellekens, O.P., Lindner, M., Lange, J.M.A., & Gaag, J. van der (2008). A new paradigm for increased access to healthcare in Africa. Washington D.C.: International Finance Corporation Financial Times. 2nd prize in the Annual International Finance Corporation/Financial Times Essay competition out of 750 submissions from 90 countries. Schellekens, O., de Beer, I., Lindner, M (2009). Innovation In Namibia: Preserving Private Health Insurance And HIV/AIDS Treatment. A novel mechanism supported by donors helped this middle-income country subsidize private health insurance premiums and maintain private HIV/AIDS services. Health Affairs, Volume 28, Number 6.
Documents on HIF approach	Simon, J., Schellekens, O., de Groot, A. (2013). Public Private Partnership and Development from the Bottom Up – From Failing to Scaling. Global Policy. University of Durham and John Wiley & sons, Ltd.
Documents on HIF approach	Preker, A.S., Lindner, E., Chernichovsky, D., & Schellekens, O.P. (2013). Scaling up affordable health insurance: Staying the course. Washington D.C. The World Bank (most downloaded book in the World Bank Series 2011).
Documents on HIF approach	Presentation to Ministry of Foreign Affairs. Making Health Markets Work in Africa. Connecting people to quality healthcare, June 2014.
Documents on HIF approach	Van der Gaag, J. and Stimac, Vid. (2012) How can we increase resources for health care in the developing world? Is (subsidized) voluntary health insurance the answer? Health Economics, 21: 55-61.
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Program documents	Annual Reports HIF 2006/7-2013
Program documents	Activity Plans HIF 2006/7-2015
Program documents	HIF Results PPT 2006-2014
Program documents	WorldBank, Implementation Completion And Results Report, Pre-paid Health Scheme Pilot in Nigeria, 30 Jan 2015

Program documents	Ogun assessment report AHME
Program documents	Re-design TCHP presentatie
Program documents	Design presentatie Bima Poa
Program documents	Re/-design iCHF
Program documents	Model per program
Program documents	Health intelligence reports (e.g. utilization)
Program documents	SafeCare brochure
Program documents	Essentials facility version
Program documents	SafeCare progress report 2013
Program documents	Support from the Ministries of Health, Kenya.
Program documents	MCF overview April 2012
Program documents	Brochure Medical Credit Fund
Program documents	MCF Annual Report 2013
Program documents	MCF Credit Fund Progress Report 2012-2013
Lessons learned	Building a business case for the provision of affordable and quality health care for low-income people in Nigeria. Submitted to the Global Partnership for Effective Development, OECD.
Operational research	AIGHD & AIID briefing paper. The role of operational research in the implementation of the HIF approach and in strengthening research capacity in Africa
Operational research	The Impact of HIF-Funded Community Health Plans. Results from the impact evaluation and other studies. AIGHD, AIID, University of Ilorin Teaching Hospital, Lagos University. November 2014
Operational research	Gustafsson-Wright, E., Schellekens, O. (2013) Achieving universal health coverage in Nigeria one state at a time: a public-private partnership community-based health insurance model. Brooke Shearer Working Paper Series, 2. Brookings Institution, Washington DC, http://www.brookings.edu/research/papers/2013/06/achieving-universal-health-coverage-nigeria-gustafsson-wright
Operational research	Impact Evaluation of HIF-supported Health Insurance Projects in Tanzania: Baseline Report KNCU Health Plan. December 2013
Policy and advocacy	Policy brief: Policy advocacy for changing the paradigm of health financing and delivery in sub-Saharan Africa: the case of PharmAccess Group and partners
Policy and advocacy	Rova publication: Working towards universal health coverage, Health care management Review, May-June 2014
Policy and advocacy	Rova publication: Healthcare SME's, Medical Credit Fund experience
Policy and advocacy	Presentation on The Business of Health in Africa - The Power of Two by Khama Rogo
Policy and advocacy	Presentation on Strengthening Engagement with the Private sector in Health Systems in Africa by Khama Rogo, May 2012
Policy and advocacy	Paper for the Presidential Summit on Universal Health Coverage, Abuja, 7-10 March 2014
External publications	IFC / World Bank Group (2008) The Business of Health in Africa Partnering with the Private Sector to Improve People's Lives, Working Paper, report number 44143, vol. 1.
External publications	D. North et al. (2007) Limited Access Orders in the Developing World: a new approach to the problems of development, World Bank Policy Research Working Paper
External publications	PhD media version: Strengthening Healthcare Systems for the Prevention of Chronic Diseases in Rural Nigeria
Midterm evaluation	Ecorys, Health Insurance Fund Learning & Support mission, May 2012

Data

We analyzed data from Hifund/PharmAccess, including the following:

- Overviews costs and incomes for Hifund and PharmAccess per year
- Financial models for KNCU and Kwara program
- Target group size estimations
- Enrolment & utilization data per program per year
- LSM and Insurance uptake from target group studies
- Data OnTrack Assessment
- Assessment score per clinic per assessment - SafeCare data
- MCF loan data per country per year
- MCF loan data per country per year